

PEOPLE'S DEMOCRATIC AND POPULAR REPUBLIC OF ALGERIA

Ministry of Higher Education and Scientific Research

Salhi Ahmed University Centre of Naama

Faculty of Letters and Languages

Department of English



**Exploring the Correlation between Introversion and
Academic Achievement in Written Tests Among EFL Learners:
The Case of First Year EFL Master Students at University
Centre of Naama.**

Dissertation Submitted to the Department of English in Partial Fulfillment of the
Requirements For Master Degree In Linguistics.

Submitted by: RAFAI Youssra Hayam.

Supervised by: Dr. BELAID Bekhta.

Board of Examiners:

- Dr. EL HADJ SAID Nabila **Chairperson** Naama University Centre
- Dr. BELAID Bekhta **Supervisor** Naama University Centre
- Dr. BENHEDDI Karima **Examiner** Naama University Centre

Academic Year: 2022-2023

Dedication

In the Name of Allah, the Most Gracious, Most Merciful, All the Praise is due to Him Alone the Sustainer of the Entire World.

To MY MOTHER, who taught me the ABCs of English and ignited my passion for this language. Your guidance has shaped my understanding and appreciation for this field.

Equally deserving my deepest appreciation is MY FATHER, whose unwavering support and encouragement have propelled me through this transformative journey. His belief in my abilities and his constant reassurance have been the pillars of strength that carried me forward.

To my brothers, ZAKARIA, MOUATAZ, and RAYAN.

To my dear AUNTIE, thank you for your love and support.

To my exceptional friends FERYAL and KHADIJA, the one who turns my blue days into rainbows.

To my beloved friends and everyone who loves YOUSSRA.

In memory of that one person, who is still in the echoes of my thoughts,
MY GRANDFATHER.

Acknowledgments

I owe sincere thankfulness to the esteemed guidance of my supervisor Dr. Bekhta BELAID, whose exceptional mentorship has been an invaluable asset throughout this academic journey. Despite her numerous responsibilities and commitments, she has consistently served as a wellspring of inspiration and motivation for me. I am profoundly grateful for her unwavering support, insightful guidance, and the wealth of knowledge she has shared.

I precisely thank the board of examiners Dr. EL HADJ SAID Nabila and Dr. BENHEDDI Karima. I deeply appreciate the fact of accepting to read and examine my humble research work.

I would like to express my heartfelt thanks to all of my university teachers who have played a key role in shaping my academic journey. Your guidance, encouragement, and support have been invaluable throughout the years, and I could not have achieved this place without your unwavering dedication to education. Thank you for inspiring me to reach for my full potential and for instilling in me a love for learning that will stay with me for life.

I must also express my sincere gratitude to the participants for agreeing to take part in this study.

Abstract

Learning a language is a complicated endeavor that raises many challenges due to the fact that psychology highly influences the process of language learning. Actually, variables such as gender, motivation, IQ, anxiety, learning strategies, and language learning styles play a major part in impacting language learning success. Despite the fact that some attention has been devoted to the previously mentioned variables, certain factors have remained unnoticed. Learners' performance and achievements therefore, differ heavily even when they share the same classroom setting, educator, material and linguistic background; this demonstrates the distinctive and unique nature of the learner's personality that can be recognized in the process of mastering a foreign language. It is widely acknowledged that personality has an enormous effect on one's ability to learn and comprehend foreign languages. For this reason, Different aspects of personality have been examined to determine the factors that influence English as Foreign Language (EFL) learners' outcomes, such as academic achievement. In this work, the researcher is interested in personality traits of the learner that can lead to successful language learning. Specially, those learners with an introverted personality who can take advantage of their introversion in their journey of learning the English language. The present study is shaped through the use of the quantitative method; A questionnaire was given to first year EFL master students at Salhi Ahmed University Center to explore the relationship between introversion and EFL learners' academic achievements, as it tends to investigate their learning style and language-related abilities. The findings demonstrate that indeed EFL students' performance in written tests can be affected by introversion trait because there was clear evidence that positively approved the correlation between these two variables. The analysis of the data collected from the research instrument employed in this study, allows the researcher to confirm the raised hypothesis and to put forward a number of pedagogical recommendations.

LIST OF ABBREVIATIONS AND ACRONYMS

AA: Academic Achievements.

E.g.: For example.

EFL: English as a Foreign Language.

FL: Foreign Language.

IDs : Individual Differences.

L1: The First Language.

L2: The Second Language.

N: Number of the students.

Q: Question.

SLA: Second Language Acquisition.

TL: Target Language.

%: Percentage of the students.

LIST OF TABLES

Table1.1. Three Views of Motivation.....	11
Table1.2. Exemplifying the introvert traits.....	27
Table2.1. Students personality traits.....	63
Table2.2. Students academic achievements.....	64
Table2.3. Students test performance.....	66

LIST OF FIGURES AND PIE CHARTS

Figure 1.1. Maslow’s hierarchy of needs.....	20
Figure 1.2. Major Subdivisions of Personality.....	25
Pie chart 2.1. Distribution of Respondents by Gender.....	34
Pie Chart 2.2. Age Distribution of Respondents.....	34
Pie chart 2.3. Responses on the Benefits of Group Discussions.....	40
Pie chart 2.4. Preferred Methods of Communication with the Teacher: In-class Questions vs. Private Approach.....	41
Pie Chart 2.5. Rating of Academic Performance.....	44
Pie chart 2.6. Comparison of Performance in Written and Oral Tests.....	45

LIST OF DIAGRAMS

Diagram 2.1. Preference for Spending Time: Alone vs. With Others.....	35
Diagram 2.2. Students' exhaustion.....	36
Diagram 2.3. Students' preference.....	36
Diagram 2.4. Students' comfortableness.....	37
Diagram 2.5. Approaching Conversations in a Group Setting.....	38
Diagram 2.6. Communication with Strangers: Comfort Level.....	38
Diagram 2.7. Perception of Personality Traits in a New Friendship.....	39
Diagram 2.8. Student Preferences for Collaborative Learning: Individual vs. Group Work.....	40
Diagram 2.10. Class Participation Preferences.....	42
Diagram 2.11. Attitudes towards Presenting: Enjoyment vs. Challenge.....	42
Diagram 2.12. Importance of Academic Achievement to Respondents.....	43
Diagram 2.13. Personality Types Frequencies.....	47

TABLE OF CONTENTS

Dedication	I
Acknowledgments.....	II
Abstract.....	III
List of Abbreviations and Acronyms.....	V
List of Tables.....	VI
List of Figures and pie-chart.....	VII
List of Diagrams.....	VIII
General Introduction	1
CHAPTER ONE: LITERATURE REVIEW	
1.1. Introduction.....	7
1.2. An Overview of Individual Differences in L2 Studies.....	7
1.3 Taxonomies of Individual Differences.....	10
1.3.1. Motivation.....	10
1.3.2. Intelligence	11
1.3.3. Aptitude.....	11
1.3.4. Learning Styles.....	13
1.3.5. Learning Strategies.....	14
1.3.6. Personality of the Learner.....	14
1.4. Personality Test Construction.....	16
1.4.1. Deductive Strategies.....	17
1.4.2. Empirical Strategies.....	17
1.5. Approaches to Personality.....	17
1.5.1. Biological Approach	18
1.5.2. Psychoanalytic Approach	18
1.5.3. Humanistic Approach.....	19
1.5.4. Cognitive Approach.....	20
1.5.5. Dispositional Approach.....	21
1.6. Personality Traits.....	22

1.6.1. Definition of Traits	22
1.6.2. Trait Models	22
1.6.3. Allport's Model	23
1.6.4. Cattell's Model	23
1.6.5. Eysenck's Model.....	24
1.6.6. McCrae and Costa's Model.....	24
1.7. Introversion.....	25
1.7.1. Introvert Personality Traits.....	26
1.7.2. Introverts Learning Style.....	26
1.7.3. The Introvert in the EFL Classroom.....	28
1.7.4 Stereotypes of Introverts in Classroom.....	29
1.8. Introversion and Academic Achievement in EFL.....	29
1.8.1. Writing Ability.....	30
1.8.2. Written tests	31
1.9. Conclusion.....	31

Chapter Two: Data Collection and Analysis

2.1. Introduction.....	32
2.2. The Sample of Population.....	32
2.3. The Research Method.....	32
2.4. Research Tools.....	33
2.5. Data Analysis.....	33
2.6 Discussion of the Results	45
2.6.1. Classifying Students into Extraverts and Introverts.....	45
2.6.2. Analysis of Students' Academic Achievements.....	47
2.6.3. Relationship between the Introversion Personality Variable and Written Tests.....	49
2.6.4. Relationship between Academic Achievement and Written Tests.....	51

2.6.5. Relationship between the Introversion Personality Variable and Academic Achievement in Written Tests.....51

2.7. Discussions of the Main Findings.....51

2.8. Limitation of the Study.....52

2.9. Suggestions and Recommendations.....53

2.10. Conclusion.....53

General Conclusion.....55

Bibliography.....58

Appendices.....65

Appendix1: Students’ Questionnaire.....66

Appendix 2: An exemplified questionnaire response of an introverted student.....68

General Introduction

Despite the fact that all humans share similarities, there is no doubt that each person is distinct and unique from one another. When observing people's behaviour, may question why they exhibit such similarities or differences; this is largely due to individual differences (IDS). IDS encompasses various factors such as physical traits (e.g., height, weight), intelligence, interests, perceptions, gender, abilities, learning styles, and personality traits. Among these factors, personality is particularly important for language learning success in the globalized modern world.

Motivation and access to resources and teachers are all essential external factors in a student's language learning journey; however, it is also important to consider the effect of personality on their mastery of a new language. Personality has gained considerable research attention in recent years but many educators remain unaware of its influence on language learning. It can be easy to mistake introverted personalities for inefficient ones, when actually research suggests that they are very effective in mastering new languages, even though they do not necessarily get as much attention as extroverted individuals. In fact, it is believed that Introverts tend to be more internally motivated, great observers and have well-developed analytical skills. All of these traits add up to the ability of introverts to observe their environment from a more critical angle and further enhance their academic achievements in language learning. Introverts often have a unique perspective and can be more efficient language learners as they demonstrate more engagement with the subject. Additionally, research suggests that introverted students who take the time to reflect deeply on their own linguistic accomplishments show tremendous potential in terms of academic achievement.

The idea of how a person's personality can predict their academic achievements is an interesting one. It suggests that certain types of personality traits can be linked to success in certain areas, such as introversion. The concept of personality has long been the subject of various psychological studies, and its influence on academic achievements is no exception. Personality variables have often been a predictor of academic performance, with introversion among the most studied. Introverted individuals are characterized by having a preference for solitary activities over

socializing, being comfortable with silence and having an inner focus or introspection over external stimulation such as conversations. They also tend to be reflective and analytical thinkers who prefer taking time to process information carefully than quickly making decisions. In terms of academic achievement, previous studies suggest that introverted students may be more likely to devote greater effort into their studies, take more initiative in their learning process, exhibit greater persistence when faced with challenging tasks and show improved time management skills. As a result, these qualities could lead to higher academic performances amongst those who consider themselves naturally ‘introverted’ in comparison to those who do not.

Learning a foreign language (FL) is an intricate journey that varies from individual to individual. A learner's personality can greatly influence their ability to effectively acquire a new language. As accepting, understanding, and incorporating different types of personalities into the learning process is key to successful acquisition of a new language, it is important for educators to take into account the students' individual traits when designing their lesson plans. Through comprehensive and customized approaches involving awareness of personality characteristics, educators can help optimize the learning experience for each student.

Researchers tend to explore it under the title of “personality psychology” (Dörnyei, 2005, p. 10). Funder (2007) defines personality as the unique and consistent habits of thoughts, emotions, and behaviors, as well as the psychological systems that underlie these patterns, whether consciously or unconsciously.

The study of personality traits has been a focus of various psychological theories since the 1970s. Ellis (1999) explains that different categorizations of these traits, known as dichotomies or pairs, have been proposed, such as extraversion/introversion. Researchers such as Fillmore in 1979 and Strong in 1983 utilized the phrase "social style" while creating their individual personality trait ideas. It is largely believed that each part of the dichotomy is interconnected and has an impact on the other, emphasizing the importance of each one of them in the process of FL learning. Moreover, Wakamoto (2000) suggests that introversion is a crucial entry point to

assess the potential impact of an individual's personality on their progress in learning a second language.

Introversion is strongly linked to the learner's general attitude and behaviors. An introverted person is someone who is highly interested in his own inner world of thoughts and emotion. They are characterized by their preference of solitude and deservedness. However, they should not be confused with being shy or social anxious because these are different concepts.

Research suggests that there is a relationship between personality traits and academic achievement, including introversion. According to a study published in the *Personality and Social Psychology Review*, individuals who score high on traits related to introversion tend to perform better academically, particularly in fields that require deep processing and focus (Ashton & Lee, 2008). This may be because introverted individuals tend to be more reflective, analytical, and detail-oriented, which can lead to better performance and outcomes. However, it is important to note that this is not always the case, as factors such as motivation, effort, and educational opportunities also play a role in academic achievement.

Introversion can also facilitate academic achievement. As Dzuka and Dalbert argued in their 2007 paper, that introverted learners are expected to have strong academic scores because they tend to be analytical and reflective. In other words, introverts may be more likely to develop study skills and habits that foster long-term academic success, such as diligent reading, note-taking, and independent research.

As it was highlighted previously, that one's personality such as being an introvert, can affect their success in learning a foreign language (FL). As personalities differ from person to person, it has been suggested by numerous scholars that teachers should consider this factor in the process of FL learning. Especially when it is confirmed in many studies that teachers unknowingly spotlight their attention on the extraverted learners in their classroom while unintentionally neglecting the introverts. This is often a result of the extroverts' more vocal and outgoing nature, which can make them more visible in class. Teachers may also believe that introverted students

are simply quiet or not good enough. In fact, various studies dealt with the role of the introverted personality in FL learning. However, little interest has been given to study the correlation between Students' academic achievements and introversion. As the majority of English assessments in Algerian universities are conducted in a written format, it would be beneficial to examine how performance on these written tests is linked to the introversion trait.

The main objective of this current research is to examine how the personality traits of introversion are correlated with the academic success of EFL students in written exams. Furthermore, it aims to enhance comprehension of the significance of the introversion dimension in acquiring a foreign language.

To achieve the aforesaid objectives, two research questions have been addressed throughout this study:

- Can a connection be drawn between the personality traits of introversion and the performance of EFL learners in written tests?
- And if there is a correlation, what type of relationship exists between the two factors?

Previous studies have acknowledged that there are two conflicting views on the connection between the personality traits of extraversion and introversion and how well students perform in written exams. As a first step to answer the above questions, one has formulated the following hypotheses:

- There might be no correlation between the personality traits of introversion and the performance of EFL learners in written tests
- There may be a strong relation between introversion and students' academic achievements in written tests.

In this current study, a quantitative method is used. Mainly, the purpose behind using this method is to provide explanations, make predictions, and connect dots. This one is adopted for objectivity and validity of the research.

This dissertation is divided into two chapters. The initial chapter contains all the theoretical information needed regarding the overall concept of personality with a

focus on the Introversion trait, along with theories that highlights the relationship between this trait and language learning. The last chapter examines the correlation between Introversion and academic achievement in written tests among EFL learners. The research concludes by addressing some limitations and educational implications.

Chapter One :

Literature Review

1.1. Introduction

1.2. An Overview of Individual Differences in L2 Studies

1.3 Taxonomies of Individual Differences

1.3.1. Motivation

1.3.2. Intelligence

1.3.3. Aptitude

1.3.4. Learning Styles

1.3.5. Learning Strategies

1.3.6. Personality of the Learner

1.4. Personality Test Construction

1.4.1. Deductive Strategies

1.4.2. Empirical Strategies

1.5. Approaches to Personality

1.5.1. Biological Approach

1.5.2. Psychoanalytic Approach

1.5.3. Humanistic Approach

1.5.4. Cognitive Approach

1.5.5. Dispositional Approach

1.6. Personality Traits

1.6.1. Definition of Traits

1.6.2. Trait Models

1.6.3. Allport's Model

1.6.4. Cattell's Model

1.6.5. Eysenck's Model

1.6.6. McCrae and Costa's Model

1.7. Introversion

1.7.1. Introvert Personality Traits

1.7.2. Introverts Learning Style

1.7.3. The Introvert in the EFL Classroom

1.7.4 Stereotypes of Introverts in Classroom

1.8. Introversion and Academic Achievement in EFL

1.8.1. Writing Ability

1.8.2. Written tests

1.9. Conclusion

1.1.Introduction

Every human being is unique and has different perceptions and specific perspectives to accomplish his/her potential. As a way to comprehend the differences and dissimilarities between individuals, a number of researchers put stress on personality studies. In the process of acquiring any target language (TL), taking the personality of the learner into account is a crucial step towards creating a suitable learning environment that fits the learner's needs.

Even though there are a lot of times when learners tend to have the same or similar linguistic background and prior knowledge, there are still some noticeable variations in the language levels and proficiency. Some learners may find it easy to acquire a new language while others face difficulties and struggles in their pave.

A detailed research has been conducted to specify the causes that lie behind this massive diversity, thus specific personality features have been presumed to be the responsible of such differences. One of these features is the introversion personality variable which has been already explored by numerous scholars as this chapter aims to highlight the main points tackled by them.

This chapter, therefore, mainly focuses on reviewing the literature on this subject. It pays attention to learners' individual differences especially when it comes to their personality. It aims to provide theoretical explanations and approaches. In addition to that, personality test construction is tackled briefly. This chapter goes deeper in the sense of explaining traits and their models. At the end, special attention is given to introversion and introverted learners, attempting to find the correlation between this personality variable and academic achievements on written tests.

1.2. An Overview of Individual Differences in L2 Studies

Since the emergence of the field of psychology, there have been attempts to achieve two opposing objectives. One is to understand the basic and the shared principles among humans' thoughts. Whereas the other one is to explore the uniqueness that characterizes the human mind and investigates the ways in which humans differ from each other in terms of multiple aspects. This latter scope has been under the

umbrella of what is referred to as “differential psychology”, but more recently it has been termed “individual difference research”. As the term suggests, individual differences (IDs) are characteristics or traits in respect of which individuals may be shown to differ from each other (Dörnyei, 2005, p1).

Admittedly, there are no two human beings that are completely alike, even identical twins. People’s behaviors, intelligence, motivations, and personalities can largely differ and vary. Thus, understanding IDs is necessary to realize why people behave and act differently in various situations including the educational one. Actually, examination into the subject concern of IDs is, therefore, a critical and significant area in SLA.

As it is widely agreed, IDs can be noticed across different areas including L2 learning. The main goal behind the IDs studies in the field of applied linguistics is to comprehend why language learners have the ability to vary from each other when it comes to their manner of behaving and reacting in different contexts as well as the way they gain new knowledge. In different terms, learners’ distinctiveness and individuality is covered under the umbrella of ID (Dewaele, 2010).

The study on Second Language Acquisition is concerned with two objectives that have been both significant to SLA research. On one hand, some scholars explore universal features that can be significant for learners like the output and the input. On the other hand, researchers are interested to know whether the language learning process, which is characterized as universal, may vary among learners depending on their IDs (Dewaele&Furnham, 1999).

Lately, there has been a noticeable attention on how IDs influence the second language learning process. These distinctive factors are regarded as crucial features that impact the way language is approached as well utilized by different learners. IDs are believed to affect two dimensions of SLA. The first one, as Ellis (1990) reported, “is the sequence or order in which linguistic knowledge is acquired”. According to him “differences in age, learning style, aptitude, motivation, and personality result in differences in the route along which learners pass in SLA.” (1999, p.10). For example, Older learners are more likely to have well developed cognitive abilities which may aid

them to enhance their understanding in grammatical structures yet they may be faced with obstacles when it comes to pronunciation. Additionally, someone with high motivation may learn and acquire language effectively rather than someone with low motivation.

The second dimension is concerned with “the rate and ultimate success of SLA”. In which he argues that ID has an influence on it. To better explain, the rate indicates how rapidly and fast learners catch and grasp a foreign language (FL).

Regarding the impact of IDs in language learning, there have been two major claims. On one side, Fillmore (1979) stated that some learners have no issues learning a new language while others may have some struggles in mastering it. This distinction is due to learners' IDs. On the other side, Ellis (1990) emphasizes that the effect of IDs on learners' rate and competence of the process of language learning is less controversial than referring to the influence on the route of acquisition. In essence, both of the scholars argued on the major role of IDs in learning a new language.

Furthermore, when it comes to the significance of IDs in SLA there are two contrasting views. One opinion believes that IDs are important in a way that makes the SLA process different in comparison to the first language. This view entails that someone's first and second language learning process vary due to the manner, cognitive abilities and other factors, thus “individuals vary greatly in the ease and success with which they are capable to master new languages” (Fillmore, 1979, p. 203). It is important to mention that the process of acquiring L1 is a universal phenomenon that happens at the same rate and order across all populations and it is highlighted as “uniform across populations in terms of developmental scheduling” (Fillmore1979, p.203). Whereas the second opinion indicates that IDs have the same amount of influence on both L1 and L2, that is to say IDs do not have a more powerful impact on one than the other.

Although there are contrasting and different views, the IDs studies remain so extensive that it is predicted to have an important role in SLA research. Scholars are

investigating how individuals vary and how IDs shape their process of SLA. A comprehensive and detailed study can provide insights to these unanswered questions.

1.3 Taxonomies of Individual Differences

In the domain of individual differences, as it is specified above, there is no single universally agreed-upon list of IDs factors that may impact someone's ability to learn language effectively. However, since there is no final list of IDs, scholars have proposed different suggestions that can possibly have an influence on the process of language learning, such as motivation, intelligence, aptitude, learning style, and learning strategies. Despite that, this study will mainly emphasize on the widely known ones, with a particular focus on personality in terms of the introversion dimension.

1.3.1. Motivation

In order someone learns a foreign language effectively; there are some specific requirements and factors that need to be matched. Learner's motivation is the most frequent and over mentioned factor. It is possible to consider it as the willingness and the feeling of wanting to learn a language. It is believed that this factor has grasped a massive focus, according to Ellis, "...motivation has attracted more attention from teachers and researchers alike than any other individual difference factor" (p. 536). Furthermore, in many language learning scenarios, the learners' motivation level is regarded as determinant of either the success or failure of this process (Brown, 2000, p. 160). Despite the fact that this term is overly mentioned, it still remains debatable point since many scholars aimed to define it, however; because of its complex nature (Dörnyei, 2001, p. 1; Vancouver, 2004, p.625), no definition was proposed that completely meet or satisfy the expectations. Brown reported that there have been different perspectives and approaches proposed by historical scholars as an attempt to understand the concept of motivation (2000, 160). behavioristic, cognitive, and constructivist are centrally the three major approaches.

Table 1.1. Three Views of Motivation (Note, **taken from:** Brown, 2000, p. 162.)

Behavioristic	Cognitive	Constructivist
- Anticipation of reward	- Driven by basic human needs	- Social context
- Desire to receive	- (exploration, manipulation, etc.)	- Community
- Positive reinforcement	- Degree of effort expended	- Social status
- External, individual forces in control	- Internal, individual forces in control	- Security of group
		- Internal, interactive forces in control

According to Brown (2000), learners' motivation can be categorized based on two variant dichotomies, intrinsic versus extrinsic, and integrative versus instrumental (p.162). Learners who are intrinsically motivated are the ones who have a desire to learn a language to achieve specific internal needs and goals such as personal interest or satisfaction, conversely, those with an extrinsic motivation aim to learn a language only to receive rewards or attention from the exterior side. Whereas, Integrative motivation is when learners decide to learn the language of a target society in order to adapt and take part in that community, instrumental motivation is another kind of motivation that is driven by the learners' willingness to realize a specific objective, in this context, the person is learning this language not because they are passionate about it, instead they go through this process only to achieve a desired outcome such as traveling, getting a job... etc (Brown, 2000, p. 161). Hence, motivation plays a fundamental role in second language acquisition (SLA). As stated by Dörnyei (2005, p.65), motivation is considered as the key factor that pushes language learners to initiate, continue, and effectively acquire L2.

1.3.2. Intelligence

Many years ago, there was an ongoing debate among researchers seeking to define the term "intelligence" accurately, attempting to give it an appropriate description. As

claimed, there have been multiple diachronic shifts in the definitions and comprehensions of intelligence. There are several influential scholars from Charles Spearman, Alfred Binet to Theodore Simon, and David Wechsler, who had essential contributions to the improvement of intelligence tests and models (p. 19).

Even Though this term has been under spotlight, it is still quite hard to pick a well accepted definition among researchers. Intelligence means different things to different people. In its general sense, the concept of intelligence takes a great part in learners' ability to learn, in other words, intelligence can determine someone's success (Dörnyei 2005. p. 33). Moreover, Chamorro-Premuzic (2011) argued that there are many terms such as "intellectual ability," "IQ," "cognitive ability," and "g" (general intelligence) that can be used exchangeably referring to intelligence (p. 10). In broader words, Intelligence is concerned with an individual's ability to learn effectively, solve problems, cope with challenging situations, and efficiently employ his reasoning abilities and thinking (Flynn, 2007, p. 54; Haslam, 2007, p. 296; Orzechowski, 2010, p. 357).

In short, the endeavor of the none ending research on intelligence is to achieve practical benefits or real world solutions of the study outcomes that is commonly known as “pragmatic ends”, "...namely, to predict future success and failure...[wherein] the essence of intelligence theory is to describe, understand, and predict individual differences related to competition and adaptation" (Chamorro-Premuzic, 2011, p. 11)

1.3.3 Aptitude

The ability to acquire and learn a language is regarded as a unique talent that individuals manifestate while others do not. Each language learner has their specific level of capacity (Dörnyei&Skehan, 2005, p. 2). Different scholars have explained the concept of aptitude in various ways. For instance, attitude is viewed as an “innate” ability or capacity for language learning (Singleton, 2017, p. 90), It a “natural” capability intended for a specific objective (Mankar&Chavan, 2013, p. 1), according to

snow's opinion Shavelson et al. (2002) have deeply defined aptitude as individuals' readiness and capability to perform a particular task in a specific scope this includes different factors like motivation and personality, which can highly impact individuals' capacity to success of acquiring (2005. p. 32), in this case, learners have the ability to develop and control these capacities through formal training (Nazimuddin, 2014, p. 183). In fact, learners who are characterized by this ability are supposed to achieve sufficient results in terms of non native language learning (Ellis, 2015, p. 53).

1.3.4. Learning Styles

It is very clear that different learners learn in different styles and manners, It is up to them to pick up the suitable and best ways that can perfectly fit their needs and goals during their learning process. Surely, each learner has a particular style of learning that is notably distinct from the rest (Torrance &Rockenstein, 1988, p. 275). Then, what does learning styles precisely mean?

There is plenty of literature explaining the notion of learning styles offered by scholars who provided definitions in order to entail a better understanding and comprehension; these definitions can range from simple to complex taxonomies (Grigorenko& Sternberg, 1995, p. 218).

Based on this light, Pritchard (2009, p. 41) categorized learning styles in different ways, either as:

- A specific way by which someone learns.
- A mode of learning is a person's optimal or favored way(s) to reflect, utilize knowledge, and demonstrate learning.
- A person's favorite manner of learning and acquiring new knowledge and set of skills.

According to Pritchard (2009, p. 55), "Individual learners have preferred ways of working, thinking and learning. If an individual's preferred approach to learning tasks is ignored in the ways that a teacher expects them to work, there is a distinct possibility that their learning will not progress as efficiently and effectively as it might." Accordingly, many scholars have characterized learning styles as fairly steady,

reliable, and permanent features that influence how learners approach language (Entwistle & Peterson, 2007, p. 537; Pawlak, 2012, p. xxix; Dörnyei, 2005, p. 122; Biggs, 1988, p. 185; Furnham, 1995, p. 406).

1.3.5. Learning Strategies

There are endless accessible learning strategies to meet variant learning styles, aspects, and goals. Language learning strategies tend to be defined as the practices and the processes that the learner consciously adopts and utilizes to acquire the target language (TL). These strategies aid them to improve their chances in being an effective language learner who can achieve his objectives (White, 2008, p. 9)

Finally, when it comes to language effectiveness and efficiency, it is confirmed that the use of learning strategies ends with positive effect on the process of acquisition and learning, including confidence, motivation, as well as the improvement of language skills (Shi, 2017, p. 24), and autonomy among learners (Oxford, 2008, p. 41).

1.3.6. Personality of the Learner

One of the most captivating and fascinating things about human beings is how they vary from each other, in terms of physical features, behaviors, traits, and many other characteristics. Scholars believe that the reason behind this huge diversity among people might be the unique personality of each one. Hence, to better investigate the notion of personality, like any ID, psychologists and researchers put massive attention and focus on it.

Throughout the past decades, explaining and describing personality has been regarded as no easy task. Till the moment, scholars and psychologists do not have a particular definition of this notion that can be validated due to its abstract nature. To put it in different terms, there is no specific universal definition of this term, instead every scholar tends to define it differently based on his area of research because individuals' personalities are as original and unique as fingerprints.

Eventually, one of the most central and over-studied topics in the field of psychology is personality since "it is the most individual characteristic of a human being" in which researchers tend to explore it under the title of "personality

psychology” (Dörnyei, 2005, p. 10). Accordingly, personality psychology is seen as the “branch of psychology which is concerned with identifying the most important individual differences” (Goldberg, 1981; Norman, 1963; Wiggins, 1979 as cited in Buss, 2008, p. 29). Simply put, the purpose behind these plethora personality theories is to offer a comprehensive and well detailed portrayals of individuals (Barratt, 1995, p. 3). Before digging into what personality indicates, it is noteworthy to comprehend and understand that additionally to IDs, types of personality, personality traits also function a significant part in the field of personality psychology (Shalabi&Nodoushan, 2009, p. 15).

According to Buss (1989) “if there is to be a specialty called personality, its unique and therefore defining characteristic is traits” (Matthews, Deary, & Whiteman, 2003, p. 4). That is to say, traits are the key factors that shape personality and therefore any aspect of study within the field of psychology under the name “personality” is mainly about the core traits of individuals.

Etymologically, the term “personality” is derived from the Latin word “persona” which means a “mask”(Feist & Feist, 2006, p. 3) worn by theater actors (Ożańska-Ponikwia, 2018, p. 1). Based on Chamorro - Premuzic’s (2011) statement, individuals' habits, acts, and performance may reflect deeper areas in their personalities which can be only understood through the identification of the possible reasons and factors behind it (p. 26).

The personality of the learner can significantly influence the process of learning. It noticeably varies from one another depending on a set of personal characteristics which include distinct skills, capabilities, and abilities. As an outcome,each learner has his/her own personality that greatly impacts his/her learning especially when it comes to language acquisition (Boroujeni, Roohani, &Hasanimanesh, 2015, p. 212).

Additionally, Maltby, Day, and Macaskill (2007, p. 12) stated that the personality of learners can be divided into various effective components or “traits” such as extraversion, neuroticism, conscientiousness, agreeableness, and openness to

experience; which they stand for the big five model, each one of them constitutes a continuum with a pair of extremes (Dörnyei, 2005, p. 13).

Finally, personality can tell a lot how human beings adapt to their environment and live based on their distinct identities, as it influences the manner they behave, interact, and learn.

1.4. Personality Test Construction

The motive behind conducting personality tests is to identify and describe and assess individuals' core traits. This latter can vary and distinguish from one to another. Moreover, the process of forming these tests constitute an assessment that needs to be largely validated and accepted by the psychological community. This is only realized through forming a collection of questions that can grasp responses and provide insights from the individual being tested. These questions are developed based on psychological frameworks and theories. It is important to note that the area of personality test construction is an ongoing process that requires careful planning and till now there are various personality tests that are under development and formulation so our understanding of human personality would evolve. Several methods of test construction have been classified in various ways (Cohen, et al., 1988). Although there is massive debate and disagreement on the real number of the various approaches that exist, there are two major approaches that should be acknowledged: deductive strategies and empirical strategies.

1.4.1. Deductive Strategies

This type of strategy is about constructing tests where personality tests are inferred based on the responses of individual test items, as every item tells about a particular personality trait. Burney (2008) suggested that this approach particularly emphasizes reaching specific judgment or assumption out of broad facts. This method contains two main approaches: the logical or content test construction and the theoretical one. The former, focuses on using logical and reasonable content in establishing and developing personality assessment (Burney, 2008). In this context,

psychologists aim to describe and identify someone's personality through the traits and features that were measured and evaluated. The latter is formulated based on theoretical frameworks and models which enable researchers to underpin test designs and item selection as it is essential for these items in the scale to be linked to the features and traits being tested.

1.4.2. Empirical Strategies

The empirical strategy is characterized by the use of data and statistics in order to analyze performance and provide results and insights of test items. It is referred to as "empirical" because it indicates a real connection and correlation between the test and traits. Mainly, there two main approaches related to this particular strategy, which are the criterion-group and the factor analytic method. The first one is about conducting the test on two various groups to adjust and select the differences among them. The second one is made particularly to minimize the least number of variables. "Factor analysis attempts to reduce many correlated variables to a few broader dimensions (i.e., factors) that summarize the correlations between those variables" (Kibeom Lee, Michael C. Ashton. 2007).

1.5. Approaches to Personality

Just as psychologists have developed personality test construction, they have formulated theories related to personality studies. Personality psychologists "evolved unique and vital theories because they lacked agreement ... [wherein] each saw personality from an individual reference point" (Feist & Feist, 2006, p. 3)

It is a bit confusing when it comes to personality approaches and theories because it is hard to tell which one is right.

1.5.1. Biological Approach

To better understand people's several personalities, theorists suggest emphasizing on the motive of individuals acts, behavior, and habits first. Behavior is regarded as a secret key to identify the specific purpose that drives people to act the way they are. Comprehending the origin of a certain individual's personality enables

psychologists to better describe and explain the subject under the study (Zuckerman, 2003, p. 85).

Virtually all of our behaviors are influenced by both psychology and physiology. The biological perspective emphasizes the physiological and hereditary aspects of our thoughts and actions, including the brain and its neurons, the nervous system, hormones and the endocrine system, genetics, and evolutionary influences. (Ewen, 2010, p. 376)

1.5.2. Psychoanalytic Approach

Sigmund Freud had a major contribution when it comes to the psychology field in which he is considered as the founding father of the psychoanalysis theory that highlights the impact of the unconscious mental process and the influence of early childhood (Hockenbury and Hockenbury 2001). In 1915, he published a work under the title “The Unconscious” in which he stated that several human behaviors are performed as a result of psychological unconsciousness. In his opinion, childhood experiences including traumas and conflicts are largely influential to adult’s life, that is to say, these experiences are the starting point of the formulation of someone’s personality. Moreover, this approach sheds light on the role of the unconscious mind as it tends to utilize certain techniques including association and dream analysis to better investigate the given situation (Freud, S. 1915). The id, the ego, and the superego are the three personality structures also known as “human psyche” divided by Freud, these structures represent the mind and its functions :

The ID is the oldest and most primitive psychic agency, representing the biological foundations of personality. It is the reservoir of basic instinctual drives, particularly sexual (libidinal) drives, which motivate the organism to seek pleasure (Lapsley, 2011)

The rational part of personality is referred to as ego, it stands between the id and eternal reality. According to Lapsley,(2011. p 396)

The ego takes on a number of functions. It commands the voluntary movement. It has the task of self-preservation and must therefore master both internal (id) and external stimuli. The ego masters external stimuli by becoming 'aware,' by storing up memories, by avoidance through flight and by active adaptation

The superego is related to ethical concerns and has a moralic function. Therefore (Lapsley, 2011) define it as “an agency that seeks to enforce the striving for perfection, as it holds out to the ideal standards of ego and moralistic goals”

1.5.3.Humanistic Approach

The key figures of the humanistic approach are Carl Rogers and Abraham Maslow. It can be referred to as the third force in psychology or the fourth force in personality. This perspective is based on the belief that individuals are “innately good” and have positive connections towards “self” including personal growth, self awareness, and self acceptance which are regarded as key components. This approach strongly emphasizes the conscious and the subjective perception of human beings and aims to understand people’s unique viewpoints, emotions, needs, and experiences, as it highlights the role of innateness in enhancing positive potentials (Ewen, 2010, p. 404). Schultz and Schultz (2008) described this approach as a psychological point of view linked to personality studies that evolved in the 60s and 70s as a response and reaction to both behaviorism and analytical approach. Furthermore, this psychological perspective is based on fundamental principles:

- It aims to bring the more developed and healthier version of human beings.
- It appreciates the subjective experiences of individuals, where everyone makes his own decision.

According to Cloninger (2004, p. 406), the present journey is more superior to the past.

Maslow stated that individuals who have reached self-actualization are seen as genuine, spontaneous, aware, and creative. As they also tend to look for positive qualities, act autonomous and independent, and effortlessly cope with others. According to him, self-actualization achievement can be drawn as a scaled hierarchy in which human motives are ranked in a set of needs.

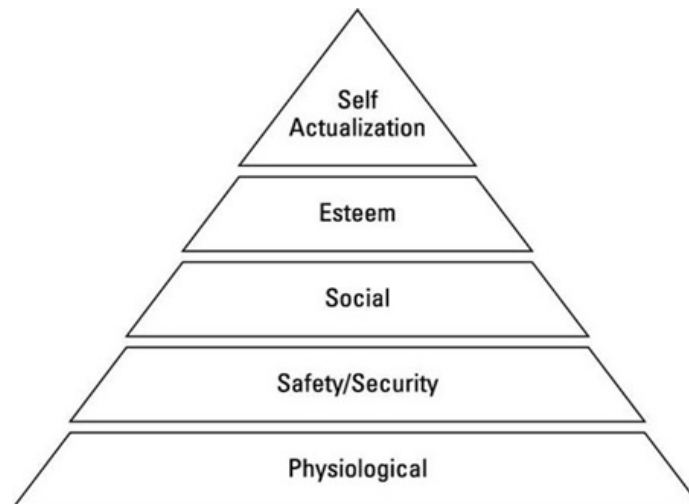


Fig 1.1.Maslow's hierarchy of needs

1.5.4. Cognitive Approach

The cognitive perspective to personality is a fundamental approach which aims to comprehend and explore how information is processed and operated, as it seeks to know how people end up making decisions and opinions about their surrounding environment as well as themselves. Same as behaviorism, the early theory of cognitivism stresses on exploring the influence of the individuals' observed behaviors and their perceptions of themselves and the world around them, in developing the personality (Matthews, 2012, p. 517). Cognitive psychologists such as George Kelly and Carl Rogers shed the light on the relevance of the cognition ,in terms of the way individuals perceive, react to, and judge, deal with problems, arrive to make decisions

and sense about themselves and the external world (Schultz & Schultz, 2008, p. 345; Matthews, 2012, p. 517).

According to this approach, in order to comprehend and understand someone's attitudes and behaviors, psychologists need first to examine their cognitive and mental processes. This perspective is highly concerned with the idea that humans possess certain individual differences (IDs), such as their unique and original personalities. Consequently, Schultz and Schultz (2016) claimed that cognitive theory "is a truly psychological approach to personality because it focuses exclusively on conscious mental activities" (p. 291), instead of solely regarding the noticeable and observed ones.

1.5.6. Dispositional Approach

This approach is based on the belief that individuals exhibit certain innate traits and characteristics or behaviors which tend to remain generally stable and consistent throughout time and across distinct contexts and situations (ChamorroPremuzic, 2011, p. 21). In another sense, it centers on revealing those consistent and durable characteristics that assure humans' defensiveness and regularly distinguish them from the rest (Mischel&Shoda, 2008, p. 209). This idea leads to the recognition of this set of characteristics as personality types and more frequently as personality traits.

It turns out that personality types and personality traits are two sub-approaches of the dispositional approach that reflect people's behaviors, opinions, and feelings Chamorro-Premuzic (2011.p.30). Wherein, the former "traits" classifies someone's personality through the use of data, statistics, and numbers on a continuum, the latter "types" places people in one of two opposite extremes of a particular dimension and is classified, stating that either they qualify in this type or the other (p. 30). "Saying that someone is introverted or extraverted is a categorical distinction, whereas saying that someone's Extraversion score is 49 is an ordinal or quantitative distinction" (Chamorro-Premuzic, 2011, p. 28). In other words"Traits are durable characteristics of a person. Types are collections of traits that are said to occur together in some individuals"

1.6. Personality Traits

A trait is regarded as a feature or characteristic of personality that combines the three requirements of constancy, stability, and individual variation. In accordance with this idea, a trait can be described as a fairly stable feature that pushes people to behave in a specific way;

The trait theory of personality suggests that people have certain basic traits and it is the strength and intensity of those traits that account for personality differences. The trait approach to personality is one of the major theoretical areas in the study of personality. Trait theory suggests that individual personalities are composed of broad dispositions (Kendra Cherry. 2023. The Trait Theory of Leadership. Verywell Mind. October 20, 2022)

Throughout history, psychologists' beliefs on personality, particularly the way they describe traits have evolved and changed. The trait approach to personality places more attention on differences between individuals more than any other theory (Kendra Cherry. 2023)

1.6.1. Trait Models

Multiple theories have been suggested and developed in psychology to understand and investigate personality traits. Numerous psychologists have proposed a variety of models in hopes to develop more accurate and detailed descriptions of what true personality is. The four models of Allport, Cattell, Eysenck, and McCrae & Costa are considered as the main core trait theories. These models have significantly changed our understanding of personality in psychology.

1.6.2. Allport's Model

In 1936, a psychologist under the name of Gordon Allport proposed the first trait theory. Allport came across the fact that in one English language dictionary, there were

over 4000 words utilized to characterize different personality traits. Hence, he categorized them in three levels which are cardinal, central, and secondary traits.

According to Allport, cardinal traits are uncommon, rare, and dominant; as they tend to get developed later in life. They often identify and define a person so deeply and thoroughly to the point their identification become synonymous to their character (Kendra Cherry. 2023. The Trait Theory of Leadership. Verywell Mind.).

In contrast, Central traits are seen as general, broad, and basic. They represent the building blocks of someone's personality. Yet, they are not dominant as the cardinal ones. These traits stress the key and core traits that characterize the individual, such as "intelligent" , "shy" , "honest" (Kendra Cherry. 2023. The Trait Theory of Leadership. Verywell Mind.).

Secondary types are connected to attitudes or interests. They often show in specific context and situations. He have proposed another two subtypes of traits which are stylistic traits and motivational traits (Feist & Feist.2006, pp. 378-379)

1.6.3. Cattell's Model

Raymond Cattell, a trait theorist trimmed the number Allport's original list of personality traits of over 4.000 to just 171. He reached this number through eliminating and removing the rare and uncommon ones, and unifying the popular ones (Kendra Cherry. 2023. The Trait Theory of Leadership. Verywell Mind.). Following that, he determined a representative sample for 171 different traits and through the use of a statistical method popular as "factor analysis", he subsequently came across the idea that there are some concepts and terms strongly connected to one another. He gradually narrowed down his list to 16 key traits. "dominance", "perfectionism", "reasoning", and "self-reliance" are some of them. According to Cattell, these 16 core traits are the cornerstone and the basis of every human personality.

1.6.4. Eysenck's Model

Hans Eysenck (1916–1997) is another factor analyst who conducted a desire to underpin the core formulation of people's personalities, mostly from a biological point of view. To serve this objective, relying on his clinical psychology observations, Eysenck established his Gigantic Three. Neuroticism, Extraversion, and Psychoticism are three components of the theory of personality (Ashton, 2007, p. 101). Therefore, there is no strategy to identify and differentiate individuals from one another, except by evaluating each of these three personality traits which are defined as follow (Chamorro-Premuzic, 2011):

The term "neuroticism" reflects a person's level of sentimentality and mood stability. Extraversion/introversion determines how much a person exhibits a tendency to be chatty, sociable, and expressive; or reserved, calm, unsociable. An individual's degree of manipulation, conformity, and empathy is known as psychoticism. (pp. 41-42)

To put it simply, the primary objective of Eysenck's model, which centers on the three already mentioned personality traits of neuroticism, extraversion, and psychoticism, is telling the extent to which a person can be different from the rest.

1.6.5. McCrae and Costa's Model

Before discussing McCrae and Costa's Big Five Model, It is important to take into account the contributions made by earlier academics to the formulation of such a model, such as Cattell's 16PF, the Big Five personality framework was mainly concerned with both lexical approach and factor analysis. In this vein, a number of researchers, that include Tupes and Christal (1961/1992), Norman (1967), and Lewis Goldberg (1981, 1982), have made an commitment, each from their own perspectives, to present an accurate list of adjectives and traits that may clearly explain the individuals' various behaviors (Ashton, 2007, p. 64). But Goldberg had proved success in creating his own sets of synonyms and then adopting the Five-Factor Model (FFM) (McCrae & Costa, 2003, p. 35).

By the 1980s among Paul Costa and Robert McCrae and other psychologists had come to feel that this model is the most significant work, they even attempted to develop this model since it is considered as the most valid approach that perfectly describes personality traits, entailing, Neuroticism, Extraversion, Openness to experience, Agreeableness, and Conscientiousness (Ashton, 2007, p. 64).

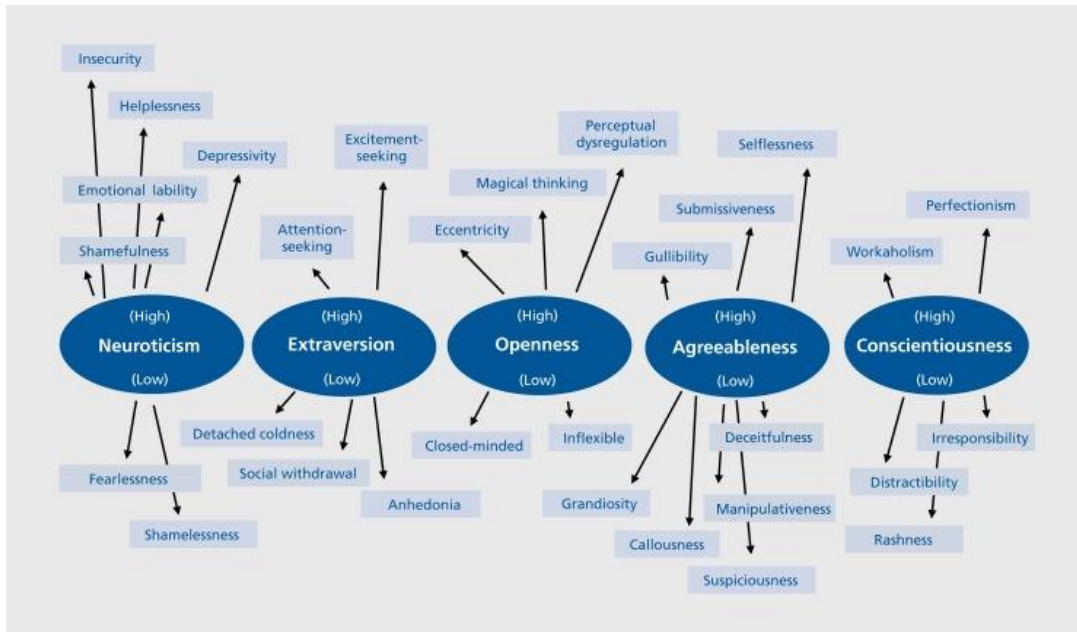


Figure 1.2. Major Subdivisions of Personality(Taken from: Trull, Timothy & Widiger, Thomas. (2013). Dimensional models of personality: The five-factor model and the DSM-5. P. 140.)

1.7. Introversion

Introversion is widely regarded as a personality trait marked by its fondness of solitary, privacy, quietness, and reservedness. According to (Costa & McCrae, 1992), “introversion is defined as the opposite of extraversion, with introverted individuals being more reserved, solitary, and thoughtful than their extraverted counterparts.”

In her New York Times best-selling book, *Quiet* (2012), Susan Cain identifies those who possess this personality variable as individuals who “tend to listen more

than they talk, they think before they speak, and often feel as if they express themselves better in writing than in conversation”.

1.7.1. Introvert Personality Traits

Laney (2002.P. 19) points out that “the strongest distinguishing characteristic of introverts is their energy source: Introverts draw energy from their internal world of ideas, emotions, and impressions”. Those who are introverted frequently tend to be into themselves and concentrate, diving in their own ideas, emotions, and moods. On top of that, Tieger&BarronTieger (1995) also reinforces the idea that introverts are often featured by their ability for private reflection and an eagerness to comprehend a situation before taking part in it. They could be easily overstimulated by unfamiliar ideas and strange situations.

In order to absorb, reflect, and process the new knowledge, introverts require and demand time away from the external world (Laney, 2002). In group situations, like during a classroom discussion or at an office meeting, introverts may look reluctant to share their ideas, but this may be because they need to take time away from the group to completely develop these ideas first (Cain, 2012). Introverts may appear hesitant to speak up in group settings, such as during a discussion in class or at a business conference, but this might be simply because they need time alone to fully develop and express their thoughts (Cain, 2012).

When given the time and room to reflect, introverts are expected to have considerable thoughts. to their surroundings, Introverts may appear hidden or reserved, yet they are just social in distinctive ways (Laney, 2002). They usually enjoy spending time in smaller groups or one-on-one and would rather get comfortable with new people more gradually (Tieger& Barron-Tieger, 1995). Introverts, according to Kahnweiler(2013), process information within themselves, manage issues carefully, prevent from showing their emotions, and maintain a calm demeanor. She summarizes the most significant five traits of introverts;

- Thinking before speaking is a familiar characteristic of introverts. They process things out before responding.

- They tend to dive deeply into issues and ideas before passing on to new ones.
- They are attracted to meaningful discussions rather than casual ones.
- They are more willing to write than talk. They communicate their ideas better and more effectively in writing.
- Those that are introverted like to spend time alone. They require this kind of time to recharge because they get energized from solitude and they frequently become burned out by other people.

More details are given by Eysenck & Eysenck (1964, P.8):

The typical introvert is a quiet retiring sort of person, introspective, fond of books rather than people; he is reserved and distant except to intimate friends... He does not like excitement, takes matters of everyday life with proper seriousness...

The Introvert traits	The Extrovert traits
<ul style="list-style-type: none"> • Gentle 	<ul style="list-style-type: none"> • Assertive
<ul style="list-style-type: none"> • Mature 	<ul style="list-style-type: none"> • Dominant
<ul style="list-style-type: none"> • Like to be alone 	<ul style="list-style-type: none"> • Strong need for companionship
<ul style="list-style-type: none"> • Good listener 	<ul style="list-style-type: none"> • Talk rather than listen
<ul style="list-style-type: none"> • Like deep conversations 	<ul style="list-style-type: none"> • Like to entertain at parties
<ul style="list-style-type: none"> • Hang out with small groups 	<ul style="list-style-type: none"> • Like to be the middle of attention
<ul style="list-style-type: none"> • Like to focus at one thing at the time 	<ul style="list-style-type: none"> • Like to meet new people

<ul style="list-style-type: none"> • Think before they speak 	<ul style="list-style-type: none"> • Take fast decisions
<ul style="list-style-type: none"> • Prefer to express in writing 	<ul style="list-style-type: none"> • Do several things at the time

Table 1.2.exemplifying the introvert traits as presented in the book Quiet by Cain (2013, pp. 24-27).

1.7.2. Introverts Learning Style

According to Lawrence (1997), introverts are generally characterized by their visual and auditory senses in which they tend to prefer lecture formats. However, Yunita in her journal, "Learning Styles of Introvert and Extrovert Students in the English Learning Process" pointed out a certain study that was undertaken to investigate 47 students. The main objective behind it was to discover the favored learning styles by introverts and extroverts. The findings indicated that whenever introverted learners are in a team work, they are more often into the kinesthetic and auditory styles, and whenever they are in an individual work, they tend to use the auditory and tactical ones.

1.7.3. The Introvert in the EFL Classroom

Personality plays a significant and crucial part in foreign language learning. In the EFL classroom, introverted students usually remain quiet and may experience discomfort when engaging in group works or public speaking. They frequently tend to learn privately and autonomously rather than in a crowded environment. Based on an investigation done by Horwitz, Horwitz, and Cope (1986), Introverted learners "tended to be more anxious about foreign language learning, and their anxiety was related to several independent variables such as fear of negative evaluation, low level of participation in class, and lack of control over language output" (p. 128). It means that this type of learners is more likely to struggle in traditional EFL classrooms, especially when it comes to group projects or speaking activities. Thus, EFL teachers need to adopt certain learning strategies that facilitate the EFL learning process for them, this

includes, offering opportunities for the personal work and supporting participation through written tasks.

1.7.4. Stereotypes of Introverts in Classroom

Whenever the word “introvert” is mentioned, countless negative preconceptions and stereotypes tend to be pointed at introverts. It actually conveys several images in people's minds, this includes EFL teachers. Various studies have proved that EFL teachers often have stereotypes about inverted learners, which might impact their academic achievements. In line with a study done in China by Liu (2018), unlike the extroverted ones, introverted students may get less support and attention from their teachers. This is because introverts are viewed as having weak speaking skills as well as being less active in classroom participation. However, these stereotypes can eventually end up in teacher bias, in which teachers unknowingly favor and encourage only those who are extroverted. Therefore, it is important for teachers to take into account learners’ different personalities.

1.8. Introversion and Academic Achievement in EFL

Karen L. Sanzo in her article “Academic Achievement: Evidence-Based Strategies and Best Practices”, she defined academic achievement as “the degree to which a student has accomplished educational goals delineated by the instruction and learning process” (p.1). She adds on to outline how educational methods, student motivation, and environmental variables all have an influence on academic achievement..

When it comes to academic achievements, based on previous study, introverted learners have unique benefits that enable them to succeed academically. Chen and Chang (2014) state that introverts achieve better academically when they are exposed to activities that require deep thinking and analytical comprehension because they are more observant, pensive, and analytic. Furthermore, they are described to be self motivated and self oriented, that enhance their ability to remain concentrated and persistent despite the variety of challenges and struggles they face academically (Chen

and Chang, 2014). As a whole, when they get the appropriate support and encouragement, their academic accomplishment can be more enhanced.

1.8.1. Writing Ability

Academically speaking, writing is viewed as a challenging skill (Coudhury, 2013). Taking in account the fact, that English is a foreign language for learners, writing turns out to be no easy task for students to do. Rules of grammar (Tang, 2012), lack of vocabulary (Hiew, 2010), and spelling are regarded as major problems for both L1 and L2 learners (Tang, 2012),

The correlation between introversion and writing skill has been already investigated. Zainuddin (2015) states that there could be a possible link between introverted learners and their proficiency and performance in written skills. Numerous academics have proposed the hypothesis that introverted students are expected to perform better than extraverted ones. A major number of these researchers agree with Eysenck and Eysenck (1985) who state that introverted learners tend to be slower but more precise in compound cognitive tasks like writing in contrast to their extroverted peers. Additionally, Revola (2016) asserts that the thoughtfulness, the carefulness, and passivity of introverts lead to greater writing abilities. As demonstrated by Ellis (1994), the writing skill and the introversion trait are strongly linked.

However, it is important to mention that there are some statements that disagree with this hypothesis. That is to say, a number of researchers found out that there is no correlation between these two aspects. Less than half of the studies that explored the effect of introversion on "the linguistic task language," according to Strong's review, were not able to find a correlation between introversion and the linguistic task language. Also, based on Nejad, Bijami& Ahmadi (2012) statements, personality and writing skill have no significant link between them.

1.8.2. Written Tests

Testing takes a crucial part in the academic context; it enables teachers to determine learners' success or failure in a particular academic year. When evaluating

their learners to identify their weaknesses as well their strengths, teachers devote special attention to several language-related elements. Generally, teachers construct their tests in either a written or an oral form. There has been a lot of studies done on the relation between introversion and written tests. Researchers have found that introverted individuals tend to perform better on written tests than extroverted people (Schuldberg&Schuldberg, 2008). Based on an investigation done in the Journal of Personality Assessment, The study revealed that extroverted learners got anxious when taking a written test, whereas introverted ones showed more nervousness when passing a test orally. The researchers suggest that this may be due to the fact that introverts favor writing as a form of test and find it more comfortable to express their ideas freely and easily in writing than in speech (Forsyth, J. P., & MacLeod, A. K. 2012).

As Dzuka and Dalbert argued in their 2007 paper, "The relation between conscientiousness and academic achievement might be stronger for introverts due to their greater tendency toward self-reflection and persistence" (p. 5). In other words, introverts may be more likely to develop study skills and habits that foster long-term academic success, such as diligent reading, note-taking, and independent research.

1.9. Conclusion

In the previous chapter, we have put stress on introversion as a personality trait in the sense of a predictor of a learner's language learning, more precisely, the focus was put on academic achievements on written tests among EFL learners. Previous studies approve the correlation between these variables. Introverted learners tend to perform better in written tests than. Moreover, introverts are seen to be more self-reflective and have an analytical mindset, which helps them excel in written examinations.

Chapter Two:

Data Collection and Analysis

2.1. Introduction

2.2. The Sample of Population

2.3. The Research Method

2.4. Research Tools

2.5. Data Analysis

2.6. Discussion of the Results

2.6.1. Classifying Students into Extraverts and Introverts

2.6.2. Analysis of Students' Academic Achievement

2.6.3. Relationship between the Introversion Personality Variable and Written Tests

2.6.4. Relationship between Academic Achievement and Written Tests

2.6.5. Relationship between the Introversion Personality Variable and Academic Achievement in Written Tests

2.8. Discussion of the Main Findings

2.9. Limitation of the Study

2.10. Suggestions and Recommendations

2.11. Conclusion

2.1. Introduction

The second chapter of this research paper will mainly deal with the practical side of this study. The significance of this section lies in providing more evidence, in order to better comprehend the relation between the introversion trait and learners academic achievements on written tests.

The field-work is the core point of this chapter. It deals with the adapted methodology; particularly it provides more details regarding the aim of study, the method used, and the sample of population. It also discusses the data collection and results.

2.2. The Sample of Population

Ahmed Salhi University Center of Naama was chosen as the place to conduct this study, particularly, at the department of English. It seeks to target first year Master students (academic year 2022-2023) as the population of this study because they have spent, at least, four years of training and instruction at this university center. From this point forward, it is believed that they are completely conscious of their choices as students. They are also supposed to share their personal perspectives and views honestly, accurately, spontaneously, and without any reservations. In this regard, 25 out of 75 students, it is noteworthy that these students were chosen randomly.

2.3. The Research Method

In this current study, a quantitative method is used, requiring quantitative data tools, and statistical analysis of the findings. Research methodological scholar John W. Creswell sets out quantitative research as a strategy that places strong stress on collecting and interpreting numerical data in order to comprehend, explain phenomena, test hypotheses, and find the correlation between the research variables. The data obtained is typically through structured tools such as questionnaires or surveys. This kind of research aims to reach generalizations about a specific population. Mainly, the purpose behind using this method is to provide explanations, make predictions, and

connect dots. Such a research methodology is picked to look for objectivity and validity.

2.4. The Research Tools

The instruments of this study include a questionnaire devoted to 25 M1 students to explore their personality traits, and unveil the effect of their introversion on their academic performance.

“Questionnaire is any written instrument that presents respondents with a series of questions or statements to which they are to react either by writing out their answers or selecting from among existing answers.” (Brown 2001: 06). The goal behind using this instrument is to gather specific information directly from participants, as it can maintain objectivity and reduce potential bias.

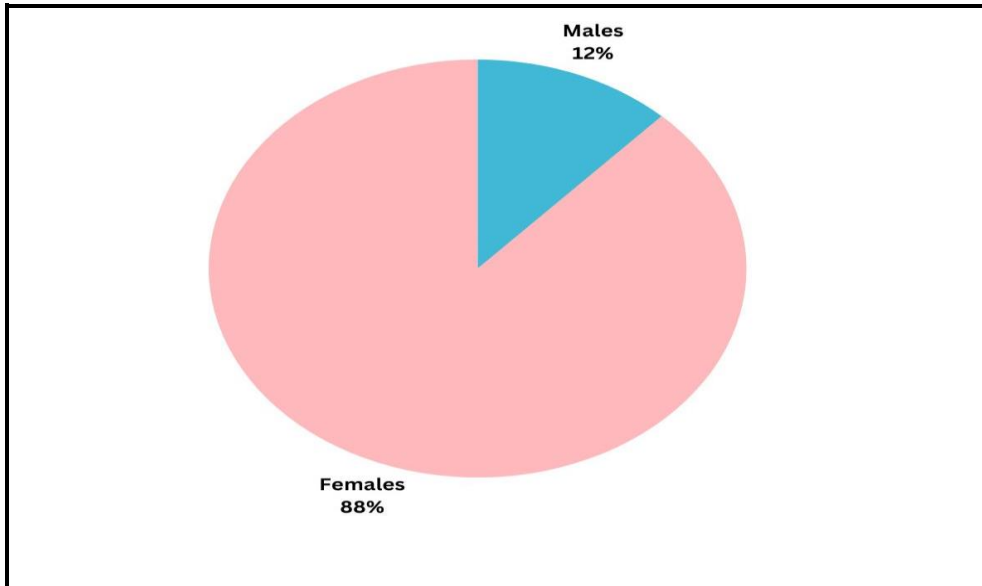
The questionnaire is used to investigate any connections between academic success and introversion. The researcher’s aim is to determine whether there is a connection between introversion and academic success through comparing the academic performance of the introverted and non-introverted students.

2.5. Data Analysis

In this given research, the quantitative approach is utilized to convey an analysis of randomly selected 25 students. The first section covers two questions about students' profiles. In addition to fifteen questions in the second section, there are two open questions at the third section.

Section One: Learner’s profile

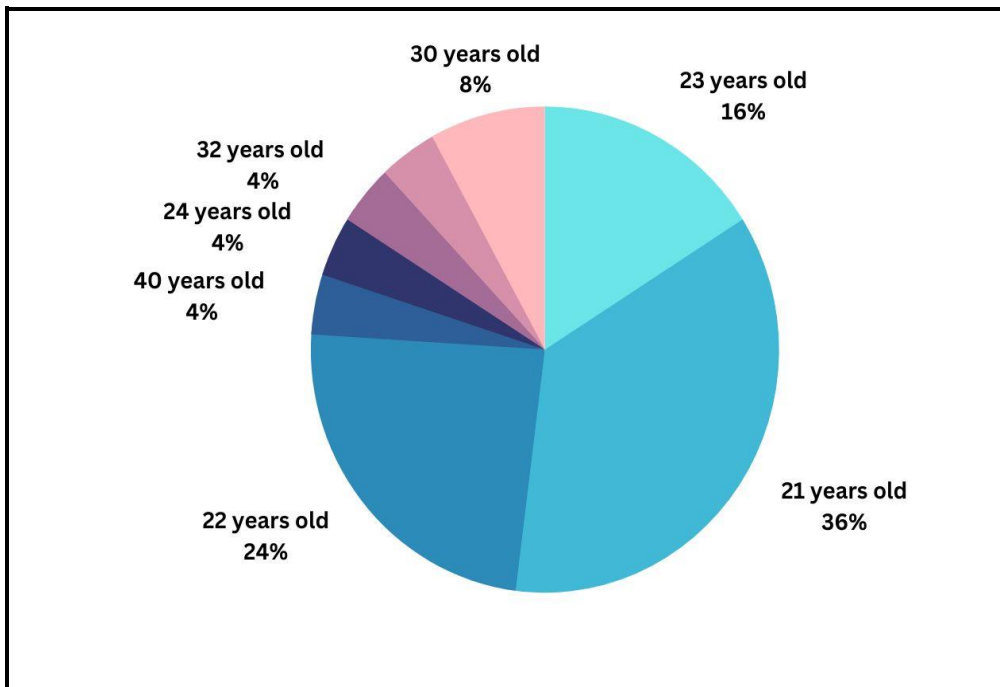
Gender: students who take part in this questionnaire are questioned about their gender, in order to acknowledge female participants from the male ones.



Pie chart 2.1.Distribution of Respondents by Gender.

As the pie chart indicates, 03 students representing 12% are male participants. Wherein, 22 students representing 88% are female participants.

2. Age: In order to know more details about the participants, learners are asked to share their ages on the questionnaire given.



Pie Chart 2.2.Age Distribution of Respondents.

By paying attention to this pie chart, it is noticeable that the majority of students are young adults. We can divide the age gap between students can be divided as follows:

- (21 - 24) representing the major age range among students.
- (30 - 32) are the minor age range among students.
- (40) is the least age range among students.

Section Two: Personality Traits and Academic Performance

Q1: Do you prefer spending your time alone or with others?

This close question aims to know about learners' tendency for social engagement. It aims to know whether students love to spend time alone or by company. 14 students (56%) out of 25 prefer to spend time alone which can be a sign for introversion, while the other 11 students (44%) prefer to stay in a company.

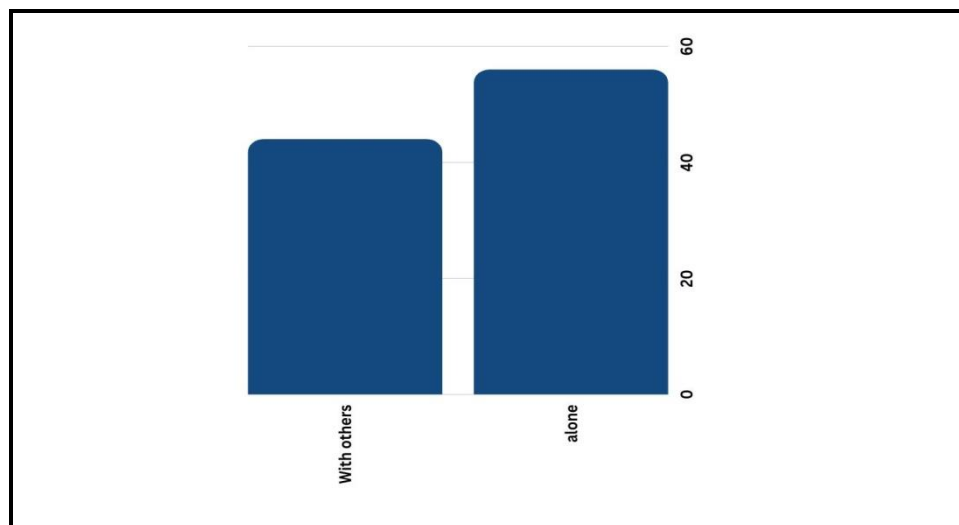


Diagram 2.1.Preference for Spending Time: Alone vs. With Others.

Q2: Do you feel exhausted after being around people for long hours?

This question helps to know whether the participating students tend to get drained or fatigue after socializing with others which is a characteristic of introverts. It can be concluded that the majority of students (60%) answered “yes” while the other answered “no”.

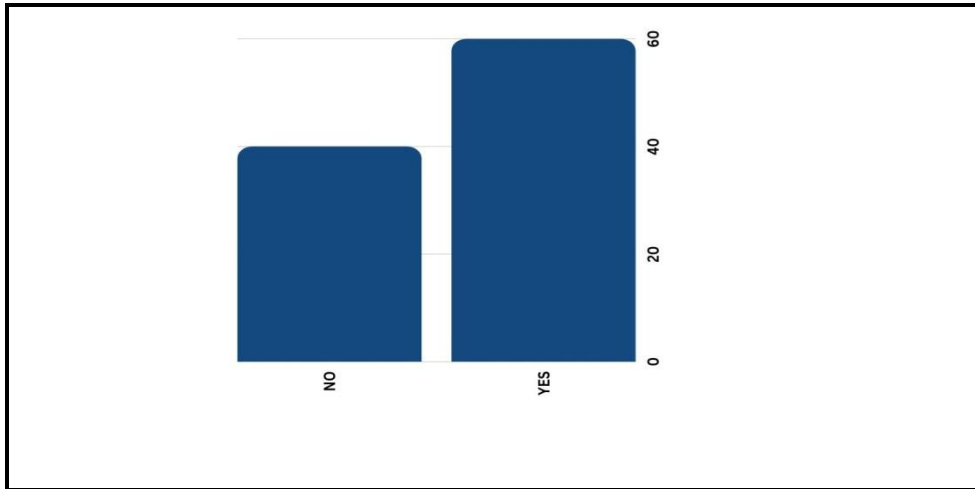


Diagram 2.2.Students' exhaustion

Q3: Would you rather go to a crowded place or stay home?

Regarding the fact that introverts are private and preserved individuals. This question helps to see if the students are the type of people that love being private and staying comfortable at home, or prefer being exposed to public places. The results revealed that 15 students prefer staying at home, while the rest s students show an interest in attending crowded gatherings.

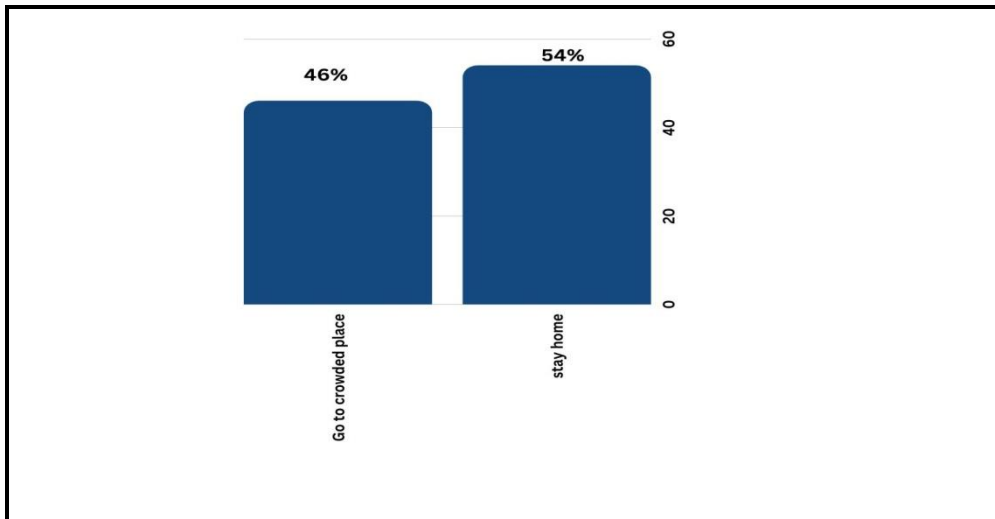


Diagram 2.3.Students' preference.

Q4: In a social gathering, does it take for you a long time to get comfortable?

Finding it easy in social gathering and loving to be surrounded with others are criteria of an extrovert person. Taking in consideration this item, then, those 15 students

60% who answer “yes” can be judged as introverts, whereas the rest are seen as extroverts with a percentage of 40%.

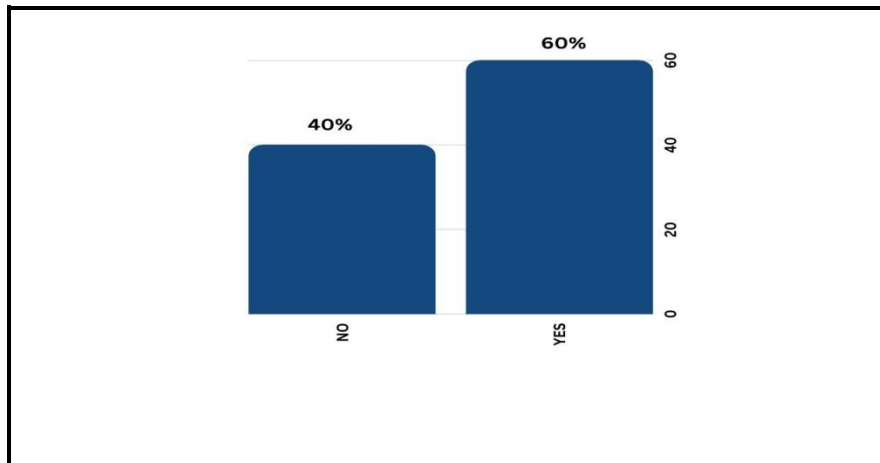


Diagram 2.4. Students' comfortableness.

Q5: In a gathering, do you start a conversation or wait to be approached?

This question aims to know whether the participant is social and initiates others or would rather wait for others to initiate. The latter is an introvert's preference. According to the results, the majority of students are introverts 60%, while the rest are extroverts 40%.

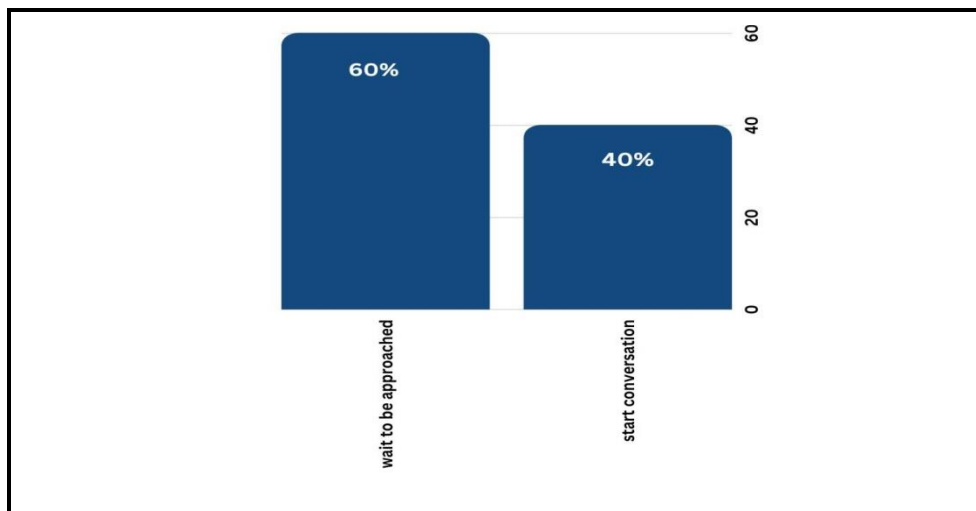


Diagram2.5. Approaching Conversations in a Group Setting.

Q6: Do you think you communicate freely and deeply with strangers or hardly talk to them?

This question helps to know about students' behavior in social settings with strangers. Those who find it hard in dealing with strangers are characterized as introverts. The results show that 14 students (56%) are regarded as introverts. While, the 11 students (44%) left are extroverts.

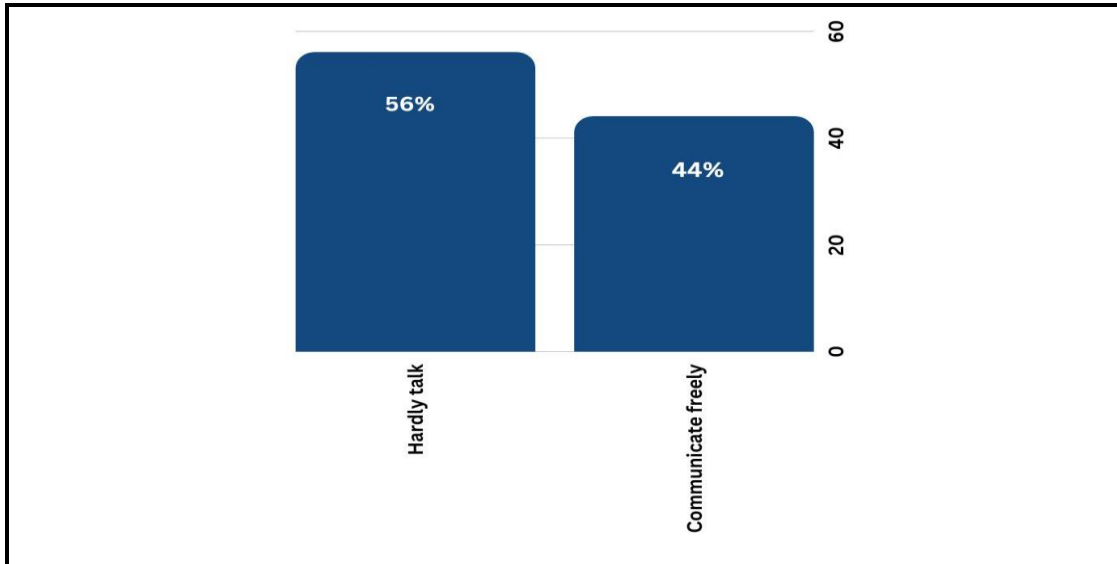


Diagram 2.6.Communication with Strangers: Comfort Level.

Q7: you recently met a new friend, how would they describe you? Sociable, chatty, and talkative or unsociable, calm, and reserved

This question tries to outline how the participants are regarded. If they tend to be described as sociable, chatty, and talkative; they are more likely extroverts. According to the results shown, 13 students (52%) are viewed as calm and reserved which means they are introverts, however, the rest (48%) are extroverts.

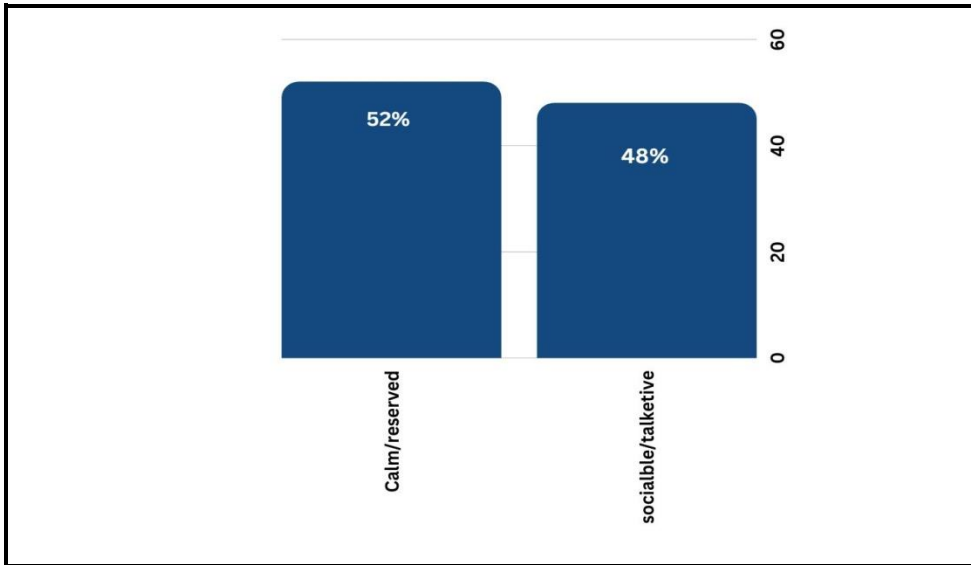


Diagram 2.7. Perception of Personality Traits in a New Friendship.

Q8: As a student, which one do you prefer? Working individuals or with a group of students?

An introvert is known for his preference of being independent in any given activity. Thus, the 14 students (56%) who claimed that they prefer individual work are introverts. The others who go for group work are extroverts

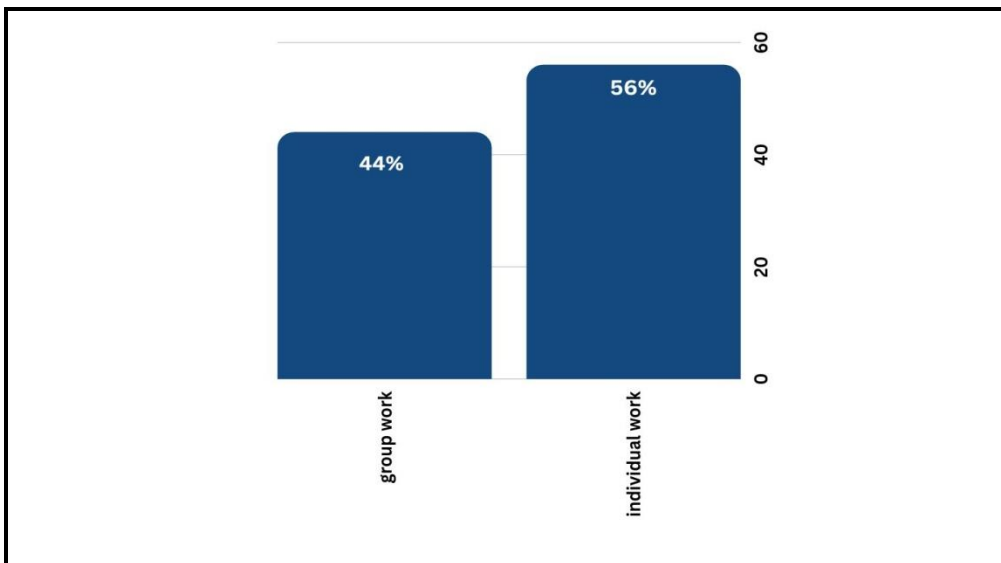
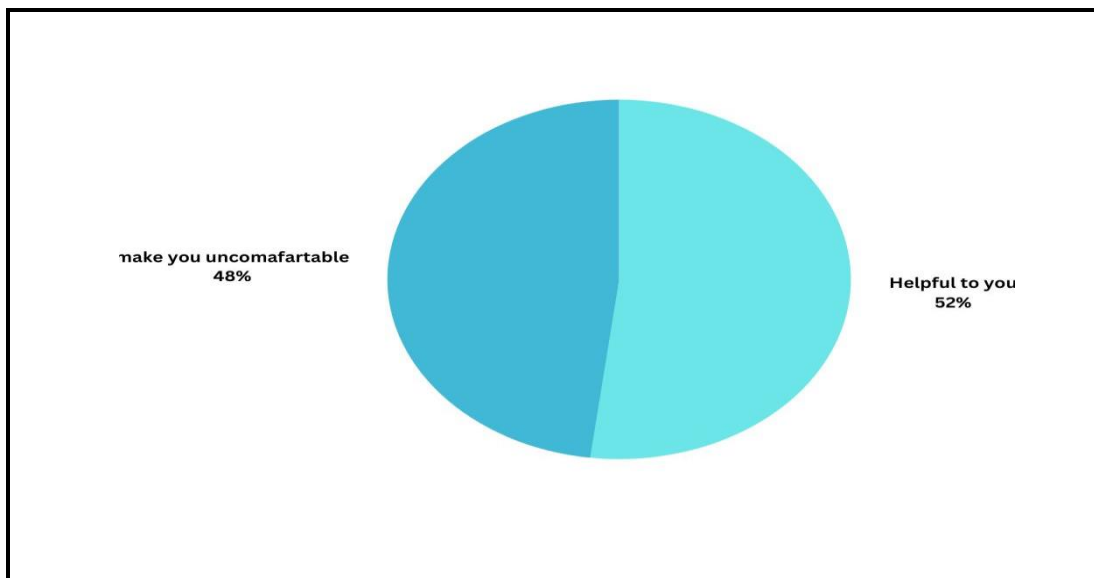


Diagram 2.8. Student Preferences for Collaborative Learning:
Individual vs. Group Work.

Q9: Do you think group discussions are helpful to you or make you uncomfortable?

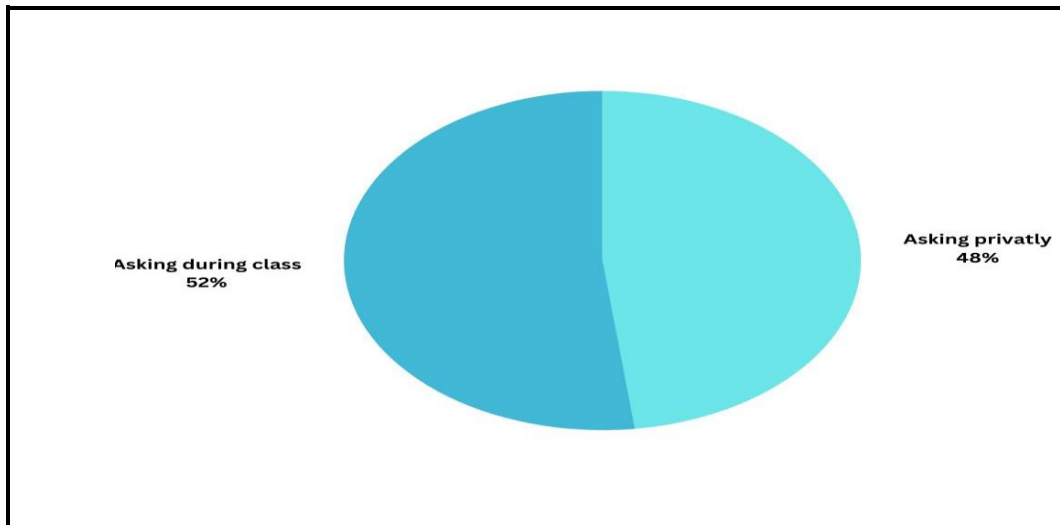
Those who love discussing and exchanging ideas with others in a group of people are extroverts. With a percentage of 52% consider group discussions as helpful, which indicate their extraversion. However, 48% of students are introverts because of their discomfort.



Pie chart 2.3. Responses on the Benefits of Group Discussions.

Q10: Which one do you prefer? Asking questions during the class or privately approaching the teacher?

A person who prefers discussing with his/her teacher privately is someone who is introverted. That is to say, the 52% individuals who favor asking questions during the class are extroverts. The 48% left are introverts.



Pie chart 2.4. Preferred Methods of Communication with the Teacher:
In-class Questions vs. Private Approach

Q11: Do you like taking part in class discussion or just observing?

The students who tend to just observe things out in class are definitely introverts. According to the results, 52% of students are observers, this criteria indicates their introversion. On the other hand, 48% love to take part in class discussion.

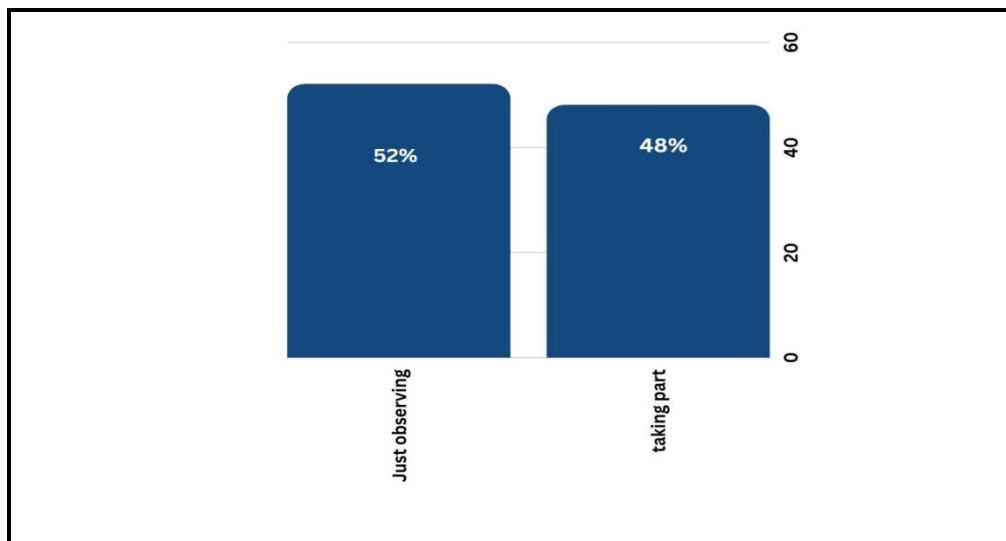


Diagram 2.10. Class Participation Preferences.

Q12: Do you enjoy making presentations or do you find them challenging?

This question aims to know about participants' feelings towards making a presentation in front of others. Students who struggle and find difficulty in public speaking are regarded as introverts. Thus, results show that 40% of students are introverts.

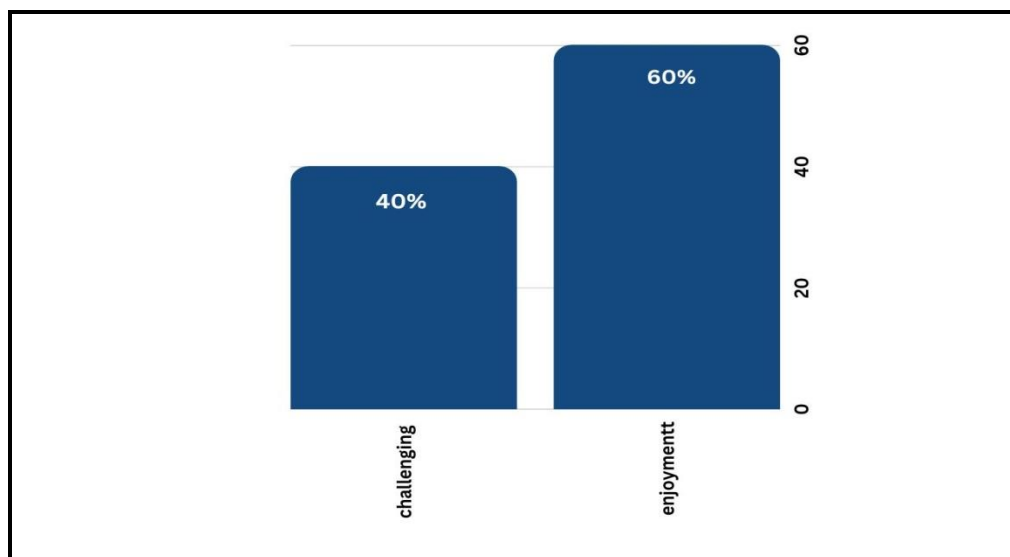


Diagram 2.11. Attitudes towards Presenting: Enjoyment vs. Challenge.

Q13: Do you find your academic achievement important to you? Justify your answer

The aim behind this question is to understand the significance of academic achievements. The majority of students agreed on the importance of AA. Some of students inserted justifications as follows:

“I want to prove myself”, “it helps me raise my self-esteem”

“It is my future” / “it will help me in future” “for my career”, “To get a job”

“It helps me develop my skills” “keeps me motivated”

Overall, most students justify their answer by focusing on the fact that their academic achievements can influence their future opportunities, as they consider it as

evidence of their skills and knowledge. These two factors can be seen as motivation that pushes them to care about it.

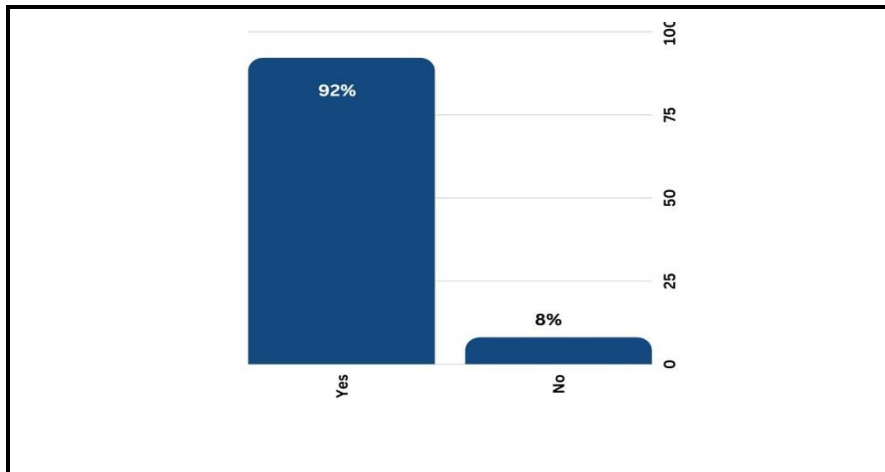
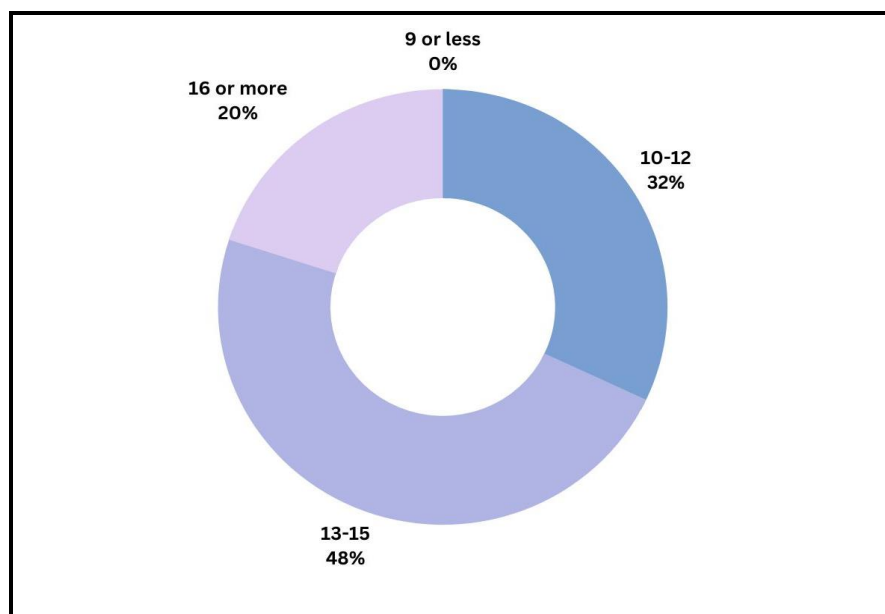


Diagram 2.12.Importance of Academic Achievement to Respondents.

Q13: How would you rate your academic performance?

In this question learners select the appropriate choice according to their academic performance. Students who score 13-15 are represented as 56% those who score 16 or more are represented as 24%, while 20% of students get 10-12.



Pie Chart 2.5.Rating of Academic Performance.

Q14: Do you perform better in written or oral tests? Justify your answer.

This question seeks to know whether students perform better in passing exams in a written or an oral form. According to the results, 72% of students believe that they do well in the written assessments. 28% of students believe that oral tests help them to perform better.

The 72% of students justified their answers as follows:

“I submit my information without any difficulty” “It is hard to master my knowledge orally” “not good enough in oral tasks”

“It is easier” “feel more comfortable expressing my thoughts via written way” “feel free and comfortable”

Most of the students' answers indicate that written tasks allow them to be free and comfortable which helps them in concentrating without feeling interrupted or disrupted by others. Also, it is important to note that these kinds of assessments reduce anxiety which enable learners to better express their ideas and thoughts as they have enough time to reflect and formulate their answers.

Section Three: Students' Perspectives

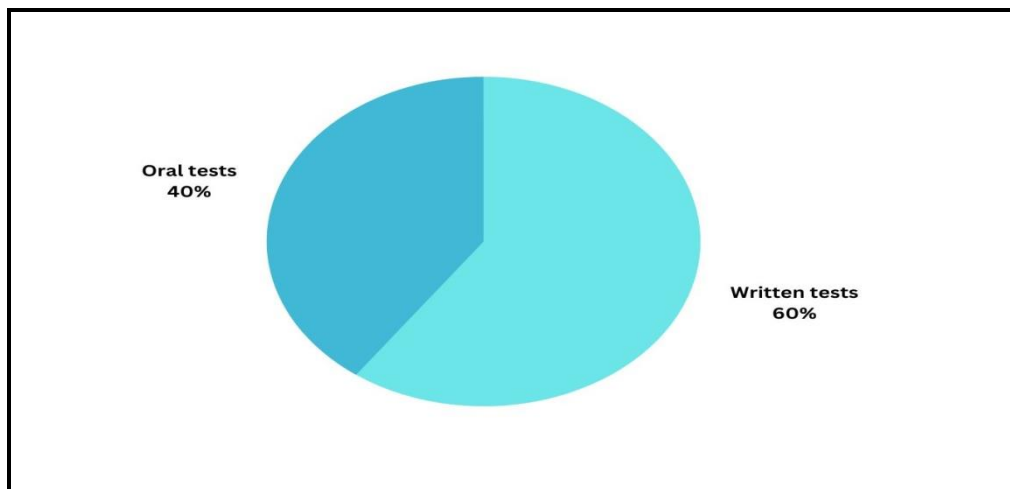
This section is composed of two main questions in which learners are asked to provide their opinions about teacher's impact in academic achievements, and suggest any possible recommendations for the Algerian education settings.

Q1: According to you, what is the impact of the teacher in enhancing students' academic achievements?

Most of those who answered generally stated that teachers play a crucial role in improving student's scores because they provide them with knowledge, guidance, and skills. When the teacher gives clear explanations, utilizes suitable teaching method, as well as provides feedback, academic results will be enhanced.

Q2: What steps should be taken to get the introverted students fit in the Algerian educational settings?

Some students think that it is important to give room for the introverted students through providing personalized learning techniques and opportunities for individual work. Teachers can play vital role in this though building a relationship with this type of students and supporting them that can help them feel comfortable and safe.



Pie chart 2.6.Comparison of Performance in Written and Oral Tests.

2.6 Discussion of the Results

In order to make general statements about the results that can tell whether this study assures the relation positively or negatively, the researcher interpreted the following points:

2.6.1. Classifying Students into Extraverts and Introverts

It is important to note that the purpose behind conducting the first 12 questions of section two is to distinguish introverted students from the extroverted ones. Participants were asked to select the suitable answer for them; their identification of personality type was ruled through a specific scoring. It works as follows:

- When the participant crosses off every answer that describes an introverted personality, (he/she got all the answers in accordance (12/12)). That demonstrates that this student is **extremely introverted**.
- When the number of answers that best describe introverts are more than six (06 >) then it is safe to state that this participant is **fairly introverted**.

- When the selected answers that represent introversion and extroversion are equal (6=6), it is fair to assume that this student is **balanced (Ambivert)**.
- When the participant crosses off every answer that describes an extroverted personality (12/12) this demonstrates that this student is **extremely extroverted**.
- When the number of answers that best describe extroverts are more than six (06 >) then it is safe to state that this participant is **fairly extroverted**.

The personality types were classified using this standardized method in accordance with a particular score rules, as giving in the bellow:

Table 2.1: Students' personality types

Items	N	%
Extremely introvert	5	20%
Fairly introvert	6	24%
Ambivert (balance)	2	08%
Fairly extroverted	6	24%
Extremely extroverted	6	24%

It is crucial to keep in mind that introversion can manifest itself in people who are either extremely introverted or only fairly so and same goes for extroversion. By clearing up this point, the researcher can divide the sample of population in accordance to their personality as follows:

- There are a total of 11 students who are typically introverted, making up 44% of the sample of the population.
- 46% (12 students) of the sample is composed of extroverted students.
- Students that are identified as ambiverts represent 08% of the sample.

These percentages of the mentioned personality types are presented in the following diagram.

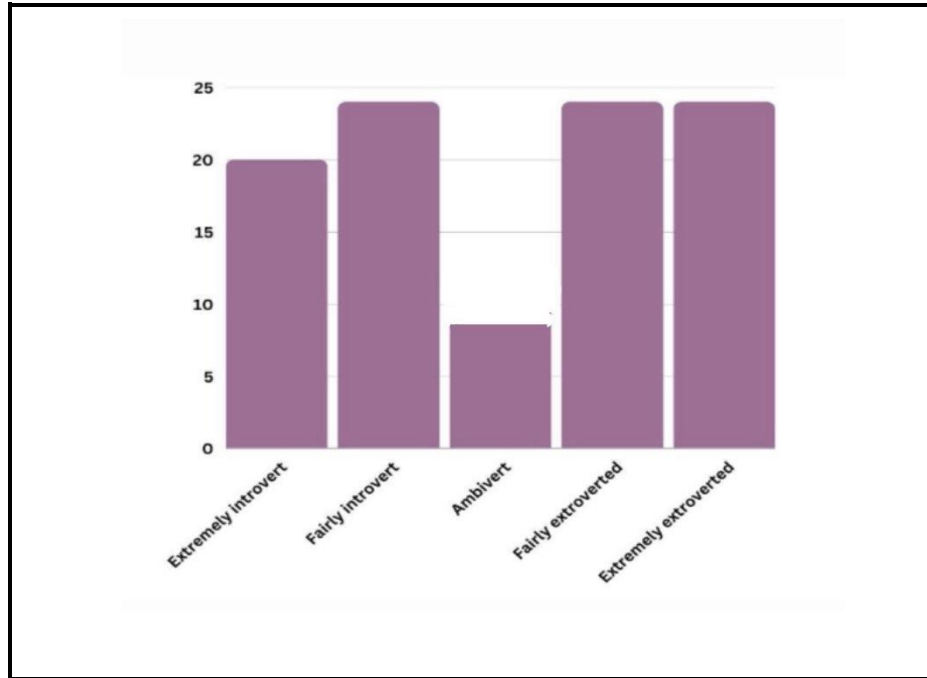


Diagram 2.13: Personality Types Frequencies.

2.6.2. Analysis of Students Academic Achievements in accordance with their personality type

In order to be more precise in this conducted research, the table below shows each student's academic achievements in accordance with their personality type that was done previously.

Students	Personality type	AA
S1	Fairly introvert	16 or more
S2	Fairly extrovert	13-15

S3	Extremely introvert	13-15
S4	Fairly introvert	13-15
S5	Fairly introvert	13-15
S6	Fairly introvert	13-15
S7	balance	13-15
S8	Extremely extrovert	10-12
S9	Extremely extrovert	13-15
S10	Fairly extrovert	10-12
S11	Extremely extrovert	10-12
S12	Extremely introvert	16 or more
S13	Fairly extrovert	13-15
S14	Fairly introvert	13-15
S15	Extremely introvert	16 or more
S16	Extremely extrovert	10-12
S17	balance	10-12
S18	Fairly extrovert	10-12
S19	Fairly extrovert	16 or more
S20	Fairly introvert	16 or more
S21	Extremely extrovert	10-12

S22	Extremely extrovert	13-15
S23	Fairly extrovert	10-12
S24	Extremely introvert	13-15
S25	Extremely introvert	13-15

Table 2.2. Students' Academic Achievements.

- 7 students were classified as introverts (either extremely or fairly) and their academic achievements rates ranged from 13 to 15.
- 4 students that were identified as introverts (either extremely or fairly) and their academic achievement rate ranges 16 or more.

2.6.3. Relationship between the Introversion Personality Variable and Written Tests

In order to understand the correlation between introversion and written test performance, as it is mentioned before, learners were asked to claim whether they perform better on written or oral tests. To specify more, each personality type is presented in the table below according to its greater test performance.

Students	Personality type	Better test performance
S1	Fairly introvert	written
S2	Fairly extrovert	written
S3	Extremely introvert	written
S4	Fairly introvert	written
S5	Fairly introvert	written
S6	Fairly introvert	written

S7	balance	written
S8	Extremely extrovert	written
S9	Extremely extrovert	oral
S10	Fairly extrovert	oral
S11	Extremely extrovert	written
S12	Extremely introvert	written
S13	Fairly extrovert	oral
S14	Fairly introvert	written
S15	Extremely introvert	written
S16	Extremely extrovert	oral
S17	balance	oral
S18	Fairly extrovert	oral
S19	Fairly extrovert	written
S20	Fairly introvert	written
S21	Extremely extrovert	written
S22	Extremely extrovert	oral
S23	Fairly extrovert	written
S24	Extremely introvert	written
S25	Extremely introvert	written

Table 2.3: Students' better test performance.

According to the results shown in the table, all of those who were classified as introverts tend to perform better in written tests rather than oral tests.

2.6.4. Relationship between Academic Achievement and Written Tests

Academic achievement and written tests are strongly related. It is important to highlight that academic achievement is always measured through multiple forms of tests, mainly written forms of tests. MI students are generally tested in a written format rather than oral tests. Therefore, the higher the score on the written test is, the higher academic achievement is.

2.6.5. Relationship between the Introversion Personality Variable and Academic Achievement in Written Tests

The purpose behind this study is to find out whether there is a correlation between students' introversion and their academic achievements in written tests. In case it does exist, is it positive or negative?. For this reason, more details and analyses were provided to connect dots between these different variables.

All in all, according to the previous findings, the researcher can sum up the following points:

- ✓ Introverts tend to perform well in the productive skill of writing, it might be because of their reflective and analytical character in the written materials that allow them get a higher academic scores.

To sum up, there is sufficient evidence to prove the suggested research hypothesis concerning the relationship between students' introversion and academic achievement in the written tests.

2.7. Discussion of the Main Findings

According to the research findings, there are 11 among 25 students who can be identified as **introverts** which make up 44% of the sample. After connecting dots with

their academic performance, it was confirmed that indeed they tend to have good to excellent academic performance.

This research demonstrates that EFL students' performance in written tests can be influenced by introversion dimension. Throughout the research, there was clear evidence that positively approved the correlation between these two variables. Thus, personality traits can predict academic accomplishments. According to prior research, introversion as a personality variable affects language learning (Robinson & Ellis, 2008). In addition to this, outcomes of studies reveal that introversion and cognitive skills are positively linked (Dewaele&Furnham, 2000; Gan, 2011; Siden, 2012).

However, this study was conducted to a limited number of students in a short period of time. This is why a further investigation is needed to indicate the effect between these two variables on a larger sample of students that can provide more accurate and reliable findings.

2.8. Limitation of the Study

There are numerous limitations and obstacles faced in studying the relationship between introversion and AA in written tests.

- ✓ First, there is no universally agreed upon definition of introversion that can be wholly adopted which makes things challenging in adjusting findings from different studies.
- ✓ Second, personality and its traits is a complicated concept to tackle that is why it is hard to underpin this factor as the only variable that affects AA.
- ✓ Third, knowing that there is a correlation between introversion and accomplishing higher grades does not indicate that being an introvert always leads to higher academic performance.
- ✓ Fourth, it is highly important to note that AA can be influenced by other variables, such as motivation, intelligence, and learning style. It is not easy to separate the effects of these variables from introversion.

- ✓ Fifth, this research may rely too largely on self-report measurements, which can be biased and misleading.
- ✓ Sixth, many students who participated in that given questionnaire provided incomplete and contradictory answers. This highlights the possibility that some participants picked answers at random.

2.9. Researcher Recommendations and Implications

Further investigation on the relationship between introversion and AA: this proposed study might inspire to investigate the link and the nature between these two variables. This may lead to a long term study, where participants are observed for an extended period to figure out if their level of introversion impacts their performance. This could include utilizing a larger sample size, different population, or distinct research methodology and tools.

Awareness and understanding: The study may also underpin the need to promote greater awareness and understanding of introversion among educators, parents, and students. This might include instructing individuals on the strength and challenges of introversion as a way to support introverted learners.

Personalized learning: there is a total need and necessity for personalized learning strategies that take into account introverted students' unique learning preferences and styles. For instance, giving students the chance to think, learn independently, or work in smaller groups.

2.10. Conclusion

In this chapter, the researcher introduced the data analysis and discussion aiming to investigate the theoretical underpinnings and foundations that were covered in the first chapter. In this respect, a quantitative method was utilized to reach this end. To be more precise, a quantitative research tool was used which is students' questionnaire. The findings, therefore, demonstrated that introversion do correlate linearly with the

performance of EFL students on written assessments. In conclusion, our alternative hypothesis was proven positively.

Over the years, many scholars have become interested in the correlation between introversion and academic achievements. Although earlier research has proven a strong relation between excellent academic performance and introverted personality, further investigation is needed to determine the extent of this relationship.

General Conclusion

This study was conducted to address the concern of introversion personality traits in EFL classes. The researcher focused on students' performance on written assessment, taking in consideration that mainly master students at Naama University Centre who are tested through written tests neglecting the oral skill. The main objective of this research, therefore, is to determine whether or not a correlation exists between introversion and learners' results in written exams.

Being aware of the fact that most prior studies concentrated at the impact of personality factors on SLA in general, the goal of this study was to look exclusively on how introverted students performed on written exams. A sample of population with 25 master 1 students was the core setting for the investigation.

This proposed work has been divided into two main chapters. The first chapter tackled mainly definitions, theories, concepts, background, and previous studies in relation to the aspect of personality generally, and specifically the introversion factor as an attempt to understand the connection between introversion and language learning. The second chapter dealt with the practical side of this study in which a questionnaire was utilized to first classify introverted students, and second to determine their academic performance.

The findings demonstrated that introversion do correlate linearly with the performance of EFL students on written assessments. In conclusion, our alternative hypothesis was proven positively.

Regarding the fact that this research has uncovered a number of intriguing findings, and based on the light of the data collected and analyzed, a few guidelines and recommendations are required to be outlined.

First and foremost, a longitudinal research design can be applied to track a person's academic achievements and level of introversion over a period of time. Through the application of this method, it will be possible to establish a direct link between being introverted and academic performance.

Future studies should take into account the size of the sample to provide more solid and reliable results because larger ones are projected to enhance the generalizability of the results.

It is also important to recommend the usage of qualitative research in which it will provide better understanding and reinforce the link between introversion and academic achievements.

The usage of technology and online devices has had remarkable influence all types of students specially those who are introverts. In this sense, technology provides them a safe and supportive environment to learn in which they feel free and comfortable without feeling overwhelmed or judged by others.

Therefore, the development of technology and online learning environments has had a tremendous effect on introverted students' academic performance and this was extremely obvious during the last COVID19 pandemic. Since they could join in discussions and ask questions without worrying about being rejected or criticized, introverted students find that online learning offers them a welcoming and encouraging learning environment. It would be intriguing to investigate how introverted students' academic performance have changed and evolved as a result of the development of technology and online learning environments.

It would be interesting if future research could dive into the impact of technology on introverted learners' performance. A future investigation should tackle the following question:

- What kind of influence does technology hold on the introverted learners' performance? And does it foster any positive studying habits on them?

Bibliography

Ahmetoglu, G., Leutner, F., & Chamorro-Premuzic, T. (2011). EQ-nomics: Understanding the relationship between individual differences in trait emotional intelligence and entrepreneurship. *Personality and individual differences*, 51(8), 1028-1033.

Al Shalabi, M. F., &SalmaniNodoushan, M. A. (2009). *Personality Theory and TESOL*. Online Submission, 3(1), 14-22.

Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review*, 11(2), 150–166. <https://doi.org/10.1177/1088868306294907>.

Ashton, M. C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review*, 11(2), 150–166. <https://doi.org/10.1177/1088868306294907>.

Barratt, E. S. (1995). History of personality and intelligence theory and research: The challenge. *International handbook of personality and intelligence*, 3-13.

Boroujeni, Ali &Roohani, Ali &Hasanimanesh, Asiyeh. (2015). The Impact of Extroversion and Introversion Personality Types on EFL Learners' Writing Ability. *Theory and Practice in Language Studies*. 5. 212. 10.17507/tpls.0501.29.

Brown, H. D. (2000). *Principles of language learning and teaching* (Vol. 4). New York: Longman.

Burney, S.M.Aqil&Saleem, Hussain. (2008). *Inductive and Deductive Research Approach*. 10.13140/RG.2.2.31603.58406.

Buss, D. M. (2008). Human nature and individual differences: Evolution of human personality. In O. P. John, R. W. Robins, & L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 29–60). The Guilford Press.

Cain, S. (2013). *Quiet: The power of introverts in a world that can't stop talking*. Crown.

Chang, H. J., Chen, W. X., Lin, E. C. L., Tung, Y. Y., Fetzer, S., & Lin, M. F. (2014). Delay in seeking medical evaluations and predictors of self-efficacy among

women with newly diagnosed breast cancer: a longitudinal study. *International journal of nursing studies*, 51(7), 1036-1047.

Choudhury, A.S. (2013). *Of Speaking, Writing, and Developing Writing Skills in English*.

Costa Jr, P. T., & McCrae, R. R. (1992). Four ways five factors are basic. *Personality and individual differences*, 13(6), 653-665.

Dewaele, J.-M., & Furnham, A. (1999). Extraversion: The unloved variable in applied linguistics research. *Language Learning*.

Dewaele, JM. (2010). Results: Attitudes towards Languages and Perception of Emotionality of Swearwords. In: *Emotions in Multiple Languages*. Palgrave Macmillan, London.

Dörnyei, Z. (2001). New themes and approaches in second language motivation research. *Annual review of applied linguistics*, 21, 43-59.

Dörnyei, Z. (2005). *The psychology of the language learner: Individual differences in second language acquisition*. Mahwah, NJ: Erlbaum.

Dörnyei, Z., & Skehan, P. (2005). Individual differences in second language learning. In C. Elder & A. Davies (Eds.), *Handbook of applied linguistics* (pp. 525-551). Blackwell Publishing.

Ellis, R. (1989). *Understanding second language acquisition* (Vol. 31). Oxford: Oxford university press.

Ellis, R. (1990). The definition of "language acquisition order" in second language acquisition research. *Studies in Second Language Acquisition*.12(4), 451-461.

Ellis, R. (2015). *Understanding second language acquisition 2nd Edition*-Oxford applied linguistics. Oxford university press.

Ewen, R.B. (2010). *An Introduction to Theories of Personality: 7th Edition* (7th ed.). Psychology Press. <https://doi.org/10.4324/9781315793177>

Eysenck, H. J. (1964). The measurement of personality: A new inventory. *Journal of the Indian Academy of Applied Psychology*, 1(1), 1-11

Feist, J., & Feist, G. J. (2006). Theories of personality.

Fillmore, C. J. (1979). On fluency. Individual differences in language ability and language behavior (pp. 85-101). Academic Press.

Flynn, J. R. (2007). What is intelligence?: Beyond the Flynn effect. Cambridge University Press.

Freud, S. (1915). The Unconscious (Standard Edition, vol. 14, pp. 159-190). London: Hogarth.

Goldberg, L. (1981). Language and Individual Differences: The Search for Universals in Personality Lexicons. In L. Wheeler (Ed.), Review of Personality and Social Psychology (pp. 141-165). Beverly Hills, CA: Sage Publication.

Grigorenko, E. L., & Sternberg, R. J. (1995). Thinking styles. International handbook of personality and intelligence, 205-229.

Haslam, N. (2007). Introduction to personality and intelligence. Sage.

Hiew, W. (2010). THE EFFECTIVENESS OF USING LITERATURE RESPONSE JOURNAL TO IMPROVE STUDENTS WRITING FLUENCY. Researchers World, 1(1), 27.

Hockenbury, D. H., & Hockenbury, S. E. (2003). Psychology. 3rd ed. New York, Worth Publishers.

Horwitz, E. K., Horwitz, M. B., & Cope, J. (1986). Foreign Language Classroom Anxiety. The Modern Language Journal, 70(2), 125-132. <https://doi.org/10.2307/327317>

Kendra Cherry. 2023. The Trait Theory of Leadership. Verywell Mind. <https://www.verywellmind.com/trait-theory-of-personality-2795955>.

Klein, S. P., Kuh, G., Chun, M., Hamilton, L., & Shavelson, R. (2005). An approach to measuring cognitive outcomes across higher education institutions. Research in Higher Education, 46, 251-276.

Laney, M. O. (2002). The introvert advantage: How quiet people can thrive in an extrovert world. Workman Publishing.

Lapsley, Daniel & Ste, Paul. (2012). Id, Ego, and Superego. *Encyclopaedia of Human Behavior*. 10.1016/B978-0-12-375000-6.00199-3.

Liu, J., Bullock, A., Coplan, R. J., Chen, X., Li, D., & Zhou, Y. (2018). Developmental cascade models linking peer victimization, depression, and academic achievement in Chinese children. *British Journal of Developmental Psychology*, 36(1), 47-63.

Maltby, John & Day, Liz & Macaskill, Ann. (2010). *Personality, Individual Differences and Intelligence*.

Mankar, J., & Chavan, D. (2013). Differential aptitude testing of youth. *International Journal of Scientific and Research Publications*, 3(7), 1-6.

Matthews, G., Deary, I. J., & Whiteman, M. C. (2003). *Personality traits* (2nd ed.). Cambridge University Press.

McCrae, R. R., & Costa, P. T. (2003). *Personality in adulthood: A five-factor theory perspective*. Guilford Press.

Nazimuddin, S. K. (2014). Computer assisted instruction (CAI): A new approach in the field of education. *International Journal of Scientific Engineering and Research (IJSER)*, 3(7), 185-188.

Nejad, A. M., Bijami, M., & Ahmadi, M. R. (2012). Do personality traits predict academic writing ability? An EFL case study. *English Linguistics Research*, 1(2), 145-152.

Norman, W. T. (1963). Toward an adequate taxonomy of personality attributes: Replicated factor structure in peer nomination personality ratings. *The Journal of Abnormal and Social Psychology*, 66(6), 574-583.

Orzechowski, J. (2010). Working memory capacity and individual differences in higher-level cognition. *Handbook of Individual differences in cognition: Attention, memory, and executive control*, 353-368.

Oxford, R. L. (2008). Hero with a thousand faces: Learner autonomy, learning strategies and learning tactics in independent language learning. *Language learning strategies in independent settings*, 33, 41.

Ożańska-Ponikwia, K. (2018). *Personality and emotional intelligence in second language learning*. Cambridge Scholars Publishing.

Paul, D. T., & Barron-Tieger, B. (1995). *Do What You Are: Discover the Perfect Career for You Through the Secrets of Personality Type*.

Pritchard, A. (2009). *Ways of learning: Learning theories and learning styles in the classroom* (2nd ed.). London: David Fulton Publishers.

Revola, Y. (2016). THE ANALYSIS OF TERTIARY EFL STUDENTS PROBLEM ON ENGLISH SPEECH. *Proceedings of ISELT FBS UniversitasNegeri Padang*, 4(2), 458-467.

Schultz, D. P., & Schultz, S. E. (2016). *Theories of personality*. Cengage Learning.

Shavelson, R. J., Roeser, R. W., Kupermintz, H., Lau, S., Ayala, C., Haydel, A., ...&Quihuis, G. (2002). Richard E. Snow's remaking of the concept of aptitude and multidimensional test validity: Introduction to the special issue. *Educational Assessment*, 8(2), 77-99.

Shi, H. (2017). Learning strategies and classification in education. *Institute for Learning Styles Journal*, 1(1), 24-36.

Singleton, D. (2017). Language aptitude: Desirable trait or acquirable attribute?. *Studies in Second Language Learning and Teaching*, 7(1), 89-103.

Swami, V., Chamorro-Premuzic, T., Snelgar, R., &Furnham, A. (2011). Personality, individual differences, and demographic antecedents of self-reported household waste management behaviors. *Journal of Environmental Psychology*, 31(1), 21-26.

Swami, V., Chamorro-Premuzic, T., Snelgar, R., &Furnham, A. (2011). Personality, individual differences, and demographic antecedents of self-reported household waste management behaviors. *Journal of Environmental Psychology*, 31(1), 21-26.

Tang, J. (2012). An empirical study on the effectiveness of the lexical approach to improving writing in SLA. *Journal of Language Teaching and Research*, 3(3), 578.

Torrance, E.P., Rockenstein, Z.L. (1988). Styles of Thinking and Creativity. In: Schmeck, R.R. (eds) Learning Strategies and Learning Styles

Trull, Timothy & Widiger, Thomas. (2013). Dimensional models of personality: The five-factor model and the DSM-5. P. 140

White, C. (2008). Language learning strategies in independent language learning: An overview. Language learning strategies in independent settings, 3-24.

Zuckerman, M. (2003). Biological bases of personality. In T. Millon & M. J. Lerner (Eds.), Handbook of psychology: Personality and social psychology, Vol. 5, pp. 85–116). John Wiley & Sons, Inc.. <https://doi.org/10.1002/0471264385.wei0504>

Appendices

Appendix 1:

Students' Questionnaire

Students' Questionnaire:

Dear Participants,

This questionnaire aims to investigate the relationship between personality traits, specifically introversion, and academic achievement on written tests. While there is research indicating a correlation between introverted personalities and higher academic achievement, there are still many unanswered questions in this area of study. By completing this questionnaire, we hope to gain a better understanding on this aspect. Your participation is voluntary and any information you provide will be kept strictly confidential. Thank you in advance for taking the time to participate in this study.

Section One:

1. Specify your gender:
 Male Female
2. Age:
----- years old.

Section Two:

1. You prefer spending your time:
 alone with others
2. Do you feel exhausted after being around people for long hours?
 Yes No
3. Would you rather go to a crowded place or stay home?
 go to a crowded place stay home
4. In a social setting, does it take for you a long time to get comfortable?
 Yes No
5. In a gathering, you:
 Start conversation wait to be approached
6. Do you think you:
 communicate freely and deeply with strangers
 hardly ever talk to strangers
7. You recently met a new friend. How would they describe you?
 Sociable, talkative, chatty.
 unsociable, calm, reserved.

8. As student, which one do you prefer:
 Working individually with a group of students
9. Do you think group discussions are:
 helpful to you. make you uncomfortable.
10. Which one do you prefer:
 asking questions during the class.
 privately approaching the teacher later on.
11. Do you like:
 taking part in class discussions just observing
12. You do:
 enjoy making a presentation. Find presentations challenging.
 Do you find your academic achievements important to you?
 Yes No
- Justify your answer:

13. How would you rate your academic performance?
 9 or less 10-12 13-15 16 or more
- Do you perform better in:
 written tests. Oral tests.
- Justify your answer:

Section three:

1. According to you, what is the impact of the teacher in enhancing students' academic achievements?

2. What steps should be taken to get the introverted students fit in the Algerian educational settings?

Appendix 2:

“An exemplified questionnaire response of an introverted student”

Students' Questionnaire:

Dear Participants,

This questionnaire aims to investigate the relationship between personality traits, specifically introversion, and academic achievement on written tests. While there is research indicating a correlation between introverted personalities and higher academic achievement, there are still many unanswered questions in this area of study. By completing this questionnaire, we hope to gain a better understanding on this aspect. Your participation is voluntary and any information you provide will be kept strictly confidential. Thank you in advance for taking the time to participate in this study.

Section one:

1. Specify your gender:

Male Female

2. Age:

22 years old.

Section Two:

1. You prefer spending your time:

alone with others

2. Do you feel exhausted after being around people for long hours?

Yes No

3. Would you rather go to a crowded place or stay home?

go to a crowded place stay home

4. In a social setting, does it take for you a long time to get comfortable?

Yes No

5. In a gathering, you:

Start conversation wait to be approached

6. Do you think you:

communicate freely and deeply with strangers
 hardly ever talk to strangers

7. You recently met a new friend. How would they describe you?

Sociable, talkative, chatty.
 unsociable, calm, reserved.

8. As student, which one do you prefer:
 Working individually with a group of students
9. Do you think group discussions are:
 helpful to you. make you uncomfortable.
10. Which one do you prefer:
 asking questions during the class.
 privately approaching the teacher later on.
11. Do you like:
 taking part in class discussions just observing
12. You do:
 enjoy making a presentation. Find presentations challenging.
- Do you find your academic achievements important to you?
 Yes No

Justify your answer:

because it will help me in future, maybe in my working career

13. How would you rate your academic performance?
 9 or less 10-12 13-15 16 or more

Do you perform better in:
 written tests. Oral tests.

Justify your answer:

because I find myself more comfortable than talking

Summary

The present research centers on the theme of introversion and academic achievements. More precisely, this study aims to investigate the relationship between introversion and academic achievements among EFL learners at Salhi Ahmad university center of Naama. It seeks to target first year master students; ultimately, this dissertation hopes to provide insights for educators that will eventually reshape the educational environment for better.

Key words: introversion, academic achievements, EFL learners.

المخلص

يركز البحث الحالي على موضوع الانطواء والإنجازات الأكاديمية. بتعبير أدق، تهدف هذه الدراسة إلى التحقيق في العلاقة بين الانطواء والتحصيل الأكاديمي بين متعلمي اللغة الإنجليزية كلغة أجنبية بالمركز الجامعي أحمد صالح بالنعامة، بالتحديد في قسم اللغة الإنجليزية. ويسعى إلى استهداف طلاب السنة الأولى ماستر. في نهاية المطاف، تأمل هذه الأطروحة تقديم رؤى للمدرسين من شأنها تعيد تشكيل البيئة التعليمية للأفضل.
الكلمات المفتاحية: الانطواء، التحصيل الأكاديمي، متعلمي اللغة الإنجليزية كلغة أجنبية.

Résume:

La recherche actuelle se concentre sur le thème de l'introversion et de la réussite académique. Plus précisément, cette étude vise à étudier la relation entre l'introversion et les résultats académique chez les apprenants d'anglais comme langue étrangère. Le centre universitaire Ahmed Salhi de Naama a été choisi comme lieu pour mener cette étude, en particulier dans le département de langue anglaise. Il vise à cibler les étudiants de première année de master. En fin de compte, cette thèse espère fournir aux éducateurs des idées qui finiront par remodeler l'environnement éducatif pour le mieux.

Mots-clés: l'introversion, résultat académique, les apprenants d'anglais comme langue étrangère.