People's Democratic Republic of Algeria

Ministry of Higher Education and Scientific Research

Mohamed Kheider University of Biskra

Faculty of Letters and Languages

Department of Foreign Languages

Section of English

The Impact of Depression on Vocabulary Choice

Case study: Adults

Dissertation Submitted in Partial Fulfillment of the Requirements for the Master Degree in Sciences of Language

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Academic Year: 2019-2020

Declaration

I, Hidoussi Wassila do hereby declare that this submitted work is my original work and has not previously been submitted for any institution or university for a degree. I also declare that a list of references is provided forward indicating all the sources of the cited and quoted information. This work was certified and completed at Mohammed KHEIDER University of Biskra. Algeria. Certified: Miss. Hidoussi Wassila Master Student, Section of English

Signature:

Dedication

In the Name of Allah, Most Gracious, Most Merciful

This modest work is dedicated to:

The memory of my beloved father may Allah bless his soul.

My Mother Rabhi Hamida my super hero… A strong soul and an Iron woman who supported me in every step of my life. She was a source of inspiration and guidance.

My sister Niamati the best sister in the world for being loving and very supportive.

My brother Ahmed my best friend and my source of happiness.

To all my family members

My best friends Fatima, Rahma, Safia, Ahlem, Chaima, Ilham and Soundous my sisters that life gave me.

My Cousins Amina, Hanaa, Wafaa, Boutheina, Chaima Amani and Wissal.

Doctor Leila Derias for her help, efforts and for being a life saver for me.

All depression patients whom I consider heroes.

To my second familes Rhouati and Fortas that I consider myself lucky and blessed to have.

Acknowledgment

First and foremost, my deepest gratitude and thanks to Allah the Almighty, who strengthened me to accomplish this work.

I would like to proclaim a special thanks and sincere appreciation to my supervisor **Dr. Zeghdoud Meriem** for her valuable guidance, patience and encouragement.

Special gratitude goes to the members of the jury **Dr. Hoadjli Ahmed Chaouki, Dr. Assassi Tarek** and **Ms. Merghmi Kenza** for assessing my work and for their constructive feedback and recommendations

I would like to express a special gratitude to **Dr. Amina Rabehi** for her support.

My infinite thankfulness goes to my sample especially: **Kaouther, Amira, Chems-Eddine, Bassem,** and **Hanaa** for their help, efforts, and time.

My endless gratitude goes to all teachers of the Division of English at the University of Biskra for their collaboration to this work.

Abstract

The mental health is deemed to have a significant influence over almost all life aspects including language. The present study aims at investigating the impact of depression as a mental illness on vocabulary choice. The researcher hypothesized that people who suffer from depression use language differently. In order to collect data, the Hamilton Rating Scale of Depression and an interview were used. Regarding the sample of the study, twelve EFL learners were selected to participate in this study; they were divided into two groups (six depressed participants and six non depressed participants) for comparison purposes. The results of the study revealed that depression does have an impact on vocabulary choice. Therefore, the study's suggested hypothesis was validated and confirmed.

Key words: Depression, Vocabulary choice, EFL, Depressed participants, Non depressed participants.

List of Abbreviations and Acronyms

EFL: English as a Foreign Language.

PDD: Premenstrual Dysphoric Disorder.

DMDD: Disruptive mood Dysregulation Disorder.

PPD: Postpartum Depression.

SAD: Seasonal Affective Disorder.

HIV: Human Immunodeficiency Virus.

L2: Second Language.

L1: First Language.

HRSD and HAM-D: Hamilton Rating Scale of Depression**.**

MCQ: Multiple-Choice Questions.

&: And

I.e.: which means

%: Percentage**.**

List of Figures

List of Graphs

List of Tables

List of Appendices

Table of Contents

General Introduction

Chapter One: Depression

Chapter Two: Vocabulary Choice

Chapter Three: Analysis and Discussion of the Results

Appendices

الملخص

Résumé

General Introduction

Background of the Study

Referring to Parekh (2017), depression is a serious and a common medical disease that negatively affects the individuals' behaviors, feelings, and cognition. Most of depressed people are not aware of their depression or ignore the depression alerting signal. Baldwin and Briswistle (2002) found that there are two neglected symptoms of depression which are low mood and reduced energy. According to Shafer (2006), depression is a complex illness cluster with various contributing factors.

The most widely used methods to recognize depression in clinical settings usually offer on ly a global picture ofdepression and do not provide individuals with a look at the specific sym ptom clusters.The distinction between clinical signs, like grieving and symptoms like sadness, is much vaguer than the clear distinction between signs and symptoms of infectious disease pa thology and physical injury. According to Lim (2008) , depression has different causes, it occurs due to a combination of things such as structure of the brain, heredity, life events and childhood problems .There are several symptoms of depression but the number of signs, their intensity, and lasting period are different from a person to another. These are some of depression signs:

- Troubles in memory or changes in personality.
- Physical pain or agony.
- Tiredness, less sexual desire, anorexia (losing appetite).
- Losing interest of socializing and new experience.
- Having Suicidal thoughts or feelings.

Hornby (1995, p. 133) defined vocabulary as "the total number of words in a language". In other words, vocabulary is all the words known and used by a specific person. Vocabulary is gained over time by exploring new words and with other particular instructions like reading

and keeping a journal. A good vocabulary is important for several reasons such as enhancing comprehension abilities and mastering a language. Once we take the effort to comprehend new words, we actually attempt to apprehend the complete context in which the word is used. Therefore, this whole process helps us to understand what the author or the speaker is trying to say.

Since depression affects nearly all life aspects, language is not an exception with all its aspects including vocabulary. The importance of vocabulary is embodied in communication and expressing one's ideas and feelings. Hence, conducting such research will facilitate understanding the pragmatic failures that may occur due to the improper choice of vocabulary. The speech acts are considered as a mirror that reflects a person's psychological state because they identify whether the person is in a controlled or a depressed state. Therefore, speech-based systems of detecting depression may perform as a screening tool to help professionals in mental health spotting clinically depressed people. Precise detection of depression from natural speech may lead to an unbiased diagnosis in order to help clinicians for a finer diagnosis. In other words, to identify whether the patient is controlled or depressed.

1. Research Problem

The core of research revealed that depression patients are generally found to be introverts, passive, ignorant, and negatively egocentric. In terms of their language, they tend to use absolutist and extremist words like: always, nothing, or completely. Moreover, depressed people seem to significantly use first person singular pronouns such as: me, myself, and I. Thus, an excessive amount of words conveying negative emotions specifically negative adjectives such as lonely, sad, and miserable are present too. A non-neglected number of Algerians suffer from depression due to the lack of awareness, social and familial

backgrounds and due to economic pressure, as well. Most of the research work done focused on the effect of behaviors neglecting the psycholinguistic aspect. This study aims at setting a solid foundation determining and describing the issue.

2. Research Questions

1. Is vocabulary choice affected by depression?
2. What is the difference between the depressed and non depressed subjects' vocabulary use?

3. Research Hypothesis

We hypothesize that depression affects vocabulary choice.

4. Significance of the Study

Language matters in mental health because it shapes the way we see things. The words we select and the implications we connect to them influence our feelings, attitudes and beliefs. Language used by depressed people can have a strong effect on others. Therefore, investigating the relationship between the mental health and vocabulary choice is significant. In addition to that, this area of study is neglected and the aim is to shed the light on it because it is not an approached area of study.

This research will help teachers and psycholinguists to spot the differences between learners according to their choice of words. In other words, teachers will be able to compare and distinguish between the different mental health states of students. Vocabulary choice will deliver a better understanding of how to deal with these learners. It will also pave the way for tutors to design and identify other specific learning and teaching styles designing professional teaching materials. It will also encourage other researchers to approach the topic from different angles.

5. Research Methodology

The nature of the research problem calls for a mixed methods research design. Thus, the sample will sit for the Hamilton test to confirm or deny their depression diagnosis. It is a multiple-choice items questionnaire used to provide an indication of depression and a guide to evaluate recovery .After that, the participants are going to be interviewed and asked to narrate a personal story. The results are going to be transcribed, thematized, coded, analyzed and decoded.

7. Population and Sample

The target population of this study represents 63 depressed patients in Amen Psychological Center of Batna. Non-random purposive sampling is used. I opt for working on 12 adult persons where six depressed participants were chosen from Amen Psychological center in Batna and other six non depressed EFL learners.

8. Structure of Dissertation

The current dissertation encompasses two main parts: a theoretical part and a practical one. Therefore, the theoretical part covered the literature review about the two variables. The practical part represented the fieldwork of this study. Thus, Chapter one presented a theoretical background about depression variable whereas chapter two dealt with vocabulary choice variable. Regarding chapter three, it is mainly devoted for the practical part. It aims at discussing sampling and data collection methods, data analysis, and findings' interpretations.

Chapter One:

Depression

Introduction

Mental health is as important as physical health and can cause serious damage on nearly all life aspects of a person; that is why mental health awareness needs to be at a high level. One of the common mental illnesses is depression; it is a dangerous mood disorder that leads to a variety of physical and emotional problems. In order to elucidate this mood disorder, this chapter attempts to provide a deep clarification about depression. It comprises a depression's definition from all aspects and approaches. It lists the symptoms of this mental illness. Furthermore, it sheds light on its different types. Then, it explains the different causes that lead to it.

1.1.1 Definition

For a better definition of depression, a definition of mental illness or mental health conditions is required. Morin (2020), defined mental illness as the disturbance in an individual's thinking, behavior, feeling or a disturbance in them combined i.e. it affects negatively the way a person thinks, behaves, and feels. When this disturbance occurs, it reflects a problem on mental functioning. Mental health condition causes a disability in different activities like social life, family, and work. It is very common in the United States as statistics has shown that one in 25 adults live with serious mental health conditions.

It is a multi-step process to diagnose mental illness that can include many therapists: first, physical examination is necessary since many mental health conditions have physical causes. After checking with the physician and making the tests, the doctor will make sure that those symptoms have no physical causes. Then, the patient will be transferred into a mental health professional for psychological evaluation. A psychiatric or a psychologist will be responsible for the second evaluation. The diagnosis will be based on an interview in which a series of questions about family history and symptoms need to be answered. The mental

health professional may use tests and/or evaluation tools to help him/her define the severity and confirm the diagnosis of the mental illness. The treatment for mental health conditions differs from an individual to another based on their diagnosis and the most common treatments that mental illnesses respond well to are talk therapy and medications.

One of the common mental health conditions is depression. According to Tacchi & Scott (2017) the word depression comes from the Latin word "deprimere" that is divided into two words "de" meaning down from and "primere" meaning to press and the whole word means to press down. This word was used in the 19th and 20th century to describe people who experience mental conditions. It was also defined as "depression is a common and potentially serious, even life threatening disorder (Graham & Reynolds, 2013, p. 19). This disorder affects mostly people who are socially and economically disadvantaged.

According to the World Health Organization (2020), depression is a common mental illness which affects more than 260 million people around the world. This mental disorder is characterized by constant sadness and losing interest in activities once enjoyed. This mood disorder prevents individuals from having a normal life. Seligman (1973) described depression as "the common cold of psychiatry" due to its diagnostic frequency. Beck (1970) provided a definition based on these attributes:

- A specific change in mood: sadness, carelessness and loneliness.
- Self-blame and self-reproaches in association with negative self-concept.
- Wishes that are self-punitive and regressive like wanting to die, hide or escape.
- Changes in involuntary bodily functions: loss of libido, Anorexia and insomnia.
- Changes in activity levels: agitation or retardation.

Parekh (2017) distinguished between depression and sadness in terms of that depression is an emotion that is naturally experienced periodically because of disappointments and sadness. Some sad events in life like losing a family member, a friend, a life partner or even a job will automatically bring sadness to life. However, feeling depressed may develop into depressive disorder if the duration and frequency is abnormal .On the other hand, grieving is a natural process that differs from a person to another that shares many features with depression like feeling sad but they are different in terms of first, when a person is sad, s/he gets mixed feelings sometimes and remembers good memories and positive things concerning the sad event that occurred. Conversely, depressed people's joy and positivity are absent for at least two weeks. In addition to that, the person's self confidence remains high unlike depressed people who lose their self esteem and feel worthless. When both grief and depression exist at the same time, it becomes more difficult to overcome and takes longer period of time to beat. That is why it is important to distinguish between the two mental states in order to get the appropriate help and treatment.

Referring to Mcleod (2015), many psychological theories have defined depression like the behaviorist theory, the psychodynamic theory, the cognitive approach and the humanist approach.

1.1.2 Behaviorist Approach

Behaviorists pointed that the environment is important in shaping the observable behavior. On that account, depression results from the person's interaction with the surrounding environment. Moreover, the conditions through which the individual learns a behavior are classical conditioning, operant conditioning and social learning theory. First of all, classical conditioning states that depression occurs when a person associates certain stimuli with negative emotional states. The second theory is operant conditioning that

proposes that the absence of the positive reinforcement from the environment causes depression. However, the social learning theory indicates that depression is due to the observation, imitation and reinforcement of negative behaviors.

To clarify more, an example is moving from a country to another induces depression because it reduces positive reinforcement from others (previous entourage of people). If the individuals' social skills are poor and their personalities are rigid, it will be hard for them to make the adjustments needed to find other sources of positive reinforcements in order not to get stuck in a negative whirlpool. The behaviorist approach was criticized because it only makes sense when it comes to reactive depression where the cause of depression is identified clearly. However, this theory is not valid for endogenous depression that has no obvious cause.

1.1.3. Psychodynamic Approach

In the 1960s, the psychodynamic approach was dominant in psychiatry and psychology. This approach incorporates all the theories of psychology that consider the human behavior to be based on the interaction of specific unconscious drives and forces within the person and between the different personality structures. The psychoanalysis theory that was established by Sigmund Freud is an example of this approach; he believed that people can be healed by making their unconscious thoughts and motivation conscious.

Freud (as cited in Mcleod, 2015) stated that depression could be due to biological factors, loss or rejection by a parent, and individuals' low self-esteem caused by inwardly directed anger. Later on, he modified his theory and he stated that depression is caused by an excessively severe super-ego. In other words, this mental disorder occurs when the person's super-ego is dominant.

The solution provided by Freud to avoid depression is to take a break and engage in the mourning work by remembering and recalling memories of the lost one. Engaging in this period will aid the persons to separate themselves from the lost member which will minimize the inner-directed anger, too. Despite the fact that psychoanalytic theories were highly influential and successful, they were criticized due to the difficulty of testing scientifically. Empirical investigation could not be achieved because the theories' central features were not defined precisely.

1.1.4. The Cognitive Approach

The approach that focused on individuals' beliefs instead of their behaviors is the cognitive approach. In other words, this approach pointed out that depression is a result of people's negative systematic influence in the thinking process. All depression's behavioral or emotional symptoms are the result of the cognitive abnormality in which patients suffering from depression have a different manner of thinking than clinically normal people. Cognitivists also believe that changes in thinking occur before the beginning of depression.

One of the leading cognitive theorists is Aeron Beck (1970) who concluded after studying people with depression that they tend to evaluate events negatively. In 1967, Beck identified three responsible mechanisms for depression which are: the cognitive triad, the negative self schemas, and errors in logic.

First of all, the cognitive triad consists of three models of helpless and negative thinking that are common for depressed people. These spontaneous thoughts are specifically about the self, future, and the world. For instance, depressed people see themselves as helpless, ineffective, and inadequate. They also have an unrealistic negative interpretation for the world and life events; they think that the world puts obstacles that cannot be handled. This gloomy perception of life makes the future seen hopelessly and its worthlessness will inhibit the

situation from improving. When the negative view of the self, world, and the future interact together; they intervene with the natural cognitive processes which lead to weaknesses in perception, memory, and problem solving. Acquiring a cognitive triad will not necessarily lead to depression.

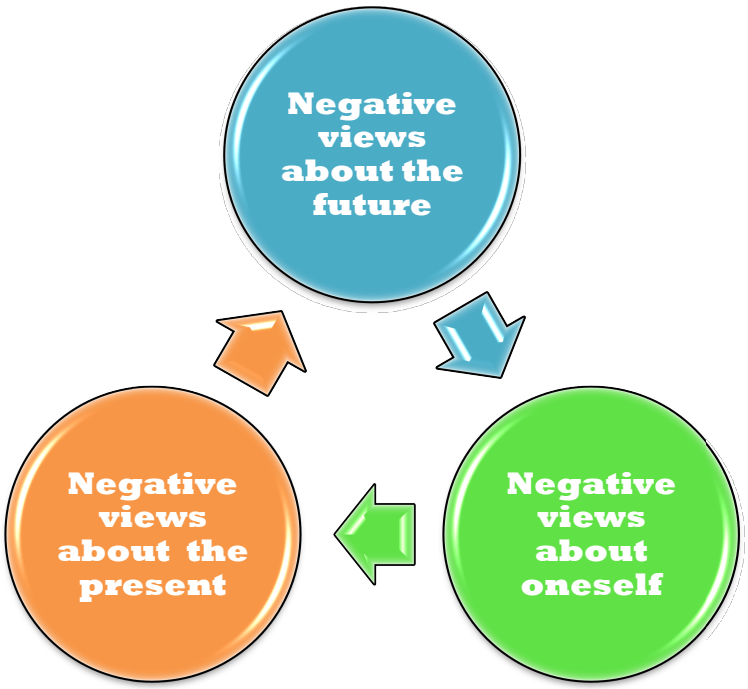


Figure1: Beck's cognitive Triad

Second, Beck (1970) indicated that patients with depression tend to develop a "negative self-schema" i.e. they have pessimistic and negative beliefs and expectations towards themselves. He also believes that these schemas result from childhood's traumatic events. Once the negative schemas are triggered, illogical thoughts influence the thinking. These are examples of experiences that may lead to negative self-schema:

- Loss of a parent or one of the siblings.
- Parental overprotection, critique, rejection or abuse.
- School bully or keeping out from a group of peers.

Third, logical errors are highly made by people with negative schemas because they have selective focusing on specific aspects of a situation while overlooking the relevant information of it. Beck in 1967 pinpointed some systematic negative alignments in information processing. These illogical thinking models are self-defeating and may lead to depression or anxiety. For example:

- **Arbitrary inference:** concluding negatively without supporting information.
- **Selective abstraction:** shedding the light only on the negative part of any situation.
- **Magnification and minimization:** highlighting and amplifying problems while reducing the solution.
- **Personalization:** blaming themselves for negative events as if it is their fault.
- **Dichotomous thinking:** thinking in a "polar opposites" which means no possibility for thinking in between two extremes.

Another cognitive explanation to depression is Seligman's theory, the so-called "learned helplessness" in which he concluded that depressed people learned that escaping from negative situations is meaningless. Consequently, they turn into passive and endure unpleasant environment. Seligman created two groups of dogs: the first group was put in cages with electrified floors while they cannot escape the electric shocks (Peterson et al., 1993).After being subjected to electric shocks that they could not escape, they stop trying eventually.

The second group was put in different cages with two floors: one side was electrified while the other was safe for them separated with a small wall. When the electric shocks start, the dogs automatically jumped to the safe side. The interesting part of this experiment was when Seligman brought dogs from the first group and put them in the second group's cages;

they did not escape like the other dogs even though they had the ability to do so. At this point, Seligman started noticing some of depression symptoms on those dogs similar to depressed patients like lethargy, appetite loss, and sluggishness. That is why he explained human's depression as "learned helplessness" because when people face tough situations; they have learned that they are helpless since they could not control what happened to them. As a result, they give up on enhancing their environment.

A new developed version of "learned helplessness" was introduced as the old version of the theory did not give importance to cognition (thoughts). So, they focused on the attributional processes. This new version of the theory is based on three aspects which are: locus (whether the cause is external or internal), stability (whether the cause is permanent or passing) and global or specific (whether the cause particularizes the whole person or some specific characteristics).

Gotlib and Colby (1987) criticized the cognitive approach in terms of the classification of the term helplessness as a cause of depression while they suggested that it should be seen as a symptom of depression. They explained that in terms of comparing formerly depressed people with people who have never been depressed before and they found that there are no differences in interpreting negative events helplessly.

1.1.5. The Humanistic Approach

Another important approach is the humanistic approach that proposes that the human beings have certain needs. Maslow (1962) stated that "self-actualization" is the most important need. Similarly stated, this need means acquiring a meaningful life, and anything that stands in the way of fulfilling this need may be a cause of depression. There are three causes that block the striving to achieve this need which are:

- Parently imposed qualities: it is when parents impose standards of worth on their kids, the lack of unconditional love, and not accepting the kids for who they are. This will lead the child to develop a negative self-image and to feel depressed.
- Some children deny their true nature by projecting an image of what they want to be. The creation of this false image is only to please others. Splitting-off of two different personalities lead to hatred of the self and despising it for accepting to live a fake life.
- For adults, a sorrowful relationship where the person is banned from giving or receiving love from their partner, or an unpleasant job in which the person cannot be creative are two main reasons that can diminish the self actualization.

1.2. Depression Symptoms

Truschel (2020) indicated that to be diagnosed with depression, the presence of at least five of the following symptoms for fifteen days is necessary for a confirmed diagnosis:

- **Constant sad or anxious mood:** having a depressed mood, sometimes people with depression do not really realize that they feel low and instead they say that they feel annoyed or angry.
- **Feeling hopeless and pessimistic:** they consider all bad incidents occurred because of them and they tend to give up easily thinking there is no way out to save the situation.
- **Irritability:** or feeling agitated. This can be shown in certain behaviors like fidgeting or pacing.
- **Feeling guilty, useless or desperate:** feeling inferior, inadequate, or like ~~a~~ failure become your friend when suffering from depression.

- **Loss of passion and interest in activities once enjoyed:** the medical term for this symptom is “anhedonia” which refers to the absence of pleasure when doing things that used to entertain them.
- **Reduced energy:** people with depression usually feel exhausted and as if their legs and arms are weighted down which will hinder the achievement of their tasks.
- **Being slow while talking or moving:** sluggishness and retardation~~, they~~ can be manifested in slowing of movements, speech, and thinking.
- **Insomnia or oversleeping:** there are two possible changes in sleeping: whether depressed people sleep a lot or do not sleep at all. And even if they fall asleep, they do not feel rested and find it challenging to leave their beds in the morning.
- **Troubles with concentration, memory or decision making:** one of the signs and symptoms of depression is being easily distracted and trying hard to concentrate. In addition to being very indecisive.
- **Thinking of death or suicide, having suicidal attempts:** also called “suicidal ideation”. This symptom can be passive when it is only a thought that life is not worth living and death is an escape from it or active when the person wants to commit suicide. The ones who suffer from active suicidal ideation are terribly ill.
- **Appetite and/or weight changes:** these two indicators of depression may increase or decrease as it differs from a patient to another. As a result of this change in weight and appetite, there will be whether gaining or losing in the person’s weight which will also lead to health problems related to this change.
- **Suffering from unexplained body aches and digestive problems:** one of the weird symptoms is having pains like headaches or cramps that do not have an organic cause and/or respond to any treatments taken.

1.3. Depression Types

The term depression is an ambiguous term due to the massive variety of its types. This mental illness differs from a person to another; it can be moderate or severe, temporary or chronic. Knowing which type of depression the person is going through will help the doctor(s) in charge to determine the appropriate treatment. According to Pallarito (2017) there are 12 types of depression which are:

1.3.1. Major depressive disorder

It is a common type of depression that is also termed as clinical or major depression; usually women experience this type of depression. According to the American Psychiatric Association's diagnostic criteria, at least five symptoms should be present for two weeks. These symptoms need to be among the following: depressed mood, emptiness, hopelessness, inadequacy, guilt, reduced energy and appetite, loss of interest in activities, changes in sleeping routine and having suicidal ideation. This type of depression is highly treatable. Clinical depression has two subtypes which are: "atypical depression" and "melancholic depression". People diagnosed with the former category are usually young adults who have the tendency to eat and sleep a lot. In addition to that, they have uncontrollable reactions to emotional stimuli and anxious feelings. However, the ones who belong to the latter category are seniors who have problems in sleeping and tend to contemplate guilt-ridden thoughts.

1.3.2. Treatment-resistant depression

From its name, it can be inferred that it is a stubborn type that hangs on. Sometimes patients with clinical depression do not respond to treatment easily due to its cause that might be genetic or environmental. Thus, antidepressants courses are not helpful for them. In order to ensure a valid diagnosis, treatment-resistant depression patients should have a careful

medical checkup and other psychiatrics opinions; a change in the dosage and duration of treatment is highly recommended. Another solution is switching to a similar drug from another class or adding another antidepressant from a different class along with their previous course.

1.3.3. Subsyndromal depression

This type includes all patients who do not have the two conditions of clinical depression. In other words, they do not have five symptoms and/or the duration needed for the diagnosis (two weeks). Psychiatrists check whether these patients are functional in their lives or not in fulfilling their responsibilities. In case of facing any struggles with the symptoms, a treatment will be beneficial for them along with their medication of course.

1.3.4. Persistent depressive disorder

Also called “dysthemia”, from its name, this type is known with the long duration not the intensity of symptoms. People who have persistent depressive disorder feel like they have been depressed as long as they remember or they have breaks between depressive phases in their lives. Sometimes, people diagnosed with this type feel like being depressed is a part of their personality because they have been depressed since childhood. There are no effective ways to prevent persistent depressive disorder from happening but the most effective treatment is a combination of medication and psychotherapy.

1.3.5. Premenstrual dysphoric disorder (PDD)

During child bearing age, some women struggle with PDD due to unnatural sensitivity to hormonal imbalance throughout their menstrual cycle. From the terming premenstrual (the week that precedes women’s period), the severity of this sensitive period can trigger severe symptoms of depression, anxiety, agitation, and sadness. The effective cure of PDD is a

course of antidepressants throughout the two weeks before the period or during the whole month.

1.3.6. Bipolar depression

It is also called manic-depressive syndrome or bipolar disorder. It affects young adults and both genders equally. Signatures of this type are moodiness and swaying in energy i.e. moving from a hyper active state to an exhausted one and from excitement to hopelessness and vice versa. Bipolar depression generally worsens without the right treatment. It can be treated with mood stabilizers, talk therapy, and antipsychotic medicines.

1.3.7. Disruptive mood dysregulation disorder (DMDD)

Children who struggle with controlling their emotions are the ones who get affected by this type; shouting and temper tantrums (stubbornness, crying, angry, ranting, and unsociability). DMDD's treatment includes psychotherapy, medications and parents' interference by getting trained to deal correctly with the child's abnormal behaviors.

1.3.8. Postpartum depression(PPD)

It is called prenatal depression, as well. From its terming, it can be deduced that it occurs after having an infant, the unexpected thing is that even men can struggle with this type too (25% of women and 12.5% of men). This type is serious because it may lead parents to thoughts of hurting themselves and/or their infant. In addition to that, it may be triggered any time at the first year after the child's birth. Having a newborn brings a huge responsibility to his or her parents and a radical change in their lifestyle. However, what triggers this type of depression differs for the two cases; for women the hormonal changes that occurs after giving birth and tiredness in addition to other factors may lead to PPD

whereas for men, it is environmental including all changes in their lives of all aspects. PDD is usually treated by antidepressants and/or talk therapy depending on the case.

1.3.9. Seasonal affective disorder (SAD)

Known as seasonal depression, it occurs periodically and it is triggered usually in winter or/and fall. Seasonal depression sufferers share some or all of the following symptoms: change in mood, decreased energy, overeating, oversleeping, food craving especially carbohydrates, gaining weight and dropping out from social activities. The diagnosis requires having seasonal symptoms for two years at least, young adults and women are highly exposed to SAD. What causes this type of depression is still unclear for researchers. However, they think that it may be hereditary or due to Serotonin (natural chemical substance in the body) imbalance in the brain. SAD is treated with medication and/ or light therapy.

1.3.10. Substance-induced mood disorder

It includes all changes in feelings, action, or thinking due to the use or the stopping of drugs. Right after drug taking, drug abuse, or during the withdrawal of the substance taken may lead to symptoms like depressed mood, losing interest in activities once enjoyed and feeling anxious. We mean by substances painkillers: alcohol and benzodiazepines. Doctors must abolish any possible causes of depression in order to diagnose patients with substance-induced mood disorder. Furthermore, depression needs to be at a high severity level to a degree of interfering in daily tasks.

1.3.11. Psychotic depression

Psychosis is a serious mental disorder that leads to impairment of emotions to the point of losing contact with reality. People with psychosis suffer from hallucinations and delusions (they do not get in touch with the real world and they keep on hearing and seeing unreal

things which will make them have illogical ideas and behaviors). The prescription of antidepressants and antipsychotic are suitable for people with this type of depression.

1.3.12. Depression to an illness

Some diseases have a scary impact on people and they directly relate it to death such as cancer and Human Immunodeficiency Virus (HIV). Thus, being diagnosed with one of these illnesses may lead to this type of depression. Disease-related inflammation releases some chemicals that may lead to brain changes that may trigger depression or aggravate it. The only solution for these desperate patients is taking antidepressants that prolongs their lives and improve its quality in order to cope with both mental and physical sickness.

1.4. Causes of Depression

Bembnowska & Jośko-Ochojska (2015) state that the onset of depression as a behavioral and emotional disorder is much more complicated than chemicals imbalance on brain's level unlike what the previous studies have shown. Chemicals are certainly involved because they are responsible for mood and interpretation. The complexity of depression is what led researchers to dig deeper in its ocean and to look for the different causes of it which are: genetic causes, the brain's impact and stress.

Genes have an impact on mood and automatically on depression too. We notice many of its members which is an evidence of depression's heritage. For people who are genetically susceptible to depression, any stress in their lives can trigger this mental illness. The exact genes that are responsible for depression are still unknown, and the researchers' ultimate goal is to determine them because it will revolutionize depression's treatment. Depression can be caused also in the fetal period; the development of the fetus's brain during pregnancy is affected by the mother's emotions. The mother's body releases stress hormones when she

faces negative emotions or being stressed which affects the brain cells; the damage is estimated depending on the feelings' duration and strength. Emotional memory carries the fetal experience and unfortunately, the mother's depression during pregnancy may be inherited by the newborn.

The brain has an impact on depression, not only in terms of the levels of chemicals but on synapses (nerve cell connections), nerve cell (neuron) expansion and nerve circuits functioning; the brain's impact on regulating the mood is what treats depression. Neurotransmitters are chemicals that deliver messages between neurons. An example of neurotransmitters that have an impact on depression is Serotonin (regulates appetite, sleeping and most importantly the mood); its low levels lead to high risks of suicide. When a patient takes an antidepressant, it increases these chemicals that will poke the brain to regulate the mood

Furthermore, stress is an emotional factor that leads to mental tension; facing stressful events in life develops a mood disorder by triggering series of chemical reactions in the body. Similarly stated; when stressful events occur they act as a stimulus; as a response to stressful stimuli, changes in the body like fast heart pounding, sweating and muscle tension. Chronic stress is the harmful one to the body because the changes in the system can last longer and cause health problems unlike when it is temporary the body gain its stability back. There are other stressful factors that also cause depression like family problems, traumatic experiences, insomnia and being overwhelmed with daily duties.

Chapter Two:

Vocabulary Choice

Introduction

Language is a structured system of communication; it is a crucial part of human connection. Vocabulary is the word-stock that makes up a specific language; moreover, vocabulary knowledge is what enables its use. Vocabulary choice is what makes the progression of ideas clear and carries the meaning of ideas; however, there are many factors that interfere in the vocabulary choice process like the psychological well-being. The aim of this chapter is to shed the light on vocabulary's definition, types, size, importance, techniques in teaching vocabulary, factors that affects its learning and the vocabulary choice.

2.1. Definition of Vocabulary

For a better definition of vocabulary, an identification of the term "word" is found prerequisite. According to De and Markley (2000, p.2) the word is "a unit formed of sounds or letters that have a meaning" which means that not any sound or a group of letters can be a word; they should make sense. Jen (2018) stated in three types of words which are basic words (tier one words), context words (tier two words) and genre specific (tier three words).

Basic words like: left, work and road are familiar ones that are used frequently with no direct instructions. These words are well understood and people are aware of their use in isolation, in context, and they are applied in personal language. The second type is called context words; these words impact directly the meaning of the passage and it is why they are powerful to know. Unlike tier one words, tier two words have multiple meanings depending on the context they are used in. Hence tutors must focus on them. For example: bombarded, winding, and intricate are context words.

The last type of words is termed genre specific; tier three words are used in specific topics like science for example and do not have multiple meanings. Atom and photosynthesis

are examples of words that belong to this category. These words are abided by content areas. In other words, they cannot be used haphazardly like: I have a good equator because the translation into figurative language is illogical.

Another important term to be defined that has a direct relation with vocabulary is "chunks". Thornbury (2005) has defined chunks as "sequences of speech that are not assembled word by word but have been pre-assembled through repeated use and are now retrievable as single units; they are any combination of words which occur together with more than random frequency" (p22-23). In other words, chunks are the grouping of three to five words into a short meaningful phrase; they are also termed as holophrases, lexical phrases, prefab and formulaic language. There are many types of chunks but the most common ones are the following:

- Collocations: such as to take a risk, to give advice, to make the bed and to do the homework.
- Idioms and sayings: such as break a leg, bite the bullet, better than never and hang in there.
- Phrasal verbs: like be down, fed up, agree with, aim at, book in, and calm down.
- Discourse markers: like so, finally, next, likewise, above all, instead of and apart from.
- Social formulas: for example have a nice day, take care, see you soon and talk to you later.

Hornby (1995) provided three definitions of vocabulary which are: the total number of words that compose the language, all the words that a person knows or uses, and the last one is a list of words and their meanings. Vocabulary's first use was in 1532 where the term vocabulary was devoted to a listing of a group of words and/or phrases that are generally ordered alphabetically with their definitions similar to a dictionary (lexicon). The common

meaning of the word vocabulary is the collection of words a person or a group of people know and use in a specific language. However, the term vocabulary has many other indications rather than words such as specific terms in a given field of study like the vocabulary of physics for example or a number of codes obtainable for use like indexing systems. Another use of the word vocabulary is when it refers to a collection of non-verbal symbols like flags or expressive forms in art like in the dance vocabulary.

Many scholars has defined vocabulary such as Neuman & Dwyer (2009) "words we must know to communicate effectively; words in speaking (expressive v) and words in listening (receptive vocabulary)"(p384). In this definition, vocabulary is directly linked to communication because that is the main use of words according to these scholars. They have also divided vocabulary into two types which are the receptive and expressive vocabulary. Another definition was provided by Ur (2015) that says:

> Vocabulary can be defined roughly, as the words in the language. However, it may include items that are more than a single word: for example post office and mother-in-law. There are also longer multi-word expressions such as call it a day, in any case, how are you? Which express a single concept and are stored in the memory as a whole chunk. A useful conversation is to cover all such cases by talking about vocabulary items rather than words. (p. 60)

This last definition was a revolutionary one because it gave a more specific definition of vocabulary and moved it from its basic relation with words. In other words, it related it with any meaningful items that can be a single word or expressions with many words.

2.2. Types of Vocabulary

Harmer (1991) divided vocabulary into two main types which are active and passive vocabulary. The former was defined as items the learner is able to use appropriately in speaking or writing; it is also called ~~as~~ productive vocabulary. This type specifies the learned vocabulary or the one has been taught earlier and the ability of using it is highly expected from the student. It is often used in the writing and speaking skills. This type is challenging to put into practice because the student needs to be aware of the right pronunciation of words from this type, the grammatical rules needed to make correct sentences and the connotation meaning of words. However, the latter indicates the words that the student knows when s/he is exposed to them while reading but will not be able to use in writing and speaking. Similarly stated, it consists of words that are understood by students in the context of reading or listening; it is also labeled receptive vocabulary.

Dugan (2010) defined two modes of vocabulary (written and oral) in addition to two processes (receptive and expressive). The crossing of these modes and processes creates reading vocabulary, writing vocabulary, listening vocabulary and speaking vocabulary. For vocabulary modes, written vocabulary represents the words learners can read and write down. By this we mean that students are able to recognize and use words in writing and reading. However, oral vocabulary refers to the words spoken or heard by the learner and the ones who are actively used in speech. On the other hand, vocabulary processes includes first the receptive vocabulary, this process means understanding words heard and read i.e. in this process the leaner can recognize words when he sees or hear them. Furthermore, the second vocabulary process is expressive vocabulary that signifies the production of words in speech and writing. More specifically, it includes words identified by the learner s/he uses when s/he speaks or writes.

		Vocabulary processes	
		Receptive	Expressive
Vocabulary modes	Written	Reading	Writing
	Oral	Listening	Speaking

Table 1: Four types of vocabulary (Dugan, 2010)

Clarence (as cited in Raţă, 2010) outlined four types of vocabulary and listed them in order of most extensive to most limited as following: Reading vocabulary, Listening vocabulary, Writing vocabulary and Speaking vocabulary. The first type is defined as all words a person can recognize when reading and it is the largest for a simple reason because a person who reads is usually more exposed to extra words compared to the words acquired when listening. The second type represents all the words people recognize when they hear in speech. However, people sometimes can understand unfamiliar words by using hints such as the context, tone, topic of the discussion, and gestures. The third type is simply the words used when writing in various forms (formal and informal). It is stimulated by the writer unlike the previous type. In writing, the words are chosen carefully i.e. if the writer knows many synonyms; he chooses the suitable one for the context. The last type is considered as a subset of listening vocabulary; it is defined as the words utilized in speech. Since speech is spontaneous, mistakes (misuse of words) are likely to occur. However, this unintentional slight misuse can be compensated by the tone of the voice and facial expressions.

Another type of vocabulary was added by the American philosopher Rorty (1989) and it was termed as Final vocabulary. He defined it as:

> All human beings carry about a set of words which they employ to justify their actions, their beliefs and their lives. These are the words in which we formulate praise for our friends and contempt for our enemies, our long-term projects, our deepest self-doubts and our highest hopes. They are the words in which we tell, sometimes prospectively and sometimes retrospectively, the story of our lives. I shall call these words a person's "final vocabulary". (p.73)

Rorty (1989) has explained any person's "final vocabulary" as all words carried out and employed as a mean of justification for their deeds, their beliefs and lives. However, it may also be used to compliment the person's friends and disregard their enemies; in addition to expressing their future plans, hopes and doubts. Another use of this type of vocabulary is sharing the personal life story prospectively or retrospectively. Final vocabulary is made up of two parts: the first part is the smaller one which includes thin flexible common words such as wrong, false and hot whereas the second part is considered larger and contains thick narrow rigid words like kindness, progressive, and decency.

The last type of vocabulary is called Focal Vocabulary. It is defined by Professor Injeeli (2013) as "a specialized set of terms and distinctions that is particularly important to a certain group; those with particular focus of experience or activity. A lexicon, or vocabulary, is a languages' dictionary, its set of names for things, events, and ideas" (pp. 6-7). This type of vocabulary pertains to a specialized set of words and distinction that is significant to a specific group of people of the same specific interest and focus. Magga (2006) one of the famous pioneers in the Saami linguistics; Saami people are indigenous Finno-Ugric mainly

settled in Norway. They had a unique terminology for reindeer, snow and ice which represents a well clarified example of focal vocabulary. These are three examples from Saami language, the female reindeer that is six months old is called “Miessi”, the term “oppas” refers to the untouched snow with no footprints and the last example is “Sealli” which means the melting frost on trees.

2.3. Vocabulary Size

According to Holmes (1948), six years old children know about 17000 basic words (like happy) in addition to 7000 derivatives (like happiness or unhappy). Around 5000 words plus derivatives can be added to a child’s (from the first to the twelfth grade) vocabulary per year. The method that vocabularies are measured is simply taking a systematic sample of words from the unabbreviated dictionary. This will give the students a chance to sample all possible kinds of words. In the case of Smith (as cited in Holmes, 1948) has duplicated this method. In other words, she has chosen the third word down counting from the top left column of all eighth pages. Her sample was composed of three public schools students from the first to the twelfth grade and the results were as following:

Grade	Basic words	Derived words	Total words
1	16900	7100	24000
2	22000	12000	34000
3	26000	18000	44000
4	26200	18800	45000
5	28500	22500	51000
6	31500	18000	49500
7	35000	20000	55000
8	36000	20000	56000
9	38500	24000	62500
10	40200	37300	67500
11	43500	29500	73000
12	46500	33500	80000

Table 2: Dr Smith's experiment's results to measure vocabulary (Holmes,1948)

The department of experimental psychology of Ghent university's estimate that American native speakers at the age of twenty know about 42000 lemmas (basic form of a word) and 4200 non-transparent multi word expressions, all derived from 11100 different word families (Brysbaert, Stevens, Mandera & Keuleers, 2016). Sex difference has always been a topic of discussion in conversational behaviors; it is estimated that women have larger vocabularies than men and a woman utters 20000 words per day while a man only uses 7000 words per day Brizendine (as cited in Mehl , Vazire, Ramirez-Esparza, Slatcher & Pennebaker , 2007). However, these numbers have always circulated through the media for years with no supportive studies, and these numbers are a bit illogical when comparing 20000 versus 7000.

Mehl et al (2007) have conducted a study to count the number of words spoken per day with a developed method for the natural recording of the language by using the electronic activated recorder “EAR”. This device is a digital voice recorder that tracks the natural use of the language while participants are spontaneously using language over the course of the day which is the average of 17 hours a day. The aim of the study is to compare the number of words used by the two sexes and for that a sample of 396 university students participated in this study (210 women and 186 men). The results denied sex differences in the daily use of words, both genders uses the average of 16000 words per day, and also this study has shown that women’s lexical budget is not larger than men’s budget.

Nation (2001) advocates that when designing a language course, the course designer needs to set goals. For vocabulary goals, there are three things to take into consideration when deciding the vocabulary size: the leaner needs which are the number of words in the target language, the number of words the native speaker knows and the number of words needed to use in the target language. For the first question, is not an easy one because to count all the words in a language is challenging for so many reasons: first do we count homonyms like green (the color) and green (grassed area) as one word or two, do we count people’s names and companies’ brands (Mercedes). The few attempts to answer this question were by counting the words in very large dictionaries and the answer was 114000 word families. For the second question, educated native speaker know about 20000 word families; native speakers add about 1000 word families per year to their vocabulary which is manageable for English language learners as a second language.

2.4. Importance of Vocabulary

Holmes (1948) states that vocabulary is one of the basic knowledge areas in learning any language, and vocabulary size is highly related to language skills development. It is the

best index to predict the achievement of many language skills like fluency, reading comprehension, and reasoning. In addition to that, having a limited vocabulary hinders successful communication both orally and written. Schmitt (2000) pointed out that "lexical knowledge is central to communicative competence and to the acquisition of a second language" (p.55). This quote underscores the importance of vocabulary acquisition especially for communicative competence. Furthermore, vocabulary is a critical factor when it comes to producing and comprehending thoughts and ideas. It is crucial in both social and academic domains because it is needed in conveying everyday needs to perceiving intricate information. (Silverman & Hartranft, 2015).

According to Harmer (1991) who demonstrated vocabulary's importance by saying "If language structure makes up the skeleton of language, then it is vocabulary that provides the vital organs and flesh" (p. 153). From this quote, we conclude that even if learners try so hard to learn language structures which are ~~also~~ important but without vocabulary knowledge these rules cannot be used; vocabulary is the basic aspect in learning any language. The importance of vocabulary was also clarified in this quote "with grammar, very little can be conveyed; without vocabulary, nothing can be conveyed" (Wilkins, 1972, p. 97). Besides, in this quote a comparison between vocabulary and grammar was employed to shed the light on vocabulary's massive role in language leaning. Accordingly, without an extensive vocabulary, learners will not be able to use the learned language structures and language forms to communicate.

Addressing young learners, another importance of vocabulary is explained by this saying "improve learner's overall language ability by improving their vocabulary" (Linse & Nunan, 2005, p. 122). Thus, it is very important for the teacher to pay more attention to vocabulary development because it is highly related to language development. By having an extensive vocabulary, the learner will engage his/her thinking and develop his/her cognitive

skills i.e. when the learner uses the language, s/he will feel confused in choosing between synonyms like big and huge, and in such situation, the teacher will start to analyze and explain the two synonyms. As a result, this process enhances the learner's thinking skills.

There are several reasons that explain why vocabulary is important. In the last two decades, there has been a strong emphasis on it and according to Seifert (2016), these reasons are as following: First, it enhances reading comprehension; the reader should understand 98% of the words in order to comprehend the written piece they are reading. So, improving vocabulary will automatically improve reading comprehension. Second, vocabulary is essential for language development; the child who develops an extensive vocabulary is expected to think deeply, read frequently, and ~~to~~ express himself/herself clearly.

Consequently, s/he will become a good communicator, too. These characteristics are the key to improve literacy skills and language at an early age which lead~~s~~ to future academic and communicative success. Furthermore, drawing from a good vocabulary luggage will help in written expression. In writing formally, we do not use conversational language, but the vocabulary to use is related to occupational success; a person who develops good communicative skills (depending on good vocabulary base) tends to be successful in the business place. To conclude, vocabulary development is a long term process that starts from childhood and its development pays off in the present and the future.

2.5. Techniques in Teaching Vocabulary for L2 Learners

Murray & Christison (2014) stated that there is a link between vocabulary development and the four skills (listening, speaking, writing and reading). Despite the fact that L2 learners develop vocabulary through the teacher's emphasis on it though learners are passive in the process, it may be developed through the four skills, as well. Regarding the

listening and speaking skills, teachers should include listening and speaking activities in the lesson plan for the sake of increasing learners' words repertoire.

For the listening activities they need to include interesting content to drag the students' attention which enables them to receive the information and discuss its meaning. An example of useful listening activities is listening to a story repetitively that suits the learners' interests. As for the speaking activities, they give the learners a chance to communicate, work cooperatively, and use their productive and receptive vocabulary. Speaking activities include plays, problem solving activities, and role plays activities and so on.

Reading and writing are considered two important skills too when it comes to developing learners' vocabulary. Teachers should choose carefully the reading materials that go along with their learner's level and interest. Graded readers also called graded reading materials are books with simplified language levels to help L2 learners to read them, they are graded from beginners level to advanced in terms of vocabulary level, grammar complexity , and by the number of words. Unmodified texts are crucial vocabulary development activities for L2 learners because there is a natural use of language by the native speakers; however, the learners may face difficulties in comprehending these texts.

As a result, the role of the teacher is to create for the learners an interaction process with the text using visuals (maps, pictures and graphs) and glosses (notes, comments and remarks). Reading is known as one of the best techniques to enhance the vocabulary in the target language; the more L2 learners read the more they expand their vocabulary. Developing vocabulary through reading automatically improves the writing skill because the lack of vocabulary is the main obstacle that hinders L2 students when writing.

When planning the course, the teacher is responsible for preselecting the lexical items to be taught. However, the most important process is in the way they are going to be presented

where the teacher needs to present the meaning (can be presented verbally or non-verbally) and its form. The teacher uses many ways when presenting the new lexical item and one of the main ways is using definitions. Providing a definition may take many forms like giving the word's synonym, antonym, taxonomic definition by saying summer is a season, giving examples by saying clothes are something like a dress, skirt or the opposite and describing the function like when saying "something we write with" to define a pen.

In addition to the manner of presentation such as the "presentation through context" in which the teacher creates a scenario where the lexical item is clearly contextualized. It can be through one sentence or more depending on the situation created and the learners will try to guess the meaning of the lexical item through the context.

2.6. Factors Affecting Vocabulary Learning and Acquisition

The first factor is the linguistic features of lexical items which involve several factors that influence the vocabulary learning and hinders its acquisition. Referring to Laufer (as cited in Pavičić Takač, 2008) these factors involve:

2.6.1. Pronounce-ability: includes two features: supra-segmental and phonological. The former refers to the indication of utterance features like stress and intonation if we are talking about the English language. The latter is related to the system of the different relationships among speech sounds that constitute a language.

2.6.2. Orthography: it is the customary spelling system of a language.

2.6.3. Length: the word length makes it difficult to learn the vocabulary of the target language because it would be hard to remember the words with many letters.

2.6.4. Morphology: the study of the word forms and structures (prefix, root, suffix etc).

2.6.5. Similarity of lexical forms: it is hard to distinguish between one form that has several meanings when learning another language. For example: homonyms.

2.6.6. Grammar: it is the different structural rules that govern a language. Grammatical rules change from one language to another and this creates difficulties for the learners.

2.6.7. Semantic features: They deal with meaning like multiple meanings of the same word, abstractness, idiomaticity and register restriction. All of these features are specific to native speakers.

Here is a table that classifies the intra lexical factors that hinder vocabulary learning, difficulty inducing factors and factors with no clear effect.

Facilitating factors	*Difficulty-inducing factors*	*Factors with no clear effect*
Familiar phonemes	Presence of foreign phonemes	
Phonotactic regularity	Phonotactic irregularity	
Fixed stress	Variable stress and vowel change	
Consistency of sound–script relationship	Incongruency in sound–script relationship	
		Word length
Inflexional regularity	Inflexional complexity	
Derivational regularity	Derivational complexity	
Morphological transparency	Deceptive morphological transparency	
	Synformy	
		Part of speech
		Concreteness/ abstractness
Generality	Specificity	
Register neutrality	Register restrictions	
	Idiomaticity	
One form for one meaning	One form with several meanings	

Figure 2: Laufer's classification of the different factors in learning vocabulary

Nation (2001) indicated that the influence of the first language and of other languages on the acquisition and learning of vocabulary is the second factor to discuss. By this we mean, when acquiring the L2's vocabulary, the learner will endure because s/he has already established L1's semantic and conceptual systems. In some cases, the L1 facilitates the

acquisition and use of the L2 depending on the equivalency‘s degree between the two languages while in other cases it creates an obstacle for the learner. When the learners try to speak or write using the L2, they rely on l1’s structures and the difference between the two languages causes a lot of errors.

The meaning, form, and culture of L1 are often transferred unintentionally by L2 learners because they got used to L1’s habits and they need time to get used to L2’s habits instead. Moreover, memory has a massive role in vocabulary acquisition and learning. When learning new information, the brain stores it in the short term memory and it needs to be transferred to the long term memory otherwise it will be forgotten immediately. The L2 teacher needs to make sure of this transfer by planning multiple encounters with the previously learned lexical items at spaced interval, by doing this, the learner’s brain will automatically move the gained knowledge to long term memory where it will be stored efficiently.

2.7. Vocabulary Choice

Speaking is the human’s vocal communication while using language; we speak to express our thoughts and feelings or to convey a piece of information. The process of speaking for a fluent speaker of a language seems easy; a healthy speaker can utter two to three words per second easily. However, in our brain it is not as easy as it seems to choose a word from tens of thousands of words from our personal mental dictionary. This fast process of naming a picture of a cat for example requires many steps and several regions in the brain in order to fetch that exact word from the memory. The steps that occur in the brain are as following:

- The first step is to simply think of the concepts related to the item in the picture like pet, fluffy, cute and so on. This first process will help us define what is demonstrated in the picture because a cat is a cute fluffy pet.
- In the second step, all the words we relate with the concepts in step one are accessed to. By this we mean, the brain brings out all the words that are related to those characteristics rather than the word cat for example bunny, hamster, and dog.
- The third step is choosing the correct word from all the activated words with a specific external selection mechanism just like it is represented in the schema bellow.
- Finally, comes the last step after selecting the correct word; the phonemes stored in the brain need to be activated and stringed together to make a whole word. This whole process happens so fast each time we name an object.

There are several regions in the brain that are involved in the word choice process and work in parallel at the same time. The brain functions by a lot of oxygen and nutrients brought to it by arteries that carry the blood stream. Sometimes, the arteries break or get clogged due to strokes; when that happens, the brain tissue of the brain regions gets damaged because it stayed for a long time without oxygen and nutrients. When the regions responsible for language get damaged, stroke victims struggle with language tasks depending on the damage's region; they might find it difficult to understand language or to speak (Anderson & Ries, 2019).

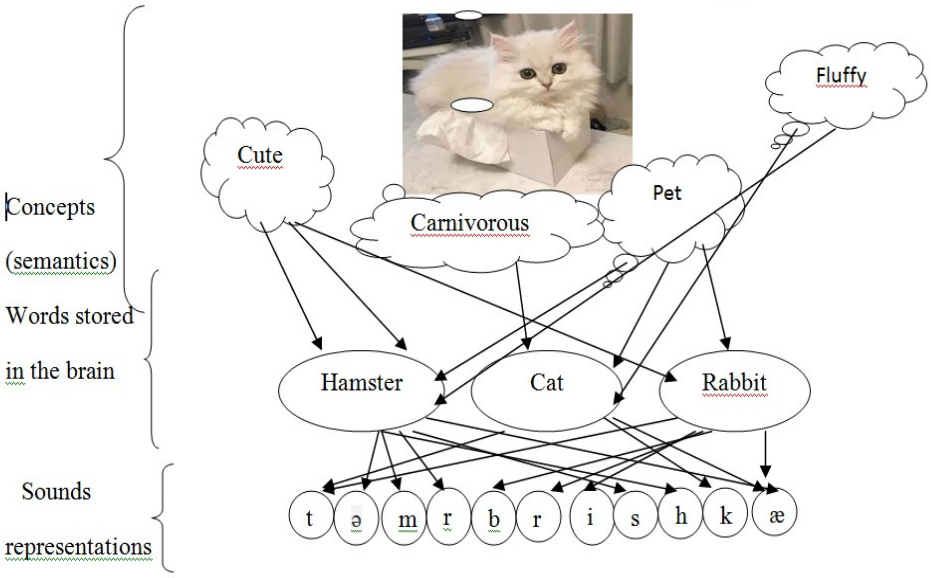


Figure 3: the steps that occur in the brain when naming a picture

Chapter Three:

Analysis and

Discussion of the

Findings

Introduction

In the previous two chapters, we have discussed the literature related to depression as a mental illness and vocabulary as well as its choice. The present chapter is the practical part that deals with the field work of the study and data analysis and interpretation. It includes two parts, the first one consists of the theoretical background of the under investigated study's research methodology i.e. research approach, research design, population, sampling and data collection method. On the other hand, the second part aims to investigate the relationship between depression and the choice of words. In addition to that, it presents a detailed analysis and interpretation of the gathered data as well as discussing and synthesizing the findings in order to check the validity of the suggested hypothesis.

3.1. Research Methodology

3.1.1. Research Approach of this Study

Every research study demands a specific research methodology depending on the nature and the aim of the study. This research aims at investigating the relationship between the two variables which are mental state of people who suffer from depression and their use of language namely vocabulary choice. Thus, I opted for the mixed method approach because qualitative and quantitative methods are both involved in this research. On one hand, this study aims to diagnose the patients through the Hamilton Rating Scale of depression and report the results via simple statistics. On the other hand, it aims to understand depression patients' behaviors in terms of their spontaneous use of language.

3.1.2. Sampling and Population

Since the study is concerned with depression and its impact on vocabulary choice, the population of the study is represented by Amen Center of Psychology of Batna's 63

depression patients. To check the hypothesis validity and to answer the research questions, a sample of twelve participants (adults) are chosen to be a part of this study. The sample targets both depressed and non depressed EFL learners. Six of them are patients from Amen Psychological center of Batna who are already diagnosed with depression. The other six are normal people who are not suffering of any mental issues. All participants are EFL learners.

3.1.2.1. Sample's Personal Information

	Depressed	**Non depressed**
Case one "Corona virus"	HN: 27 years old postgraduate EFL learner. Female	TS: 25 years old postgraduate EFL learner. Female
Case two "Bankruptcy"	SH: 30 years old postgraduate EFL learner. Female	MK: 24 years old graduate EFL learner. Male
Case three "Bullying"	AA: 23 years old graduate EFL learner. Female.	RA: 35 years old postgraduate EFL learner. Female
Case four "Moving"	AH: 32 years old postgraduate EFL learner. Male.	CD: 22 years old EFL learner. Male.
Case five "Postpartum "	GKA: 28 years old postgraduate EFL learner. Female.	FW: 31 years old postgraduate EFL learner. Female.
Case six "Losing someone special"	FB: 22 years old EFL learner. Male	NH: 29 years old postgraduate EFL learner. Female.

Table 3: The Sample's personal information.

The table above provides a clear description of the sample .The selected sample varies in age, gender, occupation, in addition to depression stimulators and severity. Every depressed case is compared to a non depressed one covering the same topic. For the first depressed case,

she is a 27 years old EFL post graduate learner female. Yet, the not depressed subject is 25 years old EFL post graduate female. They both talked about the corona virus pandemic and its effect on their mental as well as personal state. Bankruptcy was the tackled subject for the depressed as well as the non depressed case two. The depressed subject is a 30 years old female postgraduate EFL learner; however, the non depressed subject is a 24 years old female postgraduate EFL learner. As far as the third case is concerned, they have tackled bullying experiences as a topic. The depressed subject is a 23 years old female EFL learner, and, the non depressed subject is a 35 years old female postgraduate EFL learner.

On the same token, and in case four, the participant has chosen to talk about moving to a new place. The depressed patient is a 32 years old male postgraduate EFL learner. As for the non depressed case, he is a 22 years old male postgraduate EFL learner. Amid the other cases, case five covered 'postpartum" as a topic. The depressed patient is a 28 years old postgraduate female, yet, the non depressed case is a 31 years old EFL postgraduate. Last but not least, case six approached "losing someone special" as a topic. The depressed participant is a 22 years old male EFL learner, yet, the non depressed case is a 29 years old female postgraduate EFL learner. Cases are recommended by a therapist and they are carefully chosen to answer the research questions.

3.1.2. Data Collection Methods

3.1.2.1. The Hamilton Rating Scale for Depression

Hamilton Rating Scale of Depression (HRSD) abbreviated as HAM-D is a multiple item questionnaire; it is a tool that confirms depression' diagnosis and its severity for adults. It is also used to evaluate recovery i.e. it is a scale to assess depression. It was published by Max Hamilton in 1960 and revised four times in 1966, 1967, 1969 and the last update was in1980. At that time, there was an availability of many depression rating scales; however,

Ham-D was the most popular because it was the first scale that rated depression's severity (Zitman et al., 1990). Its deviser Max Hamilton (Hamilton, 1960) insists that this scale is not a tool to diagnose depression; it is devised to people who already suffer from this mental disorder. It is used to quantify the results of the interviewer i.e. the interviewer needs to be skillful in extracting information from the interviewee to make the right assessment. This scale consists of seventeen variables that are measured on three or five points, the variables are described as following:

- **Depressed mood:** can also be termed as low mood and activity disfavoring and weeping is considered as its useful indicator. However, some patients can go beyond weeping.
- **Suicide:** one of the most dangerous symptoms of depression. In this question, the rater needs to be careful in distinguishing between a real attempt and a demonstrative one. If the attempt is real, it is scored as four points and for suicidal tendencies, it is scored as three.
- **Work and loss of interest:** the mental health affects many aspects of the person's social, personal and professional life. Having difficulties at work, losing interest in leisure activities and having relationships issues can be signs of being depressed. Some people may solely quit their jobs because of depression; in such cases the rater scores this section with four points.
- **Retardation:** some types of retardation (Psychomotor Retardation) have been recognized as one of the fundamental features of depression. There are four levels of retardation: mild, moderate, severe, and profound. For the first three levels, clinicians need to be patient and careful to rate them but it is doable. However, for last patients' level, it is not possible.

- **Agitation:** is a state of anxiety associated with restlessness. It is rated on three point scale instead of five because it was found impracticable. Even moderate degrees of agitation cause difficulties for the assessor.
- **Gastro-intestinal symptoms:** these symptoms include stomach pain, nausea, vomiting, diarrhea heartburn and constipation. Such symptoms occur in both anxiety and depression because they are highly related to each other.
- **Hypochondriasis:** phobias from some diseases like cancer or venereal diseases can cause difficulties for some people. This fear is excessive and unduly for some people and leads to mental illnesses like depression. The fear from these diseases may be rated sometimes under guilt.
- **Insight:** Having insight means having a feeling or a thought about someone or something by using personal intuition. It is related to the person's thinking and background knowledge. There are patients who have no insight and others who refuse to admit that they are "mental" i.e. they are mentally ill. It is important to distinguish between the two types.

For scoring, Hamilton advises having two raters for the patients for more reliability of the score; with experience the raters learn to give half points if necessary. After the interview, the sum of the points defines the level of depression in which the scoring starts from eight, less than eight means that the person is not depressed. From eight to thirteen it is mild depression, from fourteen to eighteen it is moderate depression, from nineteen to twenty-two, it is severe depression and finally when the score is more than twenty-three; it is very severe level of depression

3.1.2.2. The Interview

The reason behind using the interview is making the patients able to talk freely and use the language spontaneously. To do so, the patients, and during the interview, were asked to narrate a story of their choice. After that, the story was analyzed based on specific criteria.

3.1.2.2.1. The Interview's Analysis Criteria

Depression changes all the life aspects of a person, from sleeping and eating habits to interaction with people around. Language is an important aspect that gets highly affected by the mental state of a person; language acts as a mirror to depressed people's pattern of thoughts and emotional state which enables the psychologists or the assessor to diagnose and evaluate their severity .The linguistic analysis will include the parts of speech in which first person pronouns, possessives/reflexives, positive adjectives, negative adjectives, positive adverbs, and negative adverbs were the criteria. (Al-Mosaiwi & Johnstone, 2018).

Additionally, there are common criteria in depressed people's speech (Brithistle, 2010) that are demonstrated in the following points:

- **Absolutist thinking**

According to Paul et al (2019) "Absolutist thinking is a cognitive distortion related to anger which leads to anxiety and depression. It promotes expressions of anger when expectations are violated. Although absolute words are interchangeably used with extreme words, the absolutist words are born out of absolutist thinking." (p. 221). Absolutist thinking has two forms: the first is known as dichotomous thinking or the black and white thinking i.e. "all or nothing" in which terms like "never" and "every" are often used; it is considered as a defense mechanism where a person is splitting and fails to bring together two opposites as a cohesive whole. The second form is known as "categorical imperatives" which means being

rigid towards people or oneself by denoting an absolute; for example, saying: I must be smart or people must be polite.

- **Negativity:**

It is not a surprising fact that depressed speech contains an excessive amount of words and phrases that convey negative emotions such as negative adjectives like horrible; in addition to negative adverbs like sadly (Al-Mosaiwi, 2018).

- **Emotional reasoning**

Negative emotions reflect assumptions that are not necessarily true. Depressed people assume that what they feel reflects reality. In other words, there is a strong link between feelings and thoughts and they are highly related. For instance, if a depression patient greets his neighbor or waves at him but he/she does not reply, the patient will feel sad for that. That feeling of sadness will automatically create an assumption that the neighbor hates him or her (Brithistle, 2010).

- **Should statements**

People who have depression tend to draw a perfect image of themselves and try to seek perfection which is an impossible thing to do. Therefore, when they fail to do so, they feel inferior and disappointed. Consequently, they direct the "should" statements towards themselves and not others by saying for example: I should have worked harder (Brithistle, 2010).

- **Selective Abstraction**

Focusing on negative events that happened in the past until distorting the way reality is viewed. This selection deforms reality by focusing on the bad things, ignoring positive things and only viewing people and the world negatively (Brithistle, 2010).

- **Overgeneralization**

Mislabeling is a part of overgeneralization and it occurs when the person tags him/herself with something she/he has assumed due to a personal misjudging; in addition to seeing negative events bigger as they actually are. For instance, if a car accident occurred to a normal person, he/she will move on and learn from the mistake s/he has made. However, a depressed person will directly put the blame on him/herself and attach an exaggerated negative label to him/herself by saying for example: I am officially a bad driver. He/ she will not only stop at that point of mislabeling, but s/he will also start to make a wrong prediction about the future by saying for example: next time I will die in a car accident because I am a bad driver (Brithistle, 2010).

- **Magnification or Minimization**

Depression sometimes occurs when a person on one hand neglects and minimizes the positive things in his/her life that are supposed to affect it positively. On the other hand, s/he overvalues negative events and expects catastrophic consequences from a small thing. By highlighting negative events and focusing on them, the good things in life will automatically have little effect and these are two factors that lead to depression (Brithistle, 2010).

- **Disqualifying the positive**

This characteristic is similar to the previous one. A depressed person gets used to a certain thinking pattern and to a negative state of mind; for instance, s/he will not focus on his strengths but instead s/he will only focus on his/her weaknesses. This disqualifying includes the person him/herself, people and the world. It will make the person feel completely hopeless (Brithistle, 2010).

- **Personalization**

Similar to emotional reasoning, people who are depressed can see themselves as a cause of a negative event and/or these events are directed to them personally. In fact, it has nothing or little to do with them. For example, if a person is in a bad mood for a specific reason; a depressed person will take it personally and think that the person's actions are directed to him/her. Another example of personalization is when a person blames him/herself for something that is not his/her fault (Brithistle, 2010).

- **Arbitrary inference**

As mentioned previously, a depressed person has a negative mindset. As a result, s/he will make wrong and negative assumptions and turn them into facts. Those facts are based on poor evidence and will make the person jump into negative conclusions. An example on how these arbitrary inferences is when someone believes that s/he is unlucky while in reality they are not (Brithistle, 2010).

- **Brooding about the past**

A guaranteed way of depression is dwelling on past negative events; the past experiences are normally a source of life lessons for the person to learn from (Brithistle, 2010).

- **Asking questions that have no answers**

Wasting time on questions that cannot be answered leads to depression and anxiety. Examples of these questions are: why me? why things are not working well? why life is unfair? (Brithistle, 2010).

- **Unrealistic High Standards**

Depressed people have problems with self love, making mistakes is a normal thing, and getting things right all the time is not possible. When a depressed person fails to reach those high standards, s/he will act harsh on him/herself. S/he needs to accept him/herself with both strengths and weaknesses instead of rebuking him/herself a mistake occurs (Brithistle, 2010).

- **Assuming powerlessness**

One of the aspects that feeds depression is giving up on something without even starting, being pessimistic about chances of things changing and allowing negative event to affect our mental health. If a person does not like his/her situation, s/he needs to make efforts to change it. If s/he could not do so for any reason, acceptance is the key to a positive mindset (Brithistle, 2010).

- **Predictions and speculations about people's thinking and the future**

Negative outlooks can provoke depression quickly, being absorbed on negative predictions of the future will prevent the person from living the present and negative over thinking about what may happen in the future will waste any possible chance of knowing present alternatives possible to enhance the future. Another thing that puts the person down and harms positive relationships is negative speculations a person make about what people around him/her are thinking about him/her. By making wrong assumptions about people's feelings, a person's self confidence and social life are both going to be destroyed (Brithistle, 2010).

3.1.3. Piloting and Validity

As a start, this study opted for a mere linguistic analysis i.e. using the transcribed answers to fetch linguistic differences between depressed and non-depressed cases. After consulting

two teachers of English, one is from Batna 2 University and the other was a teacher at a language center; they have proposed to add a deeper paralinguistic analysis. After checking the availability of the sample, a piloting phase was conducted on two participants. Their answers were rich and a shift to a deeper analysis was a necessity to better answer the research questions. First of all, we have agreed that the psychologist Dr. Leila Derias will be in charge of assessing the patients by using the Hamilton test of depression in order to confirm her diagnosis but also to check the depression's severity. The second step was to structure an interview with them and I make them use the language spontaneously.

The plan was to analyze their recorded interviews in order to answer the research questions and confirm or deny the research's hypothesis. Unfortunately, a change in the plan was necessary due to the Covid-19 pandemic; meeting the patients was impossible. That is why we have changed the interviews conduction and the participants were asked to record their answers and send them via email. They were asked to simply tell their depression story by narrating their stories and use language in a natural way which is what the study requires. Luckily, they find it more useful. They felt at ease telling their stories alone which added an authentic and a reliable touch to their answers.

Another change that was found necessary and which also added credit and reliability to this study is adding six other EFL learners who weren't diagnosed with depression to the sample. They had similar experiences as the depressed learners in which they were asked to record their own experiences. The aim of this last step is to compare both stories and language use. To conclude, the piloting phase revealed a deeper analysis tool and served at raising the authenticity, the originality, the reliability, in addition to the credibility of data gathering tools as well as the analysis techniques.

3.2. Data Analysis

3.2.1. The Hamilton Test Analysis

As explained above, the Hamilton test (1960) consists of 17 Multiple Choice Questions (MCQ) or a psychic observation checklist. The participants were asked to online answer the “Hamilton test”. The participants were recommended by a clinic therapist. The aim of the present test is to have in detailed description of every case’s depressive factors and to tie loose ends among the depression as well as language. To be more specific, the Hamilton test helped to identify the correlation between language and the depression degree. As a result, a clearer description to the vocabulary choice will be deducted.

3.2.1.2. Hamilton Test Results

Question	Case 1	Case 2	Case 3	Case 4	Case 5	Case 6
Depressed mood	2	3	2	1	3	1
Feeling Of guilt	0	3	0	0	3	4
Suicide	0	2	0	0	2	0
Insomnia (initial)	2	2	0	1	1	2
Insomnia (middle)	1	1	0	1	2	0
Insomnia (delayed)	0	2	2	0	4	0
Work and interests	1	2	2	1	3	3
Retardation	1	3	1	0	3	1
Agitation	1	0	3	0	2	0
Psychic – anxiety	2	2	1	1	2	2
Anxiety – somatic	2	2	0	1	3	3
Somatic symptoms gastrointestinal	1	0	0	1	2	0
Somatic symptoms – general	0	1	0	0	2	1
Genital symptoms	0	1	0	2	1	0
Hypochondriasis	3	1	0	1	3	1
Weight loss	0	3	0	2	3	0
Luck of Insight	1	2	1	0	1	1
Depressionalization	1	1	1	1	1	1
Score	18	31	13	13	41	20
Observation	Moderate depression	Severe depression	Mild depression	Mild depression	Very severe depression	Severe depression

Table 4: Depressed participants Hamilton test results

The table above represents the depressed participants' Hamilton test results and scores. Conducting the Hamilton Test on six depressed cases revealed the depression degree of every case. On one token, case one revealed that depressed mood state is indicated only on questioning. In other words, the idea of feeling depressed is implicitly deduced and not explicitly admitted. Feeling of guilt and suicidal thought are absent in her case. Yet, the initial as well as middle insomnia are frequently present i.e. the patient complains of nightly falling asleep and feels restless and disturbed during the night. Moreover, case one suffers from thoughts and feelings of incapacity, fatigue or weakness related to activities, work or hobbies. in addition to a slight retardation and slow flow of thoughts. Case one showed a sense of fidgetiness.

Concerning the psychic-anxiety, case one showed a subjective tension and irritability with a moderate physical complaints related to anxiety. She also advocated appetite problems. She reaffirmed a loss of appetite but eating without encouragement from others, yet, the food intake is about normal. Thus, neither general somatic symptoms nor genital symptoms were observed. Nonetheless, the hypochondriasis level was considerably noticed. Case one showed frequent complaints and requests for help, which expresses a moderate health anxiety level. No weight loss was observed, but, the luck of insight is expressed through acknowledging illness and attributing the cause to bad food, climate, overwork, virus, need for rest, and so on which led to moderate depression diagnosis. Hence, the patient was diagnosed with moderate depression condition.

On the same token, case two endorses depressed mood by communicating the feeling states non-verbally i.e. through facial expression, posture, voice, and tendency to weep. She is slavishly controlled by ideas of guilt or rumination over past errors or sinful deeds. Hence, suicidal thoughts are moderately present. She Wishes that she was dead or repetitively have thoughts of possible death. Moreover, case two peculiarly faced insomnia struggles. She

interactively has difficulty falling asleep, waking during night, or waking during early hours of the morning. Besides, her answers showed a loss of interest in activities, hobbies or work; she stated that she feels that she has to push herself to work or to do something. And even when she does, she finds herself involuntarily out of focus showing a retarded and slow grasp of the surrounding environment.

As a result she sustains a cold blood mood. No agitation was observed. Yet, an observable level of worrying about minor matters was noticeably occurring. In addition to that, physical complaints related to anxiety were moderately observed. Hence, the food intake and loss of appetite were average. And that underpinned heaviness in limbs, back or headaches in addition to a loss of energy and fatigability and mild menstrual disturbance which led to a neglected health anxiety and luck of insight. As a result case two was diagnosed with severe depression.

Amid case one and case two, case three significantly showed a depressed mood stated verbally and spontaneously without any feeling of guilt nor suicidal thought. However, the patient reported a delayed insomnia waking in early hours of the morning unable to go back to sleep with a slight difficulty in work and daily activities. Unlike the agitation level, the patient is found in a regular state. No retardation signs were observed. Yet, continuous nervous movements such as vocal stops and tone giggling were observed. Concerning the luck of insight, case three denies being ill and put the blame on other factors. No physical symptoms were present and that is why case three was diagnosed with mild depression.

In the line of case one, two and three analysis, case four endorsed depressive mood by stating it spontaneously. He approached feeling of guilt on a personal scale. He believes that his decisions let some dear people down and that provoked a sense of guilt. No suicidal thoughts were observed. Alternatively case four suffers from initial insomnia. He complains

from occasional difficulty falling asleep. He needs more than 30 minutes to fall asleep. Besides, case one reported a subjective tension and irritability. With mild somatic anxiety demonstrated by physical complaints related to anxiety. He also stated that he suffers from difficulty in eating without the urge of others. Moreover, a remarkable loss of libido as well as luck of insight were reported. Thus, case four was affirmably diagnosed with mild depression.

However, case five showed a moderate depressive mood expressed both verbally and non-verbally. She constantly shows a frequent delusion of guilt with suicidal thought as well as a mild initial as well as middle insomnia. Yet, delayed insomnia is severely torturing her. As a new mother she stated that having a new baby coasted her to give up all her beside activities which led to a decrease in actual time spent in activities or decrease in productivity. Hence, retardation as well as agitation were inevitable. Moreover, case five stated that she developed a high level of fears which are thoroughly expressed without questioning. Relatively, case five showed a moderate somatic anxiety; she suffers from physical complaints related to anxiety with a loss of appetite. Not only that but also she clearly reported seldom heaviness in limbs, Backaches, headache and sore muscles with a loss of energy and fatigability. For that and more case five was diagnosed with a very severe post partum depression.

To retain, case six reported a depressive mood stated only by questioning going hand in hand with feeling of guilt especially with ideas of guilt or rumination over past errors or sinful deeds without any suicidal thoughts. Insomnia level is initial; the patient finds troubles falling asleep and often wakes up in the middle of night. A decreased will for work and interests is also noticed. Thus, a slow flow of thoughts is noticed too but without any agitation. Both psychic as well as somatic anxiety and symptoms with hypchondriasis are generously noticed with no weight loss. Yet, genital symptoms are absent. A slight luck of insight is present. As a result, case six is diagnosed with severe depression.

In a loose sense, cases one, two, three, four, five, and six showed that the depression severity is related to the frequency and occurrence of 17 interrelated symptoms. The more frequent the symptoms are the more severe the depression is. We noticed that though the depression stimulators are different, yet the provoked symptoms are strongly interrelated. Constant changes in feelings and mood doesn't necessarily reveal depression. In some cases, depression is present and patients are unaware of its existence. The core nexus of this test affirms that depression can be spotted through language. By language we mean both verbal as well as non-verbal communication. Thus the interview analysis will thoroughly explain how language can be affected by depression.

3.2.2. Analysis of the Interview

As explained previously, the interview was conducted with 12 participants. Six of them are diagnosed with depression and the other six are normal people. The participants were asked to talk about the effect of chosen topics on their personal as well as mental states. As an attempt to linguistically and paralinguistically analyze their use of language, their answers were recorded, transcribed, thematized, and analyzed.

The analysis covered frequency of parts of speech, absolutist thinking, negativity, emotional reasoning, should statements, selective abstraction, overgeneralization, magnification or minimization, disqualifying the positive, personalization, arbitrary interference, brooding about the past, asking questions that have no answers, unrealistic high standards, assuming powerlessness, and predictions and speculations about people's thinking and the future. The raw data is classified in tables according to the analysis criteria, their frequency of occurrence in addition to vivid demonstrations.

3.2.3. Frequencies of Parts of Speech

Parts of speech are considered to have not only a mere syntactic, yet, they can be used as mental state trackers and indicators. This study focused on first person pronouns, possessives/reflexives, positive and negative adjectives and adverbs being mental state indicators.

3.2.3.1.Case one: Depressed

Case One "depressed"	Frequency	Percentage %	Demonstrations
First person pronouns	67	51.54%	I
Possessives/reflexives	18	13.85%	ME, Myself, my
Positive Adjectives	11	8.46%	A lot of (3), happy, true, active, positive, recent, ready, developed, good.
Negative Adjectives	21	16.15%	Heart breaking ,Real ,down, rigid, hard, sad , tragic, sleepless (2), unexplained, sore, terrible, severe, last, curved, luckless, harsh, helpless, pessimistic, useless, a lot ,
Positive adverbs	6	4.61%	Really(4), well, back,
Negative adverbs	7	5.39%	Unfortunately, Really (3), forever, stuck, sorry.
Total words	130	100%	

Table 5: Case 1 (depressed) parts of speech frequency

The table above shows the parts of speech's frequency in the first depressed case. Analyzing the transcribed answer, we found that first person pronouns represented 51.54% of total speech. Possessives/reflexives occurred with a frequency of 13.85%. Positive adjectives represented 8.46% of the full version. Negative adjectives represent 16.15% of the story telling. 4.61% of the total words were positive adverbs. However, negative adverbs represented 5.39% of the totality of words. Comparing the linguistic analysis, we can clearly notice that case one tends to use more negative adjectives than positive ones and less positive adverbs than negative ones.

3.2.3.2.Case one: Non depressed

Case one "non depressed"	Frequency	Percentage	Demonstrations
First person pronouns	31	43.06%	I
Possessives/reflexives	17	23.61%	Me, Myself ,My
Positive adjectives	14	19.44%	Possible, proud, right, funny, free (3), full, bright, familiar, a lot, new, thankful (2).
Negative adjectives	7	9.72%	Wrong, big, impossible, hard (2), sad, lazy.
Positive adverbs	3	4.17%	luckily, guilty, really
Negative adverbs	0	0%	/
Total words	72	100%	

Table 6: Parts of speech demonstration of the non depressed participant of case one

The table above demonstrates the frequency of the different parts of speech of the non depressed participant of the first case. The results show that the first person pronoun represented 43.06% of the full version. Meanwhile possessives/reflexives represented 23.61% of total words. Positive adjectives are 19.44% of the full text. On one hand, negative adjectives represented 9.72% of total word. On the other hand, positive adverbs represented 4.17%. No negative adverbs occurred during story telling. On a closer scope, the first non depressed participant ten first person pronouns and possessives/reflexives were the dominant parts of speech with a percentage of 43.06% and 23.61%. However, a use of negative adjectives was present, yet it still less than positive adjectives as well as adverbs.

3.2.3.3. Case two: Depressed

Case two "depressed	Frequency	Percentage	Demonstration
First person pronouns	43	48.31%	I
Possessives/reflexives	19	21.35%	Me, Me , Myself
Positive adjectives	8	8.99%	Great (2), good, new (2), beautiful, decent, successful.
Negative adjectives	16	17.98%	Poor, fast, slow, old, full, unhappy, good, small, hard (3), unhealthy, unlucky, boring, envious, pathetic.
Positive adverbs	0	0%	/
Negative adverbs	3	3.37%	Apart, little, down.
Total words	89	100%	

Table 7: Parts of speech of the depressed participant of case two

The table above illustrates the second depressed case's parts of speech frequency. This case used a total words of 623 word divided among all parts of speech and 89 words were involved in the analysis. It is noticeably observed that first person pronouns and possessives/reflexives represented the majority of the observed parts of speech with a percentage of 48.31% as well as 21.35%. On another scope, negative adjectives and negative adverbs are more occurring than positive ones with the percentages of 17.98% and 3.37%. We also notice that positive adjectives occurred with a percentage of 8.99% and no positive adverbs were used.

3.2.3.4.Case two: Non depressed

Case two "non depressed"	Frequency	Percentage	Demonstration
First person pronoun	36	47.37%	I
Possessives	17	22.37%	Me, myself, my, mine
Positive adjectives	16	21.05%	Hard, good (2), true, famous (3), free, new, successful, perfect, smart, many, patient, careful, responsible.
Negative adjectives	4	5.26%	Useless, busy, enough, hard.
Positive adverbs	2	2.63%	Actively, productively
Negative adverbs	1	1.32%	Down
Total words	76	100%	

Table 8: Parts of speech frequency non depressed case two

As demonstrated in the table above, the second non depressed participants have used 477 words, 76 of them were included in the analysis as a total of words during her story telling. 47.37% of them are first person pronouns, 22.37% are possessives, 5.26% are negative

adjectives, 21.05% are positive adjectives, in addition to 1.32% as negative adverbs and 2.63% of positive adverbs. We can notice that positive adjectives and adverbs are more used than the negative ones.

3.2.3.5.Case three: Depressed

Case three "depressed"	Frequency	Percentage	Demonstrations
First person pronoun	116	50%	I
Possessives/reflexives	49	21.12%	Me, my, myself
Positive adjective	14	6.03%	Normal, calm (2), clear, good, amazing (2), supportive, excited (2), full , early, new (2).
Negative adjectives	36	15.52%	Worthless, boneless, overbearing, terrible, horrible, painful (3), sad (2), compromised, fast, wrong (2), drained (2), consumed (2), minimalistic, dramatic, bigger (2), extreme, huge (2), triggering, gradual, prominent, mean, down, simple, twisted, augmented, worst, small, addictive.
Positive adverbs	2	0..86%	Well, genuinely.
Negative adverbs	15	6.47%	Really (8), down, extremely (3), abruptly, tremendously, slowly.
Total words	232	100%	

Table 9: Parts of speech frequency case three depressed

Case three is the richest description, she used 1455 to talk about her experience with bullying and its effect on her life but the parts of speech included in the analysis are just 232 words. 50% of her description is first person pronouns, 21.12% possessives/reflexives, 6.03% are positive adjectives, 2.47% are negative adjectives, 15.52% are positive adverbs, 6.47% are negative adverbs. Negative and positive adverbs as well as adjectives were alternatively used. Yet, the negative ones were more frequent than positive adverbs and adjectives.

3.2.3.6.Case three: Non depressed

Case three ”non depressed”	Frequency	Percentage	Demonstrations
First person pronoun	32	33.69%	I
Possessives/reflexives	20	21.05%	Me, myself, my
Positive adjectives	23	24.21%	Nice, loving, supportive, smart (2), first, real, better (3), good, polite, pretty, cute, strong (2), careful, successful, confident, secure, solid, caring ,grateful.
Negative adjectives	16	16.84%	Impolite, humiliating, desperate, bad, nagging not nice, conventional, tiny (2), alone, small (2), unacceptable, negative (2), serious.
Positive adverbs	3	4.21%	Luckily, really, simply.
Negative adverbs	1	1.05%	Simply.
Total words	95	100%	

Table 10: Case three non depressed parts of speech

As illustrated in the table above, the third non depressed case has used 569 words to describe the effect of bullying on her mental state. However, the concerned parts of speech are only 95 words. 33.69% of it was first person pronouns, 21.05% were possessives/reflexives, 23.16% were positive adjectives, 16.84% were negative adjectives, 4.21% were positive adverbs, and 1.05% were negative adverbs. Negative adjectives and adverbs were clearly used more than positive ones.

3.2.3.7.Case Four: Depressed

Case four "depressed"	Frequency	Percentage	Demonstrations
First person pronoun	52	55.32%	I
Possessives/ reflexives	17	18.09%	Me, my, myself
Positive adjectives	6	6.38%	Good, chic, astonishing, proud, good, true.
Negative adjectives	18	19.15%	Sad, weird, not happy, lonely, not easy, hard, difficult, different, small, messy, dirty, far, horrible, miserable, useless, unlucky, drained, guilty.
Positive adverbs	0	0%	/
Negative adverbs	1	1.06%	Helplessly.
Total words	94	100%	

Table11: Case four depressed participant's parts of speech.

In this participant's speech, we notice the variation of percentages in his speech. 55.32% of personal pronouns, in addition to 18.09% of possessive/ reflexives were used. Positive adjectives were demonstrated with a percentage of 6.38%. However, his speech constitutes of 19.15% of negative adjectives. For adverbs, negative adverbs were used with a percentage of 1.06% while no positive adverbs were used. First person pronouns represent the higher percentage among the other parts of speech, after that negative adjectives are ranked in the second position. Next, possessives/ reflexives are classified right after negative adjectives. The last two positions are ordered as following negative adjectives and negative adverbs; positive adverbs are absent in his speech.

3.2.3.8.Case four: Non depressed

Case four " non depressed"	Frequency	Percentage	Demonstrations
First person pronoun	18	38.29 %	I
Possessives/ reflexives	9	19.15%	Myself, me, my
Positive adjectives	16	34.04%	Good (3), first, noticeable, developed, beautiful, a lot, friendly, helpful, best, hard, organized, simple, responsible, big.
Negative adjectives	2	4.26%	Alone, urgent.
Positive adverbs	2	4.26%	Intelligently, completely.
Negative adverbs	0	0%	/
Total words	47	100%	

Table12: Case four non depressed participant's parts of speech.

For the non depressed participant of case four, we notice that the higher percentage is 38.29% and it belongs to the first person pronoun and it is higher than the possessive's percentage that occurred with a percentage of 19.15%. When it comes to the adjectives, the positive ones are of a higher percentage, they occurred with a percentage of 34.04% while negative ones are lower and they are demonstrated with a percentage of 4.26%. For the adverbs, the participant used only positive adverbs twice which are represented with a percentage of 4.26%.

3.2.3.9.Case Five: Depressed

Case five "depressed"	Frequency	Percentage	Demonstrations
First person pronoun	64	48.86%	I
Possessives/ reflexives	44	33.59%	Me, myself, my
Positive adjectives	6	4.58%	Amazing, best, happy (2), blessed, not hard.
Negative adjectives	12	9.16%	Not easy, hard (2), hardest, fat, ugly, horrible (2), sleepless, tragic, scary, hopeless.
Positive adverbs	1	0.76%	Absolutely.
Negative adverbs	4	3.05%	Barely, loudly, rarely (2).
Total words	131	100%	

Table13: Case five depressed participant's parts of speech.

The depressed participant of case five's parts of speech's variations are as following: 48.86% of first person pronouns which represent the highest percentage. After that we have the possessives/ reflexives with 33.59%. Negative adjectives are used more than the positive

ones with the percentages of 9.16% and 4.58%. As for the adverbs; the negative one's percentage is higher than the positive ones with percentages of 3.05% and 0.76%.

3.2.3.10. Case five: Non depressed

Case five "non depressed"	Frequency	Percentage	Demonstrations
First person pronoun	22	29.73%	I
Possessives/ reflexives	34	45.95%	Me, myself, my
Positive adjectives	13	17.57%	Happy (2), excited, not hard (2), normal, positive, speechless, blessed, full (2), good, beautiful.
Negative adjectives	2	2.70%	Surprised, difficult.
Positive adverbs	2	2.70%	Quickly, gladly.
Negative adverbs	1	1.35%	Impatiently.
Total words	74	100%	

Table14: Case five non depressed participant's parts of speech.

For the non depressed participant of case five, we noticed that possessives/reflexives are more used than the first person pronoun with the percentages of 45.95% and 29.73%. However, positive adjectives are represented with a percentage of 17.57% and negative ones occurred with 02.70%. For the adverbs, 2.70% of positive adverbs were used and 1.35% of negative adverbs were used.

3.2.3.11. Case Six: Depressed

Case six "depressed"	Frequency	Percentage	Demonstrations
First person pronoun	26	41.93%	I
Possessives/reflexives	21	33.87%	Me, my, myself
Positive adjectives	3	4.84 %	Strong, good, pure.
Negative adjectives	7	11.29%	A lot, personal, horrible, fake, unknown, weak, dead
Positive adverbs	2	3.23%	Unconditionally, clearly
Negative adverbs	3	4.84%	Carelessly, fearlessly, sadly
Total words	62	100%	

Table 15: Case six depressed participant's parts of speech.

For case six, the depressed participant's parts of speech analysis showed the following results: 41.94 % of first person pronouns, 33.87% of possessives/ reflexives, 4.84% of positive adjectives, 11.29 % of negative adjectives, 3.23% of positive adverbs and 4.84% of negative adverbs. Negative adjectives and adverbs were used more than positive ones.

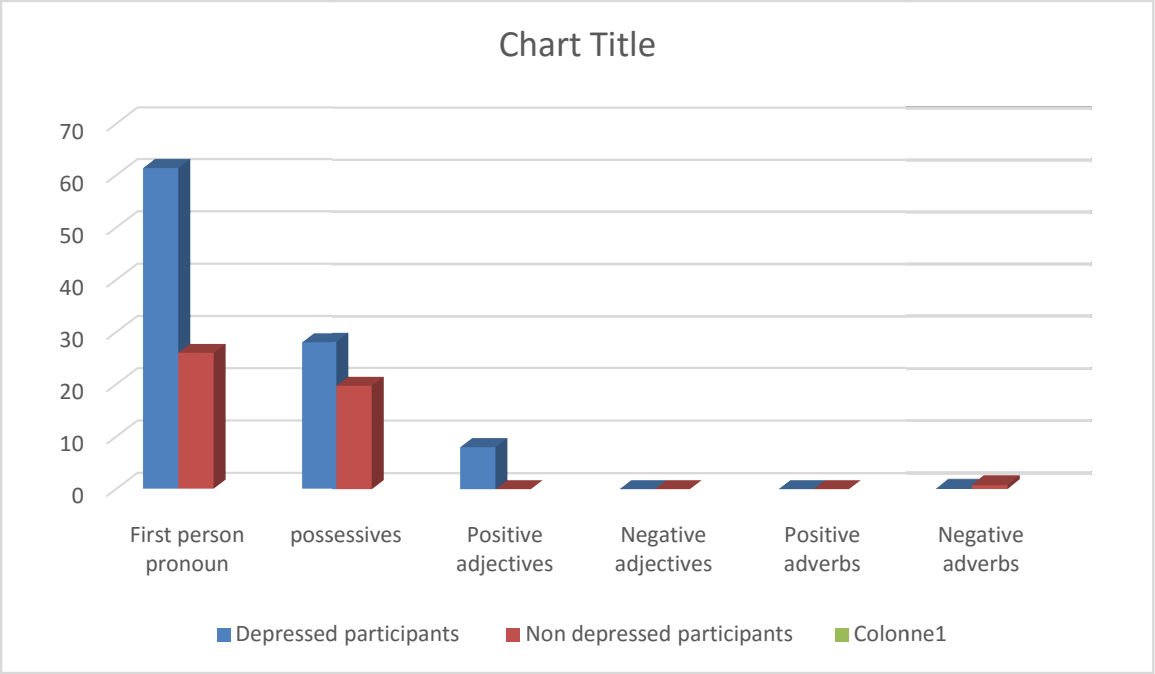
3.2.3.12. Case six: Non depressed.

Case six "non depressed"	Frequency	Percentage	Demonstrations
First person pronoun	17	30.36 %	I
Possessives/ reflexives	21	37.5 %	Me, myself, my
Positive adjectives	11	19.64%	Successful, independent, new, good, true, loved, lucky, honest, fine, happy, strong.
Negative adjectives	4	7.14%	Heartless, weak, tragic, different.
Positive adverbs	2	3.57%	Fearlessly, definitely.
Negative adverbs	1	1.79%	Completely.
Total words	56	100%	

Table16: Case six non depressed participant's parts of speech.

Case six's non depressed participant's speech demonstrates possessives/ reflexives more frequently with a percentage of 37.5%. In the second position, the first person pronoun existed with a percentage of 30.36%. For the adjectives, positive ones occurred with a percentage of 19.64% while negative adjectives represented 7.14% of his speech. Positive adverbs were strongly higher than negative ones with percentages of 3.57% and 1.79%.

3.2.4. Comparison between the depressed and the non depressed cases



Graph 01: Parts of speech results comparison.

Based on the previous analysis, the graph above represents a comparison between depressed and non-depressed participant's parts of speech. Depressed participants tend to use more first person pronoun than the non-depressed ones with an average of 61.33 words. For possessives/ reflexives, depressed participants used more possessives/ reflexives than the non-depressed ones with an average of 28 words. Positive adjectives and adverbs were used mostly more by non-depressed participants. Comparing it with the use of negative adjectives and adverbs, depressed participants used more negative adjectives and adverbs. Analyzing those parts of speech confirmed that even non-depressed participants tend to use them but less frequently. This can be explained by the fact that depressed participants usually have a negative mindset which reflects on the overuse of negative adjectives and adverbs. Non-depressed participants are more positive than depressed ones. For the use of first person

pronoun and possessive/reflexives, even though depressed participant used them more but we noticed that even non-depressed participants used them because of the ego centric nature of the human being.

3.2.5. Paralinguistic Analysis

The linguistic analysis helped in determining the type of words used by both depressed as well as non depressed cases. However, the paralinguistic analysis had taken the analysis into a deeper level. In this section, we will examine the effect of words on the mental state expression and to confirm or deny whether depression is expressed through language. For more illustrations and details (see appendices 3 and 4).

3.2.5.1. Depressed Participants' Paralinguistic Analysis

Absolutist thinking is defined as the extremist positive or negative rigid judgment of events and actions without the flexibility to objectively evaluate circumstances. It is expressed in language via the excessive use of obligation modal verbs such us: should and must, or, through adverbs such as never, every, and all. Absolutist thinking is one of the major mental criteria through which depression can be tracked.

The first depressed case (see Appendix 3) expressed absolutist thinking using the modal verb "must" to emphasize the importance of succeeding for her. Absolutist thinking was mildly used with only one occurrence. Meanwhile, Case two expressed absolutist thinking via the modal verb "must" in addition to "anyway". The later served at expressing the high level of anxiety and stress related to her financial situation. Regarding case three, absolutist thinking is spotted via the rich use of the quantifier "every" in addition to: "extremely", "never", and "everybody". Moreover, case four has used "must", "nothing", in addition to all of which stand for absolutist thinking. For case five, "never", "the last", and "all" served at

expressing absolutist thinking in her story telling. Last but not least, case six opted for “never” as an absolutist thinking’s detector.

By the same token, negativity was excessively present in the six cases’ narrations. However, negativity can be detected in language via vocabulary, sentence structure, flow of ideas, in addition to tone and pitch of the voice. For case one, she talked about the covid-19 pandemic as a topic using “this heart breaking event”, “that was a slap for us.”, “I feel helpless, pessimistic, and useless.”, “I lost passion for everything I was doing.” As we can see through the sentences above, they conveyed a negative message. Yet, the sentences from a grammatical point of view are incomplete. The participant jumped from one idea to another without showing the link between them. In the second negative statement, case two insisted on the use of negative adjectives such as: helpless, pessimistic, and useless. Moreover, a low pitch of voice was noticed while uttering these statements.

Case two expresses negativity as the following: “I am always tired and feel like negativity is pulling me down ten times harder than everyone else”, and “I feel so unlucky”. The previous statements showed triggered empathy plead. The participant earned a depressed flow of ideas using well detailed descriptions. Yet, we can notice the absence of the subject with the second verb ‘feel’. Moreover, the tenses used are different. The present continuous connotes an action that is happening now whereas the simple present expresses a constant repetitive action. The simple present is used with the verb ‘to feel’; this demonstrates the continuous negative flux.

Case three showed negativity in the following statements: “I had this negativity within me”, “I felt more consumed”, “I felt more drained”, “I started to have this terrible self talk as I lay there at night.” and “I felt extremely tired”. We can notice the use of intensifiers such as “more” and “extremely”. This participant talked about negativity as an co-existing affective variable on the patient’s personality, thus, language.

For case four, the participant used: “I wasn’t happy”; “I was lonely”, “feeling of sadness and loneliness starts hunting me”, “I was already feeling horrible”, and “feeling depressed and useless is within me”. This candidate focused more on negative adjectives to deliver negativity using both affirmative and negative modes. We can notice the excessive use of the gerund form of the verb “to feel”.

Referring to case five on one hand, “my life became a disaster.”, and “I feel hopeless and scared” were the only negativity alarms in the narrative. The sentence structure was noticed to be regular. The patient opted for simple syntax and direct style.

Case six on the other hand used “Maybe if I took revenge I could move on” and “I’m not enjoying my life” as negativity alerts. We can notice the sense of incertitude in the first statement using the modal verb “maybe”, “could” and “if”. This participant used the past tense to express regret. In addition to the present continuous tense which refers to the current situation. Regarding to the sentence structure, case six used simple sentences.

Emotional reasoning is defined as negative assumptions on basic and natural incidences. They are not forcibly true reflections. Depressed patients tend to mirror negative thoughts and feelings while interpreting others’ attitudes and behaviors. Emotional reasoning in our depressed cases can be spotted through the use of “they are afraid”. Such reasoning can be triggered by or can trigger fear like in case two’s narration. She interpreted her friends’ ignorance or isolation as a fear from her asking them for money. May be that is what she has in mind, yet then seeing her missed calls can be due to other factors.

Emotional reasoning can be also spotted by negative intuitions as in case three by the use of “I knew that something was wrong”. For case four, emotional reasoning was reflected via the mixture of other people’s expectations and feeling guilty. However case five plead emotional reasoning through mere personal negative assumptions. She was

talking about her neighbor's attitude. She convicted herself of being the reason why her neighbor is going through hard times (if she is). Case six from the same perspective took it to another level. He believes that nobody loves him for who he is! creating a link between his grandfather's death and other people's admiration.

Accordingly, emotional reasoning in the depressed cases can be spotted by the use of extreme intensifiers like nobody, everybody. Furthermore, it can be fetched via the use of simple present tense, which stands for general truths and facts. Moreover, emotional reasoning can be noticed via generalizations and absolutist adverbs such as obviously and definitely.

Depression can be detected via the use of "should statements". Cases one, four, and five and six were rich with such statements. Zooming in, we can spot their attempt of expressing their failure and disappointment as a sort of self blame. It is noticed that they have used the perfect tense with "should statements" which expresses the link between the past and the future.

Regarding the patients' subscribed answers, selective abstraction is present. First, it is defined as the focus on past events in addition to the negative side of incidences. This bad angle view can be zoomed out and fetched via linguistic devices such as: adverbs like unfortunately, anyway, and barely, passive mode, metaphors, and can. Instances are found in case one stating: My plans and objectives are dust in the wind now, case two saying "life is so hard, case three indicating "I developed insecurities". Moreover, case five said "I was like a fish that got out of water" and finally case six "People can be really fake"

By the same token, overgeneralizations, minimization or magnification are other depression indicators where participants apply one experience to all experiences including those in the future. For instance, case one considered the rest of the year as negative and depressing as its beginning. Case two believed that she always makes her parents unhappy

and she is a burden on them. Case three stacked it to self loathing. Case four considered it as a life time curse, yet, for case six, he believes that he is too weak to move on. We can notice that cases one, two, three, four, five, and six reflected minimizing good things and that is expressed via expressed via contrasted statements such us: “They are working on vaccine, but I think they are fooling us, they want us all to die”, and “even if the vaccine is ready, they will try it on us like lab rats”. Moreover, magnification is spotted at the following statement: “I always play my flaws and shortcomings over and over.” The patient used repetition as an emphasis and magnification tool.

As the table (see appendix 3) shows, depressed cases tend to use personalization arbitrary inference, brooding about the past, asking questions that have no answers, unrealistic high standards, assuming powerlessness, and predictions. This can be linguistically detected through: the excessive use of personal pronouns, paradoxical comparisons such as: worthless boneless kid, and jinx is following me, keep on coming back to past events using past tenses and adverbials, using auxiliary questions as a confirmation tool, should statements in addition to “keep on” as unrealistic high standards detectives, powerlessness is detected via negation as well as the future form to talk about predictions.

3.2.5.2.Non Depressed Patients’ Paralinguistic Analysis

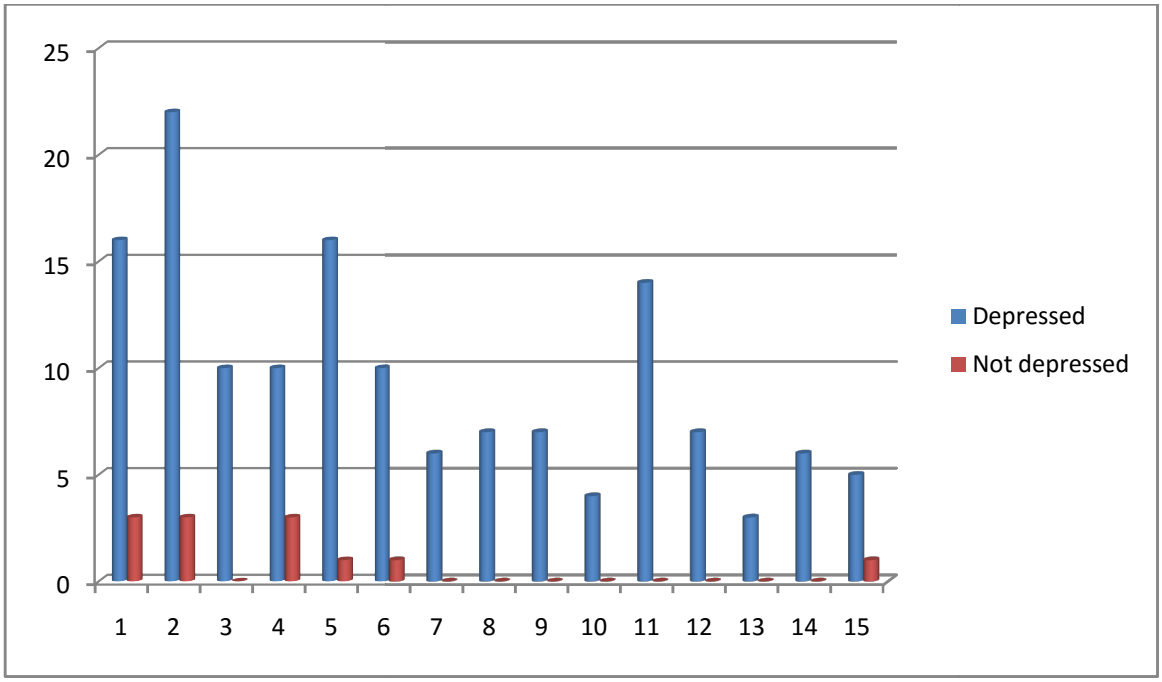
These features are mainly related to depressed people; however, they can still appear in normal people’s speech. Appendix (4) shows the non-depressed participants’ use of these features. Absolutist thinking appeared in case one by saying “anyone would be sad” and “everybody was depressed”. The participant used the second form of the absolutist thinking which is “the all or nothing thinking”. She was generalizing and making assumptions about people; she thinks that all people are sad because of the pandemic that occurred. Case three also used it twice by saying “There is no excuse” and “Everyone like to call it”. Similar to the

previous case, it was only a case of generalization too. She was talking about bullying by saying that is how everyone like to call it and she also said that there is no excuse to do that. For the sixth case, the participant talked about her experience with losing someone special and used absolutist thinking and said “Nothing should be taken for granted” and “I always keep on showing them”.

Negativity is highly related to depression. This feature was only used in the second case. The participant said “I felt so down” after he got scammed and lost all his money in one deal; he felt negative and felt down after going through that experience. Should statements were only used three times by participants in the first, fifth and sixth cases. The first participant said “This should be hard”; she was talking about the corona virus pandemic and assumed that this experience should be a hard one. For the fifth case, should statement was expressed as following “I shouldn’t give birth naturally”. The participant was talking about her postpartum experience and said that her doctor decided that it is better for her not to give birth naturally. The sixth case participant’s use of the should statement is as the following “nothing should be for granted”; the participant used the should statement to express what she learned from her experience when she lost someone special and she learned that nothing is taken for granted.

Selective abstraction is used when someone is highlighting negative events that occurred in the past and seeing people and the world negatively. In case two the participant said “I was feeling like life slapped me so hard”; he went through bankruptcy and lost his money. The expression explains how he felt back then like got slapped by life so hard. Overgeneralization is the personal misjudging a person makes about him/herself and the world in addition to blaming themselves. In case one, the participant said “I thought they were hard”; she was talking about traditional food and she had an idea that making them was so hard while in fact it was easy. Finally, the last speech criteria are predictions and speculations

about the future and people's thinking. In case six the participant said "they may think I am heatless". She was talking about losing her father and she was thinking about what people may think when they hear her positive reaction and how she managed to overcome that event with no negative consequences. She also mentioned that in our culture facing such an event positively is inappropriate and people will judge you because it is unusual.



Graph 02: Comparison of speech criteria of depressed and non depressed participants.

When comparing speech characteristics of depressed and non depressed participants, we can notice that all depressed speech criteria are used more frequently in depressed people's speech. However, some criteria also existed in non-depressed participants. Absolutist thinking was used three times in non-depressed participants' speech. However, it was used 16 times in the depressed participants' speech. Negativity was only used once in non depressed and 22 times in the depressed participants' speech. For the use of should statements, it was used ten times in depressed speech and three times in the non-depressed speech. For selective

abstraction, overgeneralization and predictions about the future and people's thinking, they were present in the non depressed participants' speech once only and for the depressed subjects, they were used 16 times, ten times and five times. The other criteria were absent in the non depressed participants and even some non depressed cases had no criteria in their whole speech.

From this comparison, we can obviously notice the huge difference between the frequencies of those criteria which makes us understand the effect of the mental health on language use. Language is one of the important features that indicate the mental state of a person; it acts as a mirror to the person's feelings and mindset.

3.3. Interpretation of Results

Comparing the depressed and non depressed cases clarified how a mental state can affect language use. Alarmed by the intensive occurrence of first personal pronouns and possessives/reflexives in depressed cases more than non depressed ones, depressed cases language tend to have an ego centric nature.

Though negative and positive adverbs as well as adjectives are present in both depressed as well as non depressed narratives, depressed participants tend to use more negative adjectives and adverbs than non depressed participants. Applying that on real context, depressed patients tend to link positive adjectives and adverbs to negative contexts. Meanwhile, non depressed cases refer to negative adverbs and adjectives as positive indications.

What is more is the frequent use of intensifiers that reaffirmed the Magnification or minimizing nature of their language. Unlike non depressed narratives, depressed participants

seem to have a complex dilemma like flow of ideas. In order for a depressed patient to narrate, they go through several stages.

Though depression triggers are different, understanding idiosyncratic nature of the unique journey of depression facilitated language analysis. As found previously in literature, depressed narratives are characterized by a set of aspects which were thoroughly demonstrated in the participants' narrations.

However, choice of words and language use can be used as depression diagnosis tools. Depressed participants' sentences are generally, complex, compound, or complex compound whereas non depressed participants' sentence structures were simple.

Voice tone and pitch played a major role identifying depressed participants from non depressed ones. Depressed patients tend to have a law voice tone while narrating. Yet, a high intonation is noticed while talking about past events or asking unexplainable questions.

Non depressed language is characterized by the absence of absolutist thinking, negativity, emotional reasoning, selective abstraction, over generalization, magnification and minimization, personalization, setting unrealistic high standards as well as arbitrary inferences.

3.4. Synthesis of the Findings

The obtained results from both tools lead to the progress of this synthesis. Both methods provided approximately similar results that help answering the research questions and validate the hypothesis concerning the effect of depression on vocabulary choice. Mental health affects all life perspectives including language. Teachers and learners need to be aware of its influence on learners and on how to spot it.

The two methods confirmed the validity of the research hypotheses that confirms the effect of depression on vocabulary choice. Furthermore, both Hamilton rating scale of depression and the interview' s stories answered the research question as well as it confirmed the hypothesis which pointed the effect of depression on the choice of vocabulary.

3.5. Conclusion

This chapter was devoted to the field work of the study that consisted of two parts. The first part focused on the theoretical background of the research methodology of the study; namely: research approach, research design, population, sampling, and data collection methods. The second part aimed to check whether depression as a mental illness affects vocabulary choice. In addition, it dealt with detailed data analysis, interpretation, discussion of findings, and the synthesis of the results.

General Conclusion

General Conclusion

This study aimed to shed the light on mental health and its impact on language. Depression is a wide spread mental illness among people and unfortunately it is neglected in our society. Thus, this research attempted to clarify this mental illness and explain it to both learners and teachers of English as a foreign language through answering the research question which highlighted the effect of depression on vocabulary choice.

The study comprises three chapters, the two initial chapters were devoted to the theoretical part of the study; however, the third chapter elucidated the study framework. The first chapter highlighted all the basics of depression; more precisely, it dealt with depression's definition , theories and approaches that defined depression, depression's symptoms, different types of depression and its causes.

The second chapter was about the second variable which is vocabulary. It provided the essential elements that concern vocabulary such as its definition, types, size, importance, techniques of teaching vocabulary. In addition to factors that hinder vocabulary acquisition and learning and vocabulary choice.

The last chapter focused on field work and data analysis of the findings, it dealt with the practical part that presented the research methodology obtained in the study, population, sample, data collection methods. In addition to reporting the data and analyzing them. An interpretation of the findings and reporting the results was the last step to shift to the discussion and to the summary of the study's findings.

To achieve the study aims, the researcher opted for a mixed-method approach in order to collect data. The researcher also used two data collection methods which are the Hamilton Rating Scale of depression and the interview. The sample was divided into two groups, six

depression patients from Amen Center of Psychology who are EFL learners and the second group was EFL learners who have no mental illnesses. The second group was added to give the study more credibility by making a comparison between the two groups. Accordingly, the obtained results obtained from the Hamilton Rating Scale of Depression and from the interview proved that depression affects vocabulary choice.

As a conclusion, we can say that mental health and language are highly related to each other and vocabulary choice indicates the mental state of the person. By spotting some criteria in a person's speech helps both learners and teachers to make assumptions about mental health. Acquiring knowledge about mental illnesses in general and depression in specific will raise awareness the importance of the mental state because it affects all life aspects especially learning and teaching aspects.

Pedagogical implications

Based on the findings and the data obtained from this study, there are some implications that can be drawn as the following:

- Teachers should be aware of the different factors that may affect the learning process like psychological factors.
- Teachers should develop their knowledge about mental illnesses and their impact on learning, motivation, attitude and language.
- Since vocabulary is important for EFL learners, teachers should develop creative ways and multiple strategies in teaching that give their learners the opportunity to learn with all their differences and mental states.
- Teachers should do their best to spot linguistic signs from learners' written and oral use of language.

- It is highly recommended that teachers pay more attention to their choice of words when giving comments to their learners because they have a huge impact on their psychological state.
- Students should learn more about mental illnesses like depression and pay more attention to their mental health.

Limitations and Further research

In conducting any research, the researcher faces some obstacles that obstruct the research process progress. In our study, we have faced some difficulties; the main obstacle that affected our research progress also hampered the progress of the research data collection (the interview) was the Covid-19; it was impossible to meet the sample face to face. Furthermore, the initial plan included an interview and other vocabulary activities but unfortunately we only opted for the story telling via recordings.

For further research, future researchers should utilize this research as a solid foundation to:

- Design a psycholinguistic test that detects depression through language.
- Work on other variables instead of vocabulary like communication for example and depression.
- Tackle the topic from a linguistic point of view with a sample that should not necessarily be EFL learner.

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Appendices

Appendix (1)

Hamilton Rating Scale for Depression (HAM-D)

The Hamilton Rating Scale for Depression (HAM-D)

Name or ID: _____ Date: _____

Instructions: For each item, select the one "cue" which best characterizes the patient.

1. Depressed Mood *(Sadness, hopeless, helpless, worthless)*
0 Absent
1 These feeling states indicated only on questioning
2 These feeling states spontaneously reported verbally
3 Communicates feeling states nonverbally—ie, through facial expression, posture, voice, and tendency to weep
4 Patient reports VIRTUALLY ONLY these feeling states in his/her spontaneous verbal and non-verbal communication

2. Feelings of Guilt
0 Absent
1 Self-reproach, feels he/she has let people down
2 Ideas of guilt or rumination over past errors or sinful deeds
3 Present illness is a punishment; delusions of guilt
4 Hears accusatory or denunciatory voices and/or experiences threatening visual hallucinations

3. Suicide
0 Absent
1 Feels life is not worth living
2 Wishes he/she were dead or any thoughts of possible death to self
3 Suicidal ideas or gestures
4 Attempts at suicide *(any serious attempt rates 4)*

4. Insomnia, Early
0 No difficulty falling asleep
1 Complains of occasional difficulty falling asleep—ie, more than 1/2 hour
2 Complains of nightly difficulty falling asleep

5. Insomnia, Middle
0 No difficulty
1 Patient complains of being restless and disturbed during the night
2 Waking during the night—any getting out of bed rates 2 *(except for purposes of voiding)*

6. Insomnia, Late
0 No difficulty
1 Waking in early hours of the morning but goes back to sleep
2 Unable to fall asleep again if he/she gets out of bed

7. Work and Activities
0 No difficulty
1 Thoughts and feelings of incapacity, fatigue or weakness related to activities, work, or hobbies
2 Loss of interest in activity, hobbies, or work—either directly reported by patient, or indirect in listlessness, indecision, and vacillation *(feels he/she has to push self to work or activities)*
3 Decrease in actual time spent in activities or decrease in productivity. In hospital, rate 3 if patient does not spend at least three hours a day in activities *(hospital job or hobbies)* exclusive of ward chores
4 Stopped working because of present illness. In hospital, rate 4 if patient engages in no activities except ward chores or if patient fails to perform ward chores unassisted

8. Retardation *(Slowness of thought and speech, impaired ability to concentrate, decreased motor activity)*
0 Normal speech and thought
1 Slight retardation at interview
2 Obvious retardation at interview
3 Interview difficult
4 Complete stupor

9. Agitation
0 None
1 Playing with hands, hair, etc.
2 Hand-wringing, nail-biting, hair-pulling, biting of lips

10. Anxiety Psychic

0 No difficulty
1 Subjective tension and irritability
2 Worrying about minor matters
3 Apprehensive attitude apparent in face or speech
4 Fears expressed without questioning

11. Anxiety Somatic

Physiological concomitants of anxiety such as:
Gastrointestinal—*dry mouth, wind, indigestion, diarrhea, cramps, belching*
Cardiovascular—*palpitations, headaches*
Respiratory—*hyperventilation, sighing*
Urinary frequency
Sweating

0 Absent
1 Mild
2 Moderate
3 Severe
4 Incapacitating

12. Somatic Symptoms, Gastrointestinal

0 None
1 Loss of appetite but eating without staff encouragement; heavy feelings in abdomen
2 Difficulty eating without staff urging; requests or requires laxatives or medication for bowels or medication for G.I. symptoms

13. Somatic Symptoms, General

0 None
1 Heaviness in limbs, back, or head; backaches, headache, muscle aches; loss of energy and fatigability
2 Any clear-cut symptom rates 2

14. Genital Symptoms

Symptoms such as:
Loss of libido
Menstrual disturbances

0 Absent
1 Mild
2 Severe

15. Hypochondriasis

0 Not present
1 Self-absorption (bodily)
2 Preoccupation with health
3 Frequent complaints, requests for help, etc.
4 Hypochondriacal delusions

16. Loss of Weight (Rate either A or B)

A. *When Rating by History:*
0 No weight loss
1 Probable weight loss associated with present illness
2 Definite (according to patient) weight loss
3 Not assessed

B. *On Weekly Ratings by Ward Psychiatrist, When Actual Weight Changes are Measured:*
0 Less than 1 lb. weight loss in week
1 Greater than 1 lb. weight loss in week
2 Greater than 2 lb. weight loss in week
3 Not assessed

17. Insight

0 Acknowledges being depressed and ill
1 Acknowledges illness but attributes cause to bad food, climate, overwork, virus, need for rest, etc.
2 Denies being ill at all

Total score: _____

Appendix (2)

“Vocabulary Choice Interview”

Section A: “Personal Information”

Introduce yourself.

Section B

Depression type

Section C

Talk about an experience that you have been through. Tell us about it.

Topics:

- **A.** Corona virus pandemic.
- **B.** Bankruptcy.
- **C.** Bullying.
- **D.** Moving.
- **E.** Postpartum depression.
- **F.** Losing someone special.

Appendix (3)

Depressed Participants' Paralinguistic Analysis Answers

	Case One	Case two	Case three	Case four	Case five	Case six
Absolutist thinking	• I must succeed.	• We must work anyway. • I must go back to Algiers.	• Every detail became extremely extenuated. It never ended. • Every single moment. • Every single phase. • Every time I meet new people. Distancing my self from everybody.	• I must find a job. • There was nothing exciting about my life. • Staying home doing nothing. • All my energy was drained.	• I never imagined that one day my life may be as horrible as it is. • That was the last happy day of my life • The baby is my responsibility alone. • All my friendships are over.	• I will never forgive the person who killed him.
Negativity	• Heart breaking event that was a slap for us.	• I am always tired and feel like gravity is	• I had this negativity within me.	• I wasn't happy. • I was	• My life became a disaster.	• Maybe if I took revenge I

	• I feel helpless pessimistic and useless. • I lost passion for everything I was doing.	pulling me down ten times harder than everyone else. • I feel so unlucky.	• I felt more consumed. • I felt more drained. • I felt extremely tired. • I started to have this terrible self talk as I lay there at night.	lonely. • Feelings of sadness and loneliness starts hunting me. • I was already feeling horrible. • I felt so miserable. • Feeling depressed and useless is within me.	• I feel hopeless and scared. • It is a horrible thing. • My life may be as horrible as it is.	could move on. • I'm not enjoying my life.
Emotional reasoning		• My friends are afraid to pick up the phone anymore. • They are afraid I ask them for money	• I knew that something was wrong with me.	• People were looking at me like a failure. • I failed them and I feel guilty for that.	• She wasn't even smiling at me like she used to. • She obviously hears the baby crying	• Nobody loved me for who I am.

					at night. • It bothers her too. • They all gave up on me.	
Should statements	• I should succeed. • I should do well in my work plan. • I should have worked harder.			• I should have stayed with my family. • I should have looked harder. • Should I just accept it?	• I should have thought twice about it. • I should at least give him love.	• Why should I care. • I should move on.
Selective abstraction	• Unfortunately, thanks to the corona virus everything went down. • My plans and objectives are dust in the wind now.	• Everything is moving so fast and I'm moving so slow. • Life is so hard.	• I developed insecurities. • I keep thinking about the flaws and all the horrible things I represent.	• I was like a fish that got out of water. • There was a cultural shock. • In any family	• I barely survived. • My happiness ended	• People can be really fake. • They didn't even respire people who are

				gathering I was the only one missing.		hurt. • At any moment anyone including me may die. • He didn't get a punishment, this is why it's still hurting me. • I'm dead anyway.
Overgeneralizations	• Luckless and curved year.	• I am a burden on my parents, I make them so unhappy.	• My self image was already compromised. • The self pity that I had and the worthlessness that I was experiencings	• I'm just unlucky.	• This huge responsibility is so hard for me. • My husband does not help at all.	• I'm too weak to move on.

			lowly started to turn into self loathing. .		• I feel ugly and fat. • I starts hating my own baby.	
Magnification or minimization	• They are working on vaccine, but I think they are fooling us, they want us all to die. • Even if the vaccine is ready, they will try it on us like lab rats.		• I became aware of all my flaws. • I always play my flaws and shortcomings over and over.	• The worst part about moving was leaving everyone I love behind.	• I was left alone fighting by myself the most tragic way.	
Disqualifying the positive		• My mom keeps on telling me that I still look good but I don't believe her.		• University studies don't matter. • Was so sad when I go back home and find	• My happiness ended the day I gave birth. • I'm only a housewife. • I wish I	• No body is as good as he is.

				that small apartment super messy.	didn't give birth.	
Personalization		• I can't believe I risked everything and it's a part of the past now. • I feel stupid by listening to Iman.		• Guilt was eating me alive. • I starts having feelings of regret. • I lost two years of my life for nothing.	• My friend stopped texting me. • They don't call me to join them anymore.	
Arbitrary inference	• The jinx was following me in every step I make.		• Having such a worthless boneless kid.	• Getting a job will not help you at all.		• It made me realize the cruelty of life.
Brooding about the past	• Everything got cancelled and this broke my heart. • It cost me so many things.	• Life was so great. • Everything I worked hard on fell apart. • That boutique	• It is still a triggering story for me. • I was genuinely excited about	• How my mother and sisters used to clean my room.		• I failed to move on. • He was my best friend when I was

		was my whole life and now that I lost it I lost everything. • I lost my dream now. • I will never forgive her and her uncle.	life. • Life was full of joy for me.			young. • I wish I can take his life with my own hands.
Asking questions that have no answers	• Am I going to be next? • Why on earth I was born in this country?		• Why would these people like a group of twenty people choose to pick on a person?	• Should I just accept it?	• Why does everyone put the blame on me.	• Why should I care about life? • Only good people are dying why is that?
Unrealistic high standards	• I keep on blaming myself, I believe that have a hand in this situation. • I should have worked harder in			• I was oblige to work and make money.		

	the first 3 months, 90 days is enough to do wonders.					
Assuming powerlessness		• I am sure we're going to fail again. • How can we grow a business in few months. • But I feel like I am such a failure.		• I couldn't fit in their society. • I couldn't get used to my new life.	• I will not be able to to go back to work.	
Predictions and speculations about people's thinking and the future		• We may go to jail if we fail to pay the debts on time. • People look at me in a pathetic way.	• You will carry it within you for the rest of your life. • The sensation of self worthlessness started to creep in. • I believed that			

			I deserved this treatment.			

Appendix (4)

Non Depressed Participants' Paralinguistic Analysis Answers

	Case One	Case Two	Case Three	Case Four	Case Five	Case Six
Absolutist thinking (1)	• Anyone would be sad. • Everybody was depressed.		• There is no excuse. • Everyone like to call it.			• Nothing should be taken for granted. • I always keep on showing them.
Negativity (2)		• I felt so down.				
Emotional Reasoning (3)						
Should Statement (4)	• This should be hard.				• I shouldn't give birth naturaly.	• Nothing should be taken for granted.
Selective Abstraction (5)		• I was feeling like life slapped				

		me so hard.				
Overgeneralization (6)	• I thought they were hard.					
Magnification or Minimization(7)						
Disqualifying the Positive(8)						
Personalization (9)						
Arbitrary Inference (10)						
Brooding about the past (11)						
Asking unanswerable Questions (12)						
Unrealistic High Standards (13)						
Assuming Powerlessness (14)						

Predictions and speculations about people's thinking and the future(15)						• They may think I'm heartless.

Appendix (5)

Participants' stories

Case One

A. Depressed

"Hello I hope you are doing well. I find it weird actually to talk on a record tape and send it for a study. However, I really wanted to help because I believe it will change a lot of things. So let us start… yes I decided to talk about the Corona virus pandemic, it is a heart breaking event that was a real slap for us. So let me take you back to December 2019 where I had my bucket list on fire, I had everything I wanted written down and planned. When I say planned it was really planned, every step I was going to make was based on strategies, research and a lot of motivation. So I had educational plans I wanted to pursuit my PHD abroad in addition to professional ones, I was working on many projects but unfortunately thanks to the corona virus everything went down. In addition to some personal plans and objectives which are dust in the wind now again thanks to the corona virus. At the beginning I was so motivated, so from December to March I was really working hard… working tooth and nail and fighting for everything. I was telling myself all the time I must succeed I should succeed, I should really do well in my work plan I was so rigid and hard on myself but in a happy way because I knew that at the end of the day I will achieve my goals and make my dreams come true. However, with this pandemic everything got cancelled and that really broke my heart. It costs me so many things that I cannot really talk about. Let's start first with my daily routine, so I moved from being a hyper active person to a couch potato. I do nothing I spend a lot of time watching sad series, tragic ones. I had sleepless nights, I suffer from insomnia now and that really drives me nuts. I lost control over my sleeping habits; I cannot sleep until 9 am and sometimes I spend sleepless nights. Now, I feel like I have pain, unexplained pain. I have sore

muscles, I have terrible headaches. I have stomach ache and when I went to the doctor all my tests were positive; I had no issue everything was okay according to the doctor which made the doctor writes a letter to the psychologist that he advised me to visit. He believed that it is psychological issue. At the beginning, I ignored his advice but I had pain and digestive problems all the time which made me give it a try. After many sessions with the doctor she told me I had depression but it was not severe and it was recent and I should not worry. I freaked out because it was the last thing I need in this curved and luckless year. The jinx was following me in every step I make. I feel like I am in a puzzle that I cannot get the hell out from but at the same time I am harsh on myself and I keep ~~on~~ blaming myself, for some reason I believe that I have a hand in this situation. May be I should have worked harder in the first three months of the year 90 days is sufficient to do wonders. I feel helpless pessimistic and so useless, all I do is sleep, eat, and watch series. I lost passion for everything I was doing. I sometimes watch in the news that they are working on the vaccine; I think they are fooling us. It is already a biological war they want us all to die and this virus. I feel like it is staying with us forever because there is no way out of this and even if the vaccine is ready, they will try it on us like lab rats. Other developed countries are back to their lives but for Algeria, we are on the climax. last time I checked, 600 cases were added to the list in just one day… I started thinking that am I going to be next? Why on earth I was born in this country? You know what drives me nuts is that I am stuck at home and people are not respecting the quarantine rules. I talked a lot and I hope my participation helps you and sorry if I spread my negativity. Good luck with your work bye".

B. Non depressed

"Hello, my name is Sophie, I am 25 years old, and I'm surviving a pandemic. This should be hard on many levels but luckily I could take advantage of it. Anyone would be so sad because

of losing their job and staying home without nothing to do, but for me it was a rest that I was dreaming about for a long time and I couldn't get, I started working just after my graduation, I know it's a blessing for so many, and I'm so thankful for it, but I really needed a vacation, and since all the world was in pause, I didn't feel guilty acting lazy. During this confinement, everybody was depressed because they did not find what to do all day, but for me, I made sure to do a lot of things. I started to learn a new language "Spanish", I wanted to learn it since ever, but because of my full time job I couldn't do it. This free time was a first step for me to start it, so that at least I will be familiar with the basis. Also practicing sports and working on gaining weight was in my to do list in this confinement. I made a program to follow and organized my meals which was also so hard for me to do when I was working. I was always retarding them and not having much food during my day, but now I'm free all day to eat every meal in the right time. Other thing I enjoyed is spending time with my family since we were all whether working or studying before. This pandemic gave us the chance to gather, play games and have movie nights. This may look funny in my age, but learn cooking was also in my to do list. I'm not a big fan of the kitchen, but since I'm free, I decided to give it a try, and actually, I'm so proud I could learn so many traditional dishes that I thought they were hard to make, " guess what! I was wrong". Also catching up with my friends while working was mission impossible for me, so now that I have a lot of free time, I'm able to talk to them at least twice to three times a week. So maybe not everybody will think the same, but I was able to see the bright side in this pandemic, and be thankful for the things I gained not the things I lost. Being optimistic and not moaning all the time helped me and my family to survive this pandemic with the least damage possible.

Case two

A. Depressed

“Hello I want to share my story I am a 30 years old English bachelor of art. I did not pursue my master degree to open a small boutique in Algiers to sell clothes; it has been five years now. Life was so great, my so called friend Iman suggested that we get a loan to expand our business and everything I worked so hard on fell apart. We were supposed to work with my friend’s uncle and make a deal with this Turkish brand. So, we gave him the money and he took it and disappeared. It has been ten months now and we have not heard anything about him. We did everything to look for him but there is no sign, so we had to sell the boutique to pay the loan but we still have debts and I had to go home and live with my parents in Batna. The first two months felt like hell. I could not get out of bed; I wake up every morning feeling like every inch of my body hurts. I gained a lot of weight because I was not moving at all and I was eating unhealthy traditional food that my mom makes which is full of calories. I cannot stand looking at myself in the mirror and I am so afraid to try on my old clothes that probably won’t fit me anymore. My poor mom keeps on telling me that I still look good and that I am beautiful. I don’t believe her, she just wants me to go out and socialize a little bit and find a job cause staying home does not help. I am always tired and feeling like gravity is pulling me down ten times harder than everyone else, feels like everything is moving so fast and I am here moving so slow. I have no energy to do anything, nothing feels good anymore not even those old movies that I used to love watching; they seem so boring now. I used to love evening car rides with my parents but not anymore. My friends are afraid to pick up the phone anymore cause they are afraid that I ask them for money; I feel like that I am a burden on my parents, I make them so unhappy. I envy my friends, everyone of them is living a decent life with their carriers and have kids. That boutique was my whole life and now that I lost it, I lost

everything. I wanted to live in Algiers and be a successful business women that was my dream and I lost it now. My life was going so great, I can't believe I risked everything and it is a part of the past now. Now, she wants to start another business to pay the debts, I am sure we're gonna fail again. How could we grow a business in few months like the previous one that took five years of hard work. We must work anyways because we may go to jail if we fail to pay the debts on time. People used to be so envious of my life but now they look at me in a pathetic way. This is why I hate to meet people now and I avoid family gathering. Life is so hard and I feel so unlucky and so stupid by listening to Iman. I keep saying that I must go back to Algiers and start all over again, get in shape, meet new people and I gotta start a new chapter of my life but I feel like I am such a failure. I will never forgive her and her uncle for wasting everything I have achieved".

B. Non depressed

"Hey, my name is Moncef. I'm a master two student of English. I was asked by a friend of mine to participate in this study and talk about a personal experience. I started working when I was 18 years old. In the summer I succeeded in baccalaureate exam, the aim was to earn money as much as possible for five years so I can start my own business after graduating. I worked in delivery, in a bull room and in Lembarkia Aqua Parc. I worked so hard and I saved money, and stopped spending money on useless stuff. As I said in the beginning the aim was to work for five years but when I changed my plan and decided to start working because I had a good amount of money and I wanted to invest them instead of only saving them like that. So my friend told me about his web store, I decided to work online at my free time since I was super busy. My friend helped me with creating my own website and stuff. At the beginning as it was a new domain for me, I couldn't take the risk. I wanted to dip a toe in the water and see how things work; it was a successful deal with a good profit. After that, I tried another deal

and it succeeded too. My friend told me that valentine's day is the perfect chance to invest and make a fortune. I looked for a famous dealer from a famous gift shop and agreed on a deal that cost me all my money. The paying method was not refundable and I didn't have enough experience to know that. After he received money, I couldn't reach him and discovered that he restricted me and I got scammed. At the beginning, I was feeling like life slapped me so hard. I felt like all my efforts and plans flew away. I remember that I spent one night in which I felt so down but the next day I woke up so motivated to work harder. A year later, I gained all my money back and I became a famous dealer. I took an online course about business and marketing in which I learned so many things. I am about to graduate and I already started my business. That failure was a turning point in my life. I became more patient, careful, and responsible and especially learned to think twice before taking the risk. Learning the hard way for me is the best way, no matter what happens in the future, I learned how to start from the scratch and how to act in a smart way. Life experiences are for learning and not for regret. I want to advice anyone who fails to work actively and productively, giving up is the true failure.

Case three

A. Depressed

"Hi hope you are well so , I don't really have an intro, to be frank I don't think this is a story that needs one or could even use one, so I'm just gonna jump right into it. I'm gonna attempt to make myself as clear as possible because it is still a triggering story for me and hope it does makes sense to you. So, I think the first question you probably have is how it all went down? So just to make things clear, when it comes to depression you can't really point at a certain event that started this whole sensation because it is more of a sequence of events that constantly escalate on a very gradual minimalistic scale. So, we do not even notice all of

this taking place until it blows up. So, when it comes to depression, you have the before phase, before having depression and the remaining phase is the rest of your life because you will carry it within you for the rest of your life. So, when it all started I was in middle school, I was a really good student. I had really good grades. I was an athlete; I was in a swimming squad. I played tennis, I did marathons, I won competitions, I had an amazing social life, an amazing group of friends, an extremely supportive family. You know! I was genuinely excited about life. You know! life was full of joy for me. I used to wake up early; I was very excited. In the last year of my middle school, I got my first period. So, my puberty hits and I felt changed; it wasn't something dramatic. The difference wasn't something that I can point at or I can describe but I felt some sort of difference it was probably the hormones. So, what comes with this difference is that all of a sudden myself image became extremely prominent. So, I started to notice things about myself, after that I graduated from middle school and I went to high school. So, this sensation that was already established in the middle school was still there. So, as I started high school, I was put in this new class. I had new classmates and I started to get picked on by one of my new classmates, so it started like any usual case of bullying. It was like a mean comment here and there, and when all of this started, I defended myself, I fought back, I stood for myself but it did had a huge tall on me. I was tremendously affected. I started nitpicking when it comes to my appearance you know! like every detail became extremely extenuated you know! I developed insecurities. I became hyperaware of all my flaws, the only thing I was aware of was my flaws and it is like had a huge tall on me because my self-image was already compromised so it's like I already had this negativity within me and all this bullying did was extenuated it and each day it grew within me and got bigger and bigger. So the nitpicking that I was experiencing with my new classmate it got worst. So, from one person we had two people who became involved and then three then it turned into a mobs. It became more of a collective bullying. So, when this group of people

started to bully me, I stopped defending myself all together and at this point. I stopped defending myself, not thought I was going to lose anyway, but it is more of that I knew it was going to be something wrong with me because why would all these people like a group of twenty people choose to pick on a person if they are not doing something wrong. So, this sensation of self worthlessness started to creep in and I believed that I deserved this treatment and with each day I felt more consumed, more drained and extremely tired. I became this shell of my former self and of course when all of this was unfolding. My family started to notice my demeanor because I started to project my frustrations at them; I didn't have any way out of the anger that I felt at myself, so I started to project it on them and whenever they ask I couldn't really express myself as deep down. I actually felt quiet sad for them of having such a worthless boneless kid. So, the shame that I felt was overbearing and I started to have this terrible self talk as I lay there at night. I always play my flaws and shortcomings over and over and over again and it never ended; it was a cycle and I was always drained and consumed throughout the day and I keep thinking about the flaws and all the horrible things that I represent and it never ends. So, after this, I feel that I have entered a new phase. So, when I was going through this, of course I didn't notice all of this but as you get older and you have the privilege of distance from the experience, you have more clarity. So, the self pity that I had and the worthlessness that I was experiencing slowly started to turn into self loathing. I started not only to hate myself but it was like extreme loathing and what I started to do was very gradual like throughout the months things that I would do and I didn't really know how to interpret these things. For instance I bought this pair of converse, and it gave me blasters. It was really painful to wear and I didn't wear the shoes at all. One day, I decided to wear it again, I took my converse out to wear it. The next day, I took the longest way home and it was extremely painful. It is like I started to inflect pain and enjoy it. I would run really fast and abruptly stop, so I can fall down and scratch myself. I also stopped checking the

traffic whenever I cross the street. So, it's really simple things that I would do and I didn't really know the meaning of them. But as I look back, it was like a sad twisted form of me gaining agency over my own body because you know I didn't wanna be harmed by others while I had the capacity to harm myself. Summer came, and this bullying went on for a year and I felt that I hit rock bottom during the summer because to be honest when you feel depressed you are already in the bottom you have already hit rock bottom but you have different nuances of bottom so every single moment and every single phase represents this new terrible chamber of bottom. So when summer came we went to the beach and although I wasn't experiencing bullying anymore because we were not at school but the sensation was augmented it was even worst it wasn't actually a case of wanting the bullying to end but I wanted to end myself. So when we went to the beach my family were having a nap so I swam very far I was really tired I felt my body cramped and I went under water and I was really calm it was a very calm sensation and at that second my brother came and I swam back with him it was really normal cause I didn't really notice back then but deep down I knew if my brother didn't show up I would have stayed there and stayed longer and this really frightened me. I also stopped doing small thing that normal people do like showering and brushing my hair, I lost parts of me to depression that I still couldn't gain back. It became addictive to me to feel depressed. It has been years now since that experience but it is still affecting me and my self confidence. One of the remarkable effects of depression is social anxiety that I have now, I can't make any friends I don't trust people and I feel like they will judge me and know my weaknesses. Every time I meet new people I always feel like they hate me and the soon I turn my back and leave they will start talking about me so this feeling of people may harm me led to distancing myself from everybody. I became like a ghost crossing the university's corridors with my headphones in my ears and go back home as soon as I finish my classes so this was my story and if you have any questions you can ask me".

B. Non depressed

“Well I did not know how to start the recording but I have to begin this by saying that there is no excuse what so ever for bullying or bullies and that the negative impact they create on the victim sometimes if not all the time causes serious damage whether physically or emotionally. So, it is unacceptable by all sorts and means. Well, personally, I was bullied simply because I was the younger student than everyone around me because of my age. I was four years old and I was small or as everyone likes to call it “tinny winy”. Yeah, it’s an expression that denotes you are tiny. I went to the primary school one day and I heard my classmates talking about my size and how small and tiny I was and when they saw me coming they all started laughing. My story began since I was four years old, after that day they started pranking me by hanging my stuff in a place where I can’t reach it. Bullying didn’t stop at primary school level but it continued to middle school since most of my classmates went to the same middle school as I went too, and at that level they started creating humiliating nagging songs about me. They banned those nice kids from talking to me and as a consequence I was always alone. Luckily, my family was so loving and supportive and also I was a smart kid to understand that those kids who bullied me are just impolite and not nice and the problem was in them and in their education, and their actions were just a result of jealousy since I always was ranked to be the first during my entire educational journey. So, it really made me discover that the actual benefits of what these bullies did to me, it took me some time but eventually I understood the fact that it really goes better; this negative energy they planted in me became my real motivation. All in all, I understood that because of them I am me and they created a better version of me. I’m now capable of spotting bullies at first sight and know how to deal with them accordingly and the situations they put me in, feelings they made me feel. Human beings are nothing but compressed emotions. Now, I learned to say no if I do not want to do something; I simply say no. I learned how to stand up for myself and everyone around me.

The most important thing I learned is that I can survive by my own and be independent. It's conventional that people will judge you no matter what because I was a good student, polite kid, a smart person with a pretty face and so cute but they have ignored all of this and just looked at my size. Now, I do not take into consideration people's opinions and judgments. Being careful in choosing the words I say because I know exactly how words have an impact on their hearer. The strong and successful person I became today has gone through a lot of experiences that shaped my strong personality and that I am grateful for. Some of those people who used to bully me are living a desperate life. God has punished them for their bad deeds. Thanks to them I became confident, secure, more solid and caring.

Case four

A. Depressed

"Hello, so I graduated in 2008, looking at my family's situation I was obliged to work and make money. So, I was thinking that I must find a job. I helplessly needed it. It was not so easy; it was always hard. You know the situation in our country is a bit difficult, your university studies don't matter; getting a degree will not help you at all. After many trials and many failures, the idea of moving from my city to a bigger one was the only option for me at that time and the worst part of it was to leave my family behind and move. I moved to many other places just to find a job. The worst part about moving is leaving everyone I love behind: my family, my friends and the city I grew up in. I went to Wahran, I started looking for a job, literally any job just to be able to survive. I worked as a waiter in restaurants in the beginning and actually I was gaining a good amount of money especially from tips because the restaurant was in a chic hotel where only rich people come. So, tips were astonishing. I used to work from 6 pm until midnight, after that I tried to look for another job in the day time to make more money, I used to work as a shop assistant. It wasn't easy in the beginning I used t

sleep like a baby but I was making money and sending some to my family which made me so proud. The weird thing is that I wasn't happy I was like a fish that got out of water, there was a kind of cultural shock if i can say that, I was so lonely I had no friends I couldn't fit in their society you know Batna and Wahran are two different cups of tea. After work my coworkers go to clubs and always invite me saying you will enjoy your time just come but I refuse first because I be so tired and second it is not me. Another thing that was so sad is the moment I go back home and find that small apartment super messy and remember how my mother and sisters used to clean my room, wash my dirty clothes and cook for me. There was nothing exciting about my life, and with time this feeling of sadness and loneliness started hunting me, I couldn't get used to my new life I started having feelings of regret I was saying I sould have stayed with my family I should have looked harder for a job there. In any family gathering I was the only one missing because where I live now is far from where my family live. One day the apartment owner called me and said I need u to empty it in two days I asked for the reason he said it's my apartment I will give you the rest of your money and just leave, I was already feeling horrible and I wasn't ready for that. I couldn't find an apartment in two days and I ended up sleeping in the restaurant. At that moment I felt so miserable that even that apartment I hated became a dream for me now. It was at that moment where I decided to go back home I have had enough, I thought that by going back home the nightmare will be over but when I got back there I went back to the starting point no job and I lost two years of my life there for nothing, people were looking at me like a failure it was at that point where I understood that feeling depressed and useless is within me and I am just unlucky should I accept this fact? For now I am staying home doing nothing all my energy was drained and the sad part is how my parents look at me, it's true that they said nothing but that look in their eyes said it all, I failed them and I feel guilty for that. Thank you for listening and good luck".

B. Non depressed

“Hello my name is Chems-Eddine, I’m an international student at City university of London, this is my first year here in London. So everything started when I applied for Chevening scholarship and I was chosen to pursue one-year master’s degree. I learned so many things that concerns my field of study. An improvement in my speaking skill was so noticeable since I was surrounded by native speakers and also I had to speak in English all the time. London is a multicultural city with a lot of citizens from all over the world, I learned so many things about different cultures and countries. Concerning teachers here they are so friendly and helpful and try to provide you with the best studying environment which gave me more courage and will to work hard on myself. On the other hand, living alone for the first time taught me a lot of things, I became an organized person since nobody is there to clean and organize stuff for me, in addition to cooking I started making simple recipes, I also learned to be more responsible on myself and on my apartment. Back when I was living with my parents, I never paid attention to how I spend money, but now I learned financial skills if we can say that on how to spend money intelligently and save for urgent situations. Living in a big city like London was an eye opening experience for me, and made me think about how to make our country as developed and beautiful as the United Kingdom it was a motivating experience because I was surprised that most people from different nationalities don’t know Algeria, I tried to be a good example to represent my country in a good way. Travelling abroad was a good experience after all, I am not the same person I was before, it has completely changed me to the better.

Case five

A. Depressed

“Hello everyone, I’m going be telling the story of my postpartum depression. So it all started on November when I discovered that I am pregnant it was absolutely the best day of my life, I made a surprise for my family to tell them that I am pregnant and it was a happy event , the pregnancy wasn’t really hard for me, I organized a sex reveal party, the baby shower and everything was amazing. Then here comes the day, on 15th of June was the day of giving birth, actually I was afraid because I knew that and like everyone else know that giving birth is not easy but I didn’t know that it will be this hard, it was the hardest thing I have eer experienced. I went to the hospital where I barely survived, I thought that I was going to die but thanks God I survived. After giving birth I thought that I am going to relax and rest and that the hardest part is over but reality hit me so hard and my suffering has just started it was the beginning of losing my life and of my suffering. I have never imagined that one day my life may be as horrible as it is, my happiness ended on the first day when I met my baby and felt so blessed for becoming a mother, that was the last happy moment of my life, after that moment, my life became a disaster, it has been now two months of sleepless nights and it’s me the one who has to wake up when the baby cries at night. My husband doesn’t help at all and whenever I ask for his help he says I work early tomorrow I need to rest. The baby is my responsibility alone I feed him, make him sleep, I change for him and let me tell you the best part, when the baby cries at night and I fail to make him quiet my husband starts to yell at me and sometimes he asks me to leave the room because the baby is crying loudly. Not only that, when the baby sleeps I don’t have the right to get some rest, I need to clean the house and cook, I rarely find time even take a shower like I used to. This huge responsibility is so hard for me I can’t take it anymore. My relationship with my husband has changed to the worst not

only him even my neighbor I met her in the stairs she wasn't even smiling at me like she used to, I don't blame her she obviously hears the baby crying at night and it bothers her too. I keep on asking myself why does everyone put the blame on me? Even my family my mother, my friends and sisters they all gave up on me, I was left alone fighting by myself in the most tragic way. One of the things no one told me before is when you will have a baby it is the end of everything, the end of me, my life was over the day I became a mother, even my passion in cooking is lost I used to enjoy making food especially sweets but now I cook because I have to, now my life is all about others, about my baby and my husband, there is no room for me anymore, even for dressing up and wearing makeup I don't have time , I even feel ugly and fat after gaining weight and whenever I feel like that I find myself eating more and more , I can't even start a diet because I am breastfeeding and I have no other source of energy but food. I had goals, dreams and plans for the future but it is impossible to achieve anything now even my job i'm thinking about quitting, now I am home because of this pandemic and I couldn't make it so when the corona virus ends I will not be able to go back to work because of my baby now I'm only a housewife, all I think of now is regret I wish I didn't give birth I should have thought twice about it. Let me tell you about my social life, all my friendships are over, I don't pick up the phone when my friends call me , I can't even have a five minutes call, I rarely check my accounts on social media which led my friends to stop texting me, even when they meet they don't call me to join them anymore. The scary part of my story is that sometimes I feel like I started hating my own baby, I couldn't even tell anyone because it's a horrible thing and guilt was eating me alive, I should at least give him love. It was at that moment where I decided to contact a psychologist who works with me and she told me that I am suffering from postpartum depression. I feel hopeless and scared".

B. Non depressed

“Hello, well I am going to talk about my motherhood experience, okay so I got married right after my graduation, and becoming a mother wasn’t a part of my plans at this early age, so the moment I discovered that I was pregnant I was surprised. However with time I got used to the idea that I will be a mother and I started feeling this connection between me and the baby . I felt so happy and excited when I was preparing for the baby with my husband and we bought the cutest things ever. I will not talk about my pregnancy a lot because It wasn’t that hard it was so normal, I didn’t face any difficulties. My doctor suggested that I shouldn’t give birth naturally, we set a date for the surgery and everything was going as planned and my angel came to life, this is why I said that my pregnancy and giving birth wasn’t that hard because I didn’t give birth naturally. The first days after laboring was a bit difficult but thanks God I was surrounded by positive people who were there for me my mother, my mother in law and my husband. Let me tell you about the first time I saw my baby his name is Anas, that was the first time ever in my life where I was speechless I had tears in the eyes, I was so happy, for me that was the meaning of falling in love at first sight. I couldn’t hold the baby in the first week because of the surgery, but when they put him next to me and I start smelling him and kissing him I feel so blessed. My life has fully changed after becoming a mother, raising him was a journey that is full of emotions, my son became my life and has strengthened us as a family. Even when sometimes I have to leave for few days because of my job I miss him so bad and I impatiently count the days so I can see him again and be with him. Now it has been 9 months since I gave birth, It feels like I gave birth yesterday, as they say that good times pass quickly, every day with him is a beautiful one, full of adventures of him discovering things and making cute reactions, I have recorded everything for him so we can save those beautiful moments for him. Becoming a mother was the best thing that ever happened to me and I thank God everyday for that, this journey is so beautiful with all its details even those

nights where you have to stay up all night when he gets sick it is done out of love and caring. I gladly lived my motherhood so far and I will do my best to be the best mother for my son because my life is nothing without him".

Case six

A. Depressed

"Hey I was asked to talk about something that is kind of personal but it concerns my depression, it is about the loss of my grandfather although it happened many years ago but I failed to move on. It is something that shocked me because it happened when I was a kid and it made me realize the cruelty of this world we live in and how people can be really fake and hiding the truth. I talk clearly it so you can understand, the day it happened I couldn't understand a thing, I was only seeing members of my family crying. The shocking thing is that no one have ever told me that you may lose people you love. I was a little kid seeing a lot of people crying and others just carelessly sitting and discussing about their personal issues like if my grandfather's funeral was a chance to meet and see each other. It was so horrible they didn't even respect people who are hurt, I remember getting into his room seeing him laying there not moving just a dead body, my father was there inside the room he said come here and say good bye to your grandfather, this is the last time you will see him again, I was just standing there shocked, I fearlessly ran towards him and hugged him, my grandfather was like a hero for me he was a strong man, he was my best friend when I was young , he used to play with me, take me with him everywhere he goes he used to buy toys and candy for me. He loved me so much because I was his first grandson. It has been fifteen years now since his death and I still couldn't move on, it was a shocking event for me because he was killed, and the person who killed him is still unknown and didn't get a punishment, maybe this is why it hurts me so bad. It is really hard to talk about something like this , now I feel like at any

moment anyone including me may die then why should I care about life? And only good people are dying why is that? I know I should move on but I couldn't, I sadly guess that I'm too weak to do that. Maybe if I could find the person who killed him and took revenge for his pure soul I could move on. I will never forgive the person who killed him, I wish I can take his life with my own hands and I won't care about the consequences I am dead anyways I am not enjoying my life. Since his death, nobody loved me unconditionally for who I am the way he did, no one could take his place because nobody is as good as he was. That's it and I hope my contribution helps you".

B. Non depressed

"Hello what I'm going to say may astonish some people and may think I'm heartless especially in our culture. Let me start by telling you my own story, in 2012, my father was diagnosed with stomach carcinoma (which is an aggressive stomach cancer). That news completely changed my life. I used to wake up every morning with the fear of not finding him awake. Scenarios with different plots kept on hunting me every day. Though we had faith and hope that he may survive , an inner voice inside of me kept on insisting it's not going to take so longue. That would better for him. Step by step his weak body started to give up organ by organ. My father lost the battle to cancer and passed away in 2013.That sounds like a tragic movie, however, from the ash we reborn. And that's when I started a new chapter of my life. One of the good lessons I learned by seeing true friends and family who offered their help and support, I realized how loved, lucky and appreciated by having all those true honest people around me. At the beginning things were different and it took me some time to get used to the new situation. And bit by bit, this leads me to a self discovery journey. Learning that nothing should be taken for granted and this empowered my sense of gratitude I thank God everyday that me and people I love are fine and I always keep on showing them that I love them and

appreciate them in my life, which is something I used to ignore by believing that they already know that, but with being more open about my feelings was such a relief. Moreover, I learned that autonomy is the key of success. I can now work on my own projects and clearly work on my goals, I became an independent person. My ultimate goal in life was making my father happy and that lit a flame of motivation inside of me to work harder to be the successful person he always wanted to see. Becoming more religious resulted from this experience, I started working more on if we can call it the after life because that’s what matters the most. This experience revealed a strong person I didn't know it exists within me. It taught me to fearlessly fly with my own wings. And so far I'm enjoying this journey. What I wanted to say is that it's okay to be weak and it's more than okay to be afraid, yet, letting that fear and weakness control you or victimize you is a losing plan. It doesn't need a miracle to start all over again. And trust me losing someone special in our lives can definitely be sometimes a bless and not a curse”.

الملخص

يعتبر للصحة النفسية تأثير كبير على جميع مجالات الحياة بما فيها اللغة. هذه الدراسة تسعى لدراسة تأثير الاكتئاب كمرض نفسي على اختيار المفردات. افترض الباحث أن مرضى الاكتئاب يستخدمون اللغة بطريقة مختلفة. للتأكد من صحة الفرضية استخدمت وسيلتان لجمع المعلومات اللازمة و هما اختبار هاميلتون لتقييم الاكتئاب و المقابلة.وقع الاختيار على اثنا عشر شخصا من طلاب اللغة الانجليزية ليشاركوا في الدراسة و قد تم تقسيمهم إلى مجموعتين لغرض المقارنة بينهما (المجموعة الأولى تتكون من ستة أشخاص يعانون من الاكتئاب و الستة الآخرون يتمتعون بصحة نفسية جيدة). تحليل نتائج الدراسة أكدت أن الاكتئاب يؤثر فعلا على اختيار المفردات و منه نتأكد من صحة الفرضيةالمقترحة.

Résumé

La santé mentale a un important influence sur tous les aspects de la vie comprenant la langue. Cette étude cherche d'examiner l'influence de la dépression comme maladie mentale sur le choix du vocabulaire. Le chercheur pense que les gens qui souffrent de cette maladie utilisent la langue différemment. Pour confirmer la validité de cette hypothèse, deux méthodes de collecte de données sont utilisée. La première méthode c'est le Test d'Hamilton et la deuxième méthode est l'interview. Douze étudiants d'Anglais ont été choisis pour participer dans cette étude. Ils étaient également divisés en deux groupes pour comparer entre les deux, le premier groupe se compose de six participants qui souffrent de dépression. L'autre groupe est composé des gens normaux qui ont une bonne santé mentale. Les résultats de cette étude ont confirmé que l'hypothèse est correcte et que la dépression influence le choix de vocabulaire.