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**PERSONALITY TYPES AS PREDICTORS OF
ACADEMIC PERFORMANCE IN ORAL
EXPRESSION COURSES**

Dissertation submitted to the Department of English Language and Literature as
a partial fulfillment of the requirements for the degree of Master in Didactics

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DEDICATIONS

This work is, first and foremost, dedicated to my loving parents, without whom none of this would have been possible.

To my siblings who encouraged me through every step of the way.

To my friends and to my colleagues

To all those who participated and contributed in this humble work.

To all those who taught me and made me what I am today.

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In the Name of Allah, the Most Beneficent, the Most Merciful. All the praises be to Allah, for it is he who has guided and aided me through not only this work but the entirety of my life. I would also like to extend my deepest and most sincere gratitude to my supervisor .

Abstract

It is commonly argued that, even with similar background, experience and environment, language learning varies greatly from one student to another. Several factors can cause this variation, and among them is personality. This study explores and attempts to describe the relationship between personality types and the academic performance of English as a Foreign Language (EFL) students. A shortened version of the MBTI personality test was administered to 21 first year students from Dr. Moulay Tahar University in Saida to determine their personality types. 11 (52%) of them were introverted and the most frequent type was ESTJ (5). As for the functions, sensors and thinkers greatly outnumbered intuitives and feelers with staggering percentages of 85% and 71% respectively. After gathering and sorting students' grades. Pearson correlation formula was used to determine if a relationship exists between types and academic performance. Results show that there is a positive correlation between introversion and academic performance and a negative one for extroversion.

Keywords: Personality, academic performance, EFL, introversion, extroversion

List of Abbreviations

EFL: English as a Foreign Language

L2: Second Language

MBTI: Myers-Briggs Type Inventory

AP: Academic Performance

ANS: Autonomic Nervous System

List of Figures

Figure:	Page
2.1. Energy Orientation and Cerebral Arousal	10
2.2. Three levels of uniqueness in human mental programming	10
2.3. Jungian Cognitive Functions.....	15
3.1. Gender of participants in the personality test.....	33
3.2. General tendencies of participants.....	35
3.3. Variation degree of scores.....	36
3.4. Distribution of basic cognitive functions (Sensing and Intuition).....	37
3.5. Distribution of basic cognitive functions (Feeling and Thinking).....	38
3.6. Type frequency.....	38

List of Tables

Table :	Page
1.1. Factors responsible for individual differences in L2 learning.....	3
2.1. Jung's Cognitive functions and their learning styles.....	30
3.1. Differences Between Introverts and Extroverts in Oral Expression Grades.....	36

Table of Contents

Statement of Originality.....	II
Dedications.....	III
Acknowledgements.....	VI
Abstract.....	V
Table of Content.....	VI
List of Figures.....	VII
List of Tables.....	VII
Table of Contents.....	IX
General Introduction.....	1
1. Background of The Study.....	2
2. Statement of the Problem.....	4
3. Significance of the Study.....	4
4. Methodology and Instruments.....	5
4.1 Scope of the Study.....	6
4.2 Research Instruments.....	6
4.2.1 Myers-Briggs Type Indicator.....	6
4.2.2 Eysenck Personality Questionnaire.....	7
4.3 Population and Sampling.....	8
4.4 Limitations of the Study.....	8
Chapter One: Personality Types.....	9
1.1. Introduction.....	9
1.2. Introversion & Extroversion.....	9

1.3. Extroverted Attitude.....	11
1.4. Introverted Attitude.....	13
1.5. Neurotransmitters and General Types.....	13
1.6. Cognitive Functions.....	14
1.6.1 Judging.....	15
1.6.1.1 Thinking.....	15
1.6.1.2 Feeling.....	16
1.6.2 Perceiving.....	16
1.6.2.1 Sensing.....	17
1.6.2.2 Intuition.....	17
Chapter Two: Personality Types and Academic Performance.....	19
2.1. Introduction.....	19
2.2. Extroverted Attitude and Academic Performance.....	18
2.1. Extroverts and Impulsiveness.....	12
2.2. Extroverts as Risk Takers.....	21
2.3. Extroverts and Self-regulated Learning.....	21
2.4. Extroverts and Test Anxiety.....	21
2.3. Introverted Attitude and Academic Performance.....	22
2.1. Metacognition.....	22
2.2. Introversion and Creativity.....	23
2.3. Introverts and Class Participation.....	24
2.4. Learning Styles and Personality Types.....	26
Chapter Three: Research Findings and Discussion.....	32
3.1. Introduction	32
3.2. Participants.....	33
3.3. Instrument Presentation and Administration.....	34
3.4. Findings and Discussion.....	35

3.5 Conclusion.....39
General Conclusion.....40
References.....41
Appendix.....46

General Introduction

It is commonly argued that English is on the path of becoming a global lingua franca, this phenomenon remains uncharted and its repercussions are yet to be discovered (Crystal David, 1997). However, the world wide spread of English has conceived several dimensions to language learning, be it in a class setting or through frequent contact. No matter the way, the results speak for themselves, “only one fourth of all English users worldwide are native speakers, and most non-native speakers using English do so in the absence of native speakers” (Seidlhofer, 2011, p. 1). Surely, one can argue that English as a foreign language (EFL) has become more relevant and meaningful than it ever was. For EFL teachers, materials and resources are easily accessible and at their finest, and the development of new strategies, approaches and methods are the main focus of several researchers and academic communities. EFL learners, as well, reap the benefits, since most of them are already acquainted with the language and can easily find authentic use for it, a perk not many languages can offer in a foreign setting.

The relationship between language teaching and psychology is a relatively common belief, this branches off of the belief that each human is unique; That we are all different from one another in certain ways, be it skills, preferences, ideals or perspectives. Therefore, it is logical indeed to integrate psychology in the process of teaching. EFL teachers are no different, they use a handful of methods and approaches tailored to fit with several psychological factors, namely learning theories, learning styles and personality types. It is crucial to note that the degree to which these are used varies greatly and may even be non-existent, and even though the debate on how big of a difference these factors can make still continues, it is certain, however, that there is one indeed. Recent research shows that success in second language acquisition can not only be attributed to cognitive factors (Carroll, 1990) but also to other factors such as affective, motivational and personality (Ehrman, 1990).

1. Background of the Study

While learning theories and learning styles had had quite a fair share of research, personality types, however, are usually neglected and given little attention. A common assumption in works related to personality and language learning is that extroverts are better learners since they prioritize contact and hesitate less to speak and practice language. As logical as it may seem, studies rarely find results supporting this hypothesis. The affective domain has proven itself to be nothing short of a challenging field to conquer considering the uniqueness of the human mind and psyche.

In 1982, Busch conducted a study in Japan to test the hypothesis that extroverts are more proficient than introverts in English, 185 students (105 junior college students and 80 adult school English students) undertook a standardized English test, a personality test and an oral interview. Busch found that introverts performed better than their counterparts in the oral interviews, introverts' success in the oral interviews, according to Busch, was attributed to their lack of impulsiveness, meaning that they took time to comprehend and respond to the questions. Furthermore, Busch also found a positive correlation between extroversion and the time spent learning English for adult school students.

Badran (2001) also investigated the relationship between introversion/extroversion and English pronunciation accuracy with the addition of the gender aspect. The results showed that general personality types (Extroversion/Introversion) affect English pronunciation accuracy, and that extroverts' pronunciation was better than their counterparts.

Mansouri (2012) carried out a case study to determine if personality traits can predict academic writing ability, 30 EFL students were selected and filled the EPI (Eysenck Personality Inventory) questionnaire to determine their tendencies and were asked to write an essay. Mansouri found no significant relation between the students personalities and their academic writing proficiency.

In China, Gan (2011) also found no significant relation between personality types and L2 oral performance after analysing the oral performance of 39 female secondary school English students.

Dewaele and Furnham (1999) reviewed around 30 studies of personality and concluded: “Extraverts were found to be generally more fluent than introverts in both the L1 and L2. They were not, however, necessarily more accurate in their L2, which reinforced the view that fluency and accuracy are separate dimensions in second language proficiency” (p. 532)

A common interpretation of the variation between the results of the researches carried out in different parts of the world is that the impact of personality types on language learning is heavily influenced by several variables such as age, gender and culture (Busch, 1982; Badran, 2001; Gan, 2001).

Ellis (2008), attempted to explain the inconsistencies regarding the results of the conducted studies of the affective domain. He listed the key factors in individual difference studies and organized them in four categories; Abilities, propensities, learner cognitions about L2 learning and finally, learner actions. The factors listed in the four categories (See Table 1) can heavily affect the learning process and should be treated accordingly in research.

Category	Factors
Abilities	<ol style="list-style-type: none"> 1. Intelligence 2. Language Aptitude 3. Memory
Propensities	<ol style="list-style-type: none"> 1. Learning Style 2. Motivation 3. Anxiety 4. Personality 5. Willingness to Communicate
Learner Cognitions about L2 Learning	<ol style="list-style-type: none"> 1. Learner Beliefs
Learner Actions	<ol style="list-style-type: none"> 1. Learning Strategies

Table 1 : Factors responsible for individual differences in L2 learning (Ellis, 2008)

2. Statement of the Problem

‘Inconsistencies between feelings, thoughts, and behaviors are common enough to make us suspect that the mind is not a simple place’ (Funder, 1997, p. 4). Evidently, this applies to everyone, teachers and students alike, and depending on the approaches used, neglecting students’ personality may cause unwanted or unexpected results. For instance, an introverted student may not learn as effectively as his counterparts in group works or oral presentations, this may not only cause a plummet in his evaluation marks but could also affect his motivation and self confidence, and therein lies problem;

Q1 : Is there a relationship between the academic performance of extroverted and introverted students ?

Many teachers encourage self regulated learning and consider it as a sign of increased motivation, Introverts are most likely to lean toward it while extroverts may produce better results with class participation and oral exercises. These points highlight the differences between the two general types and ,therefore, introverts have may higher educational performance than their extroverted counterparts.

3. Significance of the Study

The way different cultures treat the behaviour of general personality types affects those behaviours and types accordingly. Algerians endorse and encourage both introverted and extroverted behaviours, some may lean more towards introvert qualities such as being taciturn, unimpulsive and unaggressive but still favor social facilitation over social inhibition. Teachers are mostly less reluctant towards extroverted behaviour and may favor introverts more in daily classroom activities but not during the learning process, where students are encouraged to take risks and actively seek productive and constructive interactions.

This study aims to clear ambiguities regarding general personality types and to shed light on learners who are misplaced or misaligned with their teachers and their choice of approaches and methods, as well as attempt to encourage teachers to place more emphasis on their students’ personalities and

their tendencies. Simply knowing the extroversion/introversion tendencies of learners may open up several new options for teachers to choose from. Evaluation, too, can be improved by knowing learner's personality type, by asking questions that suit their tendencies, teachers can evaluate learners without any affective hindrances or barriers.

It is also crucial to note that EFL learners may benefit from this study more than ESL learners. A clear distinction between the two would be that ESL learners are those who live in an English speaking country and are of mixed cultures and origins. EFL learners, however, are those who live in a country where English is foreign and not spoken outside the classroom, they also share the same cultural background and language (Krashen, 1997). ESL learners with introverted tendencies that prevent them from learning in class can practice English outside class in situations and with people they are comfortable with, and they generally feel less pressured when talking in class and do not need to take risks during classes. On the other hand, EFL learners can only practice English during class, a task that may seem too challenging for introverts inside classrooms and extroverts outside classroom. Therefore, it is crucial for teachers to put their students at ease and facilitate their learning experience, and their personalities can be key to reach that end.

4. Methodology and Instruments

Needless to mention, research is the most effective tool to discover and improve knowledge. Research can take many forms, this one in particular, is a descriptive one, a personality test based on the MBTI (Myers Briggs Type Indicator) was used as a main investigation tool. However, due to the lengthy nature of the MBTI test, the original 76 questions were significantly modified to fit the limits of the study. 18 questions that cover the 4 categories of the test; Introversion and extroversion, judging and perception, thinking and feeling and finally, sensing and intuition. The population was rather small for the sole purpose of pursuing detailed over generalized analysis.

4.1. Scope of the study

This study covers the individual differences of students and how teachers can make use of these difference to help students overcome their challenges and reach their optimum. Teachers can dive into the minds of their students in efforts to explain certain behaviours or actions. Academically, students' personalities constitute a large part of their performance. We may be able to predict the academic performance of a certain student simply by knowing their personality type. Research shows fluctuating results across the board, but data of this type is scarce at best in Algeria, and since the reason behind the inconsistencies in the results of previous works is the culture and background of the population, the results of this study may serve a significant purpose in future works.

4.2. Research Instruments

Psychometric assessments have come a long way, their reliability, practicality, and accessibility makes them a tool with an undeniable advantage for teachers.

Myers-Briggs Type Indicator (MBTI) :

After Jung's breakthrough in 1921, which is that the human behaviour that many considered to be completely unpredictable could be predictable by understanding mental functions and types. Katharine Briggs and her daughter, Isabel Briggs Myers, followed his tracks, thoroughly studied his theories and expanded them further. Their work, however, was more focused on the practicality of Jung's theory, which led to the development of a psychometric measurement tool called the Myers-Briggs type indicator (Myers & Myers, 1980).

The MBTI is an instrument that uses Jung's theory to determine one's personality, it measures individuals on four dimensions comprising of opposite pairs; Extroversion and Introversion (E-I), Sensation and Intuition (S-I), Thinking and Feeling (T-F) and finally Judging and Perception (J-P). There are 16 possible psychological types. For Instance, ISTJ would identify a person with introverted, sensing, thinking and judging attributes (Myers & McCaulley, 1985) .

The administered test in this study was a shortened version of the MBTI test, it consists of 18 questions that measure general type tendencies as well as cognitive functions. The first 10 questions measure extroversion and introversion while the rest is for the functions. A likert scale was implemented to scale answers, participants were asked to tick the box that corresponds the most to their degree of agreement, strongly agree is the highest score, which is five, neutral is three , and strongly disagree is the lowest score, which is one.

The first question determines the general energy orientation of the individual by asking whether they feel bored when alone or not. Positive answers will indicate extroversion or outward energy orientation. The same applies to the second, third and fourth questions. These question measure the conscious extroverted attitude, this includes being energetic, preferring to work in groups and talking more than listening in conversations. As for the introverted attitude, participants are asked whether they think first or speak first when talking, positive answers indicate introverted attitude. The sixth measures the unconscious introverted attitude of the individual by asking them if they enjoy staying at home or going outside. The seventh, as well, measure the type attitude by testing the ability to shout or yell out loud in public. The three remaining are a mix of introverted and extroverted attitude to eliminate inconsistency and increase reliability.

Eysenck Personality Questionnaire (EPQ):

The Eysenck Personality Questionnaire (EPQ) was developed in 1975 by Hans J. Eysenck, an influential personality theorist, and Sybil B. G. Eysenck. The self-report instruments is based on the Eysenck personality model, it measures two personality dimensions; Extroversion (E) and Neuroticism (N). However, a revised version was developed in 1985 to reduce the item number from 90 to 36 with the addition of the 'lie scale' (Eysenck & Eysenck, 1985).

Due to the lack of allotted time and resources, this test was not administered to the sample. Initially, the EPQ was meant to be used as a complementary tool to ensure reliability and versatility. Therefore, the decision to remove it does not affect the findings of the study.

5.3. Population and Sampling

20 first year students were randomly selected to take the personality test. Age and gender were not taken into consideration. What was, however, taken into consideration, is the groups in which they belonged. Their personalities will be compared to each other with their academic scores, that is why they had to be under the same teachers and take the same tests and lessons to ensure equal opportunities and conditions.

5.4. Limitations of the Study

Just as any other study, time has never been an ally to anyone. This study in particular suffered greatly from the short period of time in which it was conducted. Unfortunately, several compromises were taken to complete the study one of which was the aforementioned removal of the EPQ from the data collection process. Classroom observation, also, was planned at the beginning but time simply did not allow for it to happen. The personality test was not developed as well as it was expected, there was simply not enough time to implement a lie scale which would increase the reliability of the test by adding questions that are intentionally formatted in ways that lead to specific answers if the subject intends to fake or aim for an ideal response.

Although the affective domain has gained traction in the past few decades, resources remain sparse at best. However, this has served more as motivation than a limitation. Also, even though the small amount of the population was intentional, the students themselves were not in their best conditions, the only time available to administer the test was the week before exams, many of the students were absent or too busy to participate in the study.

Chapter 1:

Personality Types

1. Introduction

This chapter discusses the theoretical aspects of personality types and attempts to cover works done in the past few decades as well as describe the different behaviours and combinations of different types.

2. Introversion & Extroversion

Personality refers to the consistent display of behaviours or traits that may cause an individual to act in a specific manner that is more or less consistent (Chamorro-Premuzic, 2005), the premise of individual differences has been addressed in several studies over the past few decades, Dr. Carl Jung (1921) was the first to disassemble the puzzle of personality, he discovered two general personality types: Extroversion and Introversion. Extroverts focus their energy on their surroundings and often tend to interact with other people in contrast to introverts who focus their energy towards themselves and favor solitude in most cases. According to Jung these two types heavily impact general individual attitude in ways that could attract the attention of an uninitiated psychologist. Indeed, we often find ourselves describing extroverted individuals as “friendly, open, sociable, and serene” and introverted ones as “taciturn, impenetrable and often shy” (Jung, 1921 ,p. 1). A well supported theory, from a biological standpoint, is that extroverts have a weaker arousal (excitement) than introverts on the level of brain cortex. Evidently, extroverts seek stimuli from outside, which is also the direction they point their energy towards. Introverts, on the other hand, have higher cerebral arousal and do not need external stimuli as much as their counterparts, thus allowing them to direct their energy towards themselves (Eysenck, 1987; Wakamoto, 2009).

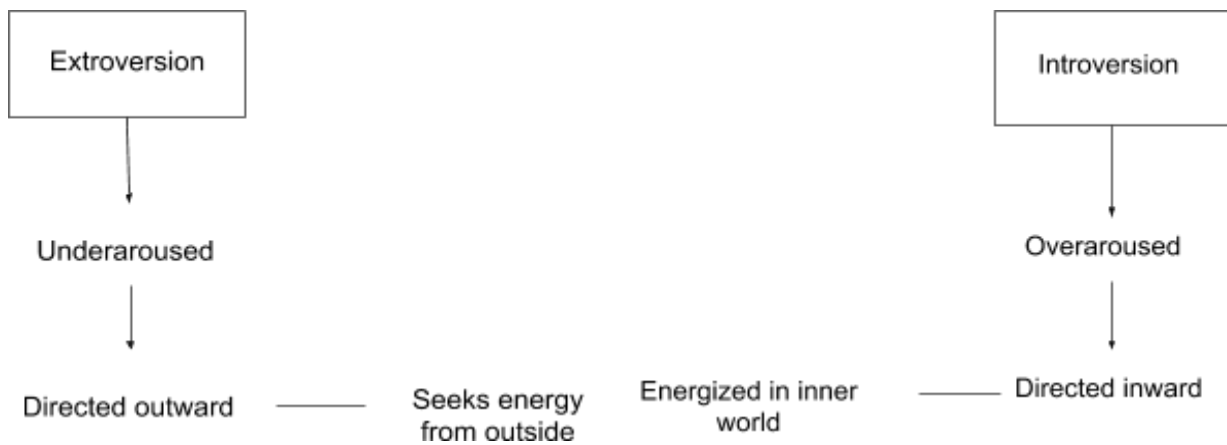


Figure 1.1. Energy Orientation and Cerebral Arousal (Wakamoto, 2009)

Several studies were conducted to measure the amplitude of brain waveform (P300). Introverts indeed had highly active brain activity in comparison to extroverts (Wilson and Languis, 1990; Ditraglia, 1991). Hofstede (1997) further simplifies the biological aspect of personality types and their relationship with social influences. According to him, our personality is very much affected by both social and biological influences, we share a common and universal human nature that is inherited and during our exposure to socio-cultural interaction we learn and nurture our personalities.

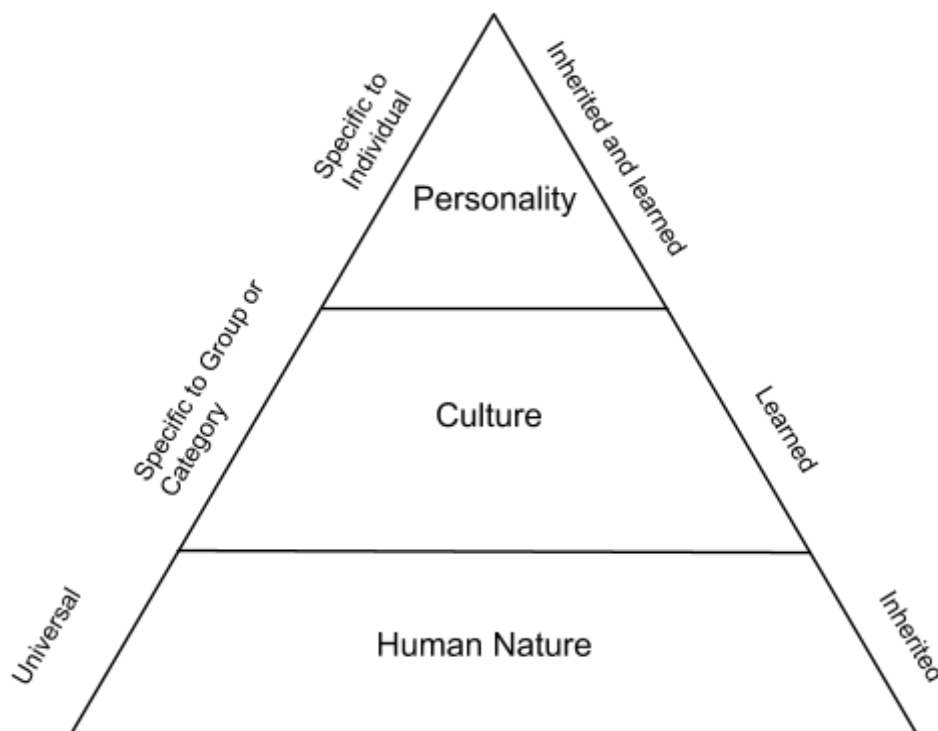


Figure 2.2. Three levels of uniqueness in human mental programming (Hofstede 1997. P, 6)

Hofstede's findings are crucial to psychometric studies such as this. Since human nature is universal, meaning that an introvert in Algeria should have the same amount of brain arousal as a Russian or Indian introvert, but cultural influences may cause a different behaviour and ultimately a completely different result between the two individuals. For instance, an extroverted individual living in a society where shyness and impulsiveness is preferred and rewarded, could be seen as an introvert by extroverts in different cultures and may not behave similarly.

3. Extroverted Attitude

When approaching any behaviour, one must consider the conscious and the unconscious psychology (Jung, 1921). However, before we dive into the type behaviour we must first establish a clear distinction between attitude and type (Jung, 1921) or traits and states (Chamorro-Premuzic, 2005).

According to Jung, we are all influenced by an object or objective data, that it to say that our responses come from outside influence. An object can be anything from weather to friends. One may wear a jacket to protect themselves from the cold weather while another may wish to harden themselves by bearing the cold. We cannot control the objects we come across, we cannot alter the objective data, we can only respond to them. For instance, if according to a certain experience we find that a certain decision may not produce any positive results, some would steer clear from such decision and seek out a new approach. While someone else may try the same thing over and over again and expect a different result. Now this is the realisation of how we process the objective data and how we use our subjective data. If we feel that our relationship and orientation with the objective and the object is the only option and we keep our subjective to a minimum, then we display an extroverted attitude. Extroverted types simply do this naturally, they consider the objective rather than the subjective and their behaviours are affected by outside influences. This leads to the underdevelopment of their inner selves since they do not rely on their subjective values and only seek answers and decisions from outside.

Premuzic (2005), as well, supports the idea that situations affect our behaviour more than we do, and the different behaviours we display are the product of the different states we go through during those situations. These

states are simply the sporadic behaviours we display and what most would consider to be moods, they may even be biological rather than psychological, ones such as hunger, procreational drives and aggression, others such as joy and anger, the states we go through for few hours at a time, may also serve a purpose in our exhibited behaviours. According to him, traits (types) are ‘conceptualized from a series of related states’ (p, 7).

Furthermore, the extroverted attitude is solely governed by prioritizing outside objects and their data. The determination process, as Jung described, comes to extroverts from outside, but that does not mean that they do not have any inner influence at all, just like any other human being, they do have subjective values of their own, but the frequency and chance of those values winning over the objective is significantly lower. Attention and interest can also influence extroverts’ behaviour, the determination process remains the same, but the actions they take are directly related to the object. Jung finds extroverts attention and interest to be peculiar in the way they match the conditions of the situation and its respective data. When an object piques the interest of an extrovert, their behaviour is usually recognizably related to it. And therein, however, lies the peculiarity. The behaviour is not a mere reaction but more of an adaptation, the uniqueness of the behaviour is, paradoxically, not from the subject but from the object.

Jung’s (1921) description of the relationship between the object and the subject is crucial to understanding personality types. ‘The relation between subject and object, considered biologically, is always a relation of adaptation’ (Jung, 1921. p, 3). This relation spans across every interaction between any given object and subject, even nature. From this we can see a dividing line being drawn between extroverts and introverts. Just like nature balances the survivability of species, some species have strong procreational abilities but much weaker defensive ones, while some have strong defensive mechanisms but they struggle with fertility. Humans, as well, are the same, extroverts seek interactions with objects to refuel their energy while introverts defend themselves and their energy from outside objects and focus on their inner selves.

Put simply, an extrovert’s attitude lies in his ability to easily fit into existing conditions, he ‘naturally pretends to nothing more than the satisfaction of existing objective possibilities’ (Jung, 1921. p, 5). Evidently, his actions are

basically what the objectives imply, he does not innovate or include his inner thoughts and values in his behaviour, he always remains within limits and boundaries set by the situation he is in and never transcends them, making his actions predictable to those surrounding him. On the other hand, an extroverted type may even be so caught up in his outside influence that he may neglect even the most influential subjective needs, his body. A very deep dive into the outside may cause several neuroses, namely hysteria, stress, anxiety and self-restriction.

These disorders are crucial for teachers to be aware of and to prevent them from hindering the learning process of extraverted types.

4. Introverted Attitude

As discussed in the present chapter, extroverts prioritize the object and its data over their own when taking action. Introverts, however, place their subjective views between the object and their action. Therefore, the action assumes a different character than the object or the conditions of the situation they are in (Jung, 1921).

Introverts' determination process is a never ending influence of the subject, it is always there and is consulted everytime an object stands out. However, the inner self is much more developed and complex than that of the extrovert, so much that it even has its own psychological structure. Jung considers the subjective factor as 'something that is just as much a fact as the extent of the sea and the radius of the earth' (p, 32). Its power is undeniable, but the same can be said for objects, since they affect subjects and force them to react. Introverted attitude dwells more into the unconscious which allows them to overcome the object's influence, that is why extroverts find it easier to explain their actions while introverts find it challenging to explain an act that is influenced by the unconscious (Jung, 1921).

5. Neurotransmitters and General Types

Recent studies show that differences between introverts and extroverts exist not only in how they behave but also in how their brains function (Marti, 2002). According to Dr. Marti, introverts are more sensitive to dopamine, a neurotransmitter that is responsible for the reward system in our brain. Dopamine is released when we experience risks or act and think quickly, the

underlying effects of this chemical are usually nothing more than temporary intense zaps of happiness and excitement. Thus, sensitivity to this chemical constitutes the level of the effect. Extroverts, also referred to as high novelty seekers, have lower sensitivity to dopamine which forces them to seek more of it by continually engaging in situations where it is released, while introverts (low novelty seekers) only require small amounts of it to make them satisfied and energized. However, too much dopamine makes them anxious, overstimulated and uncomfortable.

Introverts, on the other hand, use acetylcholine, another chemical used as a neurotransmitter, due to their tendency to use the parasympathetic side of the nervous system instead of the sympathetic one. The parasympathetic, one of the three divisions of the autonomic nervous system (ANS), is responsible for responses that decrease heart rate, relax muscles and stores energy. The sympathetic mode of the ANS is responsible for responses that release adrenaline, increase heart rate, increases oxygen levels and energize muscles with glucose. Needless to point out, introverts prefer and often use the parasympathetic mode while extroverts use the sympathetic mode. Therefore, introverts higher sensitivity allows them to enjoy the release acetylcholine released when in parasympathetic mode (Marti, 2002).

6. Cognitive Functions

Jung (1921), described four cognitive functions, thinking, feeling, sensing and intuition. These function belong to two different attitude types, rational (Judging) and irrational (Perception). These functions construct our personalities, and different combinations create different behaviours, and consistencies indicate a dominant and well developed function and the others are considered auxiliary and inferior. When the general types are taken into consideration we get eight functions in total.

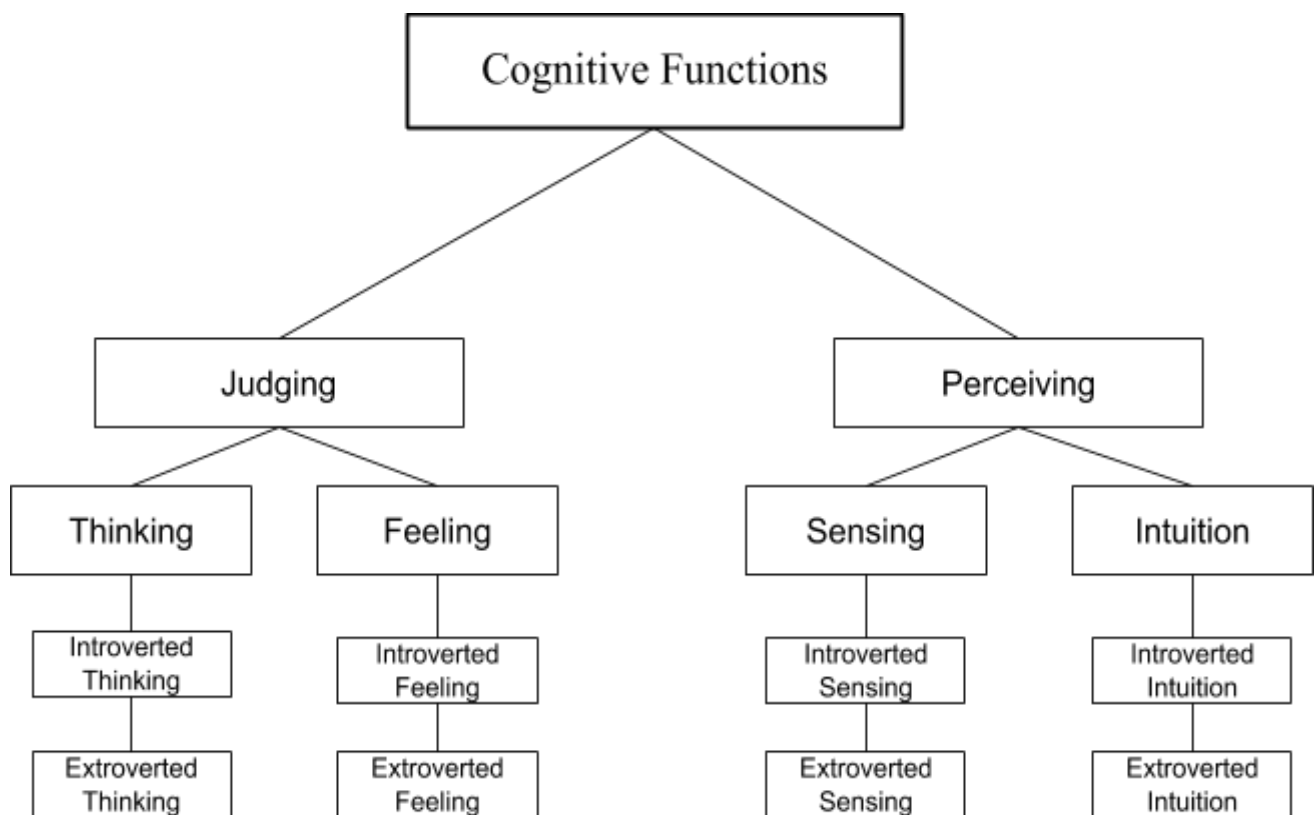


Figure 1.3. Jungian Cognitive Functions (Jung, 1921).

6.1. Judging

Judging, also referred to as the rational type, is characterized by prioritizing the reasoning and judging functions. However their judgment is under equal influence from both the object and the subject. Their actions are usually premeditated, structured and kept under control. They seek reasons and explanations within their vicinity. However, they keep within object's boundaries. Judging learners, for instance, prepare for exams ahead of time and make list and organize their time and work.

6.1.1 Thinking:

“Thinking is orientated by the object and objective data” (Jung, 1921. P, 10). When making a decision, if the object's influence is greater than that of the subject, that is considered to be thinking. Actions taken by thinking are characterized by logic, rational, impartial and objective.

a. Extroverted Thinking:

Extroverted thinking is objective and places emphasis on objective (facts) ,concrete and empirical data. They employ inductive reasoning with goals in mind (Jung, 1921). An example of this would be researching and gathering data about a certain product before buying it.

b. Introverted Thinking:

Introverted thinking is usually subjective and they employ deductive reasoning when making decisions or taking actions and they solve objective problems with subjective data.

6.1.2. Feeling:

Feeling is acting and behaving according to the subject and subjective data. The object has less influence and may be more impulsive in the sense that the outcome will most likely be unexpected or irrelevant to the object, it seeks not to create an intellectual connection between the object and the final action but to merely display the acceptance or rejection of the subjective.

b. Extroverted Feeling:

Extroverted feeling, however, still takes the object and objective data and prioritizes them in the process of determination. The nature of extroverted feeling is peculiar in the sense that it freed itself from the subjective and is no longer under its influence.

b. Introverted Feeling:

Introverted feeling is most likely the most authentic, unique and closest to subject's values. Individual who has this function as dominant or auxiliary, has strong and influential values and may be reluctant towards sharing them.

6.2 Perceiving:

Irrational attitude's "commissions and omissions are based not upon reasoned judgment but upon the absolute intensity of perception" (Jung, 1921. p , 29). Perceivers actions are usually deemed as irrational, hence the name. They accept things as they are and usually do not react to them, structure is

considered hindering rather than enabling as well as encourage autonomy and endorse personal freedom.

6.2.1 Sensing:

Sensing, as Jung described, is the act of relaying physical stimulus to perception, mainly through the sensing organs (the five senses), hence the name. An example of a sensing person is their tendency to prefer kinesthetic learning over others.

a. Extroverted Sensing:

Extroverted sensing is the function that perceive physical objects in the most concrete and objective way. They tend to notice changes and take actions accordingly without including their subject or subjective data.

b. Introverted Sensing:

Introverted sensors function similarly to extroverted ones. However, the received data is transmitted to the inner (subject) and the action will be influenced by the subjective. When dominant, this function can cause the individual to recall previous experiences or memories upon receiving objective data from physical objects.

6.2.2 Intuition:

Unlike sensation, this function perceives objects in a non concrete approach, it gathers data through the subject. Usually one can not find the origin of data gathered by this function as it sparks unconsciously from within. We mostly refer to this data as a hunch or a vision.

a. Extroverted Intuition:

Extroverted intuition is a function that prioritizes possibilities over reality. They usually find themselves wanting to know what could be and what could happen. Therefore, qualities such as indecisiveness and openness is usually associated with this function.

b. Introverted Intuition:

Individuals with this function as their dominant have a very subjective and synthesised view of their environment, their inner thoughts are completely

subjective and the object and objective data is of little importance. The objective data is fed to the subjective and then processed. Eventually, the conscious will receive the subjective data without any effort.

Chapter 2:

Personality and Academic Performance

1 .Introduction

Academic performance, according to the Cambridge University Reporter (2003), is defined in terms of the performance of students in examinations. It is mostly used to measure students abilities through their average grade points. In this study, students' AP was assumed from their grades in oral expression and written expression courses. Academic success or failure greatly and respectively influences students' self-esteem, self confidence and motivation. Therefore, researchers have always sought new and different ways to increase AP due to its importance. Subsequently, several factors have been thoroughly studied, namely age, gender, nationality, co-curricular/extracurricular activities and socio-economic status (Eamon, 2005; Valli, 2014). The affective domain, as well, has been under investigation but the data is less consistent. This, however, is to be expected due to the uniqueness of the human brain and psyche. Thus, before embarking on journey of data analysis, a need to describe expected type behaviour that may influence AP is predominant.

2. Extroverted Attitude and Academic Performance

It is crucial that before any attempt to identify differences between the two general types and their AP (Academic Performance), one must first consider any external influential variable such as age, level of education, background and types of assessments used. As for the later, different teachers use different types of assessments that may act as an advantage for certain individual over others. Ones such as essays, multiple choice, or oral tests may produce unwanted inconsistencies. Education, too, can be a crucial factor in this comparison but what's more important is age. Eysenck and Cookson (1969) found that the correlation between AP and extroversion changes from positive to negative around the age of 13 to 14. Since the chosen population are first year university students, age will not be considered an influential factor and will be treated respectively in the study.

Now that we have explored how the two general attitudes process objects and react to them, we can begin to breakdown the possible behaviours of the two types. Extroverts, needless to say, are social creatures by nature, they thrive in groups and energize everyone around them. In a classroom, this makes learning a much easier and entertaining experience. They can motivate and energize their classmates with their effective verbal communication skills. They also make good group leaders since they are not afraid to speak up and advocate vocally. However, when considering the performance of extroverts in an academic setting, it is common to assume a disadvantage due to them being easily distracted during class as well as during examinations (Eysenck and Cookson, 1969). Introverts on the other hand may seem much more eligible for success since they may have an advantage over their counterparts with respect to their metacognitive abilities. But that is not the only case.

2.1 Extroverts and Impulsiveness:

Extroverts are capable of thinking faster than introverts. However, this does not reflect intelligence by any means, since extroverts uphold objects and their data more than their own views makes their response much faster than introverts who take time to access their subjective views and then act. In an academic setting, engagement is a crucial factor in the process of developing an effective learning environment (Chinn, 2011). Therefore, it is favourable to be able to think quickly and socialize with ease. Unfortunately, this does not translate in evaluation. Busch's (1982) findings confirm the disadvantage that result from this extroverted attitude. Extroverts' oral performance plummets when evaluating efficiency, their quick thinking backfires and makes them rush their answers without any thought behind them. Introverts, on the other hand, take their time and effectively communicate their thoughts.

Impulsiveness is commonly regarded as an extroverted attitude, in the sense that it is the act of acting quickly as a reaction without reflection (Murray, 1938). Thus, it is common for psychologists to associate impulsiveness with the extrovert type. Eysenck & Eysenck (1978) identified a positive relation between impulsivity and extroversion.

2.2 Extroverts as Risk Takers

“Death, taxes, and risk are the certainties of life” (MacCrimmon & Wehrung, 1986, p. 4). Risk stands for the possibility of loss or harm and to take risks is to see reward more than loss. Extroverted attitude highlights rewards and increases their motivation, but that is not the only reason for extroverts to take risk more than introverts. Recent research shows that extroverts react biologically to risk and reward situations by releasing increased amounts of dopamine, making them more excited and motivated. Cohen (2005), conducted a study to monitor dopamine levels of extroverts while gambling, they recorded an increase in two areas of the brain, amygdala and the nucleus accumbens, areas that are responsible for the reward reinforcement stimuli.

2.3 Extroverts and Self-regulated Learning

Although self-regulated learning- SRL henceforth -is a relatively new construct in the domain of educational psychology (Zimmerman, 1989), its theoretical importance and practical implications make it a subject of immense interest by researchers and teachers alike, but not extroverts. Their inability to deeply reflect and think about a certain matter (Matthews, 1997) translates to significant weakness in SRL. Another obstacle that stands between extroverts and SRL is their low tolerance of being alone, an aspect that constitutes the entirety of SRL.

2.4 Extroverts and Test Anxiety

According to Spielberger (1979), an anxiety state can be characterized by the tension that affects the subjective. Individuals can go under fluctuating temporary amounts of anxiety at a particular moment, in addition to an increased activity of the autonomic nervous system. Depending on the situation and the individual, anxiety may vary in terms of intensity and duration. Furthermore, the interpretation of the situation by the individual can also affect the intensity of anxiety, most students consider tests to be dangerous or threatening and thus their feeling of anxiety.

The correlation of anxiety with the subjective implies that extroverts are less prone to it, and that is supported by the findings of (Krapu, T.M, 1981).

Extroverts, however, do find difficulties in the quietness nature of tests. Their low energy levels may hinder their performance but not as much as anxiety.

3. Introverted Attitude and Academic Performance

Recently, the common hypothesis that extroverts are better language learners has been nullified by introverts. While they lack in the social department, introverts excel in the academic one (Dunn, 1989; Williams, 1992). Their ability to study alone allows more room to improve and explore different approaches to learning without any hindrances. Being aware of your own limits and abilities has always been encouraged by teachers, introverts know their limits fairly better than extroverts since they dive into their subjective feelings and are always engaged in deep conversations with themselves. Depending on their cognitive functions, they actively seek new ways to improve their abilities and overcome their weaknesses, this behaviour in its own is one of introverts' strengths, metacognition has always been associated with being alone. Individuals with this ability are usually described as genius, innovative, and visionary.

3.1 Metacognition

The reason why introverts are most likely to be the ones with this ability is simply due to the allotted brain power for doing tasks, whenever we interact with someone else, they occupy a part of our brain which reduces performance. That is why, more often than not, we do not perform as well as expected simply by having someone look over our shoulder. Even extroverts who are less self-conscious divide their attention on people around them. This gives a significant advantage to introverts in the sense that they can easily grow and improve their metacognitive abilities, which, needless to say, requires a significant amount of attention and thought.

Metacognition is defined as cognition about cognition, thinking about thinking and knowing about knowing (Flavell, 1979). Introverts nature shares several points with metacognitive components and skills. Introverts are known to be good planners since they think hard about everything that comes their way. In respect to metacognition, planning is the selection of certain strategies or approaches when dealing with a certain subject matter. For instance, an introverted student may decide to employ memory rather than comprehension

for grammar or any other topic. In addition to that, introverts tend to seek comprehension and understanding when reading rather than accuracy and fluency (Vahdat, 2016). The other component is the skill of monitoring, introverts are constantly referring back to their subjective, which can also take the part of counseling, they can ask themselves if they have performed well or not, this also constitutes the third skill in metacognition, which is evaluation, an important aspect of any learning aspect, it is the final step to conclude learning and highlight progress.

Metacognition is closely linked to creativity, self-reflection and critical thinking, without the solitude tendencies of introverts this advantage would have not existed.

3.2 Introversion and Creativity

Ernest Hemingway once spoke about how he writes in his Nobel Prize acceptance speech in October of 1954, he declared:

“Organizations for writers palliate the writer’s loneliness but I doubt if they improve his writing. He grows in public stature as he sheds his loneliness and often his work deteriorates. For he does his work alone and if he is a good enough writer he must face eternity, or the lack of it, each day”

Not only artists work in solitude, many great personalities that changed the definition of inventions share the same habit of working alone. Steve Wozniak (2006) states:

“Most inventors and engineers I’ve met are like me — they’re shy and they live in their heads. They’re almost like artists. In fact, the very best of them are artists. And artists work best alone — best outside of corporate environments, best where they can control an invention’s design without a lot of other people designing it for marketing or some other committee. I don’t believe anything really revolutionary has ever been invented by committee... I’m going to give you some advice that might be hard to take. That advice is: Work alone... Not on a committee. Not on a team.” (p. 290).

The power of ideas that spur from moments of solitude are surely nothing to take lightly. Reed (2006) conducted a study to further investigate the effects of solitude on adults, according to him, adults feel less self-conscious and are more constructive when alone.

It is logical to assume that the tendency to be alone is an unhealthy habit and a sign of social inhibition but that is not the case, introverts need that time to feel comfortable and recharge their energy and that constitutes a great part of introverts' creativity. According to Mihaly Csikszentmihalyi (1996), in order for solitude to be constructive, the individual must be comfortable with being alone, individuals who had trouble with being were less likely to grow and improve their creative thinking abilities. Coincidentally, introverts enjoy and thrive in solitude, they are, therefore, more likely to be more creative than extroverts.

In an academic setting, creativity is greatly endorsed and encouraged, this becomes even more apparent when paired with metacognition. Introverts who struggle with learning have greater chances to find new ways to help themselves, they can slowly digest new information by themselves without needing any external help. They can think of their own flaws and shortcomings and address them respectively as long as it is within their limits, skills such as vocal communication may not be their strongest suit but that does not mean that they cannot hold their own. A common misconception about introverted individuals is to describe them as shy, shyness, not to be confused with the tendency to be alone, is the fear of judgment from other individuals while an introverted attitude simply implies the preference of solitude over social interactions. In class, introverts are mostly reserved and only speak when spoken to, they lack the risk taking ability of extroverts which allows them to speak their minds freely and they tend to refrain from engaging in activities and conversations when given the option. Subsequently, their participation rates are less than adequate when compared to their counterparts, which is, undoubtedly, one of their biggest weaknesses in language learning.

3.3 Introverts and Class Participation

It is common to assume that the current educational standard favors extroverts and is geared against introverts, we cannot afford to teach one on one, so we put students in a classroom which is usually full of social stimulation. Therefore, introverts surely will not think of their tendencies to be normal and

will eventually start to view extroverted attitude as the more natural and healthy of the two. From the very beginning in elementary school, learners are encouraged to join group activities and participate in classroom, soon after, they start to learn that they are graded from those activities. Class participation, in particular, is often closely associated with learning ability and academic performance since many teachers grade it in a noticeable manner. Introverts take time to find answers since they include their subject and subjective data into their determination process, so they require more time to work out an answer, and if a teacher suddenly asks them for an answer they usually stutter or completely fail to respond, this certainly does not reflect inability to answer but simply a forced error in an uncomfortable situation. This explains their lack of participation even when they are aware of the rewards they could get. This, also, explains their oracle accuracy and their performance in written assessment.

Needless to say, this sparks the question of whether or not should introverts be graded for their participation. However, this will not be discussed as it is not within this study's scope, but we can discuss the performance of both in participation. Not all introverts refrain from participation, those who do participate may not carry out the same performance through the whole day, otherwise they would be over-stimulated and would require some alone time to recover.

More often than not, teachers criticize loud and disruptive students as well as those who are too quiet, introverts think about everything that comes their way, even when a teacher shames a talkative student, they feel as though they are being told to remain quiet while, certainly, that is not the case. Whatever the situation, introverts will most likely interpret this message as one where being quiet is a problem not their unique and natural behaviour as well as a biological imperative.

Introverts should be challenged and taken out of their overly silent and reserved state, the only issue here is with the way they are pushed out of their zone. They should be given time to prepare and organize their thoughts, even a small rehearsal of their participation would be a significant chance for them to open up and express themselves boundlessly. Instead of forcing students to change their identity, we should embrace their personality and their attitude and use it to further increase their learning.

4. Learning Styles and Personality Types

Learning styles refer to the different ways individuals learn, we all have certain strengths and weaknesses, and learning style simply accommodate for those accordingly. The information is perceived and processed changes from one individual to another, same for the level and speed of understanding. Teachers techniques also influence the learning process positively by being aligned with students' learning styles and negatively when misaligned or mismatched.

Personality outlines learning styles, students cannot change the later as they cannot change the former. Teachers, however, can switch between teaching styles with small effort. Therefore, it is encouraged for teachers to be aware of their students' personality types and respectively their learning styles.

Jenna (2013) attempted to identify the learning style of each type of the 16 possible combinations of the cognitive functions, the results of the study conform with the attitude of each type. Introverts prefer a reflective learning style where they solve problems that require hard and prolonged brainstorming individually, and extroverts prefer an active learning style where they actively engage with the subject and the information to retrieve and understand it.

Diving into details, there is plenty of research linking learning to styles to each of the sixteen cognitive functions combinations. Referring to the MBTI Manual (1998), we can find the learning style and the learning behaviour of each type.

ESTJs prefer practical and concrete learning where information is presented logically and in a straightforward manner. They are visual learners in nature, this greatly improves and facilitates their learning process since material is real, concrete and easy to grasp. The dominant sensing function works equally well with kinesthetic style where they take part in the process and material is also factual and concrete. Debates, brainstorming and contests are good tools to achieve high learning efficiency. Furthermore, courses and information should be logical and consistent and, if possible, presented in different perspective and given several examples to improve retention. ENTJs, ESTPs, and ENTPs function similarly and have similar learning styles, it should always be active, concrete for the sensors and conceptuels for the intuitives.

More importantly, group or peer work is heavily encouraged and should be taken in consideration since their general tendency is extroversion.

ESFJs and ENFJs tend to learn best when collaboration is used and they prefer concrete material, they consider the feelings of everyone around them, they enjoy helping both the teacher and their classmates in class. They both prefer organised and structure courses. However, the material should be concrete for the sensing and conceptual for the intuitives. They both do not react well to criticism, teachers who are overly critical towards learners will most likely lose the respect of both types.

ESFJs find it important to feel at home in class and to feel that their teacher respects them, they prefer to engage in group activities and they make great leaders due to their constant care for others. As for ENFJs, classroom harmony and punctuality take priority, they tend to turn in their homeworks on time and work in highly methodological manners. They enjoy speaking their minds and ideas but refrain from engaging in debates and contests simply because winning may break harmony.

As for the perceptive ones (ESFPs and ENFPs), they also like to work in groups and prefer to engage in the classroom. However, ENFPs' learning style is highly imaginative, conceptual and abstract. Their perceptive attitude makes them less tolerant towards organization and structure, they bring up ideas and questions from different perspective and can be quite argumentative, they seek new information and are motivated when theoretical are tested practically, they have high deductive abilities and usually prefer subjects such as art and foreign languages.

Like intuitive feeling type, ESFPs also prefer a class of harmony and mutual respect. The only difference is how the information is presented to them. They prefer to take action and be part of the course which presents material that is concrete which they can actively engage in. They do not enjoy abstract and theoretical course and prefer to know the practical use of the information given to them.

ISTJs learn best when given information that is related to experience and which they can engage with is in a concrete way, they enjoy structure and detail during lesson, they like clear objective and expectations and will usually excel with courses that prioritize routine and employ facts, ones such as math, reading and science. They take time in answering and engaging in class, they

are usually observant and independent learners who rarely join groups voluntarily. They are creative and adaptive which allows them to change situations and solve problem by finding solutions and seeking new techniques to benefit them more. Systematic, structured and logical techniques appeal to them the most.

ISTP on the other hand are individual kinesthetic learners in nature, they are highly logical and extremely independent learners. Freedom in learning is key for them, they take their time and set their own pace, they do not enjoy structure and systematic approaches. Lessons with plenty of examples, concrete information and clear objective work best for them. It is easy for teachers to mistake them as being distracted while in fact they are simply analyzing and thinking inwardly. They do not think highly of textbooks and manuals, they enjoy learning through trial and error, this does not translate positively for them in class where structure is endorsed, lessons are more linear and there is small room for individual analysis and learning.

INTJs learn best in a conceptual and theoretical environment, intuition allows them to take in the overview of the lesson instead of structure and instruction. They, also, prefer and excel in individual and one-on-one learning, rote memory and repetition bores them and they, therefore, use patterns and connections to memorize information. Just like lessons, teachers who are competent, logical and open-minded usually appeal and motivate them, they also good at handling criticism and usually have high academic performance. According to Isabel Myers (1998), INTJs consistently have the highest IQs,

INTPs are usually very analytical and conceptual, they often ask questions about what they are learning and why they are learning it, and they often criticize what does not pique their interest. They enjoy being logical and can easily spot flaws in others' logic, they tend to ask thought provoking question in attempt to challenge teachers and others. They prefer individual learning style over other types. They set their own goals and expectations for lessons they are about to learn, and they do not tend to care for grades as much as other types do.

INFJs are similar in terms of activity orientation, they prefer individual learning and they excel in one-on-one learning. The only difference, however, is the way they make decisions, INFJs take the future in consideration and prioritize planning. They also enjoy harmony with others and and can offer

support from time to time, they handle tactful criticism well and may feel uncomfortable when other are under it. Similar to individuals who share the dominant Ni function, they see everything for different perspectives, they do not care much for absolutes and strict rules, they challenge routines and break the rules that may hinder them. However, they general tendencies does not allow them to speak up and state what they do not agree with, they, instead, keep these objections to themselves and continue doing what they consider to be right for them without telling anyone. An example of this, would be an INFJ writing an essay using a different technique than the one they studied in class, and the teacher may never notice, simply because they do not assess the process but the outcome.

INFPs are very similar to ENFPs in terms of decision making and information taking, they are highly imaginative and conceptual, they enjoy harmony with others and if given enough time they could fit in with others with ease. The only difference is the energy orientation and they seek value into everything they come across, instead of asking what happened, for instance, they would ask why did it happen and what could have happened. They have an exploratory learning style, they also, similar to ENFPs, tend to perform well in foreign languages and arts.

ISFPs, like any other type with a dominant Si function, they tend to take in real time data and compare it to previous experiences, they, therefore, evaluate data according to their own. They tend to be friendly and often enjoy a classroom with experimental hands on learning where they can feel free to be creative and are given time to take in data and process it.

ISFJs are, according to Myers (1998), highly anticipated to perform better than most types in an academic setting, they thrive in a structured and logical class and can easily retain facts and data, they excel in reading apprehension and language. They tend for details and enjoy learning with practical application. Affirmation by teachers and parent greatly motivate them and increase their confidence.

Table 2.1. Jung’s Cognitive functions and their learning styles (Myers, 1998).

Function	Learning Style
Extrovert	<ul style="list-style-type: none">- Active learning style.- Prefer to engage and be part of the course.- Prefer to talk and interact rather than listen.- Thrive in groups and peer work.
Introvert	<ul style="list-style-type: none">- Passive learning style.- Enjoy reading and listening activities.- Learn best with a slow paced course.- Prefer to learn individually.
Sensing	<ul style="list-style-type: none">- Visual and kinesthetic.- Engage in “hands-on” learning.- Learn best through concrete ,factual and practical information.
Intuition	<ul style="list-style-type: none">- Prefer abstract and conceptual information.- Work well in both individual and group activities.- Prefer open ended type of approach.

Thinking	<ul style="list-style-type: none"> - Use logic and analysis to solve problems. - Prefer to learn in a logical and orderly fashion
Feeling	<ul style="list-style-type: none"> - Prefer to learn using information which they can relate to. - Prefer to have teacher who establish report and constant feedback. - Can work both individually or with others.
Judging	<ul style="list-style-type: none"> - Learn best when course are present in a well organized and structured manner. - Prefer to learn in well ordered classrooms. - Prefer to have a clear and well detailed outline of the course.
Perceiving	<ul style="list-style-type: none"> - Prefer open-ended approaches. - Enjoy classrooms with plenty of spontaneousness. - Have an heuristic approach to learning.

Chapter 3:

Research Findings and Analysis

1. Introduction

Recently, personality types and their influence has been gaining steady traction in terms of academic research and general usage. This is mostly due to the increased accessibility and reliability of the self-report type psychometric tests such as the MBTI, EPQ and KTI (Keirsey Temperament Inventory). Personality types are often associated with vocational explorations, several companies include a personality test in their job interviews in efforts to find suitable position for their employees that maximizes content and maintains motivation. In school, personality is just as important, that is why this study aims to unveil the differences within the performance of different personality types in different courses.

It should be noted, however, that the reliability of the results is completely subjected to the integrity of the answers provided by the students. It is no secret that the introverted attitude is frowned upon in most cultures, society rewards the ones who are active and take part in it, unlike those who shut themselves away and steer clear from social activities. Furthermore, as discussed earlier, the educational system is also geared against introverts and solitude. Therefore, it is rather hard to expect honest answers from introverts who spent their lives trying to fit in society against their own tendencies. If an individual, for instance, is asked whether or not he prefers to stay at home rather than go out with friends, they will most likely respond positively to the later option. To him, it is simply a question of whether you are successful in society or not. Certainly, this presents itself as a challenge to answer with honesty, not many individuals endorse their flaws and shortcomings, this not only affects their own strengths and advantages that lie within those flaws themselves, it also affects the results of the administered personality test since a lie scale was not implemented.

2. Participants

The total number of participants is 21 in total. They are all first year students in Dr.Moulay Taher University of Saida, age was not taken into consideration. Gender, too was not taken into consideration when administering the personality test. However, it should be clarified that females tend to have an advantage over males in terms of academic performance (Voyer & Voyer, 2014). Gender will only be monitored as a possible variable since it is outside of the scope of the study, the influence of this will be marginal considering the fact that the number of female participants is higher than that of males. This was not intended, it is simply due to the fact that females' attendance rates are higher than those of the males (Woodfield & Jessop & Mcmillan, 2007), this may explain the academic performance gap and the low number of male participants in this study. As the figure below shows, females greatly outnumbered males in the study, 16 females as opposed to only 6 males.

Gender of Participants

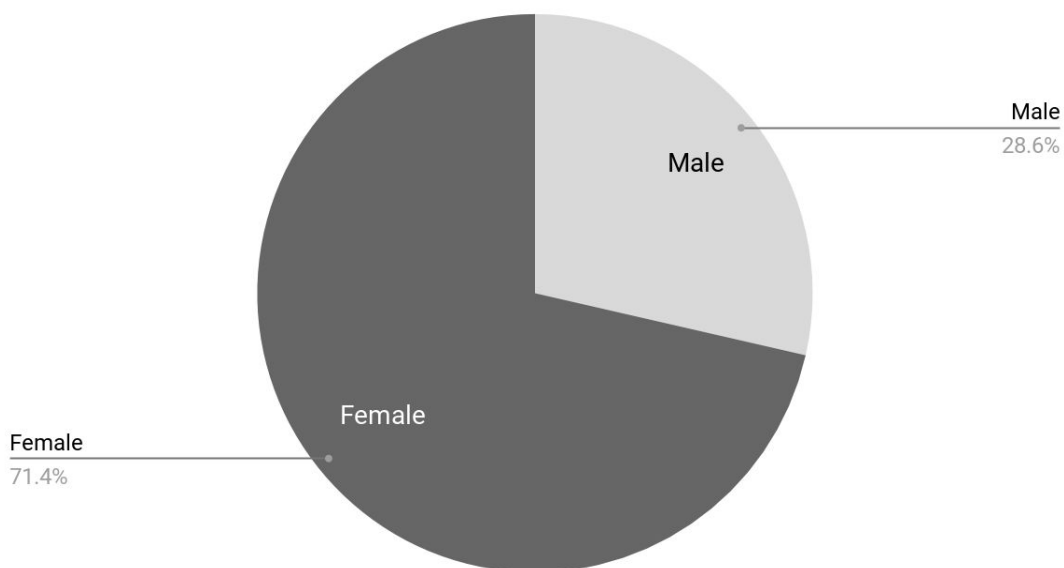


Figure 3.1. Gender of participants in the personality test.

3. Instrument Presentation and Administration

A close ended Likert scale survey consisting of 18 questions in total was developed and used to measure personality (Appendix A). The test measured the four dimensions of Myers and Jung, Introversion/Extroversion, Sensing/Intuition, Thinking/Feeling and Judging/Perception. The first 10 questions measured the general energy orientation, extroversion and introversion. The rest were evenly distributed the the rest of the dimensions, this heavily reduces the reliability of the test but the study is more focused towards general tendencies than other cognitive functions. That, however, does not mean that they will not be taken into consideration. A 5-point Likert type scale was used to measure the degree of participant agreement or disagreement: Strongly agree has a value of 1 and strongly disagree has a value of 5. In an attempt to reduce deception factor, the answers to the question were randomly jumbled and inverted. For, instance, positive answers for questions from 1 to 4 and question 8 indicate an exterior energy orientation, i.e, extroversion, while others indicate introversion. This is not as efficient as other lie scales used in the present, but for reasons discussed in the limitations of the study, they were not implemented.

As for the scoring formula, the calculation of the result is as follows. Question 10 was removed from the scoring process as it was not an original part of MBTI testing criteria. The used formula for counting the score (s) is as follows:

$$s = by + (x) - (z)$$

Score (s) is the final score, y is the the offset number to account for the inverted (extroverted) answers, and since the highest value of answers is five, we add one to account for the inverted value ($y = 6$) and b is the number of those inverted answers ($by = 30$). x is the sum of introverted (non-inverted) answers (four) and z is the sum of extroverted answers (five). With nine questions, the highest degree of possible extroversion scores the maximum score of 45, and highest degree of introversion scores the minimum score which is 9, the mean score is ($m=27$). Therefore, individual who score less than 27

have more introverted tendencies while those who score more have extroverted tendencies. The other dimensions were measured accordingly.

4. Findings and Discussion

The research question was “ Is there a relationship between the academic performance of extroverted and introverted students ?”. Figure 2 shows the general tendencies of participants.

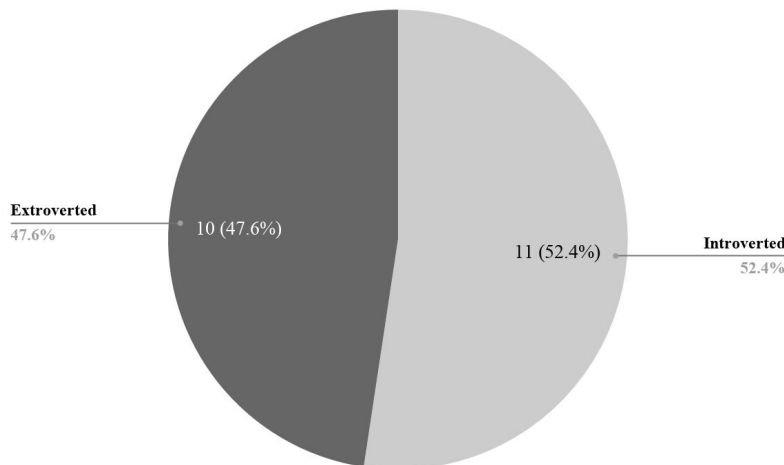


Figure 3.2. General tendencies of participants.

The calculated results are as follows: $n=21$, $m= 26.57$, $sd=5.35$. The mean score of introverts is ($n=11$, $m=22.09$) with a standard deviation of ($sd=2.31$). Extroverts respectively scored ($n=10$, $m=30.875$, $sd=1.96$). The results match with the expectations of an even distribution of both types. However, the variation can mean quite a significant influence on the attitude of the individual. For a better comparison we can use the coefficient of variation (cv).

$$cv = \frac{\sigma}{\mu}$$

this allows for a clearer distinction between the variation. Introverted coefficient of variation is ($cv=0.1$) while extroverts' ($cv=0.06$). This means that introverts score higher on their respective spectrum roughly with a mean score of ($m=63.64$), while extroverts remained closer to the neutral score with a mean score of ($m=61.04$). Figure 3 is a control chart showing the variation of scores, extroverts (upper line) are closer to the neutral score while introverts slightly go further.

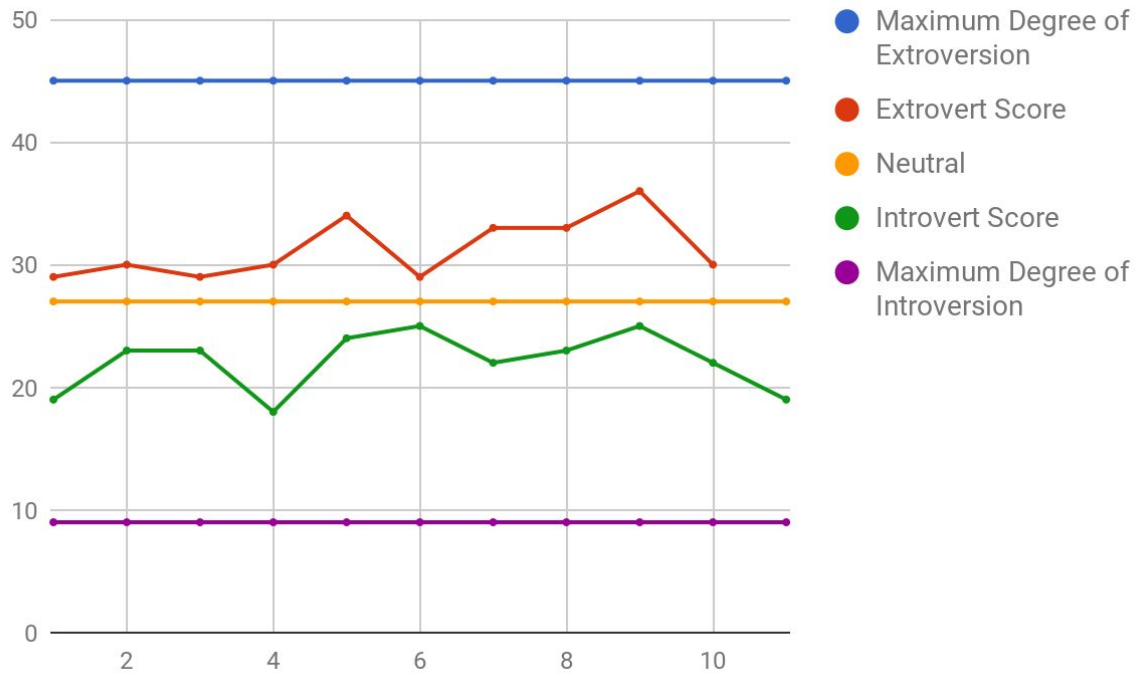


Figure 3.3. Variation degree of scores.

Personality Type	Grade Mean	Grade Standard Deviation	Correlation
Extrovert	12.8	1.66	$r=-.22$ $p=.0001$
Introvert	13.45	1.41	$r=0.26$ $p=.0001$

Table 3.1. Differences Between Introverts and Extroverts in Oral Expression Grades

When comparing their oral expression course grades, introverts take a slight lead, the mean average of the whole sample is ($m=12.95$, $sd=1.64$), introverts scored ($m=13.45$, $sd=1.41$) extroverts on the other scored slightly lowers ($m=12.8$, $sd=1.66$). It should also be noted that students who placed the highest on the introverted side of the spectrum scored significantly higher ($m=14.5$) than those who placed highest on the extroverted side ($m=12$). This translates the same way when running Pearson correlation formula, which a positive correlation between introverts and oral expression grades ($r=.22$), while extroverts correlation was negative ($r=-.26$).

As for the functions, a notable amount of students preferred sensing rather than intuition. Out of 21 participants, 18 of them preferred sensing while only 3 preferred intuition (Figure 4). An explanation of this would be the adaptation ability of students. Over the years of their learning experience, it is expected to prefer to use sensing in terms of gathering data instead of intuition

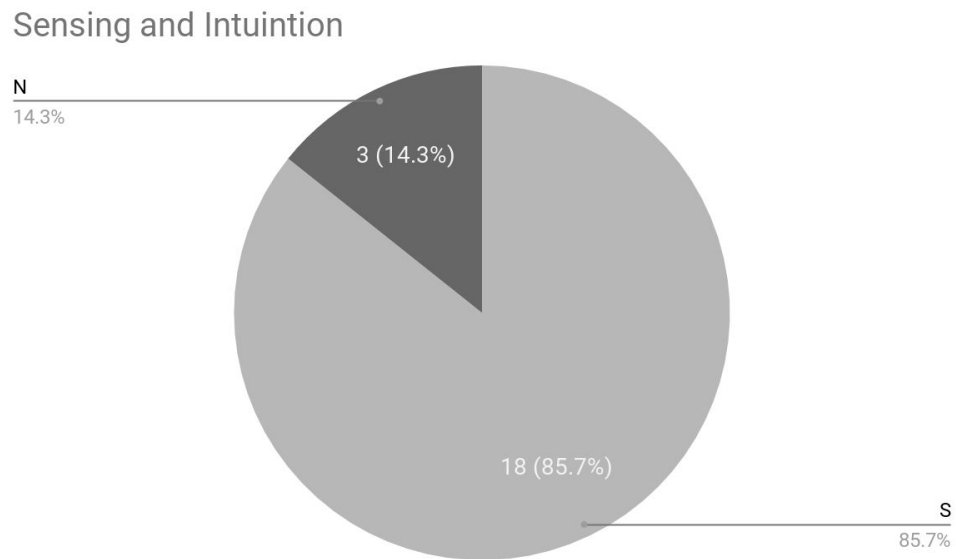


Figure 3.4. Distribution of basic cognitive functions (Sensing and Intuition)

Functions of thinking and feeling had similar results, students with the thinking function greatly outnumbered their counterparts. 15 of the total participants preferred the thinking function in contrast to the 6 who preferred feeling. This is also because the educational rewards thinkers more than feelers. Thinkers rely on concrete data to make decisions, they are logical and quick with their actions, it is, therefore, expected to discover such findings (Figure 5).

Feeling and Thinking

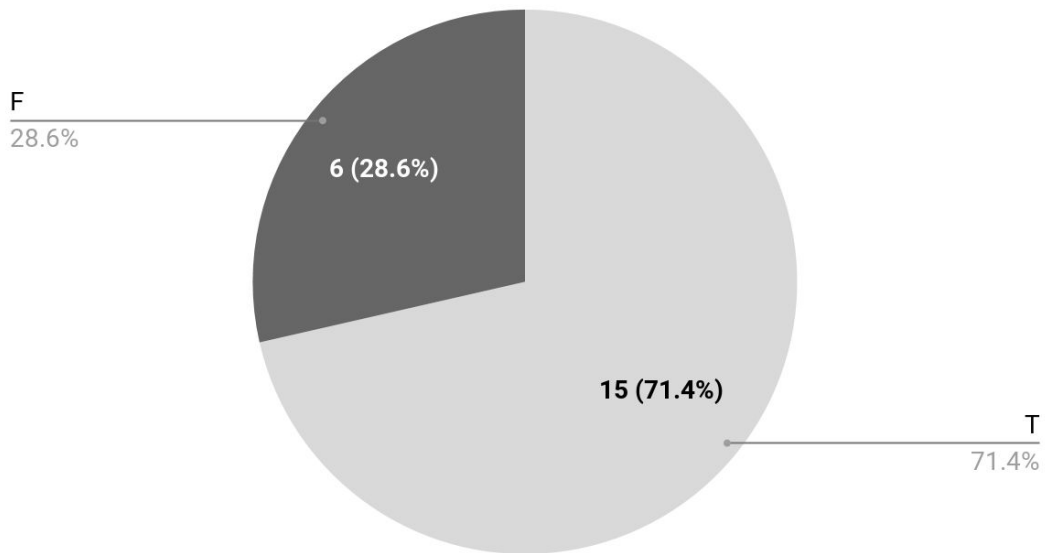


Figure 3.5. Distribution of basic cognitive functions (Feeling and Thinking)

As for the rational and irrational attitude types (Judging and Perception), their distribution among the sample was even. 52% of the participants favored the judging while the rest favored the perceiving. For the types, only eight (8) combinations were found, the most frequent one was ESTJ with five (5) iterations, the second one was ISTJ with four (4) iterations. ISTPs and ESFPs evenly occurred three times (3) while the rest occurred only once or twice (Figure 6).

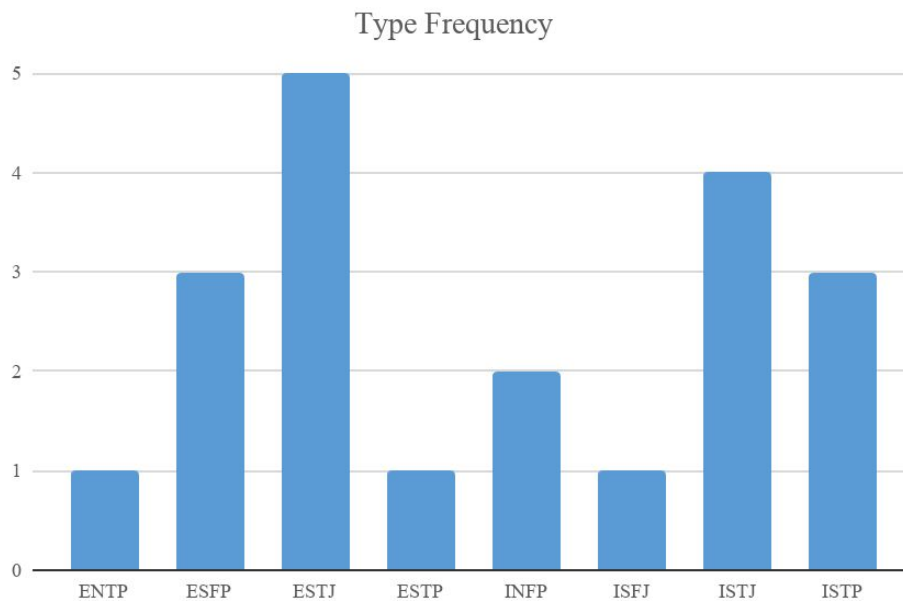


Figure 3.6. Type frequency.

5. Conclusion

In line with the results from the literature review, introverts performed better in oral expression courses. However, the sample was too small to consider these findings significant. The correlation of introversion and oral expression performance was positive but not by a significant margin ($r=.22$). ISTJs scored the highest mean score ($m=14.31$), this type is highly creative and adaptive, as long as they are within their comfort zones, they can perform well in arts and languages. On the opposite side of the spectrum, ESFPs stood out the most, their score were not enough to compete with ISTJs, but they did outperform other extroverts.

General Conclusion

Extroversion and introversion are the general tendencies of individuals, they denote the orientation of our energy and our levels of arousal. A common misconception would be for people to assume either one or the other. It is a spectrum, not an absolute value, it is also rare to come across a fully introverted or extroverted individual, most research indicates an even distribution among the population. However, within samples or environments, there may be a different and an uneven distribution. No matter the place, extroverted individuals interact with objects and act with objective data in mind, they get their energy from others and they thrive in groups and place with high social activity. They often do not engage with their subjective values, not that they do not have any, they simply do not direct any attention towards them.

Introverts, on the other hand, seek solitude where they can recharge their energy and find comfort, this does not reflect social inhibition by any means, they can have good social communication skills and can easily fit in with others, by they prefer to be alone because it is in their biological imperative. Introverts have higher sensitivity to dopamine, that is why they become over-energized in crowded places and prefer to be left alone.

In education, personality can affect learning as much as any other cognitive and affective factors. Introversion and extroversion are not the only thing that constitutes personality, several other basic cognitive functions influence and take part in the reason behind our actions and behaviours. Therefore, it is critical for teachers to be aware of their learners personalities, this could make a significant difference for students who feel mismatched with teacher's methods and approach, simply giving an introvert more time to answer and think about questions given to them could produce satisfactory results to both ends.

All in all, this study was conducted in order to shed light on a heavily underrated factor in learning. Experienced and talented teachers can develop the ability of typology through observation. Meaning that they can identify the general tendencies of their students. However, it is fairly easy for teachers to find ready to print psychometric tests such as the MBTI or EPQ and use the results to make sense of the behaviour of their learners as well as facilitate interactions with them.

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Appendix

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Department of English

Dear Students,

You are kindly requested to take part in this study by answering the following questions as part of the MBTI personality test. Your answers are considered crucial and of great help to the research findings, please answer as honestly and accurately as possible.

Please tick the box that corresponds the most to your degree of agreement.

Strongly agree = a ; Agree = b ; Neither = c ; Disagree = d ; Strongly disagree = e

Full Name :

1- You often feel bored when alone.

a b d c e

2- You consider yourself to be an energetic person.

a b d c e

3- You work best in groups.

a b d c e

4- When engaged in conversations, you usually talk more than listen.

a b d c e

5- When talking, you think first and then speak.

a b d c e

6- You mostly stay at home and rarely go outside.

a b d c e

7- You find it difficult to yell very loudly in public.

a b d c e

8- You feel comfortable talking in front of your whole class.

a b d c e

9- For you, having a few close friends is better than having a lot of friends.

a b d c e

10- You prefer taking :

a. **Oral tests.**

b. **Written tests.**

11- You rarely make task lists and mostly rely on your memory.

a b d c e

12- You strive to keep your room tidy and clean.

a b d c e

13- You usually prepare for exams:

a. **At least a few days before**

b. **The day before**

14- You are almost never late for your appointments.

a b d c e

15- You are easily hurt by others.

a b d c e

16- When making an important decision, you:

a. **Just follow your heart.**

b. **Gather information and think hard.**

17- You prefer to take multiple choice test rather than writing essays.

a b d c e

18- You prefer practical over theoretical lessons.

a b d c e

**Thank you for your time,
Kind Regards.**

