

# A Study of Stereotypes and Social Perceptions of Older Adults on Learning in Old Age

<sup>1</sup>Doris Marcela Castro-Roldán, <sup>2</sup>María Jesús Yolanda Colmenero-Ruiz

<sup>1</sup>Universidad Internacional Iberoamericana de México, [marcelac812@gmail.com](mailto:marcelac812@gmail.com)

<sup>2</sup>Universidad Internacional UNINI (México), Universidad de Jaen (España), [mjrui@ujaen.es](mailto:mjrui@ujaen.es)

## Abstract

The aging process and the old age of human beings have become topics of special interest in today's societies and present limited research, evidencing the lack of analytical interest in the subject. The general objective was to determine the negative stereotypes and social perceptions in a group of older adults about learning in old age, in the light of the right to lifelong education. The study was carried out in Colombia, in the only local government Day Care Center for the Elderly, located in Chía, Municipality of Cundinamarca. The research design was mixed, non-experimental, transactional, and exploratory, using as instruments a questionnaire of negative stereotypes (CENVE) towards old age, validated with Cronbach's alpha of 0.97, and its application showed that 63.8% were stigmatized. On the other hand, it was found that 86.4% of participants are peasants. An Ad Hoc interview was conducted and validated through the "Delphi Method" with a Kappa of Cohen=1, where it was shown that 100% believe that they can learn, but do not have greater facilities. Crosses were made between the CENVE and the sociodemographic data with an association level of chi-square = 0.996 and its moderate intensity was V Cramer  $p = 0.338$ . It was concluded that the participants present high levels of negative stereotypes, however, most of them want and believe that they can learn. The most relevant factor was character-personality, then health, and finally motivational-social. Finally, an informative-educational virtual booklet "It is never too late to learn and old age is the best time" was prepared to leave a virtual tool for future research and to ratify the benefits established in this study.

**Keywords:** Old age, Stereotypes, Perception, Learning, Law.

## I. INTRODUCTION

The aging process and the old age stage of human beings have become challenging issues in today's societies, as well as fundamental to investigate, understand and address. In order to provide efficient, real, and pertinent answers to this phenomenon, significant changes have been generated, while different unknowns are raised, including the relevant topic of learning in the old age stage and the demystification of myths and negative stereotypes, since it is evident that these may have repercussions on the decision of the older adult population that wishes to get involved in learning processes,

taking into account that education, formal or non-formal, is a right for life.

The United Nations document entitled "World Population Prospects" shows that significant progress has been made in life expectancy in recent years. Globally, life expectancy at birth increased by 3.6 years between 2000-2005 and 2010-2015, or from 67.2 to 70.8 years. All regions shared the increase in life expectancy during this period. In short, the low birth rate and the increase in technological advances and advances in medicine allow human beings to live longer so that in most countries of the world there are more older adults than children and young people, and Colombia is not

prepared to take on the challenge of lifelong learning and education, especially for the stage of old age (United Nations, 2017).

In the Census conducted in Colombia in 2005, the accelerated pace of aging of the Colombian population was warned. In the latest Colombian census of 2018 prepared by the National Administrative Department of Statistics (DANE-Dirección Administrativa Nacional de Estadísticas), alarms went off again after evidencing that there are 40.4 people over 60 years of age for every 10, which generates economic, social and psychological consequences (El Heraldo, 2018).

The SABE, a national study on health, well-being, and aging conducted in Colombia in 2015, was characterized as descriptive population-based health research on aging and well-being of the population of men and women over 60 years of age to analyze different personal and behavioral factors, health conditions and use of and access to health services for active aging. From a qualitative approach, research was conducted on the quality of life of the elderly, from a cultural and gender perspective, to understand its different dimensions and meanings. This study had several components and among them, a population survey conducted on 23,694 older adults in households in urban and rural areas of Colombia, which measured socioeconomic determinants, social environment, and physical environment of the country concerning the older population. (SABE,2015)

On the other hand, a survey of 1,141 family caregivers was carried out using purposive sampling and evaluating the characteristics of caregiving, the perceived burden, the caregiver's health assessment, and formal or informal training for the care of the elderly person. Among the results, the following stand out:

- **Age:** The mean age was 69 years (range: 60-108 years), with more than half of the older adult population in the 60-69 age group (57.2%), 30.2% in the 70-79 age group, and finally, 12.6% over 80 years.

- **Urban-Rural Distribution:** Of every 10 elderly people, 8 live in urban areas (78.1%).

- **Ethnicity:** By ethnic identification, the population was classified as mainly white (30.2%) or mestizo (46.2%), followed by 6% black and 5% indigenous.

- **Education:** On average, the older adult population reached 5.5 years of schooling and less than 1% were studying. Low educational levels increase with age and are higher in the Atlantic zone (Ministerio de la Salud y Protección Social, 2015).

Taking into account the SABE study, it becomes even more relevant to investigate the different aspects that encompass learning in the Colombian elderly, especially to evidence the need that may exist, their tastes, their needs, and even the profile of the teacher that is required, among others. In addition, it was determined that older adults are a very active and diverse population group with heterogeneous capabilities and special needs in some cases; therefore, this population does not do well when their intellectual characteristics, their ability to learn, their physical and mental health status, among others, are homogenized.

It is important to highlight that lifelong learning as a public good, plays an important role in reducing poverty, because it prepares people to exercise citizenship and democracy, protects the most vulnerable groups in society, and promotes greater equality of access to opportunities and well-being (Vargas, 2014).

On the other hand, this research was supported by the concept of a society for all ages, designated since 1999 within the framework of the International Year of Older Persons, presenting the following topics that should be compulsorily managed by all world governments: the characteristic development during the entire life cycle, the strengthening of relations between them and between different generations, the mutual relationship between population aging and human development as parallel processes, and the situation, in general, of older adults.

In this line, the general objective of this study is to determine the negative stereotypes and social perceptions in a group of elderly people about learning in old age, in light of the right to lifelong education, using a non-experimental, transactional, exploratory, and mixed design methodology.

In this research, the participant population was the total number of elderly people attending the Casa Día del Adulto Mayor program, located in the Fagua district of the Municipality of Chía-Cundinamarca. Therefore, the following were applied:

- 243 informed consents.
- 243 questionnaires to determine sociodemographic and learning aspects in old age.
- 243 CENVE questionnaires following simple random probability sampling, so that all subjects who randomly responded to the questionnaires were added to the sample.
- 10 semi-structured interviews with older adults.

To calculate the participant sample, the formula for populations with less than 100,000 subjects was used, with a 99% confidence level and a maximum estimation error of 4%. In this case, for a population of 350 subjects, the resulting sample consisted of 243 subjects; 10 elderly persons were interviewed. All of them signed informed consents.

The inclusion criteria for participation in the research were the following: first, that they were part of the Elderly program of the Mayor's Office of the Municipality of Chía-Cundinamarca, Vereda Fagua; and second, that the psychologist of the Day Center certified cognitive functionality and, finally, that they willingly accepted to sign the Informed Consent and respond to data collection and interview instruments.

Regarding the structure of the thesis, the problem questions, the general objective, and the specific objectives that integrate the particular interests of the bases and beginning of this research were observed. The following

section is dedicated to the recording of evidence directly related to the title and objectives of this research and theories related to old age, stereotypes in old age, social perception, and learning in old age were recorded. The methodology was then established, detailing both the sample and the data collection instruments used.

The last chapters will present the results with the design of the primer as a product of the research and the conclusions, as well as the limitations and implications found, and finally, all the citations used will be referenced. In the annexes section, documents of interest for the understanding of this doctoral thesis will appear.

## 2. Objectives

### 2.1 General Objective

To determine the Negative Stereotypes and Social Perceptions in a group of older adults about Learning in Old Age, in light of the right to lifelong learning.

### 2.2 Specific Objectives

- To know the sociodemographic aspects/self-perception of the population under study.
- To determine the negative stereotypes towards old age in the study population.
- To compare and statistically analyze the results of the sociodemographic aspects/self-perception vs. the questionnaire of negative stereotypes towards old age (CENVE).
- To identify the social perception of learning in old age in a group of elderly people attending the Casa Día del Adulto Mayor, located in the Fagua district of the Municipality of Chía (Cundinamarca) in Colombia.
- To elaborate a training proposal to be applied in the Casa Día del Adulto Mayor, located in the Fagua district of the Municipality of Chía (Cundinamarca), according to the needs of the elderly.

### 3. Methodology

This study focused its research on the theoretical progress in the study of old age, which in recent years has been of great relevance due to the evident sociodemographic changes, as well as to the different social ways of perceiving and valuing old age.

The stage of old age is a social construct, and defining it requires taking into account social, demographic, chronological, functional, mental, cultural, and many other aspects.

The demographic concept states that for developing countries such as Colombia, the stage of old age should be defined as people over 60 years old. However, what is not very accurate is the functionality that each of them has since there are people with chronic diseases and even centenarians without any pathology and with a great cognitive functionality required to remain in the teaching and learning processes.

Regarding the issue of negative stereotypes, it can be explained that when a person is perceived as old, his behaviors may be explained through the same social stereotype, being possible that the subject himself ends up appropriating that image and justifies his behavior based on it. In short, if society points out and stereotypes the old person as a subject who cannot learn, it is possible that the old people believe it and predisposes themselves and allow their right to education to be violated.

The methodology of this research took into account that everyone is an enrichingly different person in the different stages of life, and that the learning processes need to be investigated, especially in the stage of old age, since it is very limited, giving way to a more objective society in terms of social perception of the elderly and with it, seek the edification of a culture of active aging, since it cannot be stated that all the elderly are slow, cannot learn, are useless or are synonymous with disease, or on the contrary, it cannot be stated that all the elderly are wise, intelligent, among others.

Regarding cultural aspects, it is important to understand that the possibility of learning in old age depends on many variables. For this reason, it is not possible to homogenize the subject because aging processes are very varied, as are lifestyles. In addition, the context, economy, and culture are not the same for everyone and it became indispensable to understand them in the face of the influence that social perceptions and negative stereotypes can also generate.

It also became evident that, by researching old age in these aspects, it is possible to offer expert and equitable guidelines that can be of great use in the management of more comprehensive and objective educational services for old age and the development of future scientific research in this field.

It is important to highlight Saez (2003) in his book "Education and learning in the elderly" who states that "the subject of education for old age will not be satisfactorily developed if priority is not given to empirical-analytical and qualitative research with, for and from the elderly population" (p. 34).

On the other hand, the teaching-learning processes for older adults require qualified teaching resources that understand the process of normal and pathological aging in a multidimensional way, and from there it was also very important to investigate in depth the needs of this group of older people by applying tools from a territory of knowledge such as Gerontology, to acquire a capacity of explanation and understanding in-depth and without homogenization.

The phases of the research were:

1. Constant documentary work with the review of the literature found, Colombian and international legislation, conceptual and theoretical related to the title. The problem questions, objectives, and type of design were established.
2. Contact with the directors of the Day Center of the Colombian government of the Municipality of Chía (Cundinamarca) offering the research proposal. The study was approved.

3. The elderly population was located on the geographical map of the municipality, which delimits the research.
4. Contact with the director of the local Colombian government, the director of the day care center in the village of Fagua, and the psychologist of the interdisciplinary team. A call for applications was scheduled, to analyze the criteria for admission and the strategy for the call for applications.
5. Meeting with the elderly population participating in the study to explain the objectives of the thesis and its importance.
6. Delimitation of the participating sample.
7. Signing of informed consents.
8. Design and validation of a survey for the collection of sociodemographic and self-perception data.
9. Application of the sociodemographic and self-perception surveys.
10. Data analysis using SPSS software.
11. Application of the questionnaire of negative stereotypes for old age CENVE.
12. Analysis of quantitative results using the SPSS program.
13. Interview design to investigate social perception.
14. Validation of the Delphi interview method and Cohen's Kappa.
15. Application of the interview. First round.
16. Categorization of the data obtained in the first round of the interview through the ATLAS.TI
17. Application of the interview. Second round.
18. Categorization of the data obtained in the second round of the interview through the ATLAS.TI

19. A Chi-square test was performed to validate the association between sociodemographic aspects/self-perception and those collected at CENVE.

20. A V Cramer's test was performed to determine the intensity of the association.

21. Design and management of the primer.

22. Final drafting of the article.

This research was of a non-experimental, transactional, exploratory, and mixed design. The Questionnaire of Negative Stereotypes towards Old Age (CENVE) (Blanca et al., 2005) was administered. It is a self-administered questionnaire designed with 15 items and a Likert-type scale with 4 response choices (1=strongly disagree, 2=disagree, 3=agree, 4=strongly agree). This test dominates three components: Health (enunciates statements related to the appearance of disabilities, cognitive impairment, or difficulties related to mental illness), Motivational-social (enunciates doctrines related to affective deficiencies, lack of vital interest, and decreases in the ability to develop a work activity), and finally, the Character-personality factor, which are statements about metal rigidity, affective blunting and deficits in the status as an older adult. The instrument score ranges from 5 to 20 points for each of the three components. The total score ranges from 15 points to 60 as the maximum score. The total interpretation of the questionnaire is as follows: a) from 15 to 28 points pertains to the very low presence of stereotypes, b) from 29 to 39 points pertains to the low presence of stereotypes, c) from 40 to 50 points corresponds to high presence and d) from 51 to 60 points corresponds to very high presence of negative stereotypes towards the elderly. The total Cronbach's alpha of the CENVE is 0.97, which value represents high reliability.

On the other hand, an ad hoc questionnaire was applied to obtain sociodemographic and self-perception data, and a semi-structured interview validated by 13 expert judges with 4 criteria -writing-relevance-structure-language. The size of the significant sample was 243 older adults who attended the Casa Día del

Adulto Mayor, located in the Fagua hamlet of the Mayor's Office of Chía Cundinamarca in 2018, who responded to the scale of sociodemographic and self-perception aspects, and to the CENVE questionnaires.

### 3.1 Research design

To begin this section, it is important to emphasize that studies must emerge in which the protagonism of the theoretical contributions is established by the researched older adults themselves from their own needs and perceptions of learning, in addition to the imaginaries that are used to explain issues related to them and that are usually from social groups that are unaware of the true learning capabilities of the older population. In order to have a more assertive and real understanding, research of mixed design must arise where the quantitative describes exact situations about the negative stereotypes presented by older adults and the qualitative takes into account the voices of the actors themselves who will be able to contribute everything significant or not for them.

It is important to note that this study took into account the relevance of education as a right for all stages of life, which provides comprehensive wellbeing to all types of population, and in particular to people over 60 years of age.

The elements for the problem statement were the research objectives. From the above, the following question was formulated: What are the negative stereotypes and the social perception of a group of older adults about learning in old age, to present results in the light of education as a right for life.

Once the problem question and the title were established, as well as the objectives of the thesis, the analysis of sources regarding the research topic was carried out and thus the original thought was nurtured, making visible the achievements and possible limitations. In other words, credit was given to other interpretative, theoretical, and methodological sources of the research, to generate scientific, argumentative thinking among others, taking into account that “the qualitative paradigm

seeks to understand and interpret reality rather than analyze and explain it; in the context of documentary research it is the one that best responds to this expectation” (Gómez, 2010, p. 229).

It should be clarified that the documentary work was done by reading documents, books, theses, scientific articles, research projects, statistical file printouts, electronic documentation, and conferences. A logical order was established, which made it possible to find events that took place, research sources, types of methodologies, and even ideas for the design of research instruments. It should be noted that from this exercise it was decided to apply the questionnaire of negative stereotypes towards old age.

The following steps were applied to develop this phase:

- The material was selected following the research guidelines.
- The material was read and reviewed
- It was organized according to the relevant topics
- The information was analyzed and the document was designed to record the opinions and interpretations of the phenomenon under study.
- Specific conclusions and interpretations of what was to be demonstrated were elaborated.

The research design was determined to be non-experimental, transactional, and exploratory because the purpose is to begin to learn about a variable or a set of variables, a community, a context, an event, or a situation. It is an initial exploration at a specific time. It is usually applied to new or little-known research problems; in addition, it constitutes the preamble to other designs (Hernández et al., 2014, p.155).

Regarding the classification of non-experimental designs, the criteria of Hernández et al. (2014) differentiate them “by their temporal dimension or the number of moments

or points in time, at which data are collected” (p. 151).

Now, according to the authors Ulin et al. (2006), the characteristics of exploratory research are:

- It takes as references bibliographic information, the opinion of experts on the subject, participant observation, and sometimes individual anecdotes.
- They are not structured studies.
- It seeks valid information that allows advancing conjecture about a given situation.
- Through their study, new research can be initiated.
- It allows answering the following questions: what is the problem, what is the purpose of studying it, and what topics could be studied?
- Generally, there is no background information to guide the investigation.
- It involves risk, patience, and predisposition.
- It scrutinizes all the evidence that exists on the subject under study.
- Its methods are flexible, broad, and dispersed.
- The researcher puts aside his or her beliefs and views on the problem under study.
- The data and information provided are approximate.
- These are subjective investigations.
- They are considered free research since the subject can be approached from different points of view.
- It is often associated with rapid assessment methods.
- Observation is present in it.
- Determines priorities.
- The researcher views the environment and people as a whole, not individually.

- In exploratory research all approaches and opinions are valuable.

- The cost and time required for its application are very minimal.

- It is used when the population to be studied is large.

It is important to know that not all research with a quantitative approach involves experimentation. Thus, quantitative studies do not always seek to inspect the behavior of phenomena or facts through the manipulation of intentional changes in the variables that compose them. This is the case of non-experimental quantitative research designs, which, as Hernández et al. (2014) point out, are “studies that are conducted without the deliberate manipulation of variables and in which only phenomena are observed in their natural environment and then analyzed” (p. 149).

Regarding trans-sectional designs, it is determined that they are investigations that collect data at a single point in time and their purposes may vary. The study evaluated the situation in a community of older people, in a given context, at a point in time (Hernández et al., 2014).

- It is applied by different sciences such as medicine, chemistry, psychology, and biology to test theories.

- It is frequently used when investigating behavior.

- A study in which variables would be related to the research topic.

- Develops the observer's level of experience.

- It demands from the researcher an important capacity for creativity and innovation.

- It must be sufficiently reliable.

- It serves as a support for decision-making.

- It culminates when the researcher has a clear idea of the observed phenomenon (p. 9).

The commitment to the problems arising from the relationship between subject and context, the distinction between explanation and understanding, the impersonal and personal role of the researcher, and the concept between discovered and constructed knowledge, lead to the investigation of a topical issue. This situation, supported by axiological, ontological, epistemological, and methodological grounds, requires approaching the object of study in a complementary way, from the quantitative and qualitative methodology.

On the other hand, the exploratory research is carried out on an isolated, little-publicized topic, which is part of the challenges of the aging process and old age with its sociodemographic and cultural changes, and which lacks ample information and national and international research, so its results constitute a borderline vision of this object. The aim was to achieve a universal vision since the subject has been scarcely studied so far and there is not enough knowledge about it to allow the formulation of precise hypotheses or a systematic design. They also appear in a determined and specific field of studies such as stereotypes and the social perception of learning in the stage of old age, being topics that lead to new phenomena, to explore each one of the groups of older adults, in different countries and the results will take into account different cultures, limitations, facilities, motivations, educational and public policies of aging and old age, understanding that each human being is different and that results cannot be homogenized and that they are not fully understood exactly based on the existing theories.

The study applied a mixed design, differentiated by phases or stages, to respond to the planned objectives and follow the substantive concepts, since methodology, as stated by Borsotti (2007), is an instrumental discipline, insofar as it involves procedures and paths for the substantive disciplines to produce their propositions rigorously and systematically.

Complementarity is due to the conviction that the approach to the object of study is not only

influenced by the conception of reality, the relationship between the researcher and what he/she is investigating, the role of values, or the procedures used (since in all cases there is a personal positioning), but also by the coherence between the question and the chosen strategy.

The present investigation belonged to the category of no risk for the participants, as reflected in Resolution 8430, which establishes the scientific, technical, and administrative norms for health research. In addition to this, all participants signed an informed consent form authorizing their free and voluntary participation, which will be explained later.

### 3.2 Population and sample

In this research, the initial population was 350 older adults who attended the Casa Día del Adulto Mayor in 2018, located in the Fagua village of the Municipality of Chía- of the Municipality of Cundinamarca in Colombia.

Since not all of them wished to participate, a sample calculation was made using the formula for populations with less than 100,000 subjects with a confidence level of 99% and a maximum estimation error of 4% giving 243 subjects who were found and signed the consent form. Ten of them wished to participate in the qualitative research.

In the third phase of the research, the older adult population was located in the geographic plane of the municipality, which delimits the research in the following way from the macro to the micro context.

The older adult population participating in this research lives in the Colombian municipality of Cundinamarca, which has an area of 22,605 km<sup>2</sup> excluding the area of Bogotá, the Colombian capital. It was created in 1886 and the citizenship is cundinamarqués.

The department of Cundinamarca has 116 municipalities that make up 15 provinces: Almeidas, Alto Magdalena, Bajo Magdalena, Gualivá, Guavio, Magdalena Centro, Medina, Oriente, Rionegro, Sabana Centro, Sabana Occidente, Soacha, Sumapaz, Tequendama and Ubaté.



Within the provinces, the central Sabana province is composed of Cajicá, Chía, Cogua, Cota, Gachancipá, Nemocón, Sopó, Tabio, Tenjo, Tocancipá and Zipaquirá.

Now, the older adults for this research inhabit Chía (10 km from Bogotá capital of Colombia), a municipality known as “The city of the moon”, a name that comes from the Muisca goddess of the Moon. Its population in the last census of 2018 was 135,752 inhabitants.

On the other hand, Chía is administratively divided into nine routes or veredas, plus the urban area (clarifying that vereda is a term used in Colombia to define a type of territorial subdivision of the different municipalities of the country).

The municipality of Chía is bordered by the following limits: to the north with the municipality of Cajicá; to the south, with the Capital District of Bogotá (localities of Usaquén and Suba) and the municipality of Cota; to the east, with the municipality of Sopó and to the west, with the municipalities of Tabio and Tenjo. It is located between the Eastern hills and the Majuy and La Valvanera hills where the Bogotá and Frío rivers cross, among the most important ones (Contreras, 2017, p. 15). The same author showed a population pyramid in the Municipality of Chía- Cundinamarca for the periods between 1990 and 2020, in which the population composition coincides with that typical of developing regions, with a higher concentration of the working-age population. The region has an important demographic bonus, therefore, it has and will have in the coming decades a significant working-age population. It is projected that an acceleration of the transition in the next decade will allow the incorporation of a good number of women into the labor force. As can be seen in the following figure, when comparing the composition of the population in 1990 with that projected for 2020, there is evidence of a reduction in the group under 34 years of age and an increase in those over 35 years of age, where most of the working-age population is located. However, at the same time, it shows that the population is

aging and is not being renewed at the same rate.

As in most of the world, the older adult population in Chía-Cundinamarca is also increasing, but the importance of education in old age is not yet evident in municipal planning.

As a summary for this third phase of the research, the participant population travels to the Day Center located in the Vereda Fagua of the municipality of Chía, in the Department of Cundinamarca, in the western zone, being the only center that provides this type of services that are administered and covered economically and with the human talent of the local government.

The inclusion criteria for participation in the research were as follows:

1. To be part of the Senior Citizen program of the Municipality of Chía-Cundinamarca, Vereda Fagua.
2. That they willingly agreed to sign the informed consent forms and respond to the assessment instruments and interviews.

On the other hand, this research complies with the minimum risk category, according to the current Resolution 8430, which establishes the scientific, technical, and administrative standards for health research, in the exercise of its legal powers, especially those conferred by Decree 2164 of 1992, which restructures the Ministry of Health (Ministry of Public Health, 1992) and Law 10 of 1990, which reorganizes the National Health System and establishes other provisions (Congress of Colombia, 1990).

Research without risk refers, according to the Ministry of Health and Social Protection (Congress of the Republic, 1993) to studies that employ retrospective documentary research techniques and methods and those in which no intervention or intentional modification of the biological, physiological, psychological, or social variables of the individuals participating in the study is performed, among which are considered: a review of medical records, interviews, questionnaires and others in which

no sensitive aspects of their behavior are identified or treated (p. 3).

The second phase was a meeting held with the directors of the Day Center of the Colombian government of the Municipality of Chía - department of Cundinamarca- where the research proposal was offered through an explanation of its importance and objectives. That same day the local government, represented by the director of social action, approved the research proposal.

The fourth phase of the research coincides with the second meeting with the local Colombian government official director of the Fagua Day Center and the psychologist of the interdisciplinary team, where a date was set for the full convocation of the participants and the criteria for the research were analyzed.

These criteria were established by the researcher and her mentor:

1. Older adults participating in the Fagua Day Center.
2. That they were cognitively and physically functional since, from the gerontological point of view, the functionality of the elderly person is an important axis for the strengthening programs in active aging and learning processes.
3. To sign the informed consent for participation and image.

An assessment of the physical and cognitive function of the participants was proposed to the directors of the Day Center as it allows for identifying possible physical and/or cognitive disease states or shows possible adverse risks that may influence the learning processes.

Unfortunately, the managers of the Day Center did not allow this and assured that the participants were fully functional persons since this was also an admission criterion for the center. In response, the researcher suggested conducting a documentary investigation to consult the logs of the participants' admission assessment and the directors responded that this was not possible either because this documentation is protected by law, as recorded

in the current Resolution of the Ministry of Health and Social Protection number 1995 of 1999, in Article 1.

In the fifth phase, the directors of the Day Center made the call for all the elderly people attending the Day Center and the researcher made a clear explanation of the objectives of the research, motivating and explaining the importance of participating in the study. It was evident that most of them wanted to participate, but it was not 100%.

Subsequently, a sixth phase is established, configuring a significant sample that will be explained later.

Taking into account the sixth phase and the number of participants to adjust the representative sample, the study moved on to the seventh phase where the participants who wished to participate in the research signed informed consents. This process was accompanied by professional staff from the Day Center.

Regarding informed consent in Colombia, it is established by the Ministry of Health and Social Protection and the Constitutional Court in its ruling T-40/94, which determined that:

Everyone has the right to make decisions that determine the course of his or her life. This possibility is a manifestation of the general principle of freedom, enshrined in the Bill of Rights as one of the essential postulates of the constitutional political order. Informed consent is a culture and a culmination in the development of the clinical relationship, in the same way that human rights are of human relationships in general (Republic of Colombia, 2009, p 8).

On the other hand, as videos were made with the interviews of the participants, this research considered the law 1581 of 2012 (Congress of the Republic, 2012) that legalizes the protection of personal data. Colombian ethical codes, like international ones have established the vulnerability of some population groups, such as children, ethnic minorities, pregnant women, or people with some diseases or disabilities, in addition to those at the end of their lives,

including elderly participants with particular conditions (Lopera, 2017).

Thus, Law 23 of 1981, which establishes norms on medical ethics (Congress of Colombia, 1981) and the Colombian Political Constitution emphasize their rights and prohibit the use of these populations for scientific research purposes against their will. Consequently, they warn about the care that must be taken in the development of research.

#### 4. Results

For drafting purposes in this article, the most relevant aspects of the results of the Specific Objectives will be taken into account, without altering the data provided later in the conclusion of the article.

4.1 Results specific objective 1: To know the sociodemographic aspects/self-perception of the population under study.

Next, we are going to represent graphically either by table and/or figure (depending on the information of each item) some data that will help to understand the sample. Regarding schooling, 127 people (52.3%) have completed primary school and 116 (47.7%) incomplete primary school; of the 127 people who completed primary school, 31 (24.4%) have completed secondary school and 96 (75.6%) incomplete secondary school; of the 31 people who completed secondary school, 17 (54.8%) have completed technical education, 1 person (3.2%) incomplete technical education, 6 (19.3%) complete higher education and 4 (12.9%) incomplete higher education.

##### 4.1.1 Gender

As for the sociodemographic data of the population sample, 243 people between 60 and 91 years of age participated, of whom 209 (86%) were women and 34 (14%) were men.

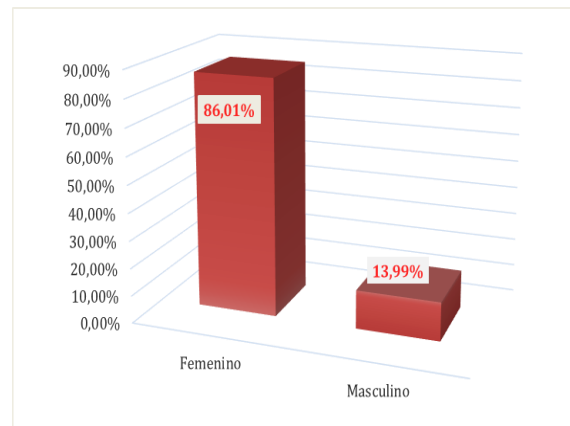


Figure 1. Gender.

Source: Own elaboration.

##### 4.1.2 Age

The ages of the respondents were in the range of 60 to 91 years, with the majority concentrated between 65 and 78 years of age with a percentage of 74.9% of the total.

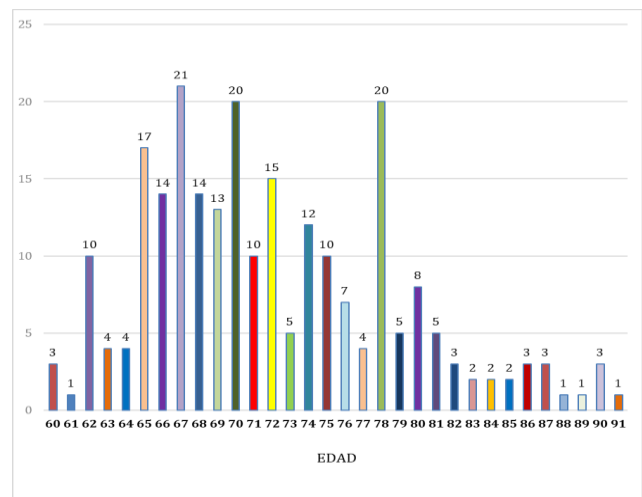


Figure 2. Age

Source: Own elaboration.

##### 4.1.3 Marital status

In terms of marital status, 109 people (44.9%) are married, 65 people, equivalent to 26.7%, are widowed, 29 people (11.9%) are separated, 27 people (11.1%) are single, 11 people (4.5%) are in a common-law relationship, and finally 2 people, equivalent to 0.8% are divorced.

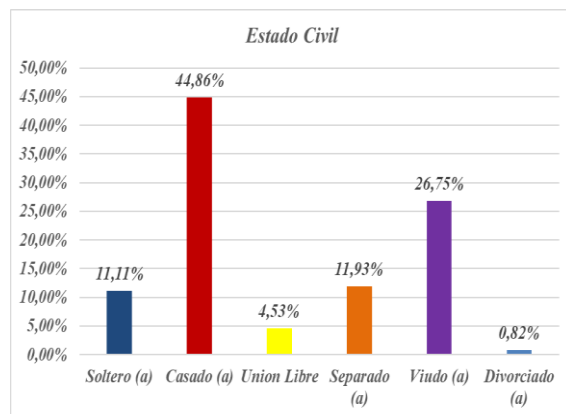


Figure 3. Age

Source: Own elaboration.

#### 4.1.4 Socioeconomic Stratum

Regarding the socioeconomic strata of the participants, 158 (65%) are located in stratum 2, 53 people (21.8%) in stratum 3, 28 people (11.5%) in stratum 1, and 4 (1.6%) people in stratum 4. It should be explained that, in Colombia, the socioeconomic strata of the population are: 1 very low in terms of the economic resources of the population, 2 low, 3 medium-low, 4 medium, 5 medium-high, and 6 is high. For the study, no older adults in strata 5 and 6 were found.

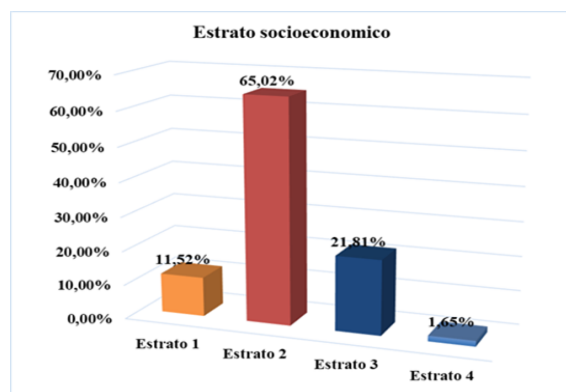


Figure 4. Socio-economic stratum.

Source: Own elaboration.

#### 4.1.5 Self-perception. Biological Dimension

Among the most relevant results, 60.5%, that is, 147 people perceive a slight difficulty in seeing, 56.4%, that is, 137 people report no difficulty in hearing, 86.4% (210 people) report no difficulty in expressing themselves verbally,

and 40.3%, that is, 98 people, report a slight difficulty in walking.

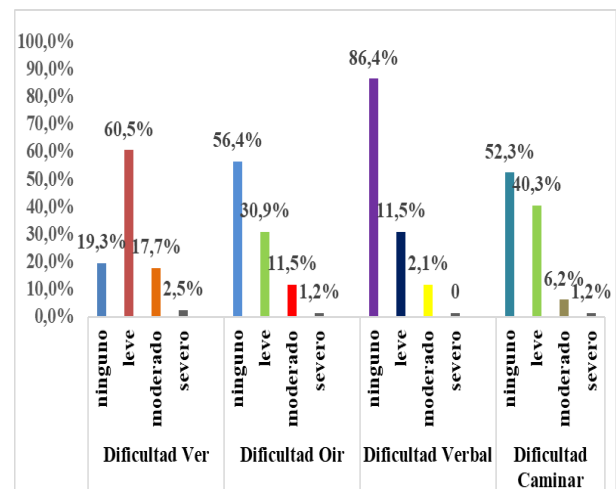


Figure 5. Socio-economic stratum

Source: Own elaboration.

#### 4.1.6 Self-perception. Bio-Psychological Dimension

Thirty-one people (12.8%) perceive their physical health as excellent, one hundred and thirty-seven (56.4%) as good, seventy (28.8%) as fair, and five (2.0%) as poor. As for their mental health, thirty people (12.3%) perceive that it is excellent, one hundred eighty-eight (77.4%) that it is good, twenty-four (9.9%) that it is fair, and one (0.4%) that it is bad.

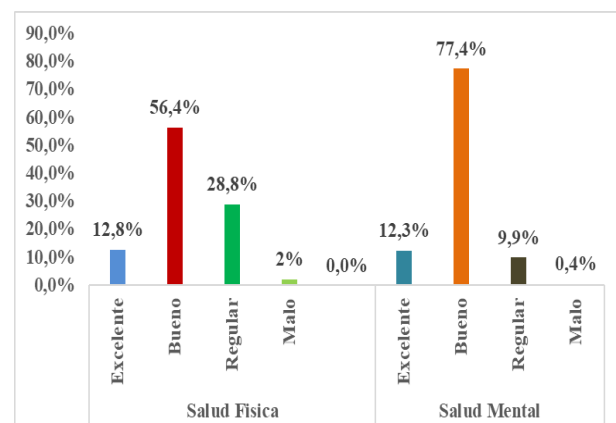


Figure 5. Self-perception. Bio-Psychological Dimension.

Source: Own elaboration.

#### 4.1.6 Activities you would like to do in your spare time.

Regarding the activities they would like to do in their free time, the most relevant are educational activities with 91.8% corresponding to 223 people, followed by spiritual activities with 69.5% corresponding to 169 people, and productive activities with 67.9% corresponding to 165 people. Similarly, 51% (124 people) said that they would like to engage in cultural and recreational activities and, finally, sports with 49% corresponding to 119 people.

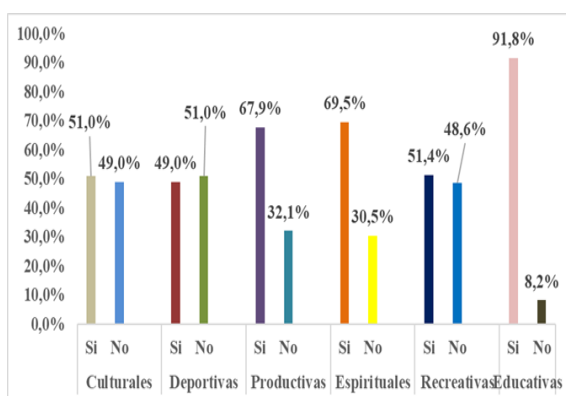


Figure 6. Activities they would like to do in their spare time.

Source: Own elaboration.

#### 4.1.7 Level of schooling

Regarding the level of schooling, 52.3% of the population completed primary school, 25.4% had no schooling, followed by high school with 12.8%, and finally technical-technological and professional with 7% and 2.5%, respectively.

Table 1. Level of schooling

N=243		%
Sin escolarización	62	25.4
Primaria completa	127	52.3
Bachillerato completo	31	12.8
Técnicas -Tecnológicas	17	7.0
Profesional	6	2.5
Postgrados	0	0.0

Source: Own elaboration.

#### 4.2 Results of objective 2: To determine the negative stereotypes towards old age of the population under study.

##### 4.2.1 Descriptive Analysis Item 1.

Most people, when they reach approximately 60 years of age, begin to have considerable memory impairment 98 respondents, corresponding to 40.3% consider themselves “Somewhat agree” with the stereotype concerning considerable memory impairment when they reach approximately 60 years of age, while 78 (corresponding to 32.1%) consider themselves “Strongly agree”, 57 people (23.5%) consider themselves “Strongly disagree” and 10 people corresponding to 4.1% consider themselves “Somewhat disagree” with the stereotype.

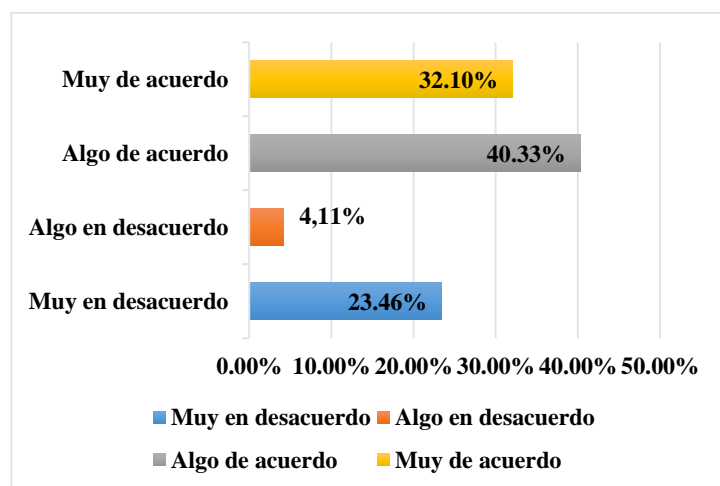


Figure 7. Descriptive analysis of item 1.

Source: Own elaboration.

##### 4.2.2 Descriptive analysis of item 3.

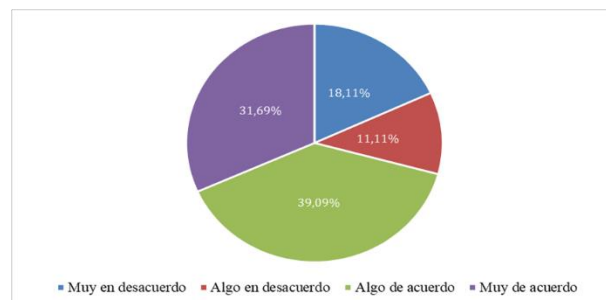


Figure 8. Descriptive analysis of item 3.

Source: Own elaboration.

Older people are easily irritated: The sum of “Strongly Agree” and “Somewhat Agree” is 70.8%; that is, 172 participants consider that older people are easily irritated and “cantankerous”.

#### 4.2.3 Descriptive analysis of Item 6.

As people get older, they become more rigid and inflexible: Fifty-eight people (23.9%) “Strongly disagree” with the stereotype, while 146 people (60.1%) consider that older people become more rigid.

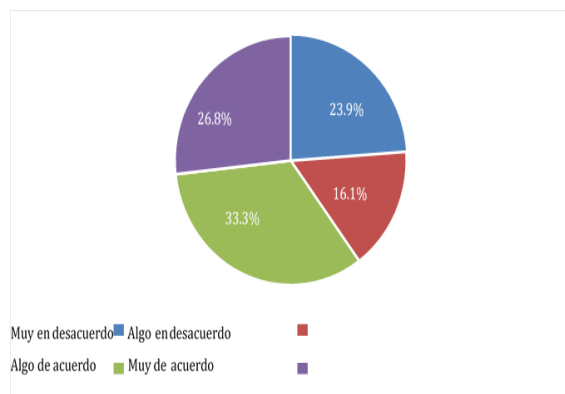


Figure 9. *Descriptive analysis of item 6.*

Source: Own elaboration.

#### 4.2.4 Descriptive Analysis of Item 8.

As people get older, they lose interest in things: Respondents' perception of this stereotype is divided into two groups of responses, 48.5% (118 people) strongly or somewhat disagree, while 51.5% (125 people) strongly or somewhat agree that as people get older, they lose interest in things.

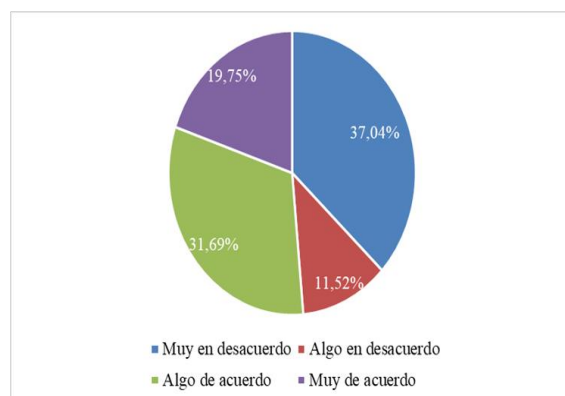


Figure 10. *Descriptive analysis of item 8.*

Source: Own elaboration.

4.3. Results of objective 3: To compare and statistically analyze the results of the sociodemographic/self-perception aspects vs. the questionnaire of negative stereotypes towards old age (CENVE).

Next, the associations were found by statistically applying the Chi-square and their level of intensity through V Cramer.

#### 4.3.1 Chi-square association crosses between CENVE results and sociodemographic data. Gender Vs Health

Sociodemographic data: Gender vs. CENVE1 health dimension: Most people, when they reach 60 years of age, approximately, begin to have a considerable deterioration of memory. The level of significance obtained by the SPSS program is 0.018, there is a significant relationship between the sociodemographic data corresponding to Gender and the CENVE1 health dimension. 98.2% (56) of the people who strongly disagree with the stereotype belong to the female gender, while 19.4% (19), which is the highest percentage of the male gender, somewhat agree with the condition. Therefore, it can be concluded that gender does matter for this condition.

Sociodemographic data: Gender vs. CENVE4 health dimension: The majority of people over 60 years of age have a mental illness serious enough to impair their normal abilities. The level of significance obtained by the SPSS program is 0.190, there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to Gender and the health dimension of the CENVE4, that is, that the results of this condition are independent of the gender analyzed.

Sociodemographic data: Gender vs. CENVE7 health dimension: Most adults maintain an acceptable level of health until approximately 60 years of age when there is a strong deterioration of health. The level of significance obtained by the SPSS program is 0.058, there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to gender and the CENVE7 health dimension.

Sociodemographic data: Gender vs. CENVE10 health dimension: Most people over 60 years of age have a series of disabilities that make them dependent on others. The level of significance obtained by the SPSS program is 0.450; there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to Gender and the CENVE10 health dimension. The variables analyzed are independent.

Sociodemographic data: Gender vs. health dimension CENVE13: Cognitive decline (memory loss, disorientation, or confusion) is an inevitable part of old age. The significance level yielded by the SPSS program is 0.028, there is a good relationship between the sociodemographic data corresponding to the are in strong disagreement with the stereotype belonging to the female gender, while the largest number of men (15) strongly agree with the condition. Therefore, it can be concluded that gender does matter for this condition.

Finally, gender has a dependency relationship with 2 CENVES, with 1 and with 13, where it is evident that depending on gender the responses will be conditioned.

#### Gender Vs Social Motivation Dimension

Sociodemographic data: Gender vs Social Motivation Dimension CENVE2: Older people are less interested in gender. The level of significance yielded by the SPSS program is 0.508, there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to Gender and the social motivation dimension of CENVE2. Regardless of whether the respondent is male or female, there is no relationship with the answers obtained.

Sociodemographic data: Gender vs. CENVE5 social motivation dimension: Older people have fewer friends than younger people. The significance level obtained by the SPSS program is 0.232; there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to Gender and the CENVE5 social motivation dimension. The variables analyzed behave independently.

Sociodemographic data: Gender vs Social Motivation Dimension CENVE8: As people get older they lose interest in things. The level of significance obtained by the SPSS program is 0.067, there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to Gender and the CENVE8 social motivation dimension. There is no relationship based on the statistical analysis between gender and the CENVE dimension.

Sociodemographic data: Gender vs Social Motivation Dimension CENVE11: As people get older they lose the ability to solve the problems they face. The level of significance obtained by the SPSS program is 0.107; there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to gender and the CENVE11 social motivation dimension. Gender does not influence the responses obtained.

Sociodemographic data: Gender vs Social Motivation Dimension CENVE14: Almost no person over 60 years of age performs a job as well as a younger person. The level of significance obtained by the SPSS program is 0.690, there is no evidence to conclude that there is a relationship between the sociodemographic data corresponding to Gender and the CENVE14 social motivation dimension.

Gender does not have a dependency relationship with any CENVE of the social motivation dimension.

4.4 Results of objective 4: To identify the social perception of learning in old age in a group of elderly people attending the Casa Día del Adulto Mayor, located in the Fagua district of the Municipality of Chía (Cundinamarca) in Colombia.

The following are the results of the first of two rounds of interviews that were applied to the research participants.

4.4.1 First round of interviews - Delphi method  
Analysis of the unit network round No. 1

In order to determine the learning process in old age, ten older people who participated in processes related to this type of learning and who have informed consent were selected. The respective analysis for each question considered is presented below:

1. What is your current perception of your learning?

The unit of analysis used was Self-perception, emphasizing how they observe their learning today. 100% of the interviewees state their capacity to learn at this stage, since they possess all the qualities and the five senses, arguing that learning is part of the life of the human being, it must be continuous and advancing. To keep up to date and keep pace with the world, they declare the need and desire to continue studying to be useful, to improve themselves, and to be able to contribute to society.

A positive perception of learning in old age can have an impact on their mood and quality of life since it produces emotions such as

happiness and joy, they feel that they achieve the goals they set for themselves while studying, they participate with their peers, they have a better perception of their state of health, they exercise their memory, attention, and concentration and develop skills by acquiring new tools that are useful in everyday life, such as technological knowledge that allows them to reduce the digital gap with their children and grandchildren.

2. List 3 to 5 topics you would like to learn about.

According to the findings, it can be concluded that the learning topics that arouse interest in the selected group are very varied, highlighting the following: internet (5), languages (3), arithmetic and mathematics (2), writing (2), nursing (2), gourmet cooking (2) motivation (1), teamwork (1), flower immortalization (1), sales (1), exercise and movement (1), administration and management (1), conflict, war and peace (1), reading (1), arts/plastics (1), literacy (1), communication (1), elder law (1), medicine (1), elder care (1).

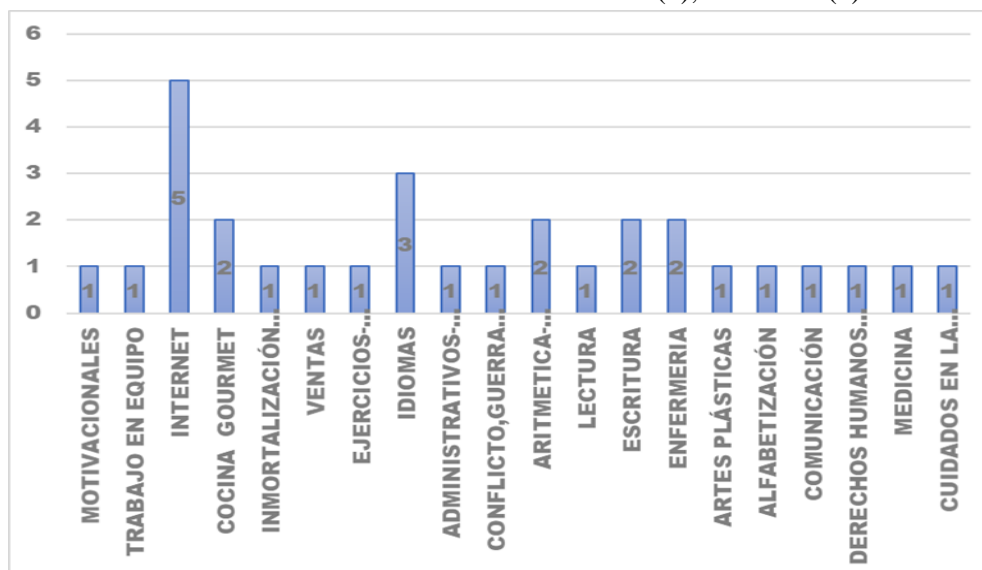


Figure 11. Descriptive analysis of item 8.

Source: Own elaboration.

3. Do you believe that at this point in your life you can learn? Why?

The unit of analysis used was the disposition, emphasizing the desire, the desire, and the attitude to learn. 90% (9) of the people believe

that they can learn at this moment of their life, because they assure that at any age they can achieve this purpose, having the desire to go ahead and do things that, at other moments of their life, they could not do. They consider that they should take an interest because they have



the will, perseverance, and willingness, as well as the desire to avoid highly complex diseases associated with intellectual inactivity. The remaining person who does not believe that he/she can learn, argues that he/she no longer has enough memory for this purpose.

4. Do you have time to study or learn any subject of your interest?

90% (9) of the people have the availability of time to study or learn some of the topics of interest. Only one prefers to do other work.

5. What things or aspects of your social and family environment facilitate or impede your learning process?

According to the perception of the elderly on the aspects that would facilitate their learning process, the group under study determined that one of the main factors is the family since it is the most important social unit for them.

On the other hand, some aspects that impede their learning process are the lack of vocation and patience of the people in charge of teaching them, the influence of imaginaries imposed by society, and the heteroperception and self-perception of learning toward the elderly.

6. There is a very popular Latin American saying or imaginary that says “old parrot does not learn to speak”, implying that old people cannot learn. Do you believe this to be true or not, why?

Ninety percent believe that this imaginary is wrong because the desire to continue to be useful drives them to want to acquire new knowledge.

7. Do you know of any institutions that provide educational services to senior citizens?

Eighty percent (8) of the older adults do not know educational institutions that provide services to older adults, while the remaining 20% (2) have heard of some institutions that do provide services, although they have not been involved.

8. Would you like to enter a university or a specialized educational center for older adults?

Seventy percent (7) of the participants admit that they would like to enter a university or an educational center specialized in older adults to obtain training, while 30% (3) do not feel able to enter these institutions or feel comfortable knowing that they are segmented into an age group.

9. How long would you like to learn and at what times?

50% (5) think that they have unlimited time to learn, 20% (1) would like to learn for approximately 3 hours, 10% (1) just enough time to take a diploma course, and the remaining 20% (2) do not respond to this question. As for the timetable, 50% (5) would like to do it in the morning, 20% (2) are indifferent, 10% think that it would be on weekends, and the remaining 20% (2) do not answer this question.

10. What is your perception of lifelong learning in other older people, and why?

The heteroperception is very varied, ranging from lack of willingness (desire to learn) to physical limitations suffered by older adults, including lack of collaboration from institutions, lack of motivation, economic factors, and the impact of a good teacher.

11. Do you believe that society allows learning in classrooms or other spaces for older adults?

Fifty percent (5) of the respondents believe that society allows learning in classrooms or other spaces for the elderly, while the remaining 50% (5) believe the opposite.

12. What facilities do older adults have to learn? Eighty percent (8) of older adults have the time, are calmer, are more responsible, have the five senses capable of acquiring new knowledge, have the desire and taste to learn, improve themselves and serve society. The other 20% (2) say they do not have time.

13. What difficulties do you think older adults may have in learning?

Some of the difficulties that older adults may have in learning are physical limitations, lack of motivation, lack of attention and laziness, economic factors, social bullying, and mental and cognitive disabilities.

14. There is a very popular Latin American saying or imaginary that says “old parrot does not learn to speak”, implying that old people cannot learn. Do you think that this saying influences older adults not to continue learning processes?

70% (7) do not agree that the saying has a negative influence on the learning of the older adult since it depends on personal interest in acquiring new knowledge.

15. Do you think that society's views on learning in older adults can influence the learning decisions of this population, and why?

90% (9) consider that society has a negative influence on the learning of the elderly because there are more impediments and criticisms towards this social group than words of motivation and support.

16. What human and professional characteristics do you think a teacher who teaches older adults should have?

The characteristics that the participants believe teachers who teach older adults should have are patience, love, understanding, dedication, knowledge of aging, training, and vocation.

4.5 Results of objective 5: To elaborate a training proposal to be applied in the Casa Día del Adulto Mayor, located in the Fagua district of the Municipality of Chía (Cundinamarca), according to the needs of the elderly.

As a product of this research, in gratitude and commitment to the older adults who participated, the following booklet was designed according to their tastes and needs in terms of various learning topics evidenced in this research, and taking into account that at present, due to the pandemic, it is not yet open in a face-to-face manner:

<https://www.canva.com/design/DAEpLZ3CSN8/UcBzeF75FxR4-tuYmPvojw/view#1>

The surveys, study forms, evaluations, and workshops of the booklet were developed using the TYPEFORM platform, which is a free cloud-based software for the construction and results of forms and dynamic surveys for all types of users, which in this case will be used for the personal academic purposes of the doctoral student. This primer can generate future research on the results of learning processes in old age on issues of literacy, basic learning systems, self-care, logical and numerical reasoning, and basic English course.

In addition, with the primer it will be possible to research the negative stereotypes of old age, validating all the answers of the users who answer worldwide via the internet, stored in a cloud system that facilitates the accessibility of the data when required. This will be done when the economic means are obtained for the cost of one of the plans offered by the platform according to the number of samples taken over time. In the future, financing will be sought for this purpose.

## 5. Conclusions, Limitations, and Implications

In this section the most relevant conclusions of the research are highlighted, one of them being the sociodemographic data, where it was found that the elderly participants of the Day Center are mostly from rural areas and that the predominant sex is female, for this reason, the dynamics of the group develops a high level of social participation of community type within its context. Another important aspect is the low level of schooling among the participants. Likewise, 65% of the socioeconomic strata correspond to stratum 2 and 21.8% to stratum 3. Linked to this issue, it was also stated that most of the participants wish to become literate and although this result cannot be generalized, it is important to express that in Colombia there may be more groups that did not have the opportunity to learn to read, write or acquire basic knowledge in mathematics, that do not have programs and/or educational spaces for

them and that there is no planning by the State where they are taken into account.

Considering the results of a Colombian national study conducted on health, well-being and aging in 2015, which yielded data on the “older adult population only reached 5.5 years of schooling” in primary school. According to the above, it can be deduced that very few Colombians in this age range were able to complete their education cycles satisfactorily, which means that the vast majority did not even reach secondary education, much less become 'professionals'. Another significant fact is that “less than 1% were studying”, which shows that there are older adults who want to advance in their learning process despite the difficulties. Finally, “low educational levels increase with age and are higher in the Atlantic zone”. These referents point out that due to the low cognitive activity of the population, this statement is not wrong and corresponds to reality, especially in this region of the country (Ministry of Health and Social Protection, 2015).

Now, to continue with the theme of the previous paragraph, it is indicated that gradually and with a scientific basis, false ideas that have affected the image, the real capacities, needs, learning opportunities, tastes, among other important aspects that continue to develop in the Colombian old age are being eliminated and it is being discovered that the value that is observed at this stage is heterogeneous depending on the culture, family, and society. The following is a reflection on the following.

In ancient hunter-gatherer societies, the elderly played an important role in terms of social stratification, since their function was the oral transmission of the symbolic-cultural aspects of knowledge, due to their accumulated experience and because they did not have written records to transmit knowledge. Later in agricultural societies, the elderly occupied a dominant status in both the family and social spheres and their authority was imposed through a series of cultural norms that favored intergenerational coexistence and co-residence. Thus, the elderly are usually isolated from the rest of the group or receive help from their

descendants as long as they do not jeopardize their standard level of well-being. As an additional complement to the current view of the role of the elderly in the Colombian context, there is the economic factor, where many families have neither the resources nor the moral conviction to take responsibility for the so-called “old man (a)”. Therefore, most of the time they are abandoned to their fate (Carbajo, 2009, p. 88).

To continue with the analysis of the problems of this population, a constant variable has been repeating itself: the abandonment, mistreatment, and indifference of society and the family towards their obligations to their relatives. Consequently, the increase of negative stereotypes about old age is highlighted. In the field of action, educational gerontology, defined by Peterson (1976), as a science that studies and develops skills to teach the elderly, taking into account three spheres: the first is to educate middle-aged and older adults in subjects where individual needs or the environmental contexts in which they develop are evidenced. The educational process seeks to prevent precocious inclinations, provide meaningful roles, seeking to increase psychological development within the framework of enjoyment of life, active participation, and socio-educational activities. The second sphere is framed in the value of education in all stages of life around the aging process and the stage of old age, with the essential objective of facilitating changes in social attitudes, such as prejudices, negative stereotypes among others that generate damage at the personal and collective level, which often limit the spaces for socializing and educational scenarios available for the elderly.

Finally, it refers to increasing the knowledge and training of personnel who work or intend to work with the elderly, which is nothing more than the training of suitable professionals in the field (Rodriguez and Gonzalez, 2006). Thanks to the field of action that has been developed in Gerontology, it has been possible to establish public policies on aging and old age in many countries, which even though they only appear on paper, already have sanctions and regulations for those responsible for neglect,

mistreatment, and failure to comply with their obligations concerning the needs of this population (Fernández, 2006).

On the other hand, taking up the subject of learning processes for older adults, it is of utmost importance to respect their heterogeneity. According to the study conducted by Rodríguez and González (2007), it was possible to establish an adjusted and objective reality for the participant group, taking into account that in this stage of life, biological and psychological characteristics, diverse biographies, cultures, and tastes regarding the social perception of learning in old age are numerous and often depend on social determinants of health and not only on the possible pathologies they may suffer. The implication of finding high negative stereotypes towards old age and, on the contrary, proving that most of them perceive a positive position regarding the issue of wanting learning spaces makes us think that even though they feel that society limits them with such stereotypes, they perceive and need to be treated with the same rights as other stages. Thus, another implication was to demonstrate the urgent need to reflect on the heterogeneity of learning needs in old age, to start from there, and to generate learning possibilities for them, taking into account that their potential teachers should know the normal and pathological biological, psychological and social processes since these can influence them.

It is very important to understand that negative and false positive stereotypes such as “all old people are wise” should be eliminated, as such a statement is not correct since it is not scientifically validated. Many of these social imaginaries have been deeply rooted for years and have produced social segregation and lack of value in the stage of old age, which some human beings could presumably reach.

Thus, in order to eliminate the aforementioned negative stereotypes, further research is needed to form an objective and real knowledge of the elderly in society. Also, the stereotypes about the stage of old age could vanish, if individuals educate in all stages of life, on topics that lead them to deepen in knowing how to age

successfully or active and healthy aging, taking as a primary concept that all human beings are in a process of aging from the moment of conception and that this process will end only with death, understanding that as people age, new learning processes must be applied, since there are new social functions and adaptations throughout life, where the importance of cognitive and sensorial stimulation must remain and be strengthened, especially in old age, trying to improve functions necessary for learning, such as attention, memory, concentration, language, etc. In short, this means preventing, motivating, and facilitating rather than curing.

It is important to take into account that to learn, social perception, psychological, ecological, spiritual, and not only biological health has a direct influence since they are all necessary for the learning processes. Furthermore, seeing the human being from different dimensions can generate a greater knowledge of them, and thus respect the heterogeneity of human beings in terms of their culture, individual being, biography, and family, facilitating educational spaces for all population groups and especially for the elderly.

Having a homogeneous and stereotyped view of old age has given rise to a negative image of this social group, considering them as a sector of people who do not need new learning or who permanently require all kinds of assistance services, forgetting once again the heterogeneity of all human beings and that the right to education is for life. It is quite possible to find in other population groups of older adults, adequate conditions to be in the process of new learning, tastes, and needs that should exist following the services that are intended to be provided.

The majority of women in this study tend to be those who wish to make the best use of their free time and benefit from the spaces where new learning is provided. As limitations were found to know why men are in the minority in these spaces. It is necessary to go deeper into the needs they have regarding learning in old age and to understand whether or not negative

stereotypes could be affecting their decision in this aspect.

Now, analyzing the associations of the CENVE with the sociodemographic aspects, it was concluded that the greatest number of associations between variables were schooling vs. gender, and the most predominant factor was the character-personality factor. Contrary to the health factor that prevailed as the most negative stereotype towards old age in the application of the CENVE, since it was established with 71.6%, which means that there is a negative imaginary where old age is homogenized and it is affirmed that all older adults present deterioration in their health and disability, a subject that contradicts scientific research and has been proven that it is not true in its totality. Then 11.5% represents the dimension of character, personality and finally, 16.9% corresponded to the social-motivation although, in this research, the quantitative results show a fairly negative picture, the qualitative results emphasized a positive picture of desire to learn and a tangible perception of the need for academic spaces adapted for this population group, who mostly want to exercise their right to education regardless of age, what society and family will say, is not of great influence on them.

Therefore, a great reflection is created for the Colombian society to be more aware of the need for literacy not only for children, youth, or adults but for the population in the stage of old age, which is essential to obtain a better quality of life, independence and curb the levels of vulnerability in them. Older Colombians and why not in Latin America, could have more academic social space and thus be more independent creating better opportunities for action. For this, gerontological education should be taken into account, challenging and breaking with it many social and cultural obstacles already evidenced, that if the individual educational needs of the elderly, of all socioeconomic strata and different contexts, were investigated more, practical spaces would be opened, which would surely have a positive impact on the economy in the future since it would be possible to reach old age with better multidimensional possibilities and a more

empowered, healthy and autonomous older adult population would be generated.

On the other hand, the great interest in learning systems or computers was discovered, and it was perceived that it is related to the desire to have the knowledge to communicate with their family or friends through social networks and again not to depend on third parties for consultations, negotiations, learning opportunities provided by the Internet, among many other benefits.

The participants as a whole believe that they can learn at this stage of their lives, because to the extent that society and the family facilitate this process and do not always and homogeneously attribute physical and/or mental limitations to them, and they do not lose their empowerment and desire to learn new subjects, exercising it freely, they can obtain the space they desire so much and that they should not exclude themselves or allow themselves to be excluded.

Importantly, in this study, older people emphasized that they have “all the time in the world to learn” or at least enough time to continue learning. It is understood that not all older people in Colombia can reach the desired retirement since some were unable or unwilling to contribute throughout their lives to the programmed savings that would allow them to enjoy a constant monthly income in the labor retirement process determined by the Colombian State. However, learning during this time can generate and become new challenges, tastes, strengthening of social networks, freedoms, novelties, interests, challenges, and a way to break negative stereotypes about old age.

Some participants in this study considered that their families supported them and encouraged them to continue learning, while others stated that they did not support them or that they were simply skeptical about learning in old age. It would be important to educate them from childhood on topics relevant to the good decisions that should be made regarding lifestyles, in a multidimensional way so that in old age they can continue to successfully enjoy

the processes of teaching and learning, and not wait for the old man to arrive with chronic pathologies due to lack of knowledge on these issues, and in that order of ideas, limits are placed on their right to education.

It is known that the stage of old age denotes the accumulation of good or bad decisions, in terms of healthy lifestyles, which influence the learning processes and that were taken in the early stages. This means that if a child reaches adolescence, becomes a young adult, and passes to adulthood in the middle of life and because of the education and knowledge acquired in early ages and obtains a healthy lifestyle, the same child in the stage of old age may have successful multidimensional conditions that allow him/her to achieve widely in academic spaces.

For this research, most of the participants perceived that society hindered their learning process since they consider that they are perceived as not having the capacity to learn and are considered, according to them, as “objects”, not as people, who are part of a space, who are there to rest or who are all too sick to do so. The participants perceive that they can learn and that this aspect is not recognized by society.

A limitation was found in this research and it is the non-existent record of wide scientific evidence that can generate adequate academic spaces for old age from the society, the family, or the Colombian government, showing the reality of the country. Although for this group of older adults it was indicated that they have the interest, the desire, and the willingness to learn, in most cases, they are truncated by limitations placed both by family members and society. The limitations that they perceive more accurately in different groups, cities, socioeconomic strata, and contexts should be studied in greater depth. Although it is not possible to generalize, this study found that the vast majority of older participants would be willing to study in institutions to acquire new knowledge. Only two participants stated that they would not feel comfortable with the fact that the institutions were directed only to the

older adult population, preferring to be linked to institutions with a diversity of age groups.

On the other hand, and taking into account the above, it would be of great relevance to deepen research to clarify whether groups of older adults wish to learn through a reflective style based on observation, questioning, where constructive and selective criticism is established, or on the contrary, they would like a more opposite style, where the use of listening strategies may be above activities that involve action.

It was very important to show that this group of older people would like to learn in the morning since they perceive that they are more willing and with a clearer mind to acquire knowledge. There is not ample scientific documentary evidence about this aspect.

It was also shown that there is a perception that not only the group of participants is willing to learn, but that they perceive that outside there is a greater number of older people who are willing to continue learning, but who do not have the opportunity to express it.

The facilities perceived by older adults to learn were defined as follows: most of them think that in old age they are more responsible for learning, they seek personal improvement, and finally, they have more time to dedicate to study. These factors should be taken into account to motivate older adults who do not see anything positive in new learning since they present high levels of negative stereotypes towards old age.

In terms of the greatest difficulties perceived by the participants in learning are:

- Physical limitations
- Lack of attention
- Economic factors
- Laziness.

These perceived difficulties could surely be destroyed by working with all age groups, gerontological education, cognitive stimulation, as well as deepening and emphasizing the

knowledge about the brain plasticity that human beings have.

This refers to the capacity of the nervous system to change its structure and function throughout its life, in reaction to the diversity of the environment. Neural plasticity represents the brain's ability to recover and restructure itself (Cognifit, n.d.).

Regarding whether or not they feel affected in the decision to enter into learning processes by the Latin American social imaginary "Old parrot does not learn to speak", most participants say they do not feel affected by this social imaginary, considering some that it is an excuse for self-sabotage, while others consider that it is an action of society to limit the elderly to be what they are supposed to be, a person who has already lived and is no longer useful simply because they are getting old.

They were asked if they considered that society influences the decision to learn in old age and most of the participants perceived their answers in the affirmative since they consider that there are more impediments than facilities for the elderly to develop learning activities, either in classrooms or in other places equipped for that purpose.

They were asked about the qualities that teachers of the elderly should have and they answered that the first quality would be the love for the elderly and for what they are going to teach, secondly, the training they should have to be able to impart their knowledge, thirdly, the vocation to perform this work and, finally, the patience required to teach them.

Based on this analysis, it was determined that: - The social environment plays a determining role in the learning process of the elderly, most of which exerts a negative influence, limiting, displacing, and reducing this population group as if it had already fulfilled its existential purpose and could not have and exercise its constitutional educational rights.

-Learning is of incalculable value for the human being, it is a life purpose and a reactive to achieve integral wellbeing.

It was found that in the group of older adults there are high levels of negative stereotypes about old age, just as they are present in today's society. It is as if this population was already admitting in their mind that the mere fact of being old is synonymous with illness, abandonment, loneliness, exclusion, and with only medical needs. It should be noted that this does not apply to all, but the majority, so that education becomes predominant not only in the academic spheres of society but also in all sectors of the country.

This is why all human beings should be educated or have knowledge from a very early age of the possible healthy aging process, where normal decreases such as wrinkles and gray hair can be observed, but not pathologies. This necessary formation must fight to achieve a quality of life and in it the education for the different stages, where the information and the formation, generate processes of well-being even in the old age.

That is why it is important to teach the entire population about gerontological issues and not just wait for people to reach geriatric chronic diseases, since we are still deficient in education and health promotion. It is possible from the right to education to generate spaces that improve the quality of life of human beings from an early age and not wait until, due to ignorance of these issues, bad decisions in lifestyles accumulate, which can have negative repercussions on the last stage of life in the teaching-learning processes. Lifelong education generates opportunities for everyone to learn, to break negative perceptions and stereotypes about old age.

It is important to recognize the need for older people who feel the need to continue learning and to generate programs adapted to their tastes and real needs, and to register that perhaps it is not a matter of not being able to learn, but of needing physical spaces and specialized professionals who know the aging process and how it influences learning.

It is also highlighted that before wanting to present learning topics from any point of view, it is necessary to generate spaces for research

on how the elderly learn or what strategies and methodologies should be applied to facilitate this process for them. It is important to know their multiple human handicaps and even to know if they present health or a possible physical or cognitive deterioration, to adapt the educational spaces to them and not always pretend that these spaces should always be the same. It is important that teachers are prepared for this and do not use methodologies that can only infantilize the elderly.

Older people who wish to learn can contribute to generating or managing a culture of active and healthier aging, increasing health indicators, integral wellbeing, happiness, the meaning of life, greater possibilities of improvement, and increasing social networks, mitigating the loneliness that some of them present.

Educational establishments should also adapt to the requirements and needs of the elderly. Educational centers will undoubtedly have to become continuing education or permanent education units. In the coming years, the demand for training and job reorientation will increase for groups of adults who, due to technological advances, will have to level or complete studies that they were unable to do in the past (Araneda, 2007, p.13).

Exploring the value and benefits of education in old age can influence sustainable human and economic development, without denying that it depends on the family, social and political commitment since human and economic resources are needed to deploy programs that demonstrate management and support for education in the human life cycle. In the case of old age, it involves investigating groups of older adults, and offering attractive and pertinent learning contexts and processes, among others, providing them with recognition as subjects of rights who can be active in society and especially within the family.

The social environment plays a determining role in the learning of older adults; for the most part, it exerts a negative influence, limiting, displacing, and reducing this population group as if it had already fulfilled its existential

purpose and is completely contradictory to what the older adult population group argues, with a fervent desire to continue considering itself part of society, to be increasingly useful, to teach and educate through its life experience and most important of all to make use of its fundamental right to learn.

As the spiritual leader and human rights activist of the 20th century, Mahatma Gandhi put it: "Live as if you were going to die tomorrow, learn as if you were going to live forever", learning is of incalculable value for the human being, it is a life purpose and a reactive to achieve integral wellbeing".

As for the results obtained from the statistical analysis, the highest significance was found in the CENVE dimension called personality character vs higher schooling, which means that the higher the schooling, the more people believe that their defects become more acute with age, and its degree of significance was  $0.050 = \alpha$ , the chi-square. On the other hand, the V Cramer level with a result of  $p=.338$  with moderate intensity of association, which corresponds to the CENVE question "Older people are easily irritated and are "cantankerous" vs the question in sociodemographic aspects Do you have any difficulty in seeing?". The interpretation of these data is that the older adult who presents visual problems tends to be moodier than those who do not present this limitation. It was concluded that, if they present negative stereotypes, nevertheless, most of them wish and believe that they can learn.

As for the product of this study, a valuable methodology was created in the management of plans, programs, and educational projects for the elderly, necessary for future research in the Municipality of Chía-Cundinamarca or anywhere in the world that wishes to continue deepening and investigating the subject.

It also highlights the development of the booklet as a product of the research that is left as a formative, informative, and investigative proposal that will allow learning more about the perception of learning in old age and the demystification of negative stereotypes that



occur at this stage of life from the participants of Colombia and the world who wish to contribute to the future would generate greater assertiveness as spaces according to the real needs of this group would be presented.

As for the conjecture of this research, it was positive since it was shown that it is possible that, despite the high levels of negative stereotypes towards old age, older adults have an excellent perception of their learning process, since they consider it to be an activity and a right for life.

Now, regarding the implications of the research, it is important to highlight that old age in Colombia and some parts of the world is seen as a problem and is repeatedly associated with the deterioration of physical and cognitive capacities and negative social stereotypes. Therefore, it was demonstrated that this group of rural people has academic needs that are not made visible due to the lack of pertinent research. This type of research allowed to generate reflections, constructive criticism, to be more objective is that although a group of older adults indeed require comprehensive assistance, there is another group that does not need it, that wishes to learn different topics, possibilities of individual and social progress and that knowing the other side of the coin is important to be able to plan programs, plans and projects according to the real needs of this population in the framework of inclusive and supportive learning, placing them in the center and thinking about planning topics from the imaginary of those responsible for it.

An example of them was observed in the Colombian digital newspaper of July 17, 2017, in a textual way it mentions the following: "that on average older adults have completed only the primary basic institutional level. In 2016, the average years of education among the Colombian population over 60 years old was 5.8. This is a very low average year of education compared to adults and young people who have on average 9.9 years of education and 11.2 years of education respectively. Finally, this situation has not changed in the last 12 years, since 14.5% of older adults do not

know how to read and write. This percentage is 5.1% of the total (DANE, 2021, p. 9).

Considering the low level of schooling that is demonstrated for this stage of life, this research determined that this group of older adults require and demand learning spaces, but unfortunately there is not a look towards them and neither are observed in the governmental plans real budgets for it since they are not taken into account. Thus, it serves as a reflection to improve the quality of life of the elderly farmers in the region.

On the other hand, the methodology of this research can be applied in different municipalities including Cundinamarca and would serve to support and invest public resources more equitably and inclusively for all types of populations.

This research has positive consequences in that this group of older adults shows interest in being more productive and improving the proper use of free time, which could have an effective impact on their well-being and satisfaction with life, in addition to a feeling of belonging and importance of having a space suitable for them, where they could be taken into account from what they want, not from what society wants to impose on them in terms of formal and non-formal learning issues, in addition to continuing to discover schedules, facilitators and even teacher profiles they require.

It is particularly relevant that this group of elderly people wish to learn with this cognitive stimulation would improve their mental health, so the implications could also be established as a pilot study in the departmental development plans since it does not contemplate the defense of the right to education and in turn cognitive stimulation so relevant for the aging population and even more for peasant people in the region who deserve the reaffirmation of the merit of their work to cultivate what the big cities consume and serves as a reflection for the government to turn its gaze towards them.

This research presents implications of an educational nature for all stages of life, regarding the importance of the imminent need

to break myths and stereotypes towards old age, which in turn general mistreatment, glimpsing the number of laws and documents that motivate participation, the inclusion of this stage of life, but that in practice and without abundant research will not have positive social impacts in Colombia. Unfortunately many of the Colombian elderly are unaware of their rights and do not know who or how they can be reestablished, among them is the right to education for life and what is observed is that the welfarist and stereotyped behaviors towards old age are not avoided.

On the other hand, it is relevant to highlight that if this group of older adults wishes to attend classes, it could be established that they also have the right to share spaces and commitments of intergenerational interactions where the younger ones could change imaginaries knowing that older generations can be the example that learning can take place at any age, reducing loneliness for all and age discrimination.

Another implication of this work and its results is that there is a growing need for experienced professionals to plan, manage, and research these programs for the region and that a budget should be considered for them since the research reveals felt needs that are not thought of or taken into account in the framework of an inclusive and participatory government.

Thus, this research shows that education for the elderly could be a growing reality in a significant way and that the abolition of fewer welfare proposals should be initiated and more significant and formative programs should be proposed to consolidate a new construction of educational praxis for all ages.

On the other hand, public policy decisions at the local level must focus on addressing educational needs by seeking ways to work for commitments to intergenerational interactions where the youngest could change imaginaries knowing that older generations are the example that learning can be done at any age, thus reducing the loneliness of all and age discrimination.

Another implication of this work and its results is that there is a growing need for experienced professionals to plan, manage, and research these programs for the region and that a budget for this should be considered since the research shows needs that are not thought of in the framework of an inclusive and participatory government.

It is exposed that in Colombia there is a lack of research showing the stereotypes and social perception of learning in old age and that it is demonstrated that negative stereotypes influence negatively, a fact that is widely demonstrated in the current pandemic of covid-19 the issue as follows:

Sociologist Quintero (2020) states in her research that an analysis of the articles grouped in the categories of rights and institutional measures revealed several aspects. On the one hand, the content of the articles in the Colombian media reflects a much broader debate that has been gaining strength in recent years in the world, and of which the country is now part: the tension between institutional measures that continue to reproduce a negative view of old age, and the increasingly urgent need for the recognition of the rights of the elderly (DÍAZ, 2020, p. 47).

This research leaves the possibility of generating lines of action for old age in the face of public policies where it is written that people must work for the restoration of human rights and social participation in old age, but people still do not know their real and true needs in terms of academic spaces. Education in old age could generate social welfare that in the long run could reduce health costs and establish a healthier, more active, and successful old age within the framework of the commitments that Colombia acquired in 2002 in the World Assembly on Aging where it submits to implement active aging in all its population.

This group of elderly rural women who ask for labor opportunities to continue exercising their independence can be observed in the following areas:

Economics. This implies that learning can allow them spaces and skills for work or

improve the techniques they implement, thus improving their quality of life and a more positive inclusion in society.

Thus, thinking about work as a right for the elderly emerges the reflection: before trying to strengthen the “Information and Communication Technologies (ICT), for older adults who wish to work, people must first think about giving them free literacy because, without it, it will not be possible to work in this space that every day opens more doors.

On the other hand, it is of great value to work from childhood on the need for education on relevant topics such as healthy lifestyles and successful active aging, to change Colombian stereotypes, and to show the great need to be more objective with the way we look at old age and, urgently and necessarily, to take into account the needs of Colombian farmers, especially the debt we have with them since most of them do not have any schooling.

Finally, a relevant implication was the product of this research, the booklet that took into account the learning needs that this group of older adults established and will allow the future to generate more research on the topic of stereotypes and learning needs in old age and that will be of great relevance for professionals in the area of aging and old age. Secondly, it was very relevant to show that the Public Policy on Aging and Old Age states to work for educational spaces for this stage of life, as a right for all life, an issue that is not put into practice in this Municipality and finally to discover that there are stereotypes that do not allow this stage to fully exercise its human rights. For this reason, it is ratified that gerontological education (teaching the entire population to age successfully and actively), should be taken into account from an early age to generate a positive impact on society.

On the other hand, the limitations that arose during this research were obstacles that hindered the fulfillment of the objectives set out in this work. The main one is that the professional field of gerontology in Colombia is unknown, universities are closing the program and the government is not aware of

generating mechanisms to demand compliance and development of existing and missing public policies.

Taking into account the little knowledge in the limited professional and labor field of this career and the little interest that is evident in the research on the subject of learning in old age and the myths and negative stereotypes, it was very complicated to find the site and the population that was willing to participate as a sample, since in the private homes, where lobbying was also carried out to include them, there were only refusals for reasons such as asking permission from their relatives, due to cognitive deterioration, and aspects such as that some asked for a series of additional requirements to the research that were not possible due to lack of economic resources since what mattered to the families was that they were paid for participating.

Once the sample was defined, the population underwent several changes during the time the research was developed. Such as health conditions, cognitive level, death, degree of socialization, and mental illness. For this reason, the willingness of the elderly to participate in the activities carried out by the project was complicated.

From the researcher's performance, many difficulties arose, such as: not having a deep knowledge of statistics, let alone the pertinent handling of the Atlas.ti and SPSS programs. It is suggested that these observations be taken into account in the future, since there may be students from developing countries who are not offered these tools at the undergraduate or graduate level, which are indispensable in the leveling of student groups. And of course, the same quality of doctoral work is offered by this prestigious university.

Finally, the achievement and product of this research was to prove and corroborate that education is a lifelong process and that old age is an ideal time to continue learning, and that the difficult part is to demonstrate and convince society that this is a global priority need. The primer is an effective tool but its limitation is the access to a computer and internet by the

elderly population, the support of a caregiver, and the motivation to complete the proposed activities.

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