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Department of English



**An Investigation of the Impact of Emotionality on the
Process of Vocabulary Learning**

A Dissertation Submitted in Partial Fulfilment of the Requirement for Master Degree in
Didactics of English Language

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Declaration

We hereby declare that the dissertation entitled “Investigating the Impact of Emotionality on the Process of Vocabulary Learning” is our own work and all resources we have used have been acknowledged by means of references. We also certify that we have not copied or plagiarized the work of other students or researchers partially or fully. In case any material not documented we shall be responsible.

Soumia Bouhanna

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22nd September 2022

Dedication

In the name of Allah the Most Merciful and the Most Compassionate

“My success is only by Allah”

*To my **Mom** and **Dad**, there is not enough space for me to thank your sacrifices, encouragement and support. Thank you for being there for me whenever I need you.*

*To my sisters: **Radia**, **Meriem** and **Khadidja**, to my brothers: **Mokhtar** and **Sofiyane** for always standing behind me.*

*To the little members of my family, **Moncef** and **Mondir**, **Taha**, **Mohammed Djasser**, **Tamim** and **Houdeifa** who put their special touch in this work.*

*To an amazing person who has touched my life in many beautiful ways, the only one who I can call soul mate, to **Selma**.*

*To my friend and partner in this work ‘**Fati**’,*

To all Master Two colleagues,

To me...

Soumia

Dedication

In the name of Allah, the most gracious, the most merciful,

To my Mom and Dad thank you for bringing me to life and raising me ,

To my sisters Nabila and Roufaida,

My grandparents may Allah bless them with long life

My second mother Zahira,

To my besties Roumis and Romeo,

To my partner Sousou

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And the rest of my family,

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Abstract

Learning a second language is a complex process that requires knowing all its different aspects including grammar, pronunciation, and vocabulary.etc. This latter is considered as the building block of any language. Many language learners face some difficulties and obstacles that may stand in the way of their mastery of vocabulary. In an attempt to facilitate these obstacles, researchers in the field of Second Language Acquisition sought to find out the appropriate platform to facilitate teaching vocabulary through inserting emotionality in the process of teaching and learning. The study at hand, sought to shed light on the impact of emotionality on vocabulary acquisition and enhancement as well as vocabulary long recall. It aims to investigate the effect of emotionality on vocabulary learning. This study has adopted an experimental research with two groups of EFL learners; the first group consists of 10 students was taught in neutral settings far from any emotional stimulus, while the second group consisting of 10 students taught in an emotional setting through the use of different emotional stimuli including videos, faces, pictures and audios. The findings of this study show that emotionality can affect language learning in many ways. It improves and enhances the learning and long recall of vocabulary items.

Key Terms: Emotionality, Vocabulary Learning, Emotional Stimuli.

List of Abbreviations

SLA: Second Language Acquisition

EFL: English as a Foreign Language

STM: Short Term Memory

LTM: Long Term Memory

JFK: John Fitzgerald Kennedy

MLK: Martin Luther King

TEFL: Teaching English as a Foreign Language

CALL: Computer Assisted Language Learning

GTM: Grammar Translation Method

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General Introduction

Vocabulary mastery is essential in language learning; no language can be acquired apart from its words and their meanings. As Wilkins (1972) suggested “without grammar very little can be conveyed, without vocabulary nothing can be conveyed” (pp. 111–112). This can clarify the need to have a rich amount of vocabulary knowledge to master any language. This importance that vocabulary gained in languages has prompted researchers in the field of Second Language Acquisition (SLA) to find out the best ways and approaches to teach it. There are always new techniques, new methods and alternative approaches that tend to simplify the process of vocabulary acquisition making it easier for the learner and permitting the teacher to be as creative as possible.

The process of learning vocabulary focuses on the ability of memorizing the vocabulary, recalling them later and using them correctly. In the light of this, no matter how great a memory as Cesare Pavese (2016) stated “We do not remember the days, we remember the moments”. If we select any human being on this planet and ask him about his memories, he can never recall all his memories or tell you exactly what happened on a specific day. The only memories he would summon are those such as the memory of his relative’s death, the memory of his childbirth or the memory of when he failed in attaining something that he worked hard for. Thus, memory is not significant unless it is emotionally loaded with any type of emotions: positive ones, such as joy, or negative ones, such as sadness which we can relate to language acquisition. Let us analyze this example; on a Friday morning, a five years old child goes outside to play for the first time, suddenly he falls and injures his knee. Now as any child would do, he would first cry because he is in pain, which is coming from his knee injury, then he would rush to his mother who would get worry about

her little child. Now examining this situation from the cognitive side; afterwards, if we ask the child to recall what he did on Friday since getting up till going back to sleep, the first memory that he would recall is when he fell and injured his knee; further than that, he will report the exact story and the feeling he experienced such as pain, sadness, fear and so on. He might even summon the face of his mother when he rushed to her crying. Now, moving on to language learning, if we examine it from an academic point of view, an infant will first recognize the word fall which he experienced for the first time, next he will learn the word pain which is the feeling he experienced when he fell, then the word cry which is his reaction to pain, moving to the word injury which is the source of pain and the word worry which his mother's reaction. All that is because of the emotional setting, the child will remember the fall and the words he learned within the context, and that something that it cannot be experienced in the L2 and FL acquisition considering that they are taught in schools which acknowledged as a neutral setting and emotion-free.

It is proven in neurosciences that our memory is deeply affected by emotions; it tends to store all the information that has an emotional load while it neglects the others, which is exactly what happen when we are in the process of acquiring our native language.

1-Background of the Study

Emotionality affects every aspect of life a human being; a single emotion can make a huge difference in a human being's life as Vuilleumier (2005). Many studies have reported that human cognitive processes such as perception, attention, learning, memory, and reasoning are affected by emotions, including attention. It is also confirmed in an article published by that the emotional stimuli tend to draw more

attention unlike the non emotional stimuli that draw less attention and cannot be remembered vividly.

When it comes to learning languages, many claimed that emotions have no role in the process until cognitive sciences were neglected. However, later Pavlenko(2005) reported that there is a difference of emotionality between the first or the native language and the second language,. That difference makes learning the native language easier than the non native language, native language is acquired in an emotional setting “the context in which a language is learned and used” (Harris et al., 2006) which the family where every word is learned with its own emotional load unlike the second language or the foreign language which is learned through classrooms and schools which are referred to as neutral setting. Second language and foreign language are emotional free, the words are learned through given their definitions.

An article was published under the title of “The Influences of Emotion on Learning and Memory” by Chai M. Tyng, Hafeez U. Amine, Mohamad N.M Saad, and Amir S. Malik on August 2017, in this article they stressed the role of emotionality and its effects on learning and memory stating that the results from their experiment revealed that emotion substantially influences memory performance and that both positive and negative words were remembered more effectively than neutral words. Moreover, emotional words were remembered better in recognition vs. recall test.

Since emotionality has a strong effect on the cognitive processes such as memory and learning, why not using this advantage in educational setting and test whether it is true that emotionality has an effect on those processes and how exactly it

affects them? Why not creating an emotional context and test whether student will remember or not?

2- Statement of the problem

EFL learners always had always experienced difficulties in memorizing vocabulary. They either fail to recall the meaning of words or their accurate usage. Though many researches were carried out in order to overcome this particular issue, none seemed to find a 100% accurate solution. The issue of vocabulary acquisition and recalling requires an in-depth investigation and careful data analysis on the part of researchers.

3- Aims of the study

As any research, this research has a set of objectives to be reached at the end; the main objectives it seeks to reach are listed as follows:

- Investigating the impact of emotionality on the teaching and learning of vocabulary process.
- Providing teachers with new techniques to deliver vocabulary lessons.

4- Research Problems

Learning and teaching processes are in constant development. With time, almost every year there is a new technique, a new approach, or a new method. This time, the new technique will be engaging emotion in teaching. This research will investigate the impact of emotionality on enhancing vocabulary learning.

5- Research questions

- 1-What is the impact of emotionality on the process of vocabulary acquisition?
- 2- If it has an impact, what are the emotions that have an impact on the process?
- 3- What are the emotional stimuli that affect memory?

6- Research Hypotheses

This research adapted two hypotheses:

- Engaging emotions in teaching vocabulary has an effect on the process of learning.
- Engaging emotions in teaching vocabulary has no effect on the process of learning

7- Significance of the study

Our dissertation highlights the impact of emotionality on the process of vocabulary acquisition, as most learners face difficulties in memorizing, recalling and using vocabulary accurately.

We find our context of research very fruitful for us as a part of our future teachers.

8- The Sample of the Study

The sample will be selected randomly to avoid any kind of stereotyping. Considering that it is nearly impossible to deal with the whole population, the sample will be selected and the results will be analyzed and generalized to the overall population which is English language beginners.

9- Research Method

The research is an exploratory quantitative study, in which we will investigate the impact of engaging emotions in enhancing teaching of vocabulary.

10- Data Collection Method

To answer the research question, an experiment will be conducted with two groups of English language beginners at TEFL Academy private school located in Jijel; a pre-test will be delivered to the participants of the study and then one of the groups will be taught vocabulary in the ordinary method (the use of plain texts) in a private school located in Texanna. The other group will be taught vocabulary with

techniques that involve emotional stimulation (the use of emotional stimuli). At the end of the experiment, a post-test will be delivered and later analyzed.

Chapter One: Vocabulary of Language, Emotionality and Memory

Introduction

When we were middle school pupils, we were introduced to the term globalization. The term was related to economy and trading. We were taught that globalization would make our world more connected when it comes to economy. However nowadays the term no longer bears idea that was once read in the book. The most important effect of the realization was making the English language as the number one language of the world, the lingua franca or as it is referred to now as The Language of the world.

English becoming the lingua franca encouraged people around the world to learn it, and English learner were favored among other languages learners (Is Globalization Damaging to Non-English Languages?).

In this chapter, the focus is placed on clarifying the terminology that is considered the basis of this piece of research, starting from vocabulary and the main points related to it, moving on the two main parts: emotionality and memory. Starting with the vocabulary, standard definitions by different scholars and dictionaries were introduced, the types of vocabulary were listed, the main aspects of vocabulary were mentioned, and the importance of vocabulary in any language was discussed. Last but not least, some vocabulary teaching and learning techniques were highlighted. Concerning emotionality and memory, some definitions were provided, followed by the types of emotions; moving to the difference between emotions and feelings. Furthermore, to the different stages and types of memory. This chapter attempted to analyze the relation between emotions, learning, and memory. In the light of this latter, it dealt with of flashbulb memory and shed light on the emotional stimulus and its types.

Section One:

Introduction

Language is a mean of communication; we learn languages to communicate with other human beings that use that language. However, that does not indicate that we must learn the grammar rules of that language, it is enough to know the vocabulary of that language, grammar is important indeed; but not that important when we lack vocabulary.

1-Definition of Vocabulary

According to Hornby (2006), “vocabulary is all the words that a person knows or uses, and it is all the words in a particular language.” In general, vocabulary is all about words of a given language that a person knows and uses to communicate, read, and write. Nunan (1999:101) goes in the same line and defines vocabulary as “a list of target language words.” Similarly, the Oxford Dictionary defined vocabulary as following “all the words that a person knows and uses” (Dictionaries). Furthermore, it was described as follows: “vocabulary refers to all the words in the Language that are understood by a particular person or a group of people.” (Nordquist, 2020). In light of these definitions, we concluded that vocabulary is the list of words in any given language with their meaning and synonyms. And what is more important is using these words correctly and appropriately.

However, vocabulary is not only about simple words; it can include compound words, some lexical chunks, phrases of two/three words like ‘good night’; it can also include idiomatic expressions.

To sum up, it no question that vocabulary is an essential element of language that cannot be ignored in teaching and learning processes in addition to the other skills and components of language.

2-Types of Vocabulary

Vocabulary can be divided into several types; grammatically, there are three main vocabulary types: adjectives, verbs and nouns. In the field of semantics, it is divided into several different types, including the vocabulary of emotions, names of things and places, colours, jobs.etc. In addition to the famous four types of vocabularies that are: reading, writing, speaking and listening vocabularies.However, we will focus on two main types of vocabulary, which are the active vocabulary and passive one.

2.1. Active Vocabulary

The term active vocabulary refers to the productive side of language; i.e. it refers to putting in use the words that a learner acquires and understands; “Active vocabulary consists of vocabulary already know, understand and use in a language, you know the correct word of these words and confidently use them in speaking and writing” (Hasa, 2021). Martin Manser (2004) argued that active vocabulary “consists of the words that people use frequently and confidently. If someone asks them to make up a sentence containing such and such a word –and they can do it- then such word is part of their active vocabulary” (Martin Manser, 2004). This definition states that active vocabulary is that one which is used correctly with awareness of its meaning, spelling, pronunciation, its correct contex.etc. It is also defined by Harmer (2015) in as follows: “active vocabulary refers to vocabulary that students have been taught or learnt and expected to be able to use” (Harmer, 2015, p. 3). To sum up, the active vocabularies are the words that a learner encounters in his learning process and uses easily in the daily conversations.

2.2. Passive Vocabulary

In the process of learning we come across many vocabularies that are understood and clear such as nouns and verbs, however these words tend to make it difficult to use, usually due the lack of practice or confidence.

Passive vocabulary is defined as follows: “refers to words whose meanings we can understand and when they appear in writing or speech but we do not confidently use them since we are not fully conversant with them”. (**Hasa, 2021, p. 1**)

In any language, passive vocabulary is larger than active vocabulary; we use what we are confident and aware of its meaning; but we ignore what we are not sure about its use and meaning.

3. Aspects of Vocabulary

A vocabulary in any language has three main aspects, in order to understand and correctly use the vocabulary; these three aspects should be taken into consideration:

3.1.Denotation: the term indicates the exact meaning of the word, like the ones we find in dictionaries in which we can find the origin of the word, the phonetic transcription, the class of the word, the definition of the word, and examples of the use of the word e.g.:

Food noun C or U

UK /fu:d/

US/fu:d/

- Something that people and animals eat, or plants absorb to keep them alive

Source: (Cambridge Dictionary, s.d.)

3.2. Connotation: each vocabulary in the English language or any other language is accompanied with one feeling or emotions; these feeling or emotions vary from one word to another. Some words accompanied with positive emotions or feeling however some words are accompanied with negative ones. Knowing the word and its meaning sometimes cannot be abundant; it is the feeling that accompanies the word what determines where and the word can be used.

E.g. the word fat which is defined in the Oxford online dictionary as follows:

- (Of a person's or an animal's body), having too much flesh on it and weighing too much. (Dictionaries).The word fat is an adjective that describes the people who weigh much more than average people. This adjective is accompanied by a negative feeling, some even consider it as insulting to refer to a person who has extra weight as fat; unlike the word overweight which is a neutral word, according the oxford online dictionary and can be used without the fear of being misunderstood.

3.3. Collocation: It is considered as an important aspect of vocabulary, every word in the vocabulary of the English language has a set of words that can be add to it to form a meaning e.g. let consider the word Food, it is defined in Oxford online dictionary as: [Uncountable],things that people or animals eat (Cambridge Dictionary, s.d.). The word food has a list of words that can be added to it to form another meaning such as:

Fast food: refers to the food prepared by fast-food shops.

Food Allergy: it is the human's body reaction to a certain type of food in which it causes choking, difficulties in breathing, rash, and it even causes death on certain occasions.

4. The Importance of Vocabulary

Vocabulary knowledge is considered an essential component for learning a language considering the fact that it has a direct influence on mastering it. Emphasizing the importance of vocabulary learning, David Wilkins in 1972 noted, "Without grammar, very little can be conveyed, without vocabulary, nothing can be conveyed." (P111-112) Back then, vocabulary learning was neglected by the old teaching methods such as GTM; they considered that mastering a language is mastering its grammar rules. All the focus on the grammar rules resulted in producing language learners lacking the ability of creating a single correct sentence.

With time and the change in needs, the language is a means of communication after all, the focus altered from mastering the grammar to the vocabulary. Read (2000, p.1) stated that "words are the basic building blocks of any language" In the light of this quote, it is indisputable that none of the languages can be acquired apart from its words. Likewise, it is argued that vocabulary proficiency and language use are two complementary elements "knowledge of vocabulary enables language use and, conversely, language use leads to an increase in vocabulary knowledge" (Nation, 2001, p. 6).

Learning vocabulary is the key to learning other language skills, i.e., listening, speaking, reading, and writing. Without vocabulary, it is unrealizable to imply the grammatical knowledge that we have learned. Likewise, we will not be able to demonstrate our writing skills. And what is more, we will not be able to communicate our ideas and information which results in us not being able to build social relationships.

Wilkins (1972) states that: “There is not much value in being able to produce grammatical sentences if one has not got the vocabulary that is needed to convey what one wishes to say” (Wilkins, 1972, p. 111). Many other researchers supported this idea, stating that vocabulary is essential in foreign or second language learning, and it is necessary to give it more attention when developing teaching curricula and approaches. Krashen said “When students travel, they don’t carry grammar books, they carry dictionaries” (Stephane, 1993, p. 111).

5- Techniques of Vocabulary Teaching and Learning

There are several techniques concerning the teaching of vocabulary in the most appropriate way that can guarantee the success and the effectiveness of the process.

5-1-Visual Techniques: presenting vocabulary through materials and tools can make both teaching and learning vocabulary easier. In simple words, it is the use of pictures, drawings, diagrams. etc. Beside the word that is going to be taught in order to clarify and explain its meaning to the learner. This technique helps the learner to understand vocabulary better as it gives a simple and clear idea about the word and its meaning.

5-2-Use of Dictionaries: one of the effective techniques for learning vocabulary is to increase the use of dictionaries; this can help learners to be familiar with word’s meaning, spelling, synonyms, pronunciation, in addition to some examples that will illustrate and give ideas about the correct context of the words.

6 -Vocabulary in the Different Approaches of Language Teaching

Vocabulary learning has gained less importance in the past approaches to language teaching and learning; however, it has become a matter of interest for many systems and researchers. This shift in interest was attributed to the recognition of the

importance of vocabulary in SLA and the difficulties that learners can face when trying to learn it individually.

The Grammar Translation Method (GTM) is one of the approaches that give vocabulary importance in language learning. GTM is an approach to language teaching that dominated the domain of language learning from the 1840s to 1940s and is still used widely till the present times. This approach aims to teach foreign languages to be able to learn and understand their literature; to do so; learners are asked to learn the grammatical rules of a language and its vocabulary. GMT lessons were built on the mastery of grammar rules and the memorization of vocabulary units, in addition to mastering the task of translation from and into the target language. Vocabulary was taught through by giving a list of isolated words and reading complex texts early, in addition to translating some units from both languages (Fredy Valencia, 2022, p. 1).

Another approach that emphasizes vocabulary learning is the Direct Method (DM). DM emerged as a response to the weaknesses of GTM in 1900; however, this approach emphasizes learning vocabulary rather than grammar. This language teaching method focused on introducing a learner who can use language and communicate with it more than analysing it and its grammar. This method focuses on teaching the vocabulary used in daily conversations with a focus on listening and pronunciation skills. According to the DM, language can be learned naturally through the learners' interactions in the classroom during the lesson.

Communicative Language Teaching (CLT) teaches vocabulary implicitly; it relates vocabulary mastering to the context of the language. Learners are expected to learn the vocabulary they need to use in real-life situations to solve problems. (Shejbalová, 2006)

Conclusion

The section in hand introduced vocabulary as the most important aspect of language. Without the knowledge of the words the communication will not be successful. It also dealt with the types, the aspects and the techniques used to teach vocabulary as well as the previous methods and approaches used by teachers.

Section Two: Emotionality

Introduction

Recent studies in neurosciences have shown that emotions have an enormous influence on cognitive processes like perception, attention, decision making, memory and learning. This can lead to the fact that emotions have an important impact on the process of learning a language as they facilitate the processes of encoding and retrieving information from our memory. This conclusion leads us to give emotions an important consideration in any learning process. Taking the example of our first language or the mother tongue which is the language that is learnt at home at a very young age, the language that we experienced our first times using it, our first time to the zoo in which we learnt the names of animals, the first time we saw the beach and knew how to name every object there such as sand, waves and swimming suit. Our first language is learnt in an emotional setting in which every word is acquired has its own emotional load, that emotional load that scripts the words in our memories the longer we live. This successful process also emphasizes the need of emotions in learning a second language which is acquired in schools in settings devoided from emotions.

1- 1-Definition of Emotions

Every human being experiences from time to time a sort of body reaction that does not occur physically; however, mentally, these reactions are response to an action or an event that happened at the moment. These reactions are referred to as emotions. “A conscious mental reaction such as anger or fear subjectively experienced as a strong feeling usually directed toward a specific object and typically accompanied by physiological and behavioral changes in the body.” (Merriam-Webster Dictionary, 2020) Emotions are mental reactions that a person experiences as a response to an action that triggered him. That reaction is usually followed by a change in behavior, e.g., a father talking to his daughter. Suddenly the daughter raises her voice out of disrespect; in this case, the father will experience the emotion of anger as a reaction to his daughter's misbehavior, resulting in him shouting back at her, which is the behavioral change that follows the response.

In psychology, emotion is often defined as “a complex state of feeling that results in physical and psychological changes that influence thought and behavior” (Myers, 2000) Every time a human experience a particular type of emotion, he experiences a type of physiological change, such as when a person is experiencing the emotion of fear as a result of him watching a horror film, his heart rate will increase, and he might even sweat. These physiological changes can appear in every emotion, and different physiological changes accompany each emotion. Those physiological changes can influence our thought and behavior; if a person experiences fear and, as a result, his heart rate increases and he starts sweating, the first thing that he would do is to scream or even cry or maybe try to escape. “Any relatively conscious experience characterized by intense mental activity and a high degree of pleasure or displeasure.” (The Free Online Palliative Care Dictionary, n.d.). Emotions are strong and fade in a short time, like the emotion of anger or joy or any other

type of emotion. When they appear, they are extreme and intense and then a few minutes or an hour later, you would be able to feel the same. First, however, you will remember it. In short, emotions are solid and intense mental reactions that appear when a person is exposed to a particular incidence that leads to that reaction. When they appear, they cause physiological or physical changes that affect the behavior and the way of thinking; later on, they vanish, leaving a memory.

1-2- Emotion Response System

Emotions are considered as responses to the stimulus received from the surrounding environment, there are three types of responses:

- Cognitive: thoughts, ideas, images and influence that they exert on the higher-level cognitive functions: attention, memory and learning. This takes charge of the processing of information either conscious or unconscious.
- Physiological: organic changes that happen in various systems producing, for example, changes in muscle tension, blood pressure, breathing, temperature, etc. It is usually the first response system that is used when facing a stimulus and these changes are involuntary.
- Behavioural: observable confrontation or avoiding behaviours', facial expression, body language, etc. (team, 2018)

3.Types of Emotions

There are two types of emotions; some emotions are considered pleasant and good to experience; however, there are some emotions that we try avoid considering them unpleasant to experience.

1-3-1- Positive Emotions: are emotions that we feel pleasurable or desirable to experience. They reflect human's well being in their daily life like in work or schools. Positive emotions include happiness, tranquillity, joy, confidence, hope, desire, and gratitude.etc.

1-3-2-Negative Emotions: are emotions that we feel unpleasant to experience. Negative emotions are defined as “an unpleasant or unhappy emotion which is evoked in individuals to express a negative effect towards an event or person” (Psychology Dictionnary, 2013) they include sadness, anxiety, fear, anger, passiveness, boredom.

4- Differences between emotions and feelings

Emotions and feelings are generally used to refer to the same thing, but they do not have the same meaning. According to Psychology Today, “Emotions are the raw data, a reaction to the present reality, whereas feelings can be diluted by stories we've created based on events of the past or fears of the future—not necessarily the truth of the situation.” (Allyn, 2022, p. 3) Feelings are conscious and may appear in some of our physical sensations, like the feeling of pain and exhaustion. However, emotions are unconscious and irrational and happen immediately when we face an experience that leads us to produce an emotional response, unlike feelings that result from the conscious analysis of a specific event or situation.

5- Definition of Memory

Memory is the term given to define the cognitive process in which information and Experiences are encoded, stored and retrieved. According to the Oxford Dictionary of languages, memory is one, and it is the faculty by which the mind stores and remembers information; the human brain has storage where it saves all the information, moments, and events. Two, it is something placed from the past; a memory is something that happened to

us in the past and can be retrieved intentionally or not intentionally. For example, someone watching his favourite drama sees a scene where the mother feeds her child, and he remembers how his mother used to feed him. This kind of memory retrieval is performed unconsciously; however, when a student is set for his history exam trying to retrieve the information he learned by hard yesterday, that retrieval is performed intentionally. These memories are made through the operation of the memory.

Memory is the ability to take in and encode information and knowledge that our brain first encounters, stores, and later retrieves and recalls when needed. Memory is defined as “an active system that receives information from the senses, organizes, stores it away and then retrieves the information from storage.” (Chapter 6 Psychology: Memory, s.d.) Psychology also defines memory as the faculty of encoding, storing and retrieving. These definitions can summarize three main stages of memory as follows:

6-Stages of Memory

Psychologists described three main stages of memory processes; each stage differs from the other in many points like storage and duration. These stages are:

2-1-Encoding: the first stage of Memory is encoding; it occurs when information is first perceived through our sensory system and sent from the sensory input to our memory after being translated from its actual form to a cognitive form that our brain can cope with. This stage is the first step to learning because no information can be remembered if it is not encoded; when encoding information, human brain is linking it to an existing knowledge in order to give it a clear and a simple meaning that can match our mental capabilities. There are three types of encoding:

2-1-1-Structural Encoding: It focuses on the shapes and forms of the word, whether it is a long or short word, the case of the letters upper or lower, and the writing whether it is handwritten or typed.

2-1-2-Phonemic Encoding: this type of encoding focuses on the words sound and pronunciation.

2-1-3-Semantic Encoding: Semantic focuses on meanings and interpretations of words and so as the semantic encoding, this latter demands more processing rather than the last two types.

2-2-Storage: this stage of memory focuses on how a memory is stored, how long it would last, how much can be stored, and what type of information can be kept in. Storage is different from one person to another on age basis, on gender basis. The duration of the memory storing differs according to the type of memory where the information is stored.

2-3-Retrieval: The last stage of memory is the retrieval which is the recall or the remembering of memories that are already encoded and stored.

7- Types of Memory

Memory has three different types at three different levels, each memory has its own characteristics and what makes it different than the others.

3-1 Sensory memory

Sensory memory is a “very brief memory that allows people to retain impressions of sensory information after the original stimulus has ceased” (Cherry, 2020, p. 2). In every moment of a human being life, sensory memory captures millions of

information, but all goes away when not given attention or loaded with an emotion, many information fade at the stage of the sensory memory due to the very short time that they last which is marked by parts of the second.

3-2 Short Term Memory

It is also known as the active or the primary memory, which is the process of keeping an amount of information for a short period of time that usually lasts from thirty seconds to minutes. STM can include up to seven pieces of information.

3-3 Long- Term Memory

This type of memory is different from the two mentioned above in terms of duration and the amount of information that can be stored. LTM lasts for very long period of time, it can last for a life time especially when the memory has a strong emotional load such as the graduations day or the first day at work. This type of memory can include unlimited amount of information in a conscious and unconscious way:

- ✓ **Conscious Long-Term memory:** Also known as the Declarative memory *refers to the conscious recollection of a previous episode, as in recall or recognition (J.F. Kihlstrom, 2012).*
- ✓ **Unconscious Memory:** *Implicit memory is sometimes referred to as unconscious memory or automatic memory. Implicit memory uses past experiences to remember things without thinking about them. The performance of implicit memory is enabled by previous experiences, no matter how long ago those experiences occurred (Zimmermann, 2014).*

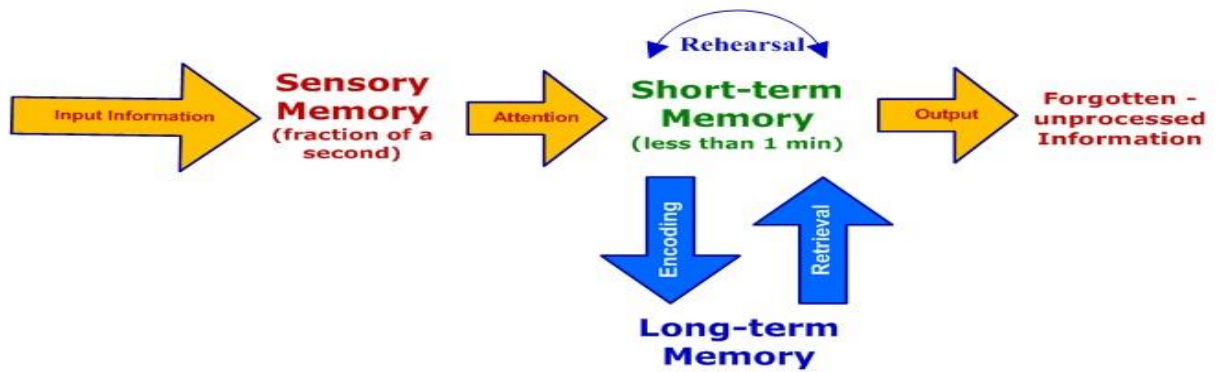


Figure01: *Stages of memory: sensory, short-term, long term.*

Source: (The Peak Performance)

Conclusion

This section has introduced one of the cognitive most important operations named which is referred to as memory. It has also shed the light on the basic concepts related to the memory starting by the stages moving to its types.

Section Three: Emotions, Memory and Learning

Introduction

According to previous studies, emotions can impact both memory and learning. They have a crucial influence on the different aspects of human cognition processes like attention and perception which in turn have a crucial role in the learning process. It is confirmed by both psychological and personal experiences that emotionally charged events are easy to be remembered contrary to non-emotional events because emotions play an essential role in the various specific processes of information encoding and retrieving. Human memory stores emotional information in details and for a long period of time in the Long-Term Memory (LTM), which allows us to recall it easily when we need it through recreating the same emotional settings that we were when we witnessed the event that we want to remember.

1- Flashbulb Memory

In 1977, psychologists Roger Brown and James Kulik lanced the theory of “flashbulb memory” in their study on memories of the assassination of John F Kennedy which highlights that emotionally charged events are important and unforgettable in our lives “memories for the circumstances in which one first learned of a very surprising and consequential or emotionally arousing event.” (Roger Brown, 1977, pp. 73-99)

Flashbulb memories are those which are charged with emotions like surprise and shock which leads a person to keep remembering it for a long period of time which can last with him/her the whole life. If you ask an American about the events of 11th September, he will remember all the details of that day from morning till evening and he will answer all types of questions related to that day like where he was, what he was doing, with whom, how he heard the news.etc. Because this day was not like other days in the routine of many

Americans, it was an emotionally charged day that will stay in their minds. In their study, Roger Brown and James Kulik asked American people about major public events that happened in their history mostly assassinations. The most common was the assassination of John Fitzgerald Kennedy (JFK) as well as the assassination of Martin Luther King (MLK), the participants' answers shows that they remember the events with a 'perceptual clarity' (Hassen, 2019).

2-Emotional Stimulus

Emotional stimuli are the reflection of outside influences that our sensorial mechanisms encounter when experiencing an event. The human brain receives these sensorial stimuli and relates it to each emotional stimulus that is affected. Emotional stimulation defined as follows: "Continuous and permanent educational process, that aims to promote emotional development as an essential complement to cognitive development, containing both essential elements for the development of the integral personality" (Bisquerra, 2000,pp. 58-65)

3- Types of Emotional Stimuli

Scientists tried to list a list of emotional stimuli based on their emotional intensity and how much of a response every stimuli produces. The following stimuli are listed according to the level of intensity from the weakest to the strongest.

- **Words**

Words are considered as the weakest emotional stimulus used, because they have less emotional intensity than the other emotional stimuli. Words lose the emotional load when being used out of the context in which they were learned in moreover, it depends on the learner perception of the words. As it is shown in a study conducted under the title of the list of emotional stimuli, words have the least emotional intensity

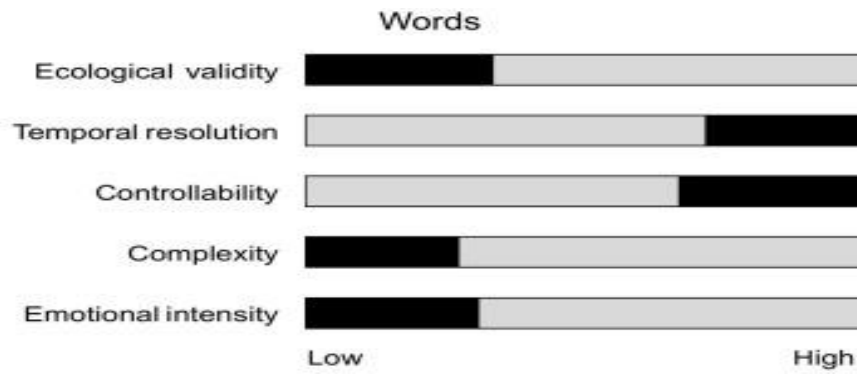


Figure 02: *emotional measurement words*

source: (Daniel Grünh, 2016)

- **Images**

Images impact on emotional responses is ranked from low to medium, it comes before words in the list of emotional stimuli, and it is difficult to get an emotional response just by presenting a set of images.

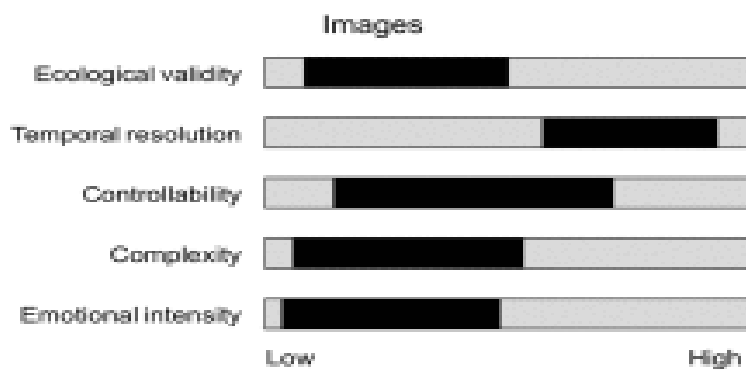


Figure03: *emotional measurement images*

Source: (Daniel Grünh, 2016)

- **Faces**

Like images, when it comes to emotional intensity, faces have from low to medium emotional intensity, however people most likely to remember faces better than images.

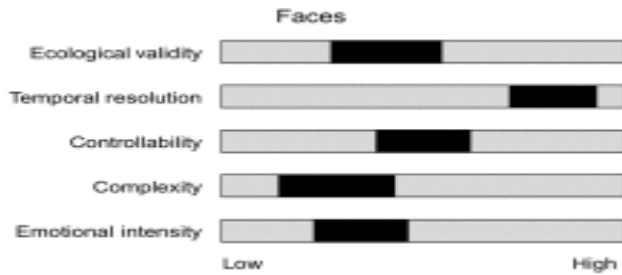


Figure04: *emotional measurement faces*

Source: (Daniel Grühn, 2016)

- **Film clips**

Film clips are the most frequent used stimuli and considered the best emotional stimulus, the emotional responses received when using film clips are the highest comparing to other emotional stimuli.

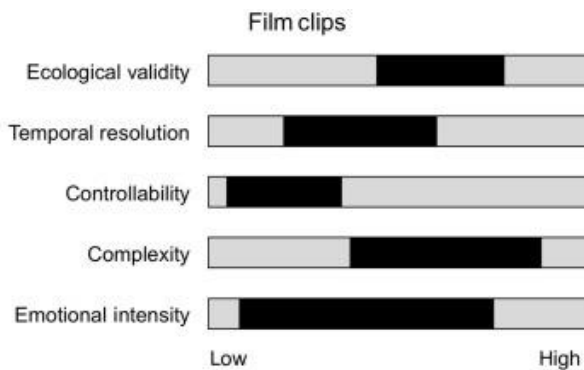


Figure05: *emotional measurement film clips*

Source: (Daniel Grühn, 2016)

4-The process of Emotional Stimulation

Emotional stimuli are the reflection of outside influences that our sensorial mechanisms encounter when experiencing an event. The human brain receives these sensorial stimuli and relates it to each emotional stimulus that is affected.

The emotional stimulation is result to using an emotional stimulus; the process is used to get an emotional response. What happens is that when using the emotional stimuli, the information goes to the thalamus to the cortex straight to the Amygdala which is the part responsible for the regulation of emotion and producing emotional response. It is widely used for different purposes and nowadays it is introduced to field of teaching and learning.

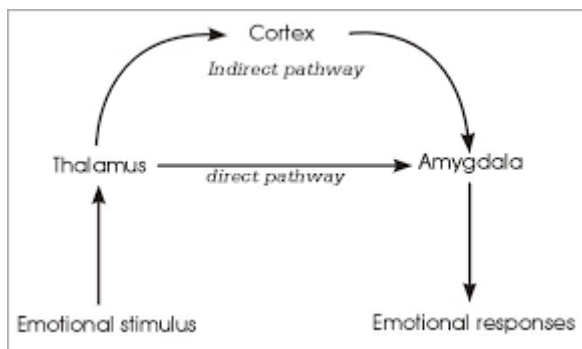


Figure06: *Direct and indirect pathways to the amygdala.*

Source: (LeDoux., 1999)

Conclusion

This chapter was a theoretical review for the study in hand, it dealt with all the terminology used in the research work, and tried to explain the roots of the study. The theoretical part of the study explained the relationship between the variables of the research. Starting by section one entitled vocabulary, it explained the concept; it introduced the types, the aspects, and clarified the importance and the need for vocabulary. Last but not least, some of the techniques used in teaching vocabulary and pervious methods used were introduced. Moving to the second section that was entitled emotionality, which the independent variable of the research. In this section, the researchers defined the concept of emotions, adding to that the types of emotional responses, moving to the types of emotions

concluding the section with the difference between feelings and emotions. Another section added to the research that falls under the name memory, which is the third variable of the research. it started by introducing the concept of memory, moving to the different stages of memory, concluding it with the types of memory. The last section of this chapter has dealt with the relationships among variables, vocabulary learning, memory and emotions.

Chapter Two: Research Methodology and Data Analysis and Discussion

Introduction

This chapter is designed to shed light on the practical part of this study it includes three main sections as follows: the first section is entitled research methodology, it discusses the general issues concerning the field work of the study, the second section analyses the experiment of this study, and the third section is concerned with the discussion of the results of the experiment. In the end, the chapter lists some limitation of the study.

Section One: Research Methodology

Introduction:

The research methodology section is devoted to discuss the issues such as the paradigm of research, the setting, the sample of the study, data gathering instruments, data collection procedures, data analysis as well as limitations of the study. Most importantly, the research methods used to carry out this experiment are listed in what follows.

1. Research Paradigm

This research work attempted to test the impact of the emotionality on vocabulary acquisition process among EFL learners. To investigate this topic, the research applied the quantitative approach which demanded gathering numerical data and generalizing it to the population being studied in order to find out the causal relationship between the two variables (the dependent and independent variables). The data were gathered from an experiment conducted among EFL learners in two different private schools in Jijel one of them is TEFL Academy in Jijel city and the other is in Texanna . The experiment aimed to

find out if the emotionally charged words and information are better remembered than neutral words i.e., words which have no emotional load.

This experiment involved with two groups, the experimental group was taught in TEFL Academy which was equipped with the devices needed to deliver the lessons, while the controlled group was taught in a different setting in Texanna without the use of the devices that helped in the emotional stimulation process. The data gathered from a pre- and post-test took place before and after a treatment of four sessions for each group.

The research applied the quantitative method for it is the most suitable for the experimental design. It investigates if there is a cause-and-effect relationship between the variables which are vocabulary, memory, and emotions in a quantitative method, researchers are trying to figure out whether one variable (Emotionality) has an impact on the other variable(s) (Vocabulary learning process, Memory). The study relies on a quantitative paradigm that gives numeric results based on statistical numbers resulting from the experiment.

2. Setting

This research work explored the impact of emotionality on vocabulary acquisition process among EFL Beginners. It took place in two different settings. The experimental group was taught at TEFL Academy, Jijel; Which is a private a school that teaches English only. The Academy is fully equipped with the materials needed to teach the first group which are data shows and speakers that are used in order to help create an emotional environment using different emotional stimuli. For the controlled group which was taught neutrally, was taught in a private school in Texanna through the use of bords and work sheets.

3. Population and Sampling

3.1. Population of the Study

Population refers to the entire group that a researcher wants to generalize his/her results to it; it is the large number of individuals, events, organisations, objects...etc. who share the same characteristics. According to Popoola (2011) population is “the totality of the items or subjects under the universe of study” (Popoola, 2011). It often connotes all the members of the target of the study. This study targeted all EFL beginners. The researcher selected the EFL beginners, because of the following reasons:

- They did not receive English instructions before, so it is most likely that their memory have not stored many English vocabulary items before, the most important process in this experiment is to store the vocabulary words in a way that makes it easy to remember, by stimulating an emotion.
- Vocabulary learning has always posed difficulties for EFL beginners as they face a totally new and different list of words and utterances which create obstacles for their memory to store and remember these words.

3.2. Sample of the Study

As it is impossible to deal with the whole population, a sample is selected in order to do the experiment with the purpose of reaching certain results about the study. In a research, a sample refers to a sub- group that is taken from the larger population. Researchers tend to work with samples because of many reasons including:

- The large numbers of many populations.
- It is impossible to get access to the whole population.
- It demands less time, efforts, and money.

The sample of this study consists of 20 EFL beginners (15) females and (5) males in the TEFL Academy- Jijel and a private school inTexanna. They were divided into two groups; each group was taught in a different way. One of the groups was taught using the emotional stimuli to initiate an emotional setting; whereas the other group were taught using ordinary traditional methods using board and plain texts.

4. Data-gathering Instrument

For the purpose of investigating the impact of emotionality on the vocabulary acquisition process, the study has gone through some assessments to test the participants' level of vocabulary. First, both groups of learners took a pre-test which can help researchers to know about their knowledge of the target vocabulary before receiving the treatment. Second, by the end of each lesson, their vocabulary acquisition was tested. Finally, the researcher adopted a post-test by the end of the treatment to test their ability to use and remember the target vocabulary.

5. Types of Assessment Used

In order to understand the learners' progress in learning, researchers have relied on three types of assessment to ensure how well the experiment was going on.

- **Diagnostic Assessment:** it was done before the treatment to assess the current knowledge, abilities, performance, strengths and weaknesses of the learners. It can be considered as a guide for the teacher to decide what and how to do his/her work and what to include and what to focus on when teaching.
- **Formative Assessment:** it took place during the learning process; it is an on-going process of testing learners' learning and evaluation during the lesson.

- Summative Assessment: it is a post-test that takes place by the end of the whole process of learning with the purpose of evaluating learners' final progress compared to their pre-learning level.

5.1. The Pre-test

The pre-test took place on the 16th May, at 10 a.m and lasted for half an hour for each group. The two groups took the same pre-test in order to find out the level of their vocabulary knowledge before teaching them. The focus was on four fields of vocabulary: vocabulary of weather, vocabulary of jobs, vocabulary of feelings and emotions and the vocabulary of different destinations. The tests were done by the researchers in the following conditions:

- The learners were not allowed to use any type of dictionaries.
- They were not allowed to discuss their information and knowledge with each other.
- The researchers did not provide any help or explanation to the learners.
- The learners were treated neutrally and spontaneously without putting them under any type of anxiety or pressure.

5.2. Immediate Testing

By the end of each session, the teachers tested the progress of the learning and teaching process through testing learners' understanding of the target vocabulary. The tasks that were used in the immediate test were a set of direct and simple questions are directed to the learners. In addition to a fill in the gaps tasks that aimed to know to what extent learners know the meaning and the correct use of the target vocabulary. Moreover, a multiple-choice test took place by the end of each session with the aim of knowing their ability to place their knowledge of vocabulary in the correct context.

6. Data collection procedures

In order to test the hypotheses of the study, an experiment should be first described and then applied in real settings with a target sample.

6.1. Preliminary Stage

The researchers chose four vocabulary lessons that were delivered to the two groups in different ways and entitled as follows:

For the experimental group:

Lesson one: how is the weather? The lesson was delivered with the use of flash cards videos of seasons and audios of different weather conditions. Lesson two was entitled what do you do for a living? in which we used flash cards, a direct interview. The lesson is entitled how are you feeling today in which the researchers used different emotional stimuli such as images, faces and film clips.

And the last lesson was entitled “what are your favorite travelling destination?” In which we used flash-cards, film clips and images. And the controlled group was taught the same lessons. However, none of the emotional stimuli were used. The lessons were chosen according to the learners’ needs and interests.

These titles and lessons are selected based on the learners’ needs and interests. Because it was nearly impossible to deal with all vocabulary of a language in a single experiment in this short period of time. Moreover, the videos, and pictures they were used have been chosen because they contain emotional stimuli that give an emotional load to the vocabulary to be taught.

When selecting the pictures and videos, the following points have been taken into account:

- The videos and pictures should be emotionally charged.
- The videos should not be long in order not to cause boredom to learners.
- They should be related to the content of each lesson.

6.2. The Implementation Stage

For the first group of learners, which was taught with an emotional stimulation, in the first lesson which targeted the vocabulary of weather, the researcher presented to them a video of the four seasons (summer, winter, spring, and autumn) and then audios of nature sound during each season (like rain, wind, thunder, sea waves, birds' chirping ...etc.) with the purpose of giving an emotional load for the words. The second group was treated in the common way of teaching there were no implementation of emotions, the researcher read to them a text about weather and seasons taken from the net, and we wrote the target words of weather and seasons on the board with their synonyms and some explanation.

In the second lesson about jobs, an interview was conducted with a PhD teacher about his job, after, a set of flash cards was shown to the learners in addition to a presentation of pictures of different jobs. At the end of the session, the learners played a game called a mimic game in which each learner was given a name of the job and he/she mimics the jobs, and the other learners try to guess the job name. In the other hand, with the second group the researcher relied on naming a list of jobs with a description of their work through reading short passages about the subject.

The third lesson was about feelings and emotions, the researcher used flash cards that express feelings and emotions, after we presented scenes from movies and series that

carry different emotions. The second group was taught the vocabulary of emotions through writing them on the board and giving their meanings and some examples.

The last session was about the different destinations in the world. The researcher relied on flash cards and videos; a map of the world is represented to present different countries, then a slide of means of transportation is represented, after a conversation about how to book a room in the hotel is played. The second group received a list of the names of some countries and synonyms of some words that are related to traveling and destinations.

6.3. The Experiment

The experiment was conducted in 15 days, four lessons were delivered to the two groups in the same time however not on the row, the sessions were delivered every two or three days, the participant of the study took a post-test two days before the beginning of the treatment in order to test their knowledge of the English language vocabulary. Four days after the treatment, the participants were exposed to the post-test with the aim of testing the efficiency of the method used to deliver the lesson which is stimulating emotions for better memory of vocabulary.

6.4. Lesson Plan Procedures

At the beginning of each lesson, both groups were engaged in a warm up aiming to prepare the learners for the content to be delivered. However, the experimental group warm-up activities always aimed to emotionally prepare them considering that the warm ups are always emotionally loaded. Moving on to the presentation of the lesson, starting with the controlled group, the lessons were delivered using the ordinary way of teaching. However, the experimental group was exposed to a content that stimulated emotions such as videos and pictures and faces. After the presentations of the lesson, the learners practice on those vocabulary learned through games such as mimic games and Pictionary game.

Moreover, the researchers were constantly asking questions in order to keep the learners active in the lesson, the later stage was pushing them to use the vocabulary learnt in small talk conversations or story-telling activities and acting short scenes.

The controlled group on the other hand, was treated in a neutral setting where the vocabulary was identified through reading tasks or questions asked by the researchers.

7. Data analysis

Data were collected from a pre and post test, the researchers analyzed the data from the tests manually in order to answer the research questions:

- What is the impact of emotionality on the process of vocabulary acquisition?
- If it has an impact? What are the emotions that have an impact on the process positive or negative?
- Which emotional stimulus affects the memory more than the others?
- Are males affected by emotional stimuli more than women or vice versa?

For the purpose of answering these questions, an in-depth analysis and a better understanding of the questions and the patterns involved in each, the research was designed to test the effectiveness of emotional stimuli on the memory operations, and its impact on the vocabulary acquisition process.

The results obtained from both the pre- and post-test were immediately analyzed using the quantitative measures. Scores of both tests were counted then compared to test the pre-test in order to test the progress. Moreover, the results of the immediate assessment were analyzed by the frequency use of the target vocabulary during the lessons presentation.

Conclusion

This section was dedicated to discuss the research design, the sampling, the data collection tools, the data collection methods and procedures and the lesson plans. All in all, it dealt with the guidelines underlying the conducting of the experiment.

Section two: Data analysis

Introduction

This section is dedicated to analyze the data collected from the experiment conducted to measure the impact of emotionality on the process of vocabulary learning, storing and later recalling. This process goes through three types of assessment; it compares between learners' (both groups) uptake of the target vocabulary before and after the treatment, using a pre-test first to measure their knowledge before teaching them, (diagnostic assessment), and a post test conducted after the treatment, (summative assessment). In addition, the remarks taken from the immediate assessment that took place during each session of treatment for both groups were analyzed.

Table one: Pre-test results

Students of experimental group	Mark /20	Students of the controlled group	Mark /20
A	5	A	5
B	3	B	8
C	6	C	4
D	7	D	3
E	4	E	9
F	3	F	4.5
G	4	G	7
H	9	H	5.5
I	6	I	7
J	3	J	4

The table number one illustrates the results obtained from the pre test that participants of the study were exposed to before the start of the treatment. The results show the poor knowledge of vocabulary considering all the marks were under the average. All the marks ranged from 3 to 9 on twenty. The poor knowledge of vocabulary was a result of not being in touch with the subject matter.

Table 03: Classroom Engagement According to the Content:

Classroom environment	Percentage of engagement
Neutral	40%
Emotional	90%

The results presented in the table are based on classroom observation and the immediate assessment after the end of every lesson. As the results indicates the participants of the study tend to be more engaging when the class environment changes from neutral to emotional due to the use of emotional stimuli.

Table 03: Emotional Stimulus Better Remembered

Emotional stimulus	Frequency of usage	Experimental group's Students recall
Words	Always	2
Pictures	Sometimes	5
Faces	Once	8
Audios	Sometimes	8
Videos	Usually	10

The results illustrated in the table indicate the emotional stimuli used in the experiment which are listed from the least affecting to the strongest: words, pictures, faces, audios, and finally videos. It also displayed how many participants of the study have shown response to the emotional stimuli used in the experiments. As presented, words are the least remembered considering that they are the least emotionally loaded stimuli, moving to the pictures they are remembered by half the members of the group, pictures when used in the correct way can stimulate emotions. The next one is the faces, this stimulus was used only once due to the lack of time and resources; last but not least the strongest emotional stimulus which is videos, the vocabulary accompanied with the videos was remembered by all the participants of the study.

Table 04: Response to Positive and Negative stimuli:

Emotions	Student's response (%)
Positive	90%
Negative	70%

The table illustrates participants' response to the type of emotions that are used in stimulation, and the percentage of student recalling the vocabulary associated to them. The results presented in the table show approximate in the recalling process, with a slight difference in which positive emotional stimuli were better remembered than the negative ones.

Table 04: Words Remembered Associated with Negative and Positive Stimuli

Emotions	The Percentage of Words remembered (%)
Words associated with positive stimuli	95%
Words associated with negative stimuli	56%

The table above indicated the percentage of remembering words associated with positive and negative stimuli; in the lessons presentations the researchers used both the positive and the negative stimuli to conclude which one is better remembered by the participants of the study.

Table 05: Gender response to Emotional Stimuli

Gender	Classroom engagement	Test results difference
Males	30%	Above +11
Females	70%	Under +11

The results presented in the table, show that females are more responsive to emotional stimuli better than males, the data were collected based on their test results and their classroom engagement in which females participants were more engaged than males. The same for the results obtained from the test women scored. It is common and been subject to many researches that females tend to be emotional more than males which lead to them being responsive to emotional stimuli better than men and that what our study have proven from the results obtained from the post test all women difference between pre- and post-test was above 11 marks however all men were under 11.

Table 06: Pre- and Post-test results comparison

Students Of the experimental group	Pre- test Mark	Post test Marks	Difference	Students Of the controlled group	Pre- test Mark	Post test Marks	Difference
A	5	14	+9	A	5	10	+5
B	3	15	+12	B	8	12	+4
C	6	15	+9	C	4	13	+9
D	7	16	+9	D	3	12	+9
E	4	13	+9	E	9	13	+4
F	3	14	+11	F	4.5	13	+8.5
G	4	17	+13	G	7	12	+5
H	9	18.5	+9.5	H	5.5	10	+4.5
I	6	17	+11	I	7	13	+6
J	3	16	+13	J	4	12	+8

As displayed in the table, the results of the pre-test were almost under the average, the learners' knowledge of vocabulary was very limited. However, at the end of the treatment the experimental group using the emotional stimuli, learners' show a noticeable progress as it is shown in the table. All the learners displayed improvement and each different than the other. Unlike the controlled group the vocabulary recalling was less successful; the participants did not show a noticeable progress.

Section Three: Discussion of the analysis

Introduction

The third section of this chapter aimed to analyze the results of the post and pre test of the experiment conducted. This section is concerned with data discussion, highlighting the overall results obtained by the research tool. Mainly, the results of the study will be discussed in relation to the research questions put forward in this study. The research method used to carry out this enquiry devoted to answer the following research questions:

- What is the impact of emotionality on the process of vocabulary acquisition?
- If it has an impact? What are the emotions that have an impact on the process?
- What are the emotional stimuli that affect memory?
- Which gender is more responsive to emotional stimuli?

1-The impact of Emotionality on Vocabulary Learning and Recalling

The finding of this study have shown that emotionality had an impact on the process vocabulary acquisition and recalling, the results of the post test and the immediate assessment have shown that student engage in classroom activities and acquire vocabulary better when there is an emotional stimulation.

2-Factors behind the Impact of Emotions on Learning

Emotions affect our perception; it is proven in neurosciences that “emotion modulates our perception and attention by privileging stimuli that are especially emotional” (Brosch, 2013, p. 123). Our brains receive a lot of sensory information continuously when being in contact with the surrounding environment, which makes it a bit difficult for our brains to process all that information coming from all the five senses

and here, comes the role of emotion. Their role lies in prioritizing the information that stimulate emotion if we consider this example: you are in the middle of the woods the scenery is breathtaking and the smell of the flowers and the cool breeze all the information till now are processed simultaneously, until you hear a voice of a wolf howling. At that time, the emotions of fear is triggered in this case the brain priorities the information coming from the ear considering it a strong emotional stimulus that triggered fear.

Selfsame case in classroom learner's perception will process all information the same way until one of the stimuli triggers any type of emotion and makes it a priority and processed it and react to it. When conducting the experiment, the learners' attention was caught when the emotional stimuli were used, and the results of immediate assessment have manifested that the learners' perception was directly affected with the emotion stimuli used.

3-Impact of Emotions on Memory

Our emotions modulate our perception and prioritize a piece of information than the others with regard to the emotional load that information carries. They also affect our memory operations, when receiving information from the sensory input and prioritize due to the emotional load that is carrying; the information goes straight to the long-term memory passing by the short-term memory. When receiving information from the sensory input and prioritizing it due to its emotional load it is received by a part of the brain named hippocampus:

“One of the most important neural regions underlying memory processes is the hippocampus, situated in the medial temporal lobe. Patients with lesions of the hippocampus suffer from amnesia, having difficulties remembering old memories or forming new ones .The hippocampus is situated adjacent to the amygdale, which, similar to its role in attention and perception, can modulate the neural circuitry underlying memory processes during emotional situations. Thus, in addition to its important role in the acquisition and expression of implicit fear

[35], the amygdale is central to the processing of explicit emotional memories via its interactions with hippocampal memory formation”.

The hippocampus is the part responsible of treating information in case of an emotional stimulation; it is responsible for storing the information that have an emotional load. Emotions affect memory deeply, it enhances our memory processes especially in case of a positive emotional stimulation. Human always remember their happiest memories better than the negative ones, negative memories are always suspected considering that our brains sometimes fake memories to protect our mental processes.

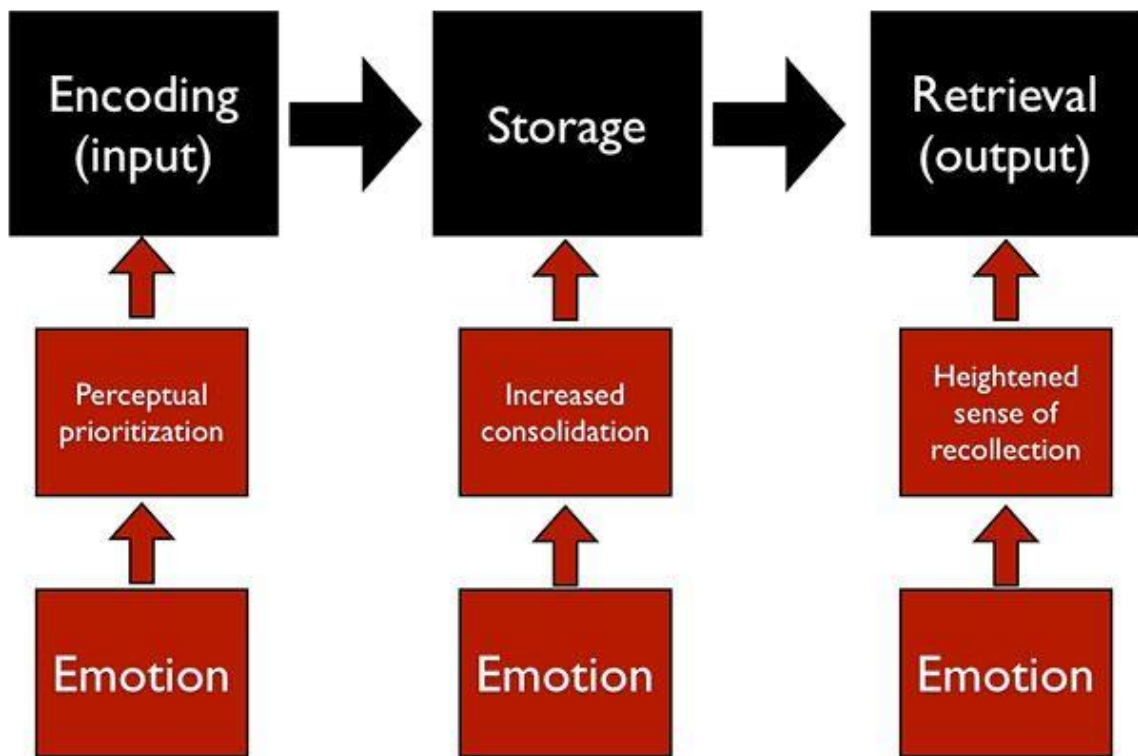


Figure 07: -Emotion Impact on Perception and Memory-

Source: (Brosch, 2013)

William James in 1890 stated that “An impression may be so exciting emotionally as almost to leave a scar upon the cerebral tissues ” (Williams, 1890, pp. 147–152).

All in all, when information is being emotionally loaded reaches the sensory stage it is treated as important; therefore, the perception of that information will be prioritized and leads to the consolidation which means “*The process by which recent memories are crystallized into long-term memory*” (Punia, 2011) to be increased at the level of storing and later when reaching the stage of recalling the information will be heightened.

4-Emotions with an Impact on the Learning Process:

As the study results illustrated before, the learners tend to be responsive to emotional stimuli; our brains perceive the information with emotional load and treats as important, however every human being has two sides of emotion positive and negative; do our brain perceive emotions the same way or differently?

4-1-Positive Emotions

From the results obtained from the experiment conducted we have noticed that learners were more engaged and responsive when being exposed to positive emotion stimuli. It was proven by researches conducted in the field of cognitive sciences that positive emotions broaden individuals’ momentary thought action repertoires, promoting them to pursue a wider range of thoughts and actions than is typical (e.g., play, explore, savour, and integrate). (BL, 2001)

Positive emotions encourage the students to be more engaging in the classroom.

4-2-Negative Emotions

According to the results obtained from the experiment conducted; stimuli that are loaded with negative emotions are not inviting for classroom engagement considering them unpleasant for the learners, however they were triggering to their emotions .As it is proven by scientists in the field, unlike of positive emotions that broaden; the negative emotions narrowed thought-action repertoires. (BL, 2001) This results in less attention to the content presented in the classroom.

5- Emotional stimuli better remembered

The emotional stimuli are means used to trigger a certain emotion depending on the type used. There are two types of emotional stimuli; on one hand, stimuli with positive effect that result with positive reactions such as a good meal make your day, and the other type of stimuli are the ones who trigger negative response leaving the body with unpleasant feeling such watching a horror movie at midnight.

The emotional stimuli are listed according to scientists based on their level of intensity i.e. how much is a stimulus can trigger and cause a reaction and how strong the emotion that results from being exposed to that stimulus. The emotional stimuli are listed from the weakest to the strongest according to their level of intensity as follows: 1- Words 2- Pictures 3- Faces 4-audios 6- videos. These emotional stimuli were listed by scientists after being subject to experiments. In the present experiment, we used all of the stimuli mentioned above and rated them according to how many learners remembered to vocabulary associated with every stimulus, and the outcomes confirmed the ratability of the listing considering that the participants of the study remembered all the vocabulary associated with the videos better than the ones associated with pictures or words.

6-Gender differences in emotional response

When it comes to gender differences, emotional response also varies from one gender to another both genders react differently to the same stimuli not in the type of emotion but in the intensity of the emotion being triggered; however it is scientifically proven that women response to emotional stimuli is stronger than men “women may indeed be more emotionally responsive than men”.

Not many studies were done in this regard but most of the studies carried out considered the female gender to be more emotional than men; which is the same results that was concluded from the experiment conducted, in classroom engagement females have shown more engagement than males. And it is was the case for the recalling test results; females scores in the recalling test better than men considering their difference value between the pre and the post test was all above +11 unlike the males which was under +11.

Conclusion

Based on the pervious researches and from the results carried out from the experiment conducted, we concluded that first; emotions have a huge impact on the process of learning in general and vocabulary in particular. The participant of the study that belong to the experimental group tend to engage when the lessons are delivered with the use emotional stimulation, unlike the participant of the controlled group who show little interest and low performance because the researchers did not expose them to any types of emotional stimuli. Second, emotions not only have impact on the learning process, they also affect the memory considering the vocabulary words loaded with emotion easy to remember. Moreover, we concluded that positive stimuli are pleasant for the learners and push student to be more engaging unlike the stimuli loaded with negative emotion they did not attract that much attention and were unpleasant for the learners. However, when it comes to

memory, both negative and positive emotions enhance the operation of storing the vocabulary in the LTM. Last but not least, from the results obtained we confirmed that women tend to be more responsive to emotional stimuli better than men.

General conclusion

Language learning is a continuous process. The more you get in touch with the language the more you know about it. Some consider that the hardest part of language learning is mastering its grammar rules; they keep ignoring the fact that language is a way of communication. What is really important about language is its vocabulary, anyone can master the grammar rules however he will not be able to put them into practice due to the lack of the vocabulary. Vocabulary acquisition is what really can be called the hard part of language learning.

The presented research work comprises of two chapters; the first chapter is dedicated to the theoretical part and a the background of the study; it is made of three sections ordered as follows; the first section have dealt with the definition of vocabulary , its aspects, its types, its importance, and the techniques of vocabulary learning and teaching. Moving to the second section entitled emotionality and memory, it is consisted of an introduction, the definition of emotions; types of emotions, difference between emotions and feeling, types of emotional stimuli and process emotional stimulation. Last but not least section three entitled memory starts with an introduction, the definition of memory, the stages of memory, types of memory in addition to the relationship between emotions learning and memory. As far as the second chapter is concerned it is dedicated to the investigation the chapter is devised into three sections, the first section in which the research methodology was discusses along with tools used for the research followed by the section in which we listed the results obtained from the experiment conducted. The third section at last highlighted the results the research tools and discussed them in relation to the research questions put forward in rational.

The results obtained from the research have revealed that emotionality has an impact on the vocabulary learning; this has confirmed the first hypotheses listed by the researchers in this study.

Limitations of the Study

Any research can be the subject of criticism. For that reason, researchers list some obstacles and difficulties that stood in their way of the perfection and success of the study.

- ✓ The lack of resources and supporting documents concerning the literature of the study on the impact of emotionality on learning.
- ✓ The field of study is new and there are no many recent studies and researches related to the topic as emotions have recently gained attention from psychological and neurological researchers in the domain of teaching and learning.
- ✓ The lack of time to conduct a better experiment for the other fields of vocabulary of language.

Recommendations for Future Research

In the light of this research, the researchers came with a list of recommendations for future researchers and teachers to enhance their research in the field of the impact of emotionality on the process of vocabulary learning. Future researchers are recommended to extend their interest to the impact of emotionality on other aspects of language learning following stronger research design.

Learning inside the classroom with an ordinary method can be a bit boring for the learners nowadays, especially with the development of technology. Thus instead of the usual ways of delivering vocabulary teachers need to be creative through:

1 the use of technology:

With the development of technology, the emotional stimulation is an easy process, with the use of videos, pictures, faces and audios, vocabulary acquisition is more fun for the learners and easier to be stored in the memory, through the use of the Computer

Assisted Language Learning CALL approach, which emphasizes the use of technological means in the teaching process to reinforce and assess the units being taught in the classroom.

2- Making learning an experience: the teaching of vocabulary can be creative, the researches recommend instead of teaching the vocabulary in the abstract i.e. classroom which is a neutral setting, we can take the learners to where we can find the vocabulary. For example, instead of teaching about the animals in pictures we can take them to the zoo where the learners get to know the animals closely and it would stimulate their emotions resulting in storing the vocabulary learned in the long-term memory.

List of references

(n.d.). Retrieved from Cambridge Dictionary: <https://dictionary.cambridge.org/>

(n.d.). Retrieved 5 10, 2022, from Dreamstime: <https://www.dreamstime.com/>

(2013, APRIL 7). Retrieved JUN 13, 2022, from Psychology Dictionary:

<https://psychologydictionary.org/negative-emotion/>

(2020). Retrieved from Merriam-Webster Dictionary: [https://www.merriam-](https://www.merriam-webster.com/dictionary/emotion)

[webster.com/dictionary/emotion](https://www.merriam-webster.com/dictionary/emotion)

Allyn, D. (2022, February 23). *The Important Difference Between Emotions and Feelings.*

Retrieved 5 12, 2022, from Psychology Today: <https://www.psychologytoday.com>

BL, F. (2001). The role of positive emotions in positive psychology: The broaden- and build theory of positive emotions. *American Psychologist*, 218-226.

Brosch, T. &. (2013). The impact of emotion on perception, attention, memory, and decision-making. *Swiss medical weekly.*

Chapter 6 Psychology: Memory. (n.d.). Retrieved from Quizlet: <https://quizlet.com/>

Cherry, K. (2020, July 31). *Cognitive psychology.* Retrieved May 3, 2022, from

[verywellmind: https://www.verywellmind.com](https://www.verywellmind.com)

Daniel Grühn, N. S. (2016). Emotion Measurement. (H. L. Meiselman., Ed.) Pages 145-164,.

Dictionaries, O. L. (n.d.). <https://www.oxfordlearnersdictionaries.com/>.

Fredy Valencia, D. S. (2022). Retrieved from The Amazing World of Teaching:

<https://sites.google.com/site/theamazingworldofteaching/>

Harmer. (2015). TEACHING VOCABULARY THROUGH INTERACTIVE

VOCABULARY TECHNIQUE. *IDEAS: Journal on English Language Teaching and Learning, Linguistics and Literature*, 3.

Hasa. (2021, november 24). What is the Difference Between Active and Passive Vocabulary.

1.

Hassen, Z. (2019). Flashbulb Memories: How Emotion Influences Cognition. *PsychCentral*.

J.F. Kihlstrom, E. G. (2012). Amnesia. In E. G. J.F. Kihlstrom, *Encyclopedia of Human Behavior (Second Edition)* (pp. 116-124).

LeDoux., J. (1999). The Emotional Brain. *Phoenix (an Imprint of The Orion Publishing Group)*.

Martin Manser, S. C. (2004). *The Penguin Writer's Manual*. Penguin Books Limited, 2004.

Myers, D. G. (2000). In *Psychology, Seventh Edition, in Modules*.

Nation, I. S. (2001). Learning Vocabulary in Another Language. *Cambridge University Press*.

Nicholas. (2022, January 17). Is Globalization Damaging to Non-English Languages?

Retrieved from <http://interactio.io/post/>

Nordquist, R. (2020, August 27). *What is Vocabulary in Grammar?* Retrieved from

ThoughtCo.: <https://www.thoughtco.com/vocabulary-definition-1692597>

Poopola, S. (2011). *Research Methodologies in Library and Information Science*. Nigeria: the Nigerian Library Association.

Punia, V. &. (2011). Effect of Memory Consolidation amongst Adolescents: An Experimental Analysis. . *International Journal of Development Studies (IJDS)*, 1.

Roger Brown, J. K. (1977). Flashbulb memories. *5*(1), 73-99. Retrieved May 13, 2022, from ScienceDirect:
(<https://www.sciencedirect.com/science/article/pii/001002777790018X>)

Shejbalová, D. (2006, June). Methods and Approaches in Vocabulary Teaching and Their Influence on Student's Acquisition.

Stephane, k. D. (1993). 25.

team, T. B. (2018, August 23). *How to develop emotional intelligence and what it is*. Retrieved from Bitbrain: <https://www.bitbrain.com/>

The Free Online Palliative Care Dictionary. (n.d.). Retrieved from Pallipedia:
<https://pallipedia.org/emotion/>

The Peak Performance. (n.d.). *Stages of Memory*. Retrieved from The Peak Performance Center: <https://thepeakperformancecenter.com/>

Wilkins, D. A. (1972). *Language and languages -- Study and teaching*, Applied linguistics. Cambridge : MIT Press, 243.

Williams, J. (1890). *The principles of psychology*. New York: Henry Holt.

Zimmermann, K. A. (2014, February 13). *Implicit Memory: Definition and Examples*.

Rtrieved April 22, 2022, from LIVE SCIENCE: <https://www.livescience.com/>