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Nursing Home in Pereira, Colombia

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Abstract

English language learning is a process that entails cognitive, personal, social benefits and growth. With this in mind, this qualitative research aimed at integrating an older adults population in English vocabulary lessons based on the principles of andragogy theory. This sample population consisted of five male older adults from a nursing home in Pereira who majorly did not have a background experience learning English. Moreover, the researchers sought to determine whether the multisensory approach as an alternative teaching strategy facilitates the participants' learning. Hence, the teaching process involved ten lessons which attempted to foster English vocabulary learning through the stimulation of the older adults' senses, and under the andragogy assumptions. The data collection methods selected were journals, observations, and interviews through which information about the teaching and learning experiences was gathered; besides, Grounded Theory (Glasser and Strauss, 1978) led the analysis of data to formulate the following findings related to Andragogical Assumptions, English Language Teaching and Multisensory-approach. In this sense, the andragogical principles were evidenced in older adults' learning through their attitudes and performance throughout the lessons. Such results show the participants' motivation to learn based on their previous lives experiences, their self-concept towards learning, and their orientation to learn and pursue learning objectives. Finally, the implementation of the Multisensory approach was beneficial for older adults' lexical development inasmuch as it integrated their perceptions and experiences with linguistic input and activities, which allowed them to construct words meaning through sensorial stimulation and contextual use. In general terms, this project sought to benefit vulnerable older adults by providing a bilingual experience aligned with their personal interests,

also it contributed to the ELT field through the empirical implementation of multisensory

modalities to teach vocabulary orally and aurally.

Key words: Andragogy, Older Adults, Multisensory Approach, English Vocabulary, Senses.

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1. Introduction

This research is conducted by undergraduate students of the Licenciatura en Bilingüismo con Énfasis en Ingles program from the Universidad Tecnológica de Pereira. The undergraduates are members of the research group In-Bloom that inquires about the theory of Andragogy and seeks to generate an impact on the population of older adults.

Considering that Andragogy is the art and science of adults' learning (Knowles 1980), this study focuses on the andragogy theory to integrate a population of older adults in an English language learning context. The project addresses the five assumptions of this adults learning theory to teach English vocabulary that is relevant to the older adults' context, and to determine their ability to continue learning. Additionally, the study implements the multisensory approach as a strategy to trigger the participants' learning through the stimulation of their senses.

2. Statement of the problem

In Colombia, older population have become one of the vulnerable communities in need of the state protection due to several reasons. According to El Ministerio de Salud Nacional, social inequality affects the older population regarding their economic income, social security, and educational level. Moreover, Colombia has suffered a long-term conflict caused by different social and political phenomena, such as the opposing political ideologies, social inequity, land distribution, narcotics trafficking, and government reluctance, which has directly affected the Colombian society for decades in terms of its integral development including that of education. As described by Tellez and Ramírez (2006), the Colombian economic model hindered the educational process of the currently older adults' generation by supporting the agricultural

development without considering the professionalization of its farmers. Hence, an entire generation was destined not to complete their primary educational levels in order to continue working on the agrarian areas.

Uribe (2006), who conducted a research about the history of Colombian education, accurately portrays the previously addressed circumstances by analyzing Colombians' illiteracy rate between the 40's and 60's. He stated that almost 60 percent of Colombia's population were illiterate throughout that specific time frame; therefore, the majority of the current generation of older adults is either illiterate or started to study at a late age. In this way, it demonstrates their exclusion in terms of both academic and cognitive development.

Accordingly, the intended impact for the population involved in this research is to include and support older adults as active social agents who have the constitutional right to access all education, bilingualism, and recreational projects, as the law statutes 1251 and 1850 demand. Throughout this section, aspects such as legislation, history, projects, objectives, and obstacles concerning older adult education and welfare will be addressed taking into account both national and local contexts. Additionally, the purpose of this research and its contribution to the English as a Foreign Language (EFL) field will be analyzed in detail.

After addressing some of the main factors affecting older adults' educational level and lifestyle, it is now fundamental to review the national government endeavors to protect this vulnerable community. The law 115 of 1994, statute 67 from the Colombian constitution, establishes education as a fundamental right for all citizens despite their social stratification, culture, age, or race; thus, the government is the entity responsible for the educational policies' success. As a result, an expected outcome deriving from the law 115 is to turn the illiterate older population into literate citizens capable of reading and writing. It is worthwhile to mention that

by having literate older adults who can manage the main four language skills in their mother tongue, possible bilingualism national projects designed for this population might have a greater impact since written input could be used during the lessons.

For instance, Pakzadian (2012) states that students' first language proficiency level and skills directly affect their second language learning process since their first language syntactic structures allow the second language concepts to be learnt effectively. Therefore, it can be stated that in order to include older adults in bilingualism projects, it is necessary first to support them to master specific skills of their first language (specially reading and writing). Before improving older adult literacy and education, it is mandatory to provide them with high-quality life conditions that allow the learning process to take place. Based on this assumption, the ideal situation of older adults in Colombia would be that the older population are recognized by society as empowered members who can act upon concerns related to nowadays reality. For instance, Colombian aging national policy, article 7, recognizes the relevance of older adults within Colombia's cultural, political, economic, and social development by appreciating their life experience, labor, and knowledge, which has to be transmitted and valued generationally.

Unfortunately, a study conducted by the "Asociación Colombiana de Gerontología y Geriatría" in 2017 suggested that almost 40% of Colombian older adults suffer from depression due to relative's abandonment, healthcare deficiency, and society's perception towards them. Finally, those are axiological and welfare obstacles that Colombia has to overcome in order to enhance the impact of every policy designed to support the older population, which includes the policies concerning education and bilingualism.

During the last two decades, the Ministerio de Educación Nacional (MEN) has launched several attempts to offer appropriate educational programs to adults which seek to decrease their

illiteracy levels. It is important to clarify that the policies that will be mentioned later on refer to adult education, which according to the Law 115 involves the population that exceed the age regularly accepted in the education by levels and grades of the public educational service, and this includes older population. One of the policies proposed by the MEN to cope with adult educational deficiency is the decree 3011 of the Law 115 which establishes that adult education is part of the public educational service; therefore, all projects that benefit the public educational institutions should also impact adults' education while taking into account its specificities. In this sense, the law statute 1251, article 17, prioritizes the access of older adults to the public educational system in order to include them within actual social concerns.

Furthermore, the second chapter of the law 115 establishes the inclusion of adults to education by providing distance, presence, and blended learning programs considering the "Proyecto de Educación Institucional" (PEI) of each educational establishment. Additionally, as stated in the decree 3011 of 1997, the programs offered to adult education by the national government are: (a) literacy; (b) basic education; (c) middle education; and (d) informal education. Moreover, the "Directiva Ministerial No. 14" (2004) and the "Circular 07" (2008) are aimed to guide the literacy programs in order to decrease the levels of illiterate adults and people above 15 years old in general. Finally, the law 1850 of 2017, article 7, addresses directly older adults needs by demanding that the national and local governments apply projects towards the empowerment of elderly adults in terms of their participation within their communities. As a matter of fact, the projects addressed in the law statute 1850 have to include older adults' rights and duties as citizens when deciding about the cultural, economic and social factors surrounding them.

Moreover, in order to contribute to the theorization of older adult education, valuable international, national, and local investigations have been conducted. These studies contribute to this field since they (a) study the relationship among two variables related to elderly education. For instance, a research conducted by Yi-Yin (2011), in the United States, inquired about the relationship between motivation and higher education. Yi-Yin (2011) found that higher education can function as a stimulating learning environment that helps older adults meet their late-life developmental needs and it can lead them toward a meaningful and positive aging experience; and b) provide insights of the implementation of different approaches, strategies, and techniques that address older adults' educational needs and specificities. For example, the study carried out in Pereira, Colombia by Aricapa and Yepes (2017) in which they aimed to investigate whether the implementation of games was a successful technique for EFL older adult learners to acquire English vocabulary. The researchers found that games not only help EFL older adult learners in their vocabulary learning, but also they have a positive impact on learners' motivation to learn.

The previously mentioned policies regarding older adult education present several issues since they attempt only to literate older population, but they do not pursue a higher educational goal in content areas such as mathematics, natural sciences, or English. Additionally, although there are several researches which investigate aspects related to older adult education, there is a lack of studies addressing the teaching of English to elderly people in Colombia. Following this line of thought, the next paragraphs are intended to go in depth into these issues.

Firstly, it is important to mention that the Colombian policies regarding adult education are based on a pedagogical perspective that contrasts with the andragogic principles that are the most appropriate to approach adult learning and teaching. Secondly, it must be said that the

Colombian policies about adult education are not designed exclusively for the elderly population, instead they attempt to embrace all the citizens that did not have access to education or that belatedly accessed to it. Thirdly, all the policies were developed more than ten years ago, which means that adult education in Colombia has not been a priority in this last decade; consequently, meaningful changes to adapt them to current priorities, such as bilingualism, have not been made. Bilingualism in Colombia has received a lot of attention this decade through the creation of the national programs such as Colombia very well (2006) and Colombia Bilingue (2014); however, they were exclusively designed for children and teenagers of public education institutions.

Furthermore, policies addressing adult English learning have not been relevant for the national government; for instance, Jaime Pérez Tamayo, who is the principal of the Instituto Metropolitano de Educación (IME), highlights the fact that in Colombia there is lack of awareness about the need of learning English, especially on adults. Moreover, it is crucial to mention the small amount of empirical research studies related to older adult education in Colombia and Pereira, specially studies aimed to implement different techniques to teach English to older adults. Furthermore, there is no evidence of investigations conducted in Colombia that integrate the implementation of the multisensory approach to teach older adults considering the andragogic principles.

In brief, the MEN does not offer policies or programs that address exclusively older adults learning of a foreign language. For that reason, Colombian older adults are being excluded within bilingual development, frameworks and projects. As a result, this social issue leads the researchers of this project to be aware of the need of bilingual programs' application as well as the implementation of different strategies, like the multisensory approach, to teach English to

third age population in Colombia. By considering the previously addressed circumstances, it is important to highlight that state protection should also support the older population beyond their literacy development with the objective of including them on 21th century social needs.

The disadvantages of older adult education in Colombia that were previously mentioned are the reasons that determine the purpose of the current project, which is to promote bilingualism in an older population applying an alternative approach while offering them engaging experiences through artistic and recreational activities. To achieve the previous objective, several aspects such as the organization of vocabulary and learning experiences need to be discussed based on the andragogic principles and the multisensory approach. Accordingly, the application of the multisensory approach to teach vocabulary is the most innovative proposal of this project due to two main reasons. Firstly, older adults' interest in artistic activities is being considered for designing and implementing the project.

Secondly, engaging activities aimed towards the production of a certain outcome allow older adults to learn and use high-frequency words with a specific purpose in the immediate context. Thus, the multisensory approach is an alternative methodology that might ease English Language Teaching (ELT) practices within the third age learners. Finally, it is important to remark that in Colombia EFL teaching practices aimed for third age adult learners have not considered methodologies related to the usage of multisensory activities as an engaging tool; this aspect increases the expected outcomes relevance in terms of vocabulary teaching and learning strategies. This makes this project an innovative study that aims to involve an excluded population in the learning of EFL in Colombia.

On the other hand, this research will contribute to the theorization of older adult education in view of the fact that it will provide information about the impact that the

multisensory approach might have on older adults with respect to the way they learn EFL.

According to Shams and Seitz (2008), educators have long believed that multisensory training

can enhance learning inasmuch as it can engage individuals with different learning styles.

Additionally, the results of this study will serve as a base for future researches so that they can

keep extending the search and go deeper for new knowledge about the multisensory approach

and older adult education, especially when referring to learning EFL.

This study will also provide an insight of the way in which the multisensory approach

might contribute to English language classrooms and the implications it may bring when

incorporated to the curricula. Moreover, in terms of the contribution to the teaching field, this

study will provide valuable information for teachers to implement the multisensory approach

considering the andragogic perceptions. Also, teachers can find recommendations about the

usage of the multisensory approach, what to do and what to avoid. Finally, teachers will benefit

from this project since they can become aware of the benefits that might have teaching older

adults based on andragogic principles since in Colombia pedagogical principles are used to teach

kids, teenagers, and adults.

2.1 Research questions

- Does the implementation of the multisensory approach ease vocabulary learning for older
adult learners based on the andragogic assumptions and principles?
- How older adult learners perceive English vocabulary learning through the multisensory
approach?

2.2 Research objectives

2.2.1 General objectives

● To characterize the implementation of the andragogic principles and multisensory

approach in relation to older adults' English vocabulary learning.

2.2.2 Specific objectives

● To identify the relationship between the implementation of the multisensory approach

and older adult learners' motivation to learn vocabulary.

● To describe older adults' learning process and their vocabulary usage in immediate

contexts: Classroom and nursing home.

● To determine the positive and negative aspects of using the multisensory approach to

teach EFL to an older population.

3. Conceptual framework

Throughout this conceptual framework the concepts of andragogy, elderly learning,

comprehensible input, vocabulary learning and multisensory approach will be defined according

to the findings and perceptions of different authors. These concepts are relevant for this project

as they encompass the applicability of strategies, theories, and modalities in the field of language

teaching and education to foster vocabulary learning in an older population. As mentioned

before, several authors with expertise have contributed with important insights related to

language teaching and adult education, which directly influence the current state of approaches

for elderly learning.

Regarding andragogy, Knowles (1970), Devici (2007), Jarvis (1985), and Davenport and

Davenport (1985) agree that andragogy is the most appropriate approach to understand and teach

adult learners. Moreover, Schmall (2000), Glisky (2007) and Bastable and Dart (2010) argue

about the aspects to consider when referring to elderly learning. Furthermore, Krashen (1985),

Schwieter (2013) and Piske (2009) take into account how comprehensible input is necessary in language teaching in order to improve learners' proficiency. Additionally, Nation (2006), Thornbury (2002) and Siyanova and Webb (2016) propose strategies to enhance vocabulary learning in order to support learners to communicate effectively. Finally, Dickinson (2002) and Rauscher, Gordon, Levine and Ky (1994) highlight the benefits of the multisensory approach for developing learners' language skills.

3.1 Andragogy

This section is aimed to present an overview of andragogy in order to understand its historical background, definition, and main aspects. Additionally, information about the relationship between pedagogical and andragogic principles and its importance in adults' learning process will be given.

3.1.1 History

Knowledge about the history of andragogy provides a deeper understanding of the trajectory of adult education and it shows the evolution of the meaning of andragogy since it was first coined by the German teacher Alexander Kapp in 1833. Kapp (1833) used andragogy to describe elements of Plato's education theory and it presented a contrast between andragogy (*andr*– meaning 'man') and pedagogy (paid- meaning 'child' and *agogos* meaning 'leading'); however, the term was disputed and fell into disuse (as cited in Henschke, 2009). Later, in 1921, after World War I, the German Rosenstock-Huessy returned the term and stated that andragogy refers to the special requirements that adults have in order to learn successfully; for example, special methods, philosophy, and teachers (as cited in Henschke, 2009). About the same time, Lindeman (1926) brought the term andragogy to America and he described it as the method for

teaching adults; in this way, he proposed the *discussion method* as the most appropriate for teaching adults, which he said is different from teaching children (as cited in Henschke, 2009).

Moreover, during the 1960's and 1970's Malcolm Knowles popularized the term and the concern on adult education; therefore, he is recognized as the "father of andragogy". Knowles' conception of andragogy tries to build a comprehensive theory of adult learning that is based on the characteristics of adult learners (Merriam and Caffarella, 1991, p. 249). To summarize, pedagogy contributed to the construction of a new theory about adults learning because andragogy emerged from the conclusion that pedagogy did not account for adults developmental changes; then, thoughts about the need to consider these developmental changes for adults to have an appropriate learning environment and to learn successfully started to arise.

3.1.2 Andragogy and Pedagogy

Jarvis (1985) compares the theories of pedagogy and andragogy. For instance, in pedagogy the learner is expected to be dependent and the teacher is the one who decides what, when, and how is the content to be learned, while andragogy gives the learner independence and the learner is supposed to be self-directed. Moreover, the learner's experience, according to the pedagogical theory, has little relevance; however, in andragogic theory the learner's experience is valuable for learning. Additionally, pedagogy involves that society determines what the learners should learn, so the curriculum is standardized. On the other hand, andragogy acknowledges what the adult learner wants to learn; in this way, learning programmers are organized around learning application. Furthermore, while in pedagogy the subject determines the sequence according to the learning content units that will be presented and taught (subject-centered), in andragogy learners need to be taught information that is useful in their personal lives and work environment (performance-centered).

Davenport and Davenport (1985) also point out some of the andragogical and pedagogical differences in application. In pedagogical theory, the instructor diagnoses the needs of the learners, prepares objectives, and evaluates the process. The instructor is the knowledge transmitter; therefore, the learner has a passive role. In contrast, an instructor with andragogical philosophy aims to create an informal, collaborative and respectful climate; besides, he involves the learner in the process of designing and evaluating the learning activities, which are based on the learner's problem areas.

Devici (2007) supports that although the majority of adults are andragogically oriented, some of them are pedagogically oriented. In this way, according to Chametzky (2014) for a learner to be able to function in an andragogical learning environment, four sub-doctrines must be considered. These tenets form an acronym that Chametzky (2014) call SEAR: learners must be a) Self-directed or Self-guided, b) Encouraged, c) Accustomed to learning in an andragogical way, and d) Ready to learn in an andragogical style. Sometimes, not everyone is ready to learn through andragogical principles (Knowles, 1984). In cases in which learners do not have the requisites to learn through andragogy, Knowles (1980) recommends using pedagogy in order to rely on the instructor to understand the most relevant information; later, when the learners are prepared enough, they can be taught through andragogical principles. Knowles (1980) stated that the principles of andragogy must enable learning rather than forming a barrier that inhibits learning.

3.1.3 Definition of andragogy

Firstly, Knowles (1980) defines andragogy as *"the art and science of helping adults learn"* (p. 38). According to Knowles (1980), andragogy is a set of assumptions about adults as learners and a series of recommendations for the planning, management, and evaluation of adult

learning. Devici (2007) states that this explanation of the concept has two important presuppositions; a) self-directedness is a core of adulthood, and b) andragogical practice involves collaboration with the learners in their quest for learning. Knowles (1980) supported the difference between adults and children learning; therefore, he developed five assumptions (the fifth was added in 1984) as the main characteristics of adults' cognitive development during their learning process. These assumptions are:

3.1.3.1 Self-concept. Maturity allows adult learners to be self-directed in their learning; this involves readiness to learn, learning goals setting, involvement in their learning process, and learning evaluation. Also, adult learners realize that the instructor is no longer the single person who holds the knowledge and when they take responsibility for their own learning, they become active consumers in their learning (Knowles, 1980) and they become self-directed (Coole & Watts, 2009; Knowles, 1975). Based on their individual needs, self-directed learners decide the speed at which they want to learn, when to study, and in what direction their learning will proceed (Knowles, 1975, 1980, as cited in Chamotzky, 2014).

3.1.3.2 Experience. Throughout their lives, adults have accumulated a great reservoir of experience which is valuable in a class based on andragogic principles. These experiences form the figurative hooks where learners can place the new knowledge (Hedin, 2010; Mezirow, 2000). Creating these cognitive connections to previous knowledge helps learners to make the learning process easier. Additionally, these hooks and connections are vital to learning success since they support the learning process and increase learners' motivation to learn. The relationship between the educational hooks, the learners' motivation, and the desire to learn is seen in Figure 1.
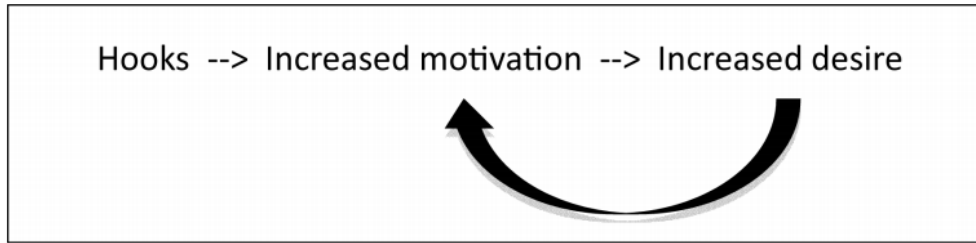
Figure 1. Relationship between educational hooks, learner motivation, and learner desire.

The hooks lead the learner to feel that he or she can relate to the material more easily thereby making the subject matter easier to internalize; consequently, learners perceive themselves to have a greater subject matter competence (as cited in Chamotzky, 2014).

3.1.3.3 Readiness to Learn. Adult learners have specific learning objectives. The connection between learner objectives and motivation is strong (McGrath, 2009). If learners are motivated to acquire specific knowledge, they will acquire it. However, learners want and need to understand how new information will benefit them (McGrath, 2009) in order to grow (Gutierrez, Baralt, & Shuck, 2010). Without that knowledge, learners may not be ready to learn and internalize the necessary subject matter (as cited in Chamotzky, 2014).

3.1.3.4 Orientation to Learn. As a person matures, his time perspective of learning is one of immediacy application of knowledge and the orientation toward learning is one of problem centeredness. The opportunity to address real-world situations in an andragogic learning environment is essential (Horsley, 2010; Zipp, Cahill, & Clark, 2009). When learners realize that they need some specific knowledge acquired from solving a real-world issue, their level of motivation increases. In addition, when learners address real-world concerns, their desire for learning the subject matter increases. In this way, a strong relationship exists between learner objectives and the solutions to real-world problems (as cited in in Chamotzky, 2014).

3.1.3.5 Motivation. Adult learners have an intrinsic motivation. This assumption is related to the first assumption since when learners are self-directed, they feel empowered, which drives

learners to learn more (Lebedev & Fedoseyeva, 2009). Furthermore, with this feeling of empowerment, learners are more motivated to study anywhere and at any time (Diaz, 2010). Additionally, *motivation* is also related to *experience* because when adult learners can relate their experiences to the new knowledge, their enjoyment of the subject matter is intensified. According to Evans, Hartman, and Anderson (2013) these motivational factors make students to want to do their work which leads to adults having an intrinsic motivation to learn (as cited in Chamotzky, 2014).

These five assumptions, which are related among them, are considered advantages that adult population have and they might serve as positive aspects that impact adults' learning process. Additionally, these characteristics mark a differentiation between pedagogy and andragogy (Knowles, 1984). Furthermore, Devici (2007) argues that these assumptions imply some principles that teachers should consider when teaching adults: learners (a) should know why something is important to learn, (b) need guidance about how to direct themselves through information, (c) need to be able to relate the topic to their experiences, (d) can learn when they are ready and motivated to learn, and (e) might need help to overcome inhibitions, behaviors, and beliefs about learning. Also, he adds that the andragogical model is a process model in which the facilitators prepare a set of procedures in order to involve the adult learners in their learning process.

3.2 Elderly learning

This section is intended to analyze the different changes that adults experiment as they become older adults and how this process affects physical and cognitive aspects that are related to their learning process. Variety of authors have been included in order to clarify how aging is a process that involves physical and mental deterioration. Additionally, information about older

adult learners' special needs will be presented. Finally, this information is relevant to this research since it is focused on older population characteristics and needs, which must be taken into account when implementing the multisensory approach to teach vocabulary to this population.

3.2.1 The process of ageing

Becoming older is an inevitable and irreversible process for which every human must go through. According to the Universidad de Barcelona interview of Dr. Francesc Formiga, the ageing process is different in each human being since the organs age in a different speed, there is not an exact moment at which all humans begin to become older, it depends on aspects as having fewer neurons, fewer nephrons, and less muscle strength. Bastable and Dart (2010) describe these factors as physiological changes that are universal, progressive, decremental, and intrinsic. To explain that ageing occurs at different times and in different ways, Glisky (2007) asserts that "just as age-related changes in brain structure and function are not uniform across the whole brain or across the individuals, age-related changes are not uniform across all cognitive domains or across all older individuals"; therefore, it is common to realize that some older adults have more cognitive and physical capacities than others.

3.2.2 Sensory perceptive abilities

As people become older, the neurons deteriorate and this affects their cognition. For instance, Bastable and Dart (2010) state that "cognitive ability changes with age as permanent cellular alterations invariably occur in the brain itself, resulting in an actual loss of neurons, which have no regenerative powers" (p.35). This means that older adults' deterioration of physical and mental health has a secondary impact on their ability to learn and understand the world around them. Generally, the first areas that start to be impacted by the cognitive

deterioration are the senses (Bastable and Dart, 2010), which are humans' faculties that allow the perception of external stimuli. As senses are an important learning sources, the decline of them hinder the learning process of older adults. However, this deterioration occurs after the 80 years of age as pointed out by Schmall (2000); therefore, it can be stated that adults having good sensory faculties still possess learning abilities. This affirmation favors one of the beliefs of this project which is that older adults still can learn despite of their age. In this sense, it is relevant to describe Schmall (2000) classification of sensory changes of third age adults, which involves vision, hearing, taste and smell, and touch.

3.2.2.1 Vision. This sense is very important for humans to function in the environment. The deterioration of this sense presents to the individual a difficulty to perform kinesthetic activities and problems when learning through elements such as colors, images, or texts. When vision starts to decrease, it may cause isolation and loss of interest to interact with others. People with vision loss may experience problems with mobility, poor orientation, and frightening visual impressions that resemble hallucinations. This also provokes difficulty in performing daily activities such as walking, getting outside, and transferring in and out of a bed or chair.

 3.2.2.2 Hearing. Hearing is considered the "social sense" since it allows humans to easily interact with people. Significant hearing loss might affect communication and relationships with people. Therefore, this can lead to withdrawal, isolation, and depression, which at the same time can lead to suspiciousness, paranoia, disagreements, and alienation from family and friends. In some cases, older adults that have hearing problems try to answer what they understand they were asked, but due to their hearing impairment they might answer something that does not make sense and it can be confused with cognitive impairment.

3.2.2.3 Taste and smell. During the old age, the affectation of the taste sense might impact the pleasure and satisfaction that older adults obtain from food. After the age of 50, the ability to perceive each of the taste sensations (sweet, salty, bitter, and sour) declines, but especially elderly become more sensible to salty food. However, the sense of smell is more affected that the taste. Smell deteriorations have important consequences for nutrition, safety, personal hygiene and enjoyment of life.

3.2.2.4 Touch. Touch sensitivity and the physical feeling of pain decrease as humans become older. Certain chronic diseases such as diabetes, circulation problems, stroke, Parkinson's disease, and arthritis can further affect a person's sense of touch. Some third age adults find it difficult to differentiate textures and objects by only touching. Some may experience a delayed reaction to being touched. Additionally, touch can reduce anxiety and provide comfort.

Schmall (2000) highlights the fact that it is more important to focus on what older adults can do rather in what they are not able to do anymore. In this sense, it is not only necessary to be patient when helping adults to learn, but also it is important to make them feel comfortable, secure, and respected for them to increase their self-esteem and thus their motivation to learn.

Furthermore, there are two important cognitive skills that have a fundamental role in elderly learning, these are attention and memory. It is essential to understand how older adults' attention and memory work since they have a significant impact on their learning; consequently, teachers should consider this information to create an appropriate class for them.

3.2.3 Elderly attention and memory

Glisky (2010) states that attention and memory are capacities that are also affected as humans become older. There are several attention and memory sub-concepts that have been investigated in the field of aging; nonetheless, this paper is particularly concerned on selective attention (SA) and working memory (WM) since the project's aim is to teach vocabulary. In this sense, these concepts are necessary to be considered when planning and implementing the project.

3.2.3.1 Selective Attention. Glisky (2010) mentions that attention is a basic but complex cognitive process that has multiple sub-processes specialized for different aspects of attentional processing. However, as attention is limited, Selecti ve Attention (SA) allow humans to focus on important details. It means that SA refers to the ability to attend to some stimuli while disregarding others that are irrelevant for a specific task. Older adults respond to the tasks slower, but they are not differentially affected by distraction than younger adults; therefore, deficits found in elderly development of different tasks can be attributed to a general slowing processing of information rather than to SA deficit. This is important for this project inasmuch as selective attention will guarantee that the participants will have the ability to respond to the teaching without being easily distracted by any other external factors.

3.2.3.2 Working Memory. Working memory (WM) is a system aimed to store and manage the information required to develop complex cognitive tasks such as learning, reasoning, and comprehension (Glisky, 2010). WM is involved in the selection, initiation, and ending of information-processing functions such as encoding, storing, and retrieving data. When the stimulus of the information that is being processed by the WM is significant and adequate for the

person, the system of WM is in charge of encoding and storing data in the long term memory, which is defined by Atkinson & Shiffrin (1968) as the change in the process of transferring or encoding knowledge that can be stored for long periods of time. Long-term memory decrease with age, elderly exhibit significant deficits in tasks that involve active manipulation, reorganization, or integration of the contents of WM. This is a relevant cognitive aspect that requires to be understood when having older adults developing tasks and learning new vocabulary.

Finally, although elderly experiment deterioration of their senses, this does not affect the implementation of the multisensory approach as a basis for teaching vocabulary to this population since multisensory approach have its basis in the multisensory stimulation therapy (psychology field). Multisensory stimulation can enhance the condition of people with cognitive and physical impairments since it stimulate all their senses and inhibit their further deterioration. Some benefits of multisensory stimulation are: a) increase concentration and focus attention, b) develop or reactive senses of hearing, sight, smell, touch and taste, c) improve coordination and motor development, d) promote cognitive development by increasing brain functions, e) provide security, f) improve creativity, g) develop of language, and h) promote social interactions, among others. Finally, multisensory stimulation prevents people from developing diseases as Alzheimer.

3.3 Comprehensible Input

It is necessary to establish the definition of comprehensible input and its applicability in the process of foreign language teaching to older adults. In this way, different authors such as Stephen Krashen, Thorsten Piske and John W. Schwieter will be mentioned.

3.3.1 Defining comprehensible input.

According to Krashen's Comprehension Hypothesis (1985), comprehensible input is the language input that can be understood by students even if they do not recognize all the utterances. In other words, comprehensible input is the language input that is above current students' stage of linguistic competence, but that still can be understood by students. Krashen (1985) states that when students are exposed to i+1 language input they acquire language effortlessly and involuntarily. To illustrate, i refers to the current level of language proficiency that learners use to make sense of the language input that is beyond their current language proficiency (+1). This theory presents some implications for language teachers: a) teachers should offer enriching language instruction (spoken and written) to students, and b) language instruction should be just above students' language proficiency.

3.3.2 Circumstances for using comprehensible input with older adult learners.

Students' comprehension does not only depend on the vocabulary provided by the teacher, in fact, even if students understand all the vocabulary during an activity, the meaning can remain incomprehensible to them (Piske, 2009). Therefore, comprehensible input requires the use of certain techniques. Schwieter (2013) points out that presenting background information, context, clarifying concepts, and implementing effective materials such as images, audios and graphic organizers contribute to students understanding of content, especially in the case of older adult learners. Additionally, to provide an appropriate context, Schwieter (2013) mentions that teachers can be sensitive to the language and cultural background of students by giving instructions that are based on experiences, preferences and concerns that are familiar to them. Also, in order to increase the possibilities of students' understanding, Schwieter (2013) suggests to use consistent vocabulary, particularly during the first stages of the learning process.

On the other hand, Piske (2009) states that teachers should consistently clarify ideas or concepts using slight variations in terminology and examples. By applying these techniques, students will be able to comprehend aspects that are required for greater understanding of general and specific ideas.

3.3.3 Points to consider when teaching older adults.

Teaching must be highly interactive; for this reason, teachers should create an environment in which students participate answering questions or sharing ideas and thoughts using the target language. At first, students might show resistance about being involved, but with the practice they get use to participate. By encouraging older adult students to participate, teachers can ask them to share their experience about their language, culture or country (Bedoya, 2008). When opportunities for using the language are provided, opportunities for increasing receptive language abilities are given. Also, cooperative learning and peer tutoring strategies can offer positive effects on the rapid and effective development of the English language, specifically when working with highly decontextualized and cognitively challenged language concepts (Hernandez & Flores, 2008).

3.4 Vocabulary

Vocabulary learning is fundamental in any language since words construct the mental lexicon and enable communication. As a result, it is necessary to highlight how relevant teaching vocabulary is for both beginners and advanced learners and in this case, older adults. Nation (2006) pointed out that learners of English as a Second Language (ESL) require around 6000-9000 word families to fully understand any written or spoken texts. Similarly, Sylanovva and Webb (2016) concluded that in order to reach a high proficiency level, high-frequency words have to guide vocabulary teaching practices according to its usage in context. In this sense,

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vocabulary teaching and learning success are attached to two main aspects: what words to teach and how to teach them.

3.4.1 Vocabulary size: How many words a learner needs to know.

Since native speakers acquire around 1000 word families every year until the age of 20 (Sylanovva and Webb, 2016), it is accurate to state that vocabulary learning in native and foreign languages is different from one another. While native speakers have to master vocabulary to accomplish daily interactional tasks, learners of a foreign language are not completely involved in situations that depend on authentic language usage. Therefore, teachers should analyze the most suitable vocabulary for students before designing their courses. A common inquiry at the time of teaching vocabulary is how many words learners need to know. Regarding this concern, Sylanovva and Webb (2016) estimate that a competent language user manages more than 1000 word families, and that high-frequency words should be the basis for learning programs. Likewise, Nation (2006) revealed that by knowing the first 1000 word families, it was possible to deeply comprehend written and spoken discourses since they embrace around the 83% of vocabulary used during interactions. This insight highlights the importance of teaching high-frequency words to foster learners' vocabulary size, which is defined as the amount of lexical units a learner is capable of using.

Thornbury (2002) referred to vocabulary size in various forms according to lexicon depth. He considered that there was a daunting difference between L2 learners and native speakers' vocabulary size. While an educated L2 learner could learn around 5,000 word families after studying several years, a native speaker under the same conditions would have around 20,000 word families available to use. To exemplify this assumption, the author mentioned that native speakers have already acquired 5.000 words at the age of five and they continue learning

almost a thousand words every year. It is clear thus, as stated by Sylanovva and Webb (2016), how foreigners' vocabulary learning rates are slow and uneven. As a consequence, it becomes crucial to determine what the appropriate vocabulary range is for students taking into account their proficiency level. Accordingly, Thornbury (2002) emphasized on the importance of equipping learners with a vocabulary of 2000 high-frequency words since this vocabulary size would be enough to help them to know the meaning of nine out of ten words in almost all texts. The previously mentioned concepts support the idea that vocabulary teaching and learning core have to be planned considering high-frequency words and students' purposes for learning them.

3.4.2 Strategies for teaching vocabulary

"Without grammar very little can be conveyed, without vocabulary nothing can be conveyed" (Wilkins, 1972. p.13 as cite in Thornbury, 2002). Learning new vocabulary is a challenging task for all language users, even for native speakers. The reason for it lays on the factors that conform the acquisition of new lexicon such as the exposure to language and comprehensible input. It is then teachers' role to apply appropriate strategies while taking into account what the processes involved in vocabulary learning are. According to Thornbury (2002), strategies' main purpose is to get students to use words for tasks completion and also to create self-directed learners; he is emphatic on the fact that teachers are unable to literally teach words to students; instead, they can only present or explain lexical items while motivating learners, but it is exclusively learners' responsibility to acquire and use words appropriately.

By considering the previous insight, he proposed several strategies useful to foster autonomy in vocabulary learners. The first of them is decision-making tasks, which aim to place words into learners' long-term memory by using them in cognitively demanding tasks that the author divided into: identifying, selecting, matching, sorting, ranking, and sequencing.

Furthermore, the author explained that when teachers elicit information related to vocabulary using this strategy, learners are able to recall words easily in different contexts according to the tasks specifications. It is then when decision making takes place since learners have to identify the task purpose before recalling the needed lexical units. On the other hand, production tasks involve learners to not only make judgments about what vocabulary should be used, but also to produce it in writing or speaking activities. A clear example of production tasks are activities such as gap-fills or texts creation; while in the first one learners have to correctly write words in the signaled gaps, texts creation tasks get students to create contexts for a list of words through written or oral performance. Given this reason, the latter tasks type requires intermediate or advance language users to be successfully applied.

Other authors have proposed their own set of strategies for improving vocabulary learning; for instance, Sylanovva and Webb (2016) recognized the value of extra-curricular activities and its impact on vocabulary learning. They addressed two main concerns that hinders new words internalization: lack of class interaction and insufficient language input. By taking into account those obstacles for vocabulary development, they proposed extensive reading and extensive viewing as strategies to cope with limitations in terms of time and input. Extensive reading is to purposefully use long texts as the main source of input to approach different words in context. Moreover, the authors suggested to use long texts since learners are more likely to encounter the same lexical units frequently; thus facilitating the learning process by allowing them to understand how the words are used. In a further matter, an important factor to consider when applying extensive reading strategies is engagement because students are responsible for selecting what they desire to read with the support of their teachers. In this sense, reading

becomes an enjoyable and motivating activity for students that usually leads to vocabulary learning.

Meanwhile, extensive viewing is useful to increase learners' exposure to authentic language through multimodal input (Aural, visual) in movies, TV shows or videos. Sylanovva and Webb (2016) remarked how convenient this strategy is nowadays due to the fact that learners can access all kind of authentic materials effortlessly, and also they are able to select what input is more engaging according to their personal preferences. Finally, extensive viewing develops in learners listening skills and strategies to analyze the meaning of words based on frequency of usage and contextual cues. A positive aspect of both strategies is that they foster vocabulary, reading, and listening skills regardless of learners' proficiency level, which proves their practicality inside and outside the classroom.

3.5 Multisensory approach

Considering the natural physical and mental deterioration linked to the aging process, active work and stimulation of senses is an important endeavor to delay the decline of old adults' abilities. According to Anthony, Bento-Torres, Cabral, De Oliveira, Dias de Macedo, and Picanço-Diniz (2015) there is evidence of plasticity still in the aging brain and such cognitive deterioration may be slowed through stimulation. In addition, as stated by Dickinson (2002), new neural connections in human brain continue to form throughout life, and these structural and functional changes are the result of learning and experience. Moreover, the stimulus received through experience represent a main contributor to the brain capacity. In this regard, the implementation of the multisensory approach represents an alternative strategy for students with learning special needs. This approach, also known as Visual-Auditory-Kinesthetic-Tactile

(VAKT) modalities, looks to countervail the needs of students that require different strategies to acquire knowledge by enhancing their strengths or learning style.

3.5.1 Visual

According to VAKT theorists, students with preference towards the visual stimulus respond better to material such as pictures, videos, painting and drawings in the learning process. Hence, either input or output that stimulates or requires them to make use of their sight, contributes to accomplish their learning goals. As an example of this, Brookes (1986), founder of the Monart Drawing Schools, has explained how the implementation of the Monart Method, intended to help students to transform information received into drawing, has enabled learners to use different learning modalities and that teachers implementing her method recognize an improvement in students' reading comprehension. On the other hand, articles concerned with third age health agree that among the main causes of sensory deprivation is aging and that the sense of sight is former on the rate of sensory reduction and loss.

3.5.2 Auditory

Similar to the visual, the auditory modality is one of the most common learning channels. Students who acquire information from this learning style require listening input such as music, recordings or dialogues for more effective processes. In this regard, an important study developed by Rauscher and Gordon et.al (1994) reports a correlation between music and spatial reasoning and how music can be implemented to develop high order cognitive skills. In contrast with this finding, a study from the Journal of the American Medical Association in 2013 reveals that nearly a third of US older adults experience cognitive decline as a result of hearing loss. In this respect, researches like Johnson (1985), examine and evaluate the benefits that music

programs have in the improvement of creativity, memory and their impact on elders' lifestyles in the field of elder education.

3.5.3 Kinesthetic

Learners who prefer this learning style acquire knowledge better by performing actions, moving and experimenting. This learning is one of the less activated styles but also of particular interest in students' cognition since, as mentioned by Dickinson (2002), physical movement is regulated by the cerebellum storing muscle memory, which is noted for being especially long lasting. Peebles (2007) suggests that incorporating movement in the process of instruction is a mean for encouraging students' motivation as well as a tool for triggering brain function for optimal learning. Another important author to consider is Anne Green Gilbert who developed the Brain Dance technique consisting on patterns of movements that contribute to the sensory motor and neurological development, stating thus, that movement is the key to learning. Accordingly, Peebles (2007) also explains that implementing the kinesthetic learning modality with third agers brings them significant benefits capable to counter the process of natural deterioration. However, there is few information regarding the ways or techniques in which this action-based modality should be implemented with elders taking into account their already restricted movement abilities.

3.5.4 Tactile

Finally, the tactile learning which is related with the sense of touching has to do with hands-on activities; tactile learners benefit from strategies that include using of finger paints, manipulating, texturing and sculpting materials. Most authors relate this learning style with the kinesthetic one; however, a differentiation must be established since the tactile modality is concerned with touching and the sense of feeling, while Kinesthetic specifically refers to body

movement. Regarding older population, attention needs to be brought when it comes to the application of strategies involving the use of hands, highlighting diseases such as Parkinson's, being a disorder of the nervous system that affects movement. According to the 2014 article *Sensory Deprivation among Older Adults*, the most frequent problem connected to the sense of touch in the third age is Peripheral Neuropathy, which reduces the ability to perform finer sensorimotor tasks. Thus, this nerve affection can interfere with the development of learning based on the sense of touch. Therefore, it leads to a current need for further investigation regarding the implementation of the tactile learning modality with older adults.

To conclude, andragogy, elderly learning, comprehensible input, vocabulary, and the multisensory approach are essential concepts that work in conjunction in the development of this research project, which is aimed to implement the multisensory approach with the objective of promoting English vocabulary learning in older people. In this way, andragogy is considered the most suitable approach for implementing the multisensory approach as an alternative strategy that helps to decrease older adults' senses deterioration; additionally, multisensory approach addresses learners' different learning styles while contributing to the development of a foreign language. Moreover, elderly learning explains the physical and cognitive factors affecting elders learning processes. Besides, comprehensible input highlights the importance of learners' comprehension of what they are being taught in order to successfully learn. Lastly, vocabulary represents the very basic of the language and it implies the acquisition of words and their contexts.

4. Literature Review

Aging is the biological process by which human beings must go through from the very moment of birth. This progressive set of morphological and physiological changes occur over time, and it implies a gradual deterioration of organs and their functions. However, despite the common belief, getting to the old age does not mean that older people become unable to learn. Common social beliefs as "old dogs never learn new tricks" promote the misconception of older adults as less successful learners. For instance, Ekotto and Gaikwad (2015) remark the current need for a richer perspective of educational practices addressing adult learning needs and obstacles, which demands the application of innovative strategies to teach third age adults appropriately; thus, it is imperative to analyze relevant studies in order to guide this research about how to teach vocabulary to older people. In this sense, five research studies about approaching elderly populations, regarding the implementation of multisensory approach to teach EFL, will be reviewed.

To start with, Chang (2013) postulates the characteristics that contributed to the evolution of adult education since 1950 to 2000. The second article resembles García and Muñoz (2015) research findings related to some aspects involved in the adult meaningful learning of EFL. Additionally, Cassell (2011) carried out her study about the factors that influence third age adult English language learning.On the other hand, Gorjian, Hayati, and Barazandeh (2012) inquiry about the influence of multisensory modalities on the acquisition of vocabulary. Similarly, Jubran (2011) investigated the impact of multisensory approach on learners' English achievement. These researches integrate aspects about adults learning and provide insights of the multisensory approach as an innovative strategy for teaching English. Cassell (2011), Chang (2013), and García and Muñoz (2015) provide fruitful perspectives about the development of

adult education, while Jubran (2011) and Gorjian, Hayati, and Barazandeh (2012) support the benefits of the implementation of multisensory strategies in the EFL field.

Initially, Chang (2013) carried out a study called *Shift of Adult Education Research a descriptive analysis of the evolution of adult learning since 1950's to 2000's.* The purpose of this research was to analyze literature related to adult education. The research questions used in order to guide the study were (a) what are the main features of adult education research? and (b) what are the main features of adult education research methods? According to the findings made by Chang (2013), there was a shift in terms of the focus of adult education: a) from a descriptive reflection of practical experience and borrowing theories from other fields, to starting building its own philosophical and theoretical foundations and professionalizing the field; b) from one positivist perspective and quantitative methods, to multiple perspectives and qualitative methods; c) individual growth and psychological development, to social and political integration.

Additionally, it was evidenced that the modifications of adult education theorization were determined by the change of social needs through time and some internal and external social forces. Moreover, the role of adult education changed from a perspective of adults being trained to learn and solve practical problems, to a view of adults as social actors who are concerned about social issues to come up with solutions and improve the society. Another important finding is that adult education research has always been aimed to meet the society's needs. To sum up, Chang (2013) found that perspectives, dynamics, and methods on adult learning have greatly changed from 1950s to 2000s and that social changes have an impact on the focus of adult learning.

In a similar study involving society, *Third Age Adult English Language Learners in non-formal Library Settings in Florida,* Cassell (2011) evidenced the social impact that teaching

English to the older population had regarding motivation, learning supports, learning barriers, and older adults' class suggestions; thus Cassell (2011) involves two of the main constructs that the present research is focused on: older adult learners and teaching English. Three questions were established in order to guide the study: a) what motivates third age learners before and while attending the library's ESOL classes? b) what supporting factors do third age ELLs experience in ESOL library learning environment? And c) what barriers to learning and attending do third age ELLs experience in the library's ESOL classes? Moreover, this study carried out in Florida, United States, involved 10 teachers and 11 older adult learners who were selected based on their ethnicity. Furthermore, the data collection methods implemented by Cassell (2011) were in-depth and open ended interviews to the 21 participants as well as observations and essays.

Besides, document analysis was used in order to confirm the study's findings, which revealed that second language learning success is influenced by self-directed learning strategies. This means that adult learners are mature enough to be autonomous in their learning, which involves being ready to learn, setting learning goals, engagement in the learning process, and evaluating learning; this helps them to improve their proficiency level. Additionally, Cassell (2011) found that language skills development is affected by the lack of English practice. Also, the author determined that in order to improve learners' performance, adjustments in terms of amount of classes, tutoring, language labs, study skills classes and classroom management training were needed. Finally, the author states that learning a language has social interactional purposes, and that the need and benefits of having a good L2 proficiency promotes motivation.

Similarly, in terms of motivation, in their research project called "*Aprendizaje significativo del Inglés en la edad adulta*", Muñoz and García (2015) support the idea that

motivation is a factor that should be taken into account when planning a class for older people. This study was aimed to explore the under-researched area of teaching EFL to adult learners in order to contribute to the existent literature, reinforce the current theories and help new projects by providing a basis for further investigations. In this respect, from an andragogic perspective, the authors analyzed the different ways adults over 40 years learn EFL in the "Fundación Alianza social Educativa" (ASE), which is a non-profit independent organization located in Bogotá, Colombia, that offers educational programs like teaching English to adult population. However, lack of an appropriate curriculum for this population was evidenced, mainly in relation to specific strategies that fulfill this population's academic needs; therefore, it was necessary to implement a research to gain a better understanding of the process of adult learning English.

The research project was oriented in the qualitative descriptive methodological approach. Through classroom observations, the researchers developed a deliberate random sample in order to identify the educational needs of ten students over 40 years, who completed a basic English level. An observation grid and a survey were applied in order to achieve the research objectives. Moreover, the opinions of the participants were collected by using five questions with multiple choice and six open questions which inquired about their interests and educational needs in relation to learning EFL; however, the questions are not explicitly stated in the research. A triangulation was made and categorized allowing the establishment of different adult educational needs. As result of a painstaking research, the authors considered the existence of four main aspects to take into account when planning a class for adults over 40 years: motivation, real contexts of learning, scaffolding, and favorable learning environments.

All in all, Muñoz and García (2015) found that teachers should reflect teaching strategies that contribute to meaningful learning since elder people need to recognize that what they are

learning is valuable for their daily life. Also, it was found that adult learners need to be provided with values and attitudes that favor autonomy and self-assessment of the teaching and learning processes. Taking into account the lack of information about the educational necessities of elderly people, Muñoz and García (2015) aimed to contribute to the orientation of future EFL teachers from an andragogic point of view.

Another important concept in this study is the one addressed by Jubran (2011), who developed a research in which he provides an insight of the benefits of using the multisensory approach as an alternative strategy in order to contribute to the EFL field. The author conducted a study called *using multisensory approach for teaching English skills and its effect on students' achievement at Jordanian schools* with the objective of evaluating the impact of the multisensory approach on the learners' engagement and achievement in English. Jubran (2011) formulated one relevant question to guide his research: a) Are there any statistically significant differences in learners' performance in English due to the teaching strategy they are exposed to (multisensory approach vs traditional way)? The participants of this study were 122 tenth graders, 57 males and 65 females from two different high schools (one for girls and the other for boys). The participants were divided into experimental group, who were taught English using the multisensory approach, and control group, who were taught English through a traditional way.

Furthermore, pre and post-tests were used as methods to collect information about students' achievement in English. Descriptive statistical analyses were implemented to analyze the pre and post-tests. Jubran (2011) came up with important findings. Firstly, the findings showed that the experimental group had better English achievement than the control group thanks to the implementation of the multisensory approach. Secondly, the author evidenced that the experimental group significantly increased their English vocabulary Thirdly, Jubran (2011)

found that when students are given the opportunity to use all their senses, they are more engaged in learning. Finally, the author concludes stating that the multisensory approach is a powerful strategy for students to learn English entertainingly.

In a related study involving the multisensory approach, Gorjian, Hayati, and Barazandeh (2012) conducted a research called *an evaluation of the effects of art on vocabulary learning through multi-sensory modalities*, in which they aimed to investigate the effects of art on vocabulary acquisition by implementing multisensory modalities. The participants were 56 EFL beginner learners from a primary public school and a private language institute. Their ages were ranged from 8 to 12. Moreover, the participants were randomly divided into a) experimental group, who were taught through multisensory modalities, and b) control group, who were taught through traditional methods. The data collection methods were vocabulary pre and post-tests which were designed by the researchers and that included 14 items for assessing learners' vocabulary achievement. The research was conducted in Bandar Imam Khomeini, Iran, and it was carried out during three months. After analyzing the data gathered, the researchers found that using multisensory techniques is effective for teaching vocabulary to EFL beginner learners.

Additionally, a relationship between teaching English through multisensory modalities and learners' language development was evidenced. Also, Gorjian, Hayati, and Barazandeh (2012) identified that it is beneficial to use visual arts for students' language learning development. Moreover, the author evidenced that kinesthetic movement supports students in understanding the meaning of words. Finally, it was observed that teaching something abstract as language through something concrete as art encouraged students to link their own experiences. It is important to highlight the fact that the researches carried out by Jubran (2011) and Gorjian, Hayati, and Barazandeh (2012) involve as participants, children and adolescent population;

therefore, the need to explore the impact of multisensory approach on elderly vocabulary learning is evident.

To conclude, these studies contribute to this project by providing information about adult learning. Firstly, Chang (2013) and Cassell (2011) support the idea that society has a fundamental role in adult learning. Chang (2013) found that the change of social needs has determined the focus of adult learning theorization throughout time because depending on society's needs, adults are taught to meet these needs and help to improve the society; additionally, adults are seen as important social actors. Regarding this concern, Cassell (2011) stated that learning a language is beneficial for adults to enhance their interaction with other people that speak English; therefore, in this case, language learning has social interactional purposes.

Secondly, Cassell (2011) and Muñóz and García (2015) highlight the fact that motivation is a key element involved in adult learning. For example, Cassell (2011) investigated what factors motivate third age adults and she found that the need and benefits having a good proficiency in English increase their motivation to learn. Alike, Muñoz and García (2015) pointed out that motivation is a factor that should be considered when planning a class for elderly people since when teachers contribute to meaningful learning, adult learners recognize that what they are learning is valuable for their daily lives and this have a positive impact on their motivation to learn. It can be concluded that Chang (2013), Cassell (2011), and Muñóz y García (2015) support that the andragogical approach is appropriate for teaching senior citizens since children learning (pedagogy) is different from adult learning (andragogy). On the other hand, the studies conducted by Jubran (2011) and Gorjian, Hayati, and Barazandeh (2012) contribute to

this project in terms of providing information about the benefits of implementing the multisensory approach in the EFL class.

Firstly, Jubran (2011) and Gorjian, Hayati, and Barazandeh (2012) defend the idea that the multisensory approach is effective and beneficial for students to increase their vocabulary learning. For instance, Jubran (2011) found that that the experimental group, who was taught through the multisensory approach, improved significantly their English vocabulary. Similarly, Gorjian, Hayati, and Barazandeh (2012) established that using multisensory techniques is effective for teaching vocabulary to EFL beginner learners. Secondly, Jubran (2011) and Gorjian, Hayati, and Barazandeh (2012) agreed on the fact that the multisensory approach help students to enhance their overall English proficiency level. For example, Jubran (2011) found that the experimental group had better English achievement than the control group. Correspondingly, Gorjian, Hayati, and Barazandeh (2012) evidenced a relationship between teaching English through multisensory modalities and learners' language development.

It must be mention that there are some weaknesses presented in the previous articles. Firstly, the lack of studies on the articulation between teaching vocabulary through multisensory approach to older adult learners. Secondly, the lack of studies on methodologies to teach third age adults. Additionally, the fact that four of the researches included were conducted in countries different from Colombia can be considered another drawback. However, these weaknesses make this research more innovative since it is aimed to address these needs. Finally, to sum up, the studies included in this literature review have contributed to the construction of the bases for teaching vocabulary to elderly through the implementation of the multisensory approach in the sense that they provide important insights of the basic concepts related to this research; additionally, they take into consideration the special characteristics of adult learning and the

benefits of using the multisensory approach in teaching-learning processes. Additionally, having clear several authors' insights on adult education and the multisensory approach provides a path to follow during the application of this study in the Colombian context.

5. Methodology

The following section describes all the information that was relevant for the implementation of this study. Firstly, the nature of this research will be explained in terms of the type of study and research. Moreover, important facts regarding the current situation of older adults in Colombia will be presented along with the context and participants of this project. Additionally, the role that participants and researchers played in this study will be addressed. Finally, the data collecting methods, instructional design and ethical considerations will be presented and explained.

5.1 Type of study

This project is framed as qualitative research, which according to Merriam (1998) involves different characteristics definite for this concept. Firstly, qualitative research focuses on the general understanding of inductive processes within a particular context. Secondly, the researcher is the primary instrument of data collection and analysis. Thirdly, the product is richly descriptive in regards to behaviors, attitudes and outcomes concerning the project. In order to conduct a qualitative study, researchers should aim to understand how participants interpret their experiences from a specific case that occurs in a particular location; thus, researchers adopt different procedures in order to collect evidence of the participants' perspectives related to a particular situation. All of these characteristics are integrated to collect data, which the

researcher interprets and analyzes afterwards to provide a description about the related phenomena.

As pointed out by Denzin and Lincoln (2005), "qualitative researchers study things in their natural settings, attempting to make sense of or interpret phenomena in terms of the meanings people bring to them" (p. 3). In other words, in this research study, researchers sought to understand events and processes that occurred regarding the teaching of English vocabulary to a specific older adult population in a nursing home. In that sense, the researchers analyzed the project events and results based on the older adults' perceptions and their own.

5.2 Type of research

According to Gerring (2007), a case study is an "intensive study of a single unit wherever the aim is to shed light on a question pertaining to a broader class of units"; whose definition is coherent with the nature of this particular project. In this way, researchers implemented this study with a small group of elders, and the data analysis offered valuable results that are relevant for a larger third age population at a local and global extent. Considering the general purpose of this study, it is a descriptive case study since the researchers aimed to explain in detail the project impact on both the participants and the educational field. According to Yin (2003), a descriptive case study is the "description of an intervention or phenomenon and the real-life context in which it occurred".

5.3 Context

This study took place on Risaralda, Colombia, which is located in the Andean region, and it constitutes a wide area of the "Eje Cafetero". Specifically, this project was conducted in Risaralda`s capital city, Pereira. Before addressing the local factors concerning elders' education and lifestyle, it is crucial to describe first the general circumstances surrounding this population

in Colombia. According to law statute 1276 of 2009, Colombian citizens become third age adults after turning 60 years old. Regarding this concern, the *Departamento Administrativo Nacional de Estadística* (DANE) established that almost six percent of Colombia's population are older adults, which means that 2´612.508 Colombians are 60 years of age or older.

In addition, it is important to remark that in Colombia, the older adults' growth rate is currently at 4% while general population rate is only at 1.9% per year. This means that by 2050 more than 20% of Colombia population will be 60 years old or even older, which is a considerable high amount. By taking into account these statistics, the Colombian government have designed several national policies aimed to improve third age adults' life conditions. The most representative of them is "*Colombia Mayor*", which aims to improve older population currently living conditions. Through this program, the Colombian Government attempts to provide integral support to third age adults. Moreover, the law statute 1850 of 2017 establishes legal protection for the older population such as the penalization of intrafamily abuse and abandonment, which demonstrates significant advances towards the enhancement of third age adults' life quality.

When referring to governmental policies in Pereira, there are almost 70.000 older adults, and only 10.500 of them are actually receiving subsidies from the national program "*Colombia Mayor*". Also, it is relevant to state that there are 46 elders' protection centers and nursing homes; in addition to this, Pereira has seven "*Centros de Bienestar del Anciano*" (C.B.A). The administrative functionaries receive a monthly subsidy of $650.000 for every older adult in the CBA, and those resources are designated to cover the older adults' medical expenses. Despite the fact that these programs and laws include policies for the protection and recreation of the elderly population, they do not take into account education as a relevant factor to address.

The education should be an integral part of these programs, projects and laws, and it should be based on the current needs of Colombian society, which embraces bilingualism. Accordingly, the Pereira government should promote innovative programs with the objective of engaging the elderly in the learning of EFL. In order to make an impact on this particular population, students from the program Bachelor in Bilingualism strived to positively affect elders' education by using the multisensory approach to foster their English vocabulary knowledge. This project was implemented in one of the 46 nursing homes mentioned before, which is "El Divino Pastor". It is important to remark that other organizations such as public schools, religious groups and governmental functionaries have intended to enhance older adults' welfare through physical activities, crafts, and social work. Nonetheless, as the participants of this project stated, educational programs and courses had not been regularly implemented at the nursing home, which demonstrated a deficiency concerning the effectiveness of older adults' education.

5.4 Setting: El Divino Pastor

The nursing home El Divino Pastor has had a long and remarkable legacy of work with the third age adults. The care staff is integrated by two nurses who accompany and help the elderly the 24 hours of each day of the week during different shifts; also, there is one person responsible of the kitchen, one woman responsible for the cleaning, and four people supervising and managing the home. Additionally, there are two geriatric professionals attending the older adults, one is financed by the Pereira government and the other one is part of the home staff. This nursing home has two floors and one terrace where elderly can walk and rest. Each elder has a bed which are placed in different rooms where elders can sleep and spend their time. This

institution provides the conditions for the appropriate personal care, comfort and well-being of the third-age people that live there.

5.5 Participants:

This project directly impacted two populations who benefited from the outcomes of its implementation. the first population was the learners, who are elderly people living in the nursing home "*El Divino Pastor*". the second population was the researchers, who are three students of the *Licenciatura en Bilingüismo con Énfasis en Inglés,* from *Universidad Tecnológica de Pereira*. The participants involved in the current project conformed a small group of 6 healthy third-age adults with basic or missing academic background. Some of these participants were qualified as "vulnerable" population since their families do not support them anymore. Therefore, they do not have any additional aid different from the one provided by the nursing home and the local administration. These elderly learners have limited background on bilingual education, which means that they have a low proficiency level in the English language. Working with this specific population provided the opportunity to develop this research, which led to draw meaningful conclusions from the implementation of the multisensory approach through andragogy.

5.6 Role of the older adult learners

The role of the third-age adult learners was to complete English learning tasks designed specifically with the objective of promoting students learning of English vocabulary from an andragogic approach. In these tasks, the elderly learners had to use their senses in order to convey meaning and communicate using the English target vocabulary.

5.7 Role of the researchers

In order to successfully conduct this study, the researchers had to exchange between several roles. To begin with, they designed and implemented different lesson plans that integrated tasks involving andragogic principles and the multisensory approach. Also, they taught the lessons and analyzed the data, not only by strictly following the lesson plan, but also by adapting it depending on the required outcome. Furthermore, the researchers observed the sessions in order to collect data for further analysis and decisions concerning the project. In addition, the researchers applied the four stages proposed by Howell (1972) throughout the implementations in order to assure their effectiveness: 1) establishing rapport or getting to know the people, 2) immersing oneself in the field, 3) recording data and observations, and 4) consolidating the information gathered. Finally, the role of each researcher varied as needed since they had to design and implement the lessons at different moments.

5.8 Data collection methods

5.8.1 Interviews

Regardless of the researchers' influence over the project's implementation and outcomes, the participants also play a major role in any research project since they are directly impacted by the researchers' practices. For that reason, it is crucial to collect and interpret their perceptions, behaviors and attitudes towards the activities developed during the lessons. Accordingly, participants should express their personal thoughts and opinions freely, which requires the implementation of interviews at the beginning and at the end of the implementations. Therefore, the semi-structured interview was used since it is considered the most appropriate method to obtain relevant information about the participants. Merriam (1998) defines semi-structured interviews as those containing a balanced amount of close-ended and open-ended questions. This

method offered a wider range for the formulation of questions within this research, which

enriched the answers provided by the older adult population in "El Divino Pastor".

Flipp and Pollien (2011), stated that there is strong evidence supporting the assumption of how

interviewers' behavior influence their respondents' truthfulness and willingness to answer

questions. Therefore, the interviewers' role within this research was to inquire accurate concerns

as well as to create an appropriate rapport with the older adult interviewed. In addition, the

authors also suggest to perform two interviews, which are conducted at the beginning and the

end of the implementation and it is aimed to identify participants' perception changes towards

the research practices. Those perceptions were mainly related to older adults' motivations, self-

esteem, behavior and target vocabulary development.

5.8.2 Journals

Merriam (2009) points out that the researcher is the main responsible for collecting data

based on the observations and implementations. In this sense, researchers require the most

appropriate method to collect details concerning the project in order to enhance their outcomes,

decisions or even analysis. Wherefore, journals are a useful method as they allow the

simultaneous observation, collection and interpretation of data retrieved from the researchers'

immediate experience. According to Bonilla and Rodriguez (1997), journals enrich research

practices through the recording of a vast quantity of experiences within the project; thus, it

constantly supports the collection of data and its relentless organization. Finally, the journal

cannot be limited to a certain criterion since it portrays direct experience that otherwise would be

unrecognized, which demonstrates its value on research practices.

As an instrument that allows to organize, monitor and analyze specific   non-quantitative aspects

of any study, journals enrich teaching and learning practices. Regarding this specific project,

journals implementation enabled the interpretation of andragogic principles based on older adults' behaviors, aptitudes and attitudes during the classes. Besides, this method helped the researchers to follow the participants' adaptation to the multisensory approach in terms of their vocabulary learning. It is also important to remark that since this project embraced the complex phenomena of teaching and learning, the journals had as main priority to collect information about target vocabulary usage, assessment, strategies, motivation, and attitudes. In this sense, the implementers were responsible for recording the older adults' responses towards the project throughout the ten lessons. Finally, the collected information was useful to analyze the project's attempted purpose, findings and contribution to the field.

5.8.3 Observation

One of the most common instruments for collecting data are observations. Observations, as a data collection method, are characterized by taking place in the actual spot in which the phenomenon of interest is occurring. For this reason, data represents first hand encounter with the occurrence that is being analyzed. In addition, conducting observations can provide both qualitative (narratives) and quantitative data (length of interactions or number of questions); however, when there is lack of practice, observations can fall into researchers' subjectivity. Therefore, as Merriam (1998) pointed out, "conducting observations is a deliberative process and not an unpremeditated action; consequently, observing is a skill that can be learned through practice". In order to practice, common activities such as watching films, being an observer in public places or even at university represent useful strategies to practice in case they are done consciously. Also, according to Merriam (2016), the *what* and *who* to observe depends on the purpose, problem, and question of interest of the study. To conclude, considering Merriam (2016), it is important to highlight that observations allow the researcher to record data as it is

occurring, and it can be used to have a record of the context or specific incidents. Thus, it guarantees (together with film material) an objective and fresh perspective of events.

Finally, the researchers observed the adults throughout the implementation of the lessons, while they pursued as a main objective the collection of data regarding their learning process and how the andragogic principles and the multisensory approach impacted it.

5.9 Instructional Design

The attempted objective of this project was to support the older adults' vocabulary learning process. To do so, the multisensory approach and andragogic principles guided the various teaching practices for its implementation. In addition, as suggested by Knowles (1985), the course content also considered the participants' preferences and experiences, which had a direct relationship with the lexical syllabus and outcomes.

The participants' expected performance embraced two main aspects. Firstly, they should remember the taught vocabulary and use it according to the context. Secondly, they should use different language functions along with the taught vocabulary for two purposes: Describe objects and express preferences. Regarding the lesson planning process, it followed four main procedures and three stages, which were presentation, practice and production. On top of that, the first procedure was to decide the lesson content and target vocabulary, which had to be related with the stimulation of one sense. Then, both content and vocabulary were aligned with the Andragogic Principles proposed by Knowles (1980). After selecting the main Andragogic Principle, different activities and materials were designed to elicit the participants' expected performance, and it involved the senses stimulation and language use.

The materials relied on the required sensorial stimulation for each lesson plan. Therefore, their selection depended on the objective, stimulated sense and activities for it. In general terms, such

materials included objects, food, fragrances, musical instruments, flashcards, clay and sounds. Furthermore, they were used to introduce the target vocabulary by stimulating the participants' senses, and they functioned as assessment instruments to check their performance and progress.

The participants were assessed according to their language performance and artistic outcomes at the end of each lesson through formative assessments. In regards to the assessment instruments for this project, the implementers applied different criteria related to speaking skills, which were used to provide feedback. Moreover, the purpose of these instruments was to check the participants' progress in terms of language performance (vocabulary and language functions).

5.10 Ethical Considerations

"In the conduct of research several key principles and actions must be observed and preserved" (Rogers, 1987, p.456). To develop this project, it was imperative to cover some ethical considerations that guaranteed the protection of dignity, comfort and welfare of the research population. Accordingly, this section will review the ethical principles proposed by Lankshear and Knobel (2004): designing valid research, obtaining informed consent, avoiding deception, minimizing intrusion, ensuring confidentiality, minimizing risk of harm, and demonstrating respect.

5.10.1 Designing Valid Research

In order to theoretically support the reliability of the findings, the instructional design of this project took into account two main theories within the educational field, which were the Multisensory approach and Andragogic Principles. In this sense, their purpose was to serve as a basis for the collection and support of data concerning the participants' vocabulary development and researchers' teaching strategies. Nonetheless, the interpretation of data and its strict relation with the project literature review and theoretical support did not favor the project interests at the

time of reporting the empirical evidence, thus it assured the findings reliability regardless of the outcome. Furthermore, the data collection instruments used throughout this project aimed to provide trustworthy information about the participants' learning process, perceptions and interests in regards to the research questions and objectives. Finally, as mentioned before, such data collection methods were journals, interviews and observations.

5.10.2 Obtaining Informed Consent

As part of the ethical matters concerning this project, it was of utmost importance to present detailed information to the participants regarding the research objectives, the purpose of the study, the methodology to develop the project, the role of implementers and participants, and their acceptance to participate as well as their right to decline at any point. Moreover, having provided the previous information, a consent form was developed, read, and explained to the participants who voluntarily agreed the terms and procedures of the implementations and the collection of data from their productions.

5.10.3 Avoiding Deception

Having provided information about the research, its objectives, and methodology to the participants, it was also necessary to consider the advantages that making part of this process would bring to the older adults regarding social and cognitive matters. Furthermore, the project set clear, objective, realistic, and honest parameters in order to establish these advantages with attainable expectations.

5.10.4 Minimizing Intrusion

Intrusion is a crucial concern when conducting a qualitative research since participants' emotional, personal and social backgrounds have an important influence over their performance and behavior. For that reason, all the personal information provided by the older adults, which

was collected through interviews, was strictly related to this particular project, also the researchers committed to respect the participants' privacy, decisions and willingness to be part of the learning process.

5.10.5 Ensuring Confidentiality

Another principle that allows to guarantee an ethically appropriate process of research is to protect the participants right of privacy. Hence, the researchers had to follow a specific protocol that ensured the protection of the participants' identity and avoid disclosure of personal information. Accordingly, as part of this project development, the researchers committed not to reveal the older adults' identity by changing their names in the data analysis and findings sections.

5.10.6 Minimizing risk of harm & demonstrating respect

Taking into account the Andragogic principles concerning this project, it was necessary to create a suitable environment for learning based on respect, tolerance, empathy and encouragement. To do so, the researchers and participants agreed to follow certain roles during the implementations, which had a neutral nature to ease the interactions between both. Finally, in order to minimize participants' possible physical or mental harm, the researchers were informed about their current health state to avoid risky physical activities throughout the project.

6. Data Analysis

The main data collection methods used throughout this project were journals, observations, and interviews, whose purpose was to document its different teaching and learning events. Furthermore, such collected data serve as a basis to inform about the older adults' English vocabulary learning. For this project, it is necessary to analyze that information

according to the Grounded Theory proposed by Glaser and Strauss (1967), who defined it as a methodology to guide research on behavior through logical deduction. Accordingly, they proposed the constant comparative method to analyze and collect data based on a systematic set of procedures, whose aim is to develop a theory associated with the immediate context of research. The constant comparative method integrates four different stages: Comparing incidents applicable to each category, integrating categories and characteristics, and delimiting and writing the theory. Hence, the process followed in this research project consisted on: comparison, integration, delimitation, and theorization of the collected data.

1. *Comparing incidents applicable to each category*: According to Glaser and Strauss (1967), the analytical process for Qualitative Research starts with the categorization of data based on similar incidents and events. In this sense, this research embraces a set of categories related to Andragogic principles, methodology, and teaching-learning strategies. Those categories were developed depending on the characteristics evidenced in the conclusions and reflections of the data collection methods. Moreover, the information being classified required specific codes that accounted for the origin of the data and its further revision.

    Thus, these codes provide details regarding the exact part of the document where the data is located, the type of instrument that the data belongs to, and the researcher who sets the information. For instance, one of the codes obtained from journals presents the following format: "L3-L6;J1;LR", where "L3-L6" stands for the lines of the writing in which the data is found; "J1" refers to the instrument that justifies the information (in this case, journal) and its number (in this case, the first written journal); finally, "LR"

indicates the researcher responsible for executing the instrument (researcher Luisa Rojas). Similarly, observations obtained related codes such as "L14-L16;O3;JL". In the case of the interviews, the codes provide information about the questions asked to the participants and their names: "Q5;I2;LF", here "Q5" refers to the fifth question, "I2" is the second interview developed, and "LF" is the participant's nickname to ensure their confidentiality.

2. *Integrating categories and their properties*: Being that this is a long-term project, the data categories were pre-established during the previously conducted studies. Therefore, the analysis and integration of events into the already defined categories had a settled structure that was followed. This eased the process of deciding their properties in order to select suitable data for each category. Furthermore, similar or connected categories were combined into a general one that embraced the characteristics of both. In addition, if a category had several differences among its data, it was subdivided into fitting ones based on their properties.

3. *Delimiting theory:* Once the categories were established, the researchers proceeded to constantly analyze the collected data according to the theoretical basis of the study. Henceforth, it was possible to determine the unrelated parts of information for our research questions and objectives as well as those that directly addressed them. Moreover, the categories were organized considering teaching and learning aspects, which entailed the researcher to decide what specific research question each category accounted for.

4. *Writing theory:* Having carefully and systematically analyzed the data, the last stage consisted of writing the findings. Consequently, the researchers assigned an

interpretative title to each category, which was then described by presenting and

discussing specific events of the implementation based on the main theoretical

concepts for this study. Thus, the triangulation of this data led us to the following findings.

7. Findings and Discussions

The manifestation of andragogic traits on participants learning process.

7.1 *Older adults' motivation to learn and their willingness to participate during the lessons when being approached through their life experiences.*

Older adults, like any other learning population, vary from their preferences, approaches,

and strategies to learn a foreign language. In this case, such variations led to the systematic

recognition and manifestation of the participants' Andragogic traits based on their learning

characteristics. These Andragogic traits were intentionally considered through the

implementation of the multisensory approach in order to collect information about older adults'

characteristics to learn; That is to say, it triggered their existent traits through different teaching

and learning strategies based on the multisensory approach, which was being implemented to

promote English vocabulary learning. Thereby, that sensorial stimulation to learn English

vocabulary elicited from the participants their already existing andragogical tendencies, which

varied according to the lesson objective, task, materials, affective filter, background knowledge,

and input. As a consequence, the participants' behaviors such as interactions and collaborative

work, that also included their responses to the multisensory approach, were categorized

according to the Andragogy Principles proposed by Knowles (1980): Motivation to learn,

orientation to learn, readiness to learn, life experience, and self-concept.

The following paragraphs address our findings concerning the relationship between the collected data and the theory of adults' learning process, which mainly emphasizes on their behavioral traits instead of their language production. In this sense, the first finding embraces one of the previously addressed assumptions and also an unexpected trait regarding older adults' interests. The former trait refers to older adults' motivation to learn, and the latter refers to their willingness to participate in the sessions in relation to the appreciation of life experience, which was a crucial strategy to approach this population.

During the implementation of this project, a set of teaching and learning events fostered older adults' voluntary attendance to the sessions; thus, it resulted in the emergence of two main types of motivation regarded as, the willingness to participate and motivation to learn. While willingness to participate refers to their attendance to class and performance during the project, motivation to learn relates to older adults' internal desire to apply knowledge. Nonetheless, these phenomena corresponded to differentiated participants' responses, which included their presence and performance in relation to the lessons. Finally, participants' life experience, which is one of the main assumptions, contributed to the development of both motivation types inasmuch as it structured the strategies to approach older adults; aspects that will be addressed in the following paragraphs.

a) **Learners' willingness to participate:** Different from the aim of fostering older adults' English vocabulary knowledge, it was indeed necessary to analyze their attitudes and motivations in relation to all Andragogic assumptions. Respectively, one of the challenges to overcome when approaching older adults is to effectively assure their willingness to participate throughout the entire project; an attitude that refers to their attendance and performance during

the project. However, the appreciation of older adults' life experience proved to be a suitable strategy for teaching and learning.

Participants' previous knowledge and life experience (which is an assumption of Andragogy coined by Knowles (1980) as adult learner experience) had a paramount role within their participation and encouragement during the project; also, it was evident how widely known themes eased their interactions by enhancing their sociability. This means that they interacted more with other older adults, the facilitators and guests throughout the sessions in comparison to their regular basis. Additionally, their perceptions, customs, and memories were considered relevant by the researchers because they portrayed the group interests. Therefore, as the project advanced, the participants willingly started to take the initiative to participate in the activities that teachers proposed by discussing with peers and the facilitators aspects as their favorite foods, music preferences, beloved people or life itself within the content. For which further lessons evolved from the usual facilitators' intervention consisting of the presentation of English target vocabulary such as fruits or colors, to trigger group dialogues about their background in their native language. As a consequence, it became necessary to allow different moments for discussion in order to include participants' interests and experiences within the lesson plans, which meant that a community for vocabulary learning was formed inside the nursing home; also it is important to mention that such interactions were held in older adults' L1 inasmuch as the group was English vocabulary learners in development. Excerpts from Journals demonstrate how considering participants' previous experiences and background influences their involvement and willingness to be part of the lessons: In this particular session, the integration of aural stimulation and older adults' musical preferences through the multisensory approach resulted in an active interaction about participants' favorite song and stories related to it. Furthermore, learners had

the chance to experience a live band show where a group of musician played for them and gave

them the chance to sing and play some of the instruments they were going to learned in the target

language.

> J4/JL: *"It was a great engaging strategy to their musical preferences, including songs from authors like Julio Jaramillo, Andy Montañez, Caballero Gaucho, and Armando Moreno, along with sharing their stories as the basis for this lesson plan since older adults really enjoyed it, and they were motivated to share their thoughts, memories, and preferences for specific musical genres while learning the vocabulary of the instrument. Additionally, other older adults, who were different from the participants, joined the lesson with the purpose of telling their personal experiences with the shared songs."*

It was observed that the content from the lesson engaged the participants since it implied

aspects of personal experience, such as memories, events, likes and love ones, linked to musical

preferences. It is important to highlight that this type of activities have an important influence

over older adults' willingness to be part of a lesson. Different from younger learners' possible

reluctance to perform under the same specificities due to their limited experiences in relation to

this topic, older adults' experience contributes significantly to their interest and motivation to

participate during the lesson.

Beyond reviewing English vocabulary related to musical instruments, older adults

demonstrated enthusiasm due to that they were always ready not only to participate, but also to

undertake the pace of the session motivated by the possibility of sharing their experiences and

background knowledge in L1.

This are another samples from a journal and an observation that show how learner's live

experience trigger their interest to participate during the lessons. In this case, the intervention

was based on participants' preferences in terms of pets and animals, and it was a relevant topic

for them inasmuch as all learners had worked as farmers in the countryside. Moreover, since the

attempted stimulated sense for this lesson was audition, different animal sounds served as a basis

to introduce the target vocabulary in English.

> J9/JL: "*Before starting with the presentation stage, I wanted to know if the participants have had pets before, in order to build the target vocabulary based on their life experiences with animals. Therefore, when I asked about their pets, the participant LF expressed that he had a cat which "meowed", sound that was his characteristic one, and he told a story about it. After that, the rest of the group shared their pets' names and their preferences in terms of animals using their native language:*

> O9/LF: *¨Yo tenía un gatito y su nombre era Mambrú y era de color negro, el sonido que hace es el de todos los gatos miau, pero un día dejé la puerta de la casa abierta y me lo envenenaron".*
> O9/DS: *"Yo tuve un perrito su nombre era Pocker como la cerveza Poker, y precisamente le puse ese nombre porque era el que me cuidaba las borracheras cuando vivía en Filandia Quindío, y claro que ladraba así como ladran los perros, pero me da un poco de pena ladrar¨*
> 09/DW: *"tuve una perrita llamada Niña y ella era de la familia mía cuando vivíamos en Guapí, era una perrita pequeña entonces no ladraba muy duro. La tuvimos hasta que murió de viejita."*

The data from the journal and observation shows that addressing the English vocabulary

based on the learners' experiences brought their attention and increased their will to share their

anecdotes related to the topic. In such a way, the implementer was interested in older adults'

perspectives about pets before presenting the target vocabulary or lesson aim. Thus, he

encouraged learners to tell their stories and preferences about the subject, which allowed them to

participate on the construction of the session and determining its development.

During this another lesson, the integration of taste sense stimulus and older adults'

favorite flavors fostered their participation by allowing them to share different anecdotes related

to such theme. Among those anecdotes, they emphasized on how their favorite drinks reminisced

them of their younger-selves.

> J6/LR: *"Then, the implementer asks them to think about things they used to drink when they were younger, and they started sharing anecdotes from their youth, talking about alcoholic beverages and experiences linked to those drinks. There, the implementer*

introduces the word liquor and asks participants to repeat it. Then, the implementer passes around candies with the flavors of each of the beverages: first, they all try the coffee candy and say several times the word coffee; second, they receive the chocolate candy and are asked to repeat the corresponding word; last, they try the liquor candy and say the name of the beverage."

OB6/ AV:

- *LF: The coffee, chocolate, orange juice, jugo de paico, Brandy Domecq, Champaña, aguardiente, cerveza, Ron con Coca-Cola, Jengibre, Ron Viejo de Caldas. Todas esas bebidas me recuerdan mis años de parranda"*
- *DG: ¨El jugo de guayaba es muy bueno, y siempre lo tomaba cuando vivía con mi mujer. Cuando salía por ahí ya no tomaba jugo sino Ron Viejo de Caldas¨:*
- *DW: "A mí me gusta la Chicha, el guarapo, Manzanica, el Ron Viejo de Caldas, me recuerdan años en los que pasé muy bueno¨:*
- *DJA: ¨A mí me gusta el Vodka, y cuando vivía en puerto rico lo tomábamos mucho en las reuniones con la familia y con los amigos de juventud¨: DS: ¨ A mi me gustaba el aguardiente de joven."*

These journal and observation data provides a further example of how starting the lesson by approaching aspects of the participants' lives, triggered their enthusiasm to remember and talk about their preferences based on life experiences; being that the purpose of the session was that the learners identified vocabulary related to beverages, the intention of asking them about what they used to drink before was to generate interest in English target words based on their own perspectives and to build a pleasing environment for the interaction around the topic. Furthermore, it was also evident how their memories related to drinks settled the dynamics for the target vocabulary introduction by creating a direct relationship between anecdotes, words and flavors, which resulted in participants' voluntary interactions revolving the lesson content.

b) Motivation to learn: Knowles (1980) defines adults' motivation to learn as their reaction to specific desires of self-development or problem-solving scenarios, that foster the applicability of new knowledge. Accordingly, for participants' motivation to learn through this project, it was of considerable importance the coherence between their previous experience, background knowledge, target vocabulary, stimulated sense, and lesson objective.

The integration of the previously addressed aspects was crucial to align activities and objectives with older adults' internal motivation to learn. This implicated not only that vocabulary learning was based on participants' life experiences and interests, but also that target vocabulary had a clearly stated purpose during activities; which improved their overall performance as they were always aware of the connection between their life experience, target vocabulary, stimulated sense and lesson objective. As a result, it fostered their motivation to learn since the target vocabulary became comprehensible to use during tasks, and the lesson objectives eventually turned attainable.

Different excerpts from journals and observations depict how the focus on the learners' experiences had an impact on their motivation to continue learning.

> **J5/AV:** *"it was clear that all of them were committed and focused on the lesson objective since they were actively discussing their experiences in the nursing home along with the meaning, usage, and pronunciation of words; also they are progressively becoming a collaborative group of learners as evidenced by the constant support of the most advanced participants towards the less skilled ones. Furthermore, we have not lost any participant at this point of the project implementation, which is a great advance taking into account that their commitment is voluntary, and they can leave the session at any time. This is a clear corroboration of the participants' internal motivation to continue learning and being part of the project. "*

O5/JA: *No sé qué puedo decir, ya dijeron lo que iba a decir.*
> *DS: No, todavía no han dicho "vaso", y yo creo que eso puede ser redondo.*
> *JA: Sí, la forma de un vaso es redonda y profunda.*
> *DS: ¿Entonces como es la palabra que es parecida a circulo?*
> *LF: es circle y se pronuncia "circol" parecido a circo, y es como el reloj de Alfonso.*

The data from this implementation reveals how the possibility to describe objects from their nursing home enhanced the adults' interest in practicing and committing with the session. On that account, the connection of the target vocabulary with aspects of their contexts, which in this case refers to the nursing home and their experience living there, represented a reason to recognize the usefulness of the lesson objective, which encouraged them to use shapes

vocabulary purposefully in order to describe objects from their surroundings. As a further matter, it was observed how the participants took the learning process forward as they voluntarily helped each other to accomplish the lesson activities, also those with a higher language proficiency supported their partners' vocabulary learning by discussing the pronunciation of those words.

J9/JL: *"Despite the participants' reluctance to mimic the animals' sounds, they were motivated when identifying which sound represented a specific animal in English because it was directly related with the previously shared lesson objective, which was shared at the beginning of the lesson. Therefore, older adults were already conscious about what they had to accomplish at the end of the implementation which was to identify the different reviewed animals according to their characteristic sound. TO do so, they were going to listen it using headphones and a recorder with the purpose of assessing their vocabulary knowledge and stimulating their hearing sense."*

The aforementioned context portrays two important moments regarding older adults' motivation to learn when they encountered an unfamiliar situation such as mimicking animal sounds, that they do not usually experience during their daily routine in the nursing home. Therefore, it demonstrates how older adults rely on their life experiences to interpret the relevance of activities within the consecution of the main objective.

Firstly, the researcher stresses the fact that despite the participants' reluctant response to the proposed activity, they were still motivated to identify the target vocabulary according to animals' sounds replicated by the implementers. Secondly, the participants' awareness of the lesson objective allowed them to recognize the importance of the activity without having to perform it: Thereby, it indicates that older adults' internal motivation to learn was not limited by their attitudes towards one particular stage of the lesson inasmuch as they were committed to accomplishing the main objective, which involved practicing animals sounds and English words through the multisensory approach by building a shared connection between aural stimuli, English vocabulary and animal sound. Furthermore, due to their life experiences, they did not

require to mimic such sounds in order to comprehend the association between that aural

stimulation and the target vocabulary meaning.

> **J7/JL:***" I was able to recognize their motivation to use the target vocabulary since the beginning even though the more engaging stage for them was the presentation due to its gambling level, those games involve different random moments that increase older adults' motivation to play since they find it entertaining. Therefore, as the first activity for this lesson required to guess the texture and shape of a random object in order to win, older adults' demonstrated their involvement by using the target language with that clear purpose. They were also more confident about using the target vocabulary because they have already learnt them during lessons 2 and 5 respectively (textures and touching sensations along with object shapes).*
> *Furthermore, it is evident that this specific population is interested in gambling, and most of the games that they play inside the nursing home are related to it. Therefore, it may be advantageous to use their interest in gambling with target vocabulary, which during this lesson was related to the touch sense and object shapes, that could be used to win the game or the lesson goal".*

After the researcher identified the participants' experience and interest in gambling, it

became an element to align with the lesson activities since they demonstrated through

performance their endeavors to use the target vocabulary on games. As a result, such engagement

settled a specific context for vocabulary usage driven by the older adults' life experience and

internal motivation to play or win. Indeed, it is evident how the participants' motivation derived

from their existing confidence with routine activities, such as playing Parcheesi, that took place

at the nursing home; hence, their daily hobbies influence over the lesson plan fostered a

motivational learning process because it appropriately combined life experience, sensorial

stimulation, vocabulary usage, and lesson objective.

As supported by the previous journal excerpts, older adults' motivation to learn and

participate differ in nature due to several aspects such as learning environment, activities,

objectives, routines, or even materials. In this sense, while participants' motivation to learn was

driven by internal desires to develop lexical knowledge under specific conditions, their

willingness to participate depended on external stimulus unrelated to lexical input at first; and those stimuli included the recognition and integration of the group's interests into the lessons. However, both behaviors came to shared terms since they were built around participants' life experience, that articulated the implementation of teaching and learning events. Finally, it is necessary to relate these findings with theoretical concepts in order to state their concordance and discrepancies.

Firstly, according to Knowles (1980), adults' motivation to learn is intrinsic in nature due to the fact that they pursue education to accomplish professional or personal objectives. However, problem-solving circumstances also activate adults' motivation to learn and apply knowledge. In this regard, different lesson dynamics involving challenges and life experience motivated the participants to accomplish lesson objectives and tasks, which implicated the usage of their background and new lexicon. Mezirow (2000) refers to adult learning characteristic as the "figurative hook" of placement, and it develops through the assimilation of new concepts within adults' background knowledge and experiences. The author also states that by creating these figurative hooks, adults ease their learning process resulting in an enhanced motivation to learn and apply new knowledge. This aspect was clearly evidenced during the project as older adults progressively connected their life experiences with vocabulary learning as in the cases of the following themes: Gambling games, nursing-home objects, music genres, favorite drinks, foods, and animals.

From a theoretical perspective, older adult's willingness to participate corresponded to integrative and external motivations according to Krashen (1981). For this author, integrative motivation consists of various attitudes that a community holds towards Language learning, and it generally refers to the desire of being appreciated by the group members that speak the foreign

language. In this case, participants built a sense of partnership since their experiences played a paramount role during the project planning and execution, which resulted in a consistent motivation to be part of the lessons.

7.2. *Older adults' self-concept influence over their learning process to comprehend language tasks and produce English target vocabulary.*

Even though older adults' motivation to learn and participation emerged progressively and conjunctively during the project, their learning outcomes were driven by individual beliefs, skills, and strategies that eventually fostered collaborative work. One of the reasons for this individualization of their learning process relies on each participant's self-concept towards learning, which according to Sabbaghian (1979) is characterized by personal experience, beliefs, awareness, and initiatives to improve expected learning outcomes. Therefore, older adults' self-concept manifested during this project throughout the following actions: how they verified task instructions to improve their comprehension; how they created different learning strategies to use the target vocabulary; and how they perceived the relationship of English words and meanings according to self-made beliefs; which contributed to their understanding of the target vocabulary.

In this sense, the following data excerpts depict older adults' andragogic trait of self-concept towards implementers' instructions, learners' strategies, and linguistic production.

a) Verifying instructions: Firstly, it is important to mention that all implementations involved different vocabulary drills, which required solely linguistic production after a sensorial stimulation. For this particular lesson, the stimulated sense was hearing, and the language drill referred to in the following data excerpt as "word-chain" required participants to recognize and produce animals vocabulary; in that way, each of the adults was provided with a target word and their task was to say the name of their assigned animal and repeat the ones his partners had just

said. Hence, the data below, taken from an observation, evidences participants' initiative to

verify instructions to comprehend the expected outcome and perform the task.

> O10/LR: *The participants performed accurately when they stopped hesitating after fully understanding the word-chain game, and such understanding emerged from their analysis of the initial game instruction.*
> - *the participant SL stated that "Entonces debemos repetir las palabras que los demás dijeron antes y la que nos tocó para practicar todo lo que hemos visto hoy, ya entiendo. Es como difícil porque hay que tener buena memoria, pero ya entiendo que hay que hacer.*
> *Si quiere le explico DW porque nos equivocamos antes." in order to confirm what they had to do after previous partners' attempts.*
> *observer: From this conclusion, I noticed that the participants need to reconstruct the previously given instructions using their own words, expressions, and thoughts to completely follow them.*

As evidenced in that lesson procedure, participants' self-concept towards learning made

them reconstruct the implementer's instructions using their L1. This had the purpose of

confirming the task specificities before executing them again; which was indeed necessary since

they did not perform it accurately at first as stated by the observer. Therefore, it can be observed

how one of the participants took the initiative to clarify and verify instructions comprehension

after identifying his partners' challenges with the task expected performance. Rivers (2005)

discussed a dichotomy between metacognition and cognition by establishing two main behaviors

labeled as self-assessment and self-management, which are only set after individuals experience

educational instruction in either formal or informal settings resulting on their self-regulation of

behaviors. As a result, adults autonomously build metacognitive skills throughout their lives, and

they count with a solid self-concept integrated by self-assessment and management skills

regulating specific conditions for learning. In this particular case, their internalization of

instructions emerges as a basis for their learning process because they constantly sought to avoid

mistakes during the implementations. Accordingly, if older adults are hesitant about any procedure, they are either reluctant to perform, or they inaccurately execute the task.

b) **Learners' strategies:** Another important aspect of self-concept consists of how adults identify and adopt strategies in order to achieve their learning goals. Different from younger learners that usually copy and use their facilitators' suggested strategies, older adults develop their own according to their personal beliefs and awareness towards learning needs and challenges. They also apply already existing strategies that proved to be effective in previous experiences.

Moreover, the following journal excerpt gives evidence of participants' strategies development based on L1 phonemes and known words, which were related to the shapes vocabulary and sight stimulation worked out in that particular lesson.

> J5/AP: *the participants used their own strategy to learn the English Language phonemes, which is mainly to find similar phonemes within their L1 to practice the target vocabulary pronunciation. A clear example of this, is how the participant LF, who has been part of previous bilingual projects within the nursing home, helped DW and others to pronounce the word circle by using its Spanish cognate "circulo" and a non-meaning related word "circo". After that example, other participants started to find related words that eased the comprehension of target vocabulary, and those words were Spanish cognates either in terms of meaning or pronunciation".*

> O5/LF: *LF: "Circle y círculo se dicen muy parecido, la diferencia es que en inglés la palabra es más corta. Como si se dijera solo al principio o a medias…Primero es circ como en español y luego ol como en la palabra olmo."*

Based on the events described in the previously addressed journal, as the data shows how this participant developed an assimilation strategy to support his partners within their comprehension of English words; and such strategy was based on his self-concept towards language learning. It is important to mention that the origin of this assimilation strategy was unknown given the fact that he was part of previous bilingual projects within the nursing home.

In addition, his strategy consisted of approaching English words pronunciation through known words in Spanish; which had a positive impact as the example used was appropriate for the whole group. Therefore, this participant assumed that the linguistic assimilation of unknown phonemes was eased through the comparison of similar words in the native language, and such strategy application portrayed his self-constructed preferences in terms of English vocabulary learning.

It is also important to remark that this participant had previous experience with a similar project within the nursing home; which reflects the self-constructed strategies that he had developed or copied to learn English including the aforementioned one. Finally, all participants started to apply different learning strategies that proved to be effective for comprehending or producing language, and that they have evidenced throughout the implementation of the project. This phenomenon indicated that older adults' self-concept towards learning eventually changes according to internal and external factors such as: strategies usefulness, individual learning rate, and peers influence over their learning process.

As stated by Sabbaghian (1979), learning processes rely greatly on learners' previous experiences and background, and their existing knowledge work as a basis for the new information being acquired. This was evidenced along with adults' participation in the implementations, especially considering that the target vocabulary in each lesson was intended to address features related to the participants' context and that made part of their previous knowledge.

The following fragment of a journal portrays an example of how the participants built the meaning of target vocabulary based on their self-constructed perceptions; in this lesson, the

older adults had to listen to some animal sounds and organize the flashcards corresponding to

such animals in the same order as they listened to.

> *J9/JL: Their overall performance was positive despite the fact that they did*
> *not recognize at first the difference between the chicken and birds sounds.*
> *However, when listening to both recordings in a row, they were able to correct their mistake by*
> *properly ordering the flashcards. In that sense, I consider that mistake to be related with*
> *their knowledge of both words and an*
> *overgeneralization of what a "bird" sound consists of. For instance, they stated that a chicken*
> *is a bird. Therefore, they did not think that their answer was incorrect even though I*
> *explained that both sounds corresponded to different flashcards.*

> *O9/LR: One by one, the participants listen to the sounds and try to*
> *organize the cards; it is observed that they don't have issues listening and organizing the*
> *images; however, most of them confused two of the animals - bird and chicken, as*
> *evidenced, they confused these animals being that the chicken is also classified as a*
> *bird. for instance: DS stated that "Yo creo que Chicken puede también ser Bird ya que las*
> *gallinas también son aves, entonces hacen parte de las especies de aves domésticas".*

The data demonstrates how older adults' perceptions influence their understanding of

English words. As it is evidenced in the excerpt, the objective of the lesson was that the

participants learned animals vocabulary based on their sounds, and this vocabulary included the

target words "bird" and "chicken" among others. Moreover, the production stage of the session

expected the learners to identify a given animal by listening to its sound; then, after the

participants heard all the animals and organized them accordingly, the learners were expected to

say the English word for each of the animals. In this respect, when some of the participants

listened to the chicken they referred to the flashcard of the bird, instead of the chicken. Then,

when the sound of the bird was played, they realized that the first sound they had heard

corresponded to the chicken and not to the bird. Therefore, it was evident how they

overgeneralized two related concepts by including a specific word (chicken) within broader

category (bird). Once all of the older adults had completed the task, the implementer provided

feedback and socialized the activity and their performance, then, one of the participants expressed, in the L1, that when he listened to the bird sound, he chose the chicken flashcard because chickens are also birds. This finding is important evidence of how adult learners make use of their current general knowledge of the world and can employ it in the learning of English vocabulary.

According to the previous analyses, an important extent of older adults' learning rely on their self-concept, that is, their own life experiences, perceptions, and beliefs help to construct the learning path and frame their performance and strategies along such process. As the data evidenced, older adults' appropriation of the instructions helped them comprehend the expected outcomes and carry out the activities successfully; furthermore, their use of strategies contributed to the assimilation of the linguistic input; and finally, participants' self-perceptions facilitated building the meaning of target vocabulary. These findings will be now discussed according to the andragogy theory.

First of all, adult learning is characterized by the autonomy in undertaking processes and the initiative in guiding personal improvements and achievements. As Chametzky (2014) proposes, self-direction is one of the elements involved in andragogic learning environments and an essential aspect for adults to consciously lead their development. Accordingly, learners' experiences and background influence their ability to guide their learning process. Throughout the language teaching opportunities, and especially the production stages of this project, the older adults identified the necessity to take charge whenever instructions were provided with the objective of comprehending activities and self-direct their performance, which is an aspect embedded to their self-concept traits. On top of that, they used the directions given by the

implementers to re-construct them in a way that they could not only assimilate the task

instructions but also help their partners understand them.

According to Knowles (1980), adults learning is characterized by the progressive usage

of strategies, which they assess to identify their effectivity in relation to learning needs and

objectives. In an andragogic educational environment, adults self-generate and direct their own

strategies in order to approach previously diagnosed challenges; also they are able to take the

initiative within a group to enhance learning practices through their self-generated strategies. In

this sense, such self-concept trait emerged during this project when older adults reconstructed

target vocabulary meaning and pronunciation. Indeed; participants required to assure English

words form and usage before producing them, and this eventually led to the development of a

strategy based on L1 concepts and phonemes. The previously addressed strategy was first

applied by one of the participants, and its effectiveness to comprehend the target vocabulary

consolidated its usage among other older adults. Thus, this autonomous action demonstrates

participants' initiative to self-assess their learning process and adapt depending on their progress,

which is influenced by their peers' self-constructed strategies and group interactions to apply

them.

7.3. *Older adults' orientation to learn as a means to complete learning tasks while using English vocabulary.*

It is now necessary to address older adults' orientation to learn; which is the Andragogic

trait that structures the purposeful application of knowledge within problem-solving scenarios.

Adults' education has been based on problem-solving or social change purposes, and both

aspects rely on adults' self-development desires and contextual needs (Chang, 2013). Thus,

adults' orientation to learn depends greatly on knowledge applicability under specific situations,

that include their personal or collective interests. In this project, participants' orientation to learn

derived from their usage of English vocabulary and senses to complete learning tasks, also this

Andragogic trait was influenced by external factors inasmuch as the facilitators designed the

lesson materials and procedures according to participants' interests.

In this sense, the following data excerpts depict older adults' orientation to learn and

apply English vocabulary for lesson objectives accomplishment; also it portrays how they

completed the language tasks by using their senses. Finally, participants' orientation to learn is

also addressed according to their own perceptions and interests.

a) Older adults' use of senses to convey L2 words meaning: Based on the research
objectives of the project, all the implementations involved stimulating one of the participants'
senses to facilitate the learning of English vocabulary. In this particular session, the stimulated
sense was the taste, and the target vocabulary consisted of three different flavors (coffee,
chocolate, and liquor) that they tasted through candies. Furthermore, the learners' task was to
taste one of those flavors, create a drawing about the beverage that the candy represented, then
they had to explain it using L2 by saying "This is coffee". This lesson procedure required an
appropriate meaning construction based on sensorial stimulation and its relationship with the
target vocabulary, which older adults had to comprehend in order to accomplish the expected
performance. Therefore, the following instrument describes older adults' orientation to learn
regarding the application of knowledge, based on the recognition of words through sensorial
stimulation.

J6;LR: Finally, the implementer explains the last activity in which they will taste one of the

flavors, closed eyes, and represent in a drawing the corresponding beverage. The

participants receive and taste one of the candies and start drawing; it can be

observed that they all connected the flavors to the corresponding beverage, since

everyone represented in their drawings the assigned beverage. After finishing their

drawings, they are asked to explain them and say the target vocabulary: all of the

participants were able to use the words coffee and chocolate appropriately, in

regards to the word liquor, most of them were able to recognize it, however, it was

challenging for them to pronounce it.

O6;AP: "DS: fue el primer participante en llevarlo a cabo donde la implementadora le pone la

banana en la mano y se come el dulce, dependiendo de la banana que comió, el

participante representa   ese sabor en este dibujo y dice la palabra en inglés Liquor DJA

es el segundo participante y aquí dibujó el dulce que saboreó el día de la

implementación y dijo la palabra en inglés coffee"

The previous data demonstrates how older adults orientated their learning through the

sense of taste to apply the learned vocabulary and perform a task. As mentioned in the excerpt,

this lesson objective was that the participants learned the name of three common beverages by

means of tasting them to create a flavor-word meaning relation. Accordingly, each participant

was provided with one of the flavors and once they tasted it, they were asked to draw the

corresponding beverage and to explain their outcome to the group using the vocabulary. For

instance, one of the participants tasted a coffee candy; thus, he drew a cup of coffee. This

procedure allowed us to observe an important aspect concerning adults' ability to guide their

learning throughout the two parts of the activity, which consisted of tasting and drawing. First,

the participants used the sensory stimuli to apply existing knowledge like the flavor of each drink

to create the drawing. And second, they demonstrated the learning of new knowledge (English

vocabulary) to complete the task by explaining their assigned flavor and the beverage drawing.

Therefore, in concordance with Chang (2013) and Knowles (1980), participants' orientation to

learn obeyed to an external problem-solving scenario; that involved the application of

experience, background knowledge, and new knowledge to produce a linguistic and artistic

outcome.

b) Words usage: In addition to constructing words meaning through sensorial stimulation, older adults also oriented their learning process by interpreting English target vocabulary and grammatical structures. This interpretation strategy had as the main purpose to support the lesson objective achievement. Additionally, it contributed to the application of previously learned vocabulary under various tasks; which involved sentence frames usage in order to express a language function. During the following implementation, the language function was to describe objects (triangle, rectangle, square, and circle) texture (soft, rough, hot and cold) through the touching sense, while the language task consisted of creating simple sentences by using isolated words. Therefore, participants' expected performance was to appropriately classify orally each object and its corresponding texture.

J7; JL: The productive stage main requirement was to rely solely on the touching sense to identify the object and English vocabulary. Nonetheless, their performance was different from what was required during the previous implementations inasmuch as they had to work in pairs to construct a simple sentence in English, which had to describe the object shape and its texture. It is important to remark that as this implementation was focused on stimulating the touching sense, the participants were blindfolded while identifying the object shape and texture. In this regard, Participants DW and DS: The triangle is soft. I consider this productive stage to be the most demanding so far in terms of language use since they had to create a sentence including an object and a texture. In addition, the participants needed to use the language chunk "The object is". By taking into account all the previous aspects, I recognized a similar performance between the pairs inasmuch as they had to remember one word at a time before creating the whole sentence. As an example, when I asked the participants DS and DW about the shape and texture of their object, they identified first the object triangular shape and then its rough texture. Only after that classification procedure, they were able to create the sentence "the triangle is soft". It is important to mention that I did not provide an example on how to create the sentence.

O7;AP:" ***2)****El implementador JL les pregunta what was the shape? It was a circle. Luego hace la misma pregunta pero uno de los dos ya sabía la respuesta, el implementador les pregunta ¿Lo que ustedes tocaron? Segundo grupo: DG y DF: Inmediatamente DF dice ¨Circle soft¨ Uno de los participantes ya sabía lo que el implementador les iba preguntar y esto le sirvió al otro participante para decir la palabra en inglés, por lo que ambos fueron capaces de identificar la forma aunque uno de los dos pudo identificar la textura del objeto. Luego ambos dicen ¨Soft¨ como en la primera pregunta uno de los dos ya*

sabía cómo era su textura, el otro participante del mismo equipo pudo identificar la textura y decir la palabra en inglés, ya que, su compañero de trabajo le ayudó a él para decir la palabra en inglés.

This data excerpt portrays adults' interpretation strategy within the application of vocabulary, and it also addresses participants' orientation to learn those words as a requirement for the production task. Accordingly, adults' orientation to learn implicates a series of premeditated actions that result in a concrete solution for a specific learning challenge (Chamotzky, 2014). That is to say that adults implement a structured plan in order to obtain a pre-established outcome, which reflects an expected solution within the problem-solving scenario.

 In this particular case, older adults applied their knowledge with the purpose of attaining the lesson objective, which was mainly to create a simple sentence orally. In addition, participants autonomously oriented their vocabulary usage through a specific plan since the facilitators did not intervene on instructing how to construct the sentence. The aforementioned plan consisted of identifying, classifying, and using previously learned words along with a new grammatical structure, and its execution followed this sequence. Firstly, participants recognized the object shape by using their touching sense, then they recalled the required word (triangle) by appealing to their English vocabulary repertoire. Secondly, after they applied the same procedure to identify the object texture, they continued to learn the language chunk as requested during the productive stage. Finally, older adults completed the implementation task by interpreting the language chunk meaning and usage as demonstrated through their linguistic outcome, which was the following sentence: *the triangle is soft*.

c) Personal perceptions and interests: Another aspect that influences adults' orientation to learn is their perspective towards the purpose of learning as well as their understanding of the

applicability of new knowledge. Whenever they identify the relevance of the learning process together with its usefulness in the immediate context, adult learners are able to orientate their process (Knowles, 1980). Similarly, older adults' perception of target vocabulary usefulness allowed them to undertake their own learning. In this respect, the following excerpts present part of an interview conducted with two of the participants at the end of the implementation process, which evidences the previously addressed conclusion about their orientation to learn.

Q5;I2;DS: *Escuché cosas que nunca en la vida había escuchado, entonces fue duro. Pero fue algo especial porque yo nunca en la vida había escuchado como se daba una clase de inglés, para mí fue una primera vez, a los 76 años me di cuenta cómo se aprende inglés, y como se usaban algunas palabras. Fue una sorpresa darme cuenta que aún puedo aprender palabras nuevas, y usarlas como esta vez en inglés. No recuerdo todo lo que me enseñaron, pero si la mayoría como las frutas, las formas, las texturas y los animales.*

Q5;82;LF: *Si, yo no conocía las palabras "soft y rough" , se me quedaron porque no las conocía. Ustedes se manejaron muy bien con nosotros, su presencia me alegra. Ustedes fueron los primeros en entrevistarnos y preguntar qué nos gustaba hacer.*

As evidenced during the first interview, this participant recognized the usefulness and applicability of English words within a specific context; besides, he labeled the different categories of words according to what was learned. His orientation to learn remarked his perception about the learning process inasmuch as he classified it as a valuable experience. Thus, the consistent usage of a foreign language encouraged him to continue learning despite his age, which changed his beliefs in relation to his skills. Additionally, the participant stated not only that he was able to recall the target vocabulary, but also that he applied the lexical content throughout the project implementation. This perspective about knowledge applicability fostered their conscious learning practices by establishing a clear purpose to accomplish language tasks. Hence, it portrayed the Andragogic trait of orientation to learn. Moreover, the other participant's answer refers to his inner desire to develop his English lexicon by purposefully selecting the words to learn. Since this participant had a previous experience learning English, his orientation

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to learn emerged autonomously after identifying two new concepts and their lexical form. Therefore, he was able to guide his learning practices by focusing on understanding previously unknown words. This demonstrates the requirement of knowledge purpose and applicability to foster this andragogic trait within adult learners.

A common concern of the Andragogic model is the classroom dynamics between facilitators and adult learners since their relationship does not revolve around authoritative figures. Therefore, adult learners are supposed to be capable of orienting their own learning process without the constant support of a teacher, and they do it through classifying knowledge according to the contextual needs. However, as it is expected with any type of population, adults also differ in their orientation to learn. Hence, this Andragogic trait is occasionally replaced by Pedagogically oriented learning according to Deveci (2007), who states that some adult learners rely on external authorities such as teachers or curricula to guide their learning practices. This orientation to learn shift occurs when adult learners do not recognize the applicability of knowledge; thus, they do not relate the new acquired information or skills with a problem-solving scenario without additional support. On the other hand, Merriam (2001) clarified that this need for a guided orientation to learn does not overlap other Andragogic traits; instead, the author concluded that adults usually need help to overcome inhibitions, behaviors, and beliefs about learning, which consequently reassures their self-concept, self-directedness, orientation, and motivation to learn.

In relation to this project, older adults' orientation to learn was flexible because it gradually changed in nature from Pedagogical to Andragogic. In this sense, the participants did not decide autonomously to learn English without the researchers' invitation and influence, which indicates an initial Pedagogically oriented learning since the facilitators provided the

learning experiences and strategies. However, as reported in the data collection methods, older adults eventually took the initiative of their learning process by applying senses, strategies, and experiences to complete language tasks. This behavioral change implicates that the participants were able to identify the applicability of English vocabulary after being supported by the facilitators, which resulted in the emergence of their orientation to learn in regards to the problem-solving scenario (language tasks). Thereby, in coherence with Merriam (2001) statement, older adults' required initial aid to overcome opposing beliefs about learning as they expressed in the final interview. This support evoked their orientation to learn in order to enhance their agency and autonomy towards English vocabulary comprehension and usage.

8. Limitations

This chapter will address the limitations and difficulties found throughout the project implementation that affected the teaching and research process in the nursing home; these include two core research limitations, which are the researchers' inexperience and limited theory regarding the multisensory approach and andragogic assumptions. Furthermore, while the first set of limitations refers to the conditions that hindered the researchers' development and implementation of activities within the nursing home, the second one embraces all aspects that delayed the collection of data and its analysis according to theoretical foundations.

One of the main implementation challenges was the inadequacy of the nursing home schedules since it constantly interrupted the older adults' participation; thus, the implementers had to reschedule various lessons due to time constraints and unplanned meetings organized by religious and governmental entities. It is important to highlight not only that the researchers were not informed of those schedule changes, but also that older adults' participation within those

activities was mandatory. Consequently, the implementation of the project demanded three additional weeks to conduct the remaining lessons.

Another implementation challenge was the limited amount of materials to stimulate older adults' senses; indeed, it became necessary to replace specific materials for their affordable alternatives during various sessions. For instance, candies replaced older adults' favorite drinks during the taste-sense lesson since their prices exceeded the implementers' budget. Thus, considering that the stimulation of senses is one of the major pillars of this project, the resources implemented to produce such stimulus had a significant incidence in the results found, and more appropriate materials that produce sensorial reaction such as actual flavors or visual aids would imply a greater impact throughout the research.

Finally, nursing home location and facilities were not ideal for the lessons inasmuch as the group had to use almost all resources and space available. Setting the place to carry out the implementations, for example, required borrowing tables and chairs from other older adults who were not part of the project, interrupting their own leisure activities like playing table games or watching tv. Another inconvenient characteristic of the nursing home was that it consisted of a terrace located right in front of an avenue, which meant that all the noise from traffic interfered with the teaching and learning activities.

Regarding research limitations, implementers' inexperience contributed to a delayed data collection and analysis process since a set of journals and observations did not include paramount aspects of teaching and learning events. Therefore, they had to be modified using as a basis for different lesson recordings, which had as a purpose to avoid including unreliable information within the findings chapter. In further regard, the theoretical foundations of this project also embraced a research limitation because of the limited related studies locally and

internationally. Given the fact that older adults' education is not a priority for governmental entities in Colombia, it was challenging to use as a reference ELT studies aimed for this population. Similarly, the implementation of both andragogic assumptions and multisensory approach within older adults was non-existent at the moment of structuring this research project. Thereby, the required analysis of data and theory proved to be troublesome on the grounds of its limited references.

Based on the aforementioned aspects and challenges, it is appropriate to suggest a set of guidelines

9. Implications

Throughout this chapter, different research and Andragogic implications will suggest the enhancement of future research practices within similar populations, contexts, and objectives. These implications emerged from the researchers' particular experiences during the development of this project; thus, it addresses specific aspects to improve when conducting research on English Language Teaching and older adults' learning specificities.

9.1 Research Implications:

Research implications include two main suggestions concerning lessons implementation and data analysis, which are paramount procedures to design findings based on Grounded Theory (Glasser and Strauss, 1967). Firstly, as for an ideal language implementation of lessons, it becomes necessary to expose older adults to written linguistic input in order to fully develop their receptive and productive skills, which is only possible if the participants are literate. Given the fact that most participants of this project did not complete their primary education, researchers had to restrict all language lessons to oral discourses for speaking and listening

development. Thus, this aspect deprived older adults from learning written target vocabulary, and it also reduced the possibilities for expected linguistic outcomes and tasks throughout the project. For all the previous reasons, future studies should embrace literate older populations to maximize the implementation of the selected methodology and approach for Language Teaching, which in this case refers to the Multisensory approach and Andragogy.

Secondly, given the fact that Andragogy theory and Multisensory approach count with a limited amount of references, it would be beneficial to construct a set of the most relevant sources for both theories. This research implication has as the main purpose to avoid ambiguity when defining core concepts of future related studies, and it eventually will lead to the theoretical strengthen of Andragogy due to concepts coherence and empirical reassurance. In conclusion, to conduct meaningful research practices in future related studies, it is suggested to include literate participants for a consistent linguistic development, which would portray older adults written and spoken outcomes analyzed under an unambiguous theoretical framework. Thus, it would result in meaningful contributions to the fields of ELT and adult education in terms of language teaching methodologies and Andragogic assumptions.

9.2 Andragogic Implications

The research process also provides insights and suggestions concerning the teaching of English vocabulary to older adults, the implementation of the multisensory approach to enhance English learning, and the strategies for teaching older adults. In respect to the teaching of English vocabulary, it is important to consider those aspects that belong to this population's immediate context when deciding about the target words. This is important due to the fact that older adults recognize a particular context for language use when their environment and daily habits are

included in the lessons. Regarding the implementation of the Multisensory approach, it is essential to gather information about the participants' health conditions and disabilities, and it is also crucial to know whether or not their senses are in optimal conditions beforehand. Hence, it becomes necessary to conduct different surveys in order to collect this particular information. After recognizing such participants' characteristics, it is possible to select the most appropriate sensorial stimulation based on their physical conditions.

Older adults' background knowledge needs to be taken into account as a resource to enhance their learning process; also, they ought to produce artistic outcomes while practicing the target language as they are engaged in physical and cognitive demanding activities. Therefore, it is important to foster their creativity and linguistic development through arts and its related materials. Last but not least, language tasks and activities should be attainable according to older adults' current cognitive skills since this population requires an initial encouragement to change their beliefs about learning a foreign language, assumption that refers especially to vulnerable older adults in Colombia.

All the previously addressed implications sought to support similar studies by contributing with suggestions in terms of research implementation and design.

10. Conclusions

Throughout this project implementation, various results derived from the researchers' and participants' practices that developed the following conclusions and contributions to ELT, Andragogy, and multi-sensorial theories. In this sense, the aforementioned learning and teaching experiences led older adults' emergence of Andragogical assumptions since the learning environment fostered such traits with problem-solving scenarios. Even though all Andragogical

assumptions were evidenced at some extent, this project focused solely on older adults' traits of self-concept, motivation, willingness, experience, and orientation to learn; concepts that worked as basis for the description of the participants' learning process and attitudes. In synthesis, the following paragraph will generally address the Andragogical assumptions emergence and its connection with the multi-sensorial methodology.

Regarding self-concept, older adults' completed linguistic tasks by creating and executing self-designed strategies based on their perceptions and experiences, which they developed through collaborative work and discussions on their native language. it was also possible to identify older adults' motivation to learn and participate by valuing their life-experiences as a resource for learning. In this case, the researchers sought to align participants' experiences, sensorial stimulation, and language tasks in order to provide meaningful learning events. Furthermore, older adults' oriented their own learning process after identifying lexical knowledge applicability under specific learning scenarios, that were related to the two main lesson objectives: Learning English vocabulary and producing artistic outcomes through senses usage. In regards to the latter term, the multisensory approach for ELT allowed older adults to eventually construct words meaning through sensorial stimulation. Therefore, it suggested the multisensory approach efficiency to teach vocabulary when stimuli resembled words meaning. Finally, the project attempted outcome was attained since older adults were integrated into a bilingual educational experience, who ultimately recognized themselves as individuals capable of learning English.

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12. Appendix

Find the appendix of this project in the following link:

https://drive.google.com/drive/folders/1OBeedD9wkPmF56xRIVYFmn6bF0sz_n1Y?usp=sharing