La discriminación por edad: un estudio comparativo entre estudiantes universitarios

Margarita Gutiérrez; Teresa Mayordomo

How to cite this article: Gutiérrez, M., & Mayordomo, T. (2019). Age discrimination: a comparative study among university students. *Acta Colombiana de Psicología*, 22(2), 62-69. doi: http://www.doi.org/10.14718/ACP.2019.22.2.4

Recibido, julio 4/2018; Concepto de evaluación, octubre 24/2018; Aceptado, noviembre 13/2018

Margarita Gutiérrez* Universidad Católica de Valencia, San Vicente Mártir, España ORCID: https://orcid.org/0000-0001-5247-1777

Teresa Mayordomo

Universidad Católica de Valencia, San Vicente Mártir, España ORCID: https://orcid.org/0000-0003-1873-4910

Resumen

Diversos estudios sobre estereotipos con estudiantes universitarios muestran que las personas mayores son percibidas más desde una imagen negativa que con estereotipos positivos. Teniendo en cuenta el creciente aumento de la población mayor en la actualidad, y con el fin de trabajar con personas mayores desde una visión positiva de sí mismos, es necesario que estos estereotipos desaparezcan. El objetivo de este trabajo fue determinar si existen estereotipos negativos hacia la vejez en estudiantes de carreras universitarias relacionadas y no relacionadas con el campo de la salud. En total, se evaluó a 262 estudiantes con el cuestionario CENVE, y, para saber si existían diferencias de estereotipos negativos entre los estudiantes según su titulación, se realizó un análisis ANOVA, además de comparaciones *post hoc*. Los resultados fueron significativos al nivel del 5 % y evidenciaron la existencia de estereotipos negativos hacia la vejez en estudiantes de títulos universitarios relacionados con el campo de la salud. Los ANOVA mostraron diferencias para el CENVE total ($F_{3,259} = 3.574$; p = .015; $\eta^2 = .040$), para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) y para la dimensión de *motivación social* ($F_{3,259} = 3.697$; p = .002; $\eta^2 = .057$). Las pruebas *post hoc* mostraron la existencia de diferencias en el grado de estereotipos negativos según las titulaci

Palabras clave: discriminación por edad, personas mayores, estudiantes universitarios, estereotipos.

Age discrimination: a comparative study among university students

Abstract

Different studies with university students show the presence of a negative image about the elderly and an absence of positive stereotypes regarding this age group. With the increase of the older population, these stereotypes must disappear in order to work with aged people without a negative view of them. The aim of this paper was to identify the existence of negative stereotypes towards old age in students who are pursuing health-related and not related university degree courses. A total of 262 students were assessed with the CENVE questionnaire. In order to find out whether there were differences between students with respect to negative stereotypes, an ANOVA and a post-hoc comparison test were carried out. Results were significant at the 5% level. These show evidence of the existence of negative stereotypes about old age in students pursuing university degrees related and not related to the field of health. ANOVAs showed differences in total CENVE ($F_{3,259} = 3.574$; p = 0.015; $\eta^2 = 0.040$), Social Motivation dimension ($F_{3,259} = 3.697$; p = 0.012; $\eta^2 = 0.042$), and Personality dimension ($F_{3,259} = 5.157$; p = 0.002; $\eta^2 = 0.057$). The post-hoc tests show the existence of differences in stereotypes depending on the course that is being studied, where the health related courses show the lower level of negative stereotypes. *Key words*: ageism, elderly, university students, stereotypes.

San Vicente Mártir, c/ Sagrado Corazón, 5, Godella 46110, Valencia, España. Tel.: +34963637412, ext. 5473 margarita.gutierrez@ucv.es

A discriminação por idade: um estudo comparativo entre estudantes universitários

Resumo

Diversos estudos sobre estereótipos com estudantes universitários mostram que as pessoas idosas são percebidas mais frequentemente a partir de uma imagem negativa do que com estereótipos positivos. Levando em consideração o crescente aumento da população idosa na atualidade e como o fim de trabalhar com pessoas mais velhas a partir de uma visão positiva de si mesmos, é preciso que esses estereótipos desapareçam. O objetivo deste trabalho foi determinar se existem estereótipos negativos com respeito à velhice em estudantes de cursos universitários relacionados e não relacionados com o campo da saúde. No total, 262 estudantes foram avaliados com o questionário CENVE e, para saber se existiam diferenças de estereótipos negativos entre os estudantes de acordo com sua habilitação, foi realizada uma análise ANOVA, além de comparações *post hoc*. Os resultados foram significativos com um nível de 5% e evidenciaram a existência de estereótipos negativos com respeito à velhice em estudantes de nuiversitárias relacionadas e não relacionadas com o campo da saúde. Os ANOVA mostraram diferenças para o CENVE total ($F_{3,259} = 3.574$; p = .015; $\eta^2 = .040$), para a dimensão de *motivação social* ($F_{3,259} = 3.697$; p = .012; $\eta^2 = .042$) e para a dimensão de *personalidade* ($F_{3,259} = 5.157$; p = .002; $\eta^2 = .057$). As provas *post hoc* mostraram a existência de diferenças no grau de estereótipos negativos com as habilitações em curso, sendo que as habilitações de saúde mostraram menor grau em comparação com as demais.

Palavras-chave: discriminação por idade, pessoas idosas, estudantes universitários, estereótipos.

Introduction

Due to improvements in quality of life and health, it is a demographic reality that the elderly population is increasing. In fact, 18.4% of the Spanish population is over 65 years old, and this percentage is expected to reach 31.9% by 2049 (Abellán & Esparza, 2011). According to data from the 2017 review of the "World Population Prospects" report, the number of older adults is expected to double by 2050 and triple by 2100. In 2017, 962 million people were 60 years old or more, that is, 13 percent of the world's population (United Nations, 2017).

This increase in the older population is causing a series of changes associated with the needs of older adults and the behaviors and attitudes of the rest of the population towards them.

As in the case of other social constructs, chronological age is one of the dimensions people use to automatically categorize others (Nelson, 2005). One of these categorizations, or stereotypes, has to do with the established idea that older people experience a decrease in the development of new goals and objectives in this stage of life. However, some authors have indicated that this is not always the case because some of human beings' life goals are maintained or increase in old age (Mayordomo, Sales, Satorres, & Meléndez, 2016). Upon seeing an older person, assumptions are made about his/her skills, beliefs, and aptitudes. In this regard, authors such as Teixeira, Settembre and Leal (2007) point out that a stereotype about older people is created or recognized because the characteristics or qualities that define this population are taken for granted.

According to Barón and Byrne (2005), stereotypes are beliefs about characteristics or traits shared by members of specific social groups and the typical or modal traits that supposedly pertain to these groups. Specifically, the term "Ageism" (Butler, 1980) was coined to refer to the process of stereotyping and systematically discriminating against people because they are older.

Some authors distinguish stereotypes from other social phenomena to which they are related, such as attitudes and prejudices. Ayalon (2013) differentiated between a behavioral component (for example, discrimination), an affective component (prejudices), and a cognitive component (stereotypes) or attitudes.

Psychological research on ageism is necessary because many of the beliefs about older adults negatively influence life habits or self-perceptions of the older people themselves, and these beliefs may even determine the behavior of individuals and health professionals, regardless of their age group, social group, contact, or familiarity with the older population (Bustillos, Fernández & Ballesteros, 2013; Chalabaev, et al., 2013; Fuentes, 2014; Kornadt & Rothermund 2015; León, Correa-Beltrán & Giacaman, 2015; Rivera & Paredez, 2014).

Ageism stems from ideas that are not based on reality or scientific findings about old age and ageing (Gázquez, Pérez-Fuentes, Fernández, González, Ruiz & Díaz, 2009), and it has an important impact on the way society in general, and caregivers or health professionals in particular, treat older adults, encouraging behaviors that harm their well-being (Losada, 2004). This type of behavior helps to perpetuate stereotypes and resistance to change, and, according to the self-fulfilling prophecy, older adults can adjust their behavior to fit the negative image others have of them (Levy, 2003). This image negatively influences the type of ageing older people experience and leads to less active ageing (Fernandez-Ballesteros, Olmos, Santacreu, Bustillos, & Molina, 2017).

Research in this field has shown that both the general population and the professional literature, including medical and gerontology textbooks (Robinson, Briggs, & O'Neill, 2012), have misconceptions about ageing (Chrisler, Barney, & Palatino, 2017).

Specifically, in the professional area, ageism biases favor a description of older adults based mainly on negative traits, which can encourage discriminatory professional practices (Losada, 2004). According to Casado, Bustillos, Vaquero, Casal and Fernández-Ballesteros (2016), discrimination, both direct and indirect, is in some cases established through the procedure of excluding or setting age limits that are difficult to justify when performing measures for the early detection of certain diseases. When diagnoses are made, older adults are more likely to receive an organic diagnosis such as dementia, and they tend to receive different treatments (preference for pharmacological treatments, for example) from those that would be provided if the person were younger, which in some cases favors pathological ageing styles (Kydd & Fleming, 2015). With regard to mental health, ageism contributes greatly to the limited medical attention provided to older adults with psychological problems. In this regard, the pessimistic beliefs (personality changes and tendency toward rigidity, dementia and loss of cognitive functions and abilities in general, tendency toward depressed mood and loneliness, among others) held by professionals about the possibilities for improvement at this age contribute to a therapeutic nihilism that acts as a barrier to older people's access to psychosocial intervention services (Montorio, Márquez, Losada & Fernández de Trocóniz, 2003).

In Spain, some of these forms of ageism appear to be socially accepted in the field of health care for older adults. The Ombudsman Report in the year 2000 already highlighted the lack of rehabilitation treatments in speech therapy, physiotherapy and occupational therapy for the elderly population.

The role of health professionals is fundamental in combating false myths about this stage of life; therefore, authors such as Abreu and Caldevilla (2015) believe that the attitudes of current university students in the area of healthcare will influence the quality of older people's care in the future. Studies carried out with university students in different knowledge areas show the presence of a negative image of ageing and a lack of positive stereotypes about older people (Campos & Salgado, 2013; Chamorro, 2014; Sandoval, Galindo, Figueroa, Pulido, & Ruvalcaba, 2016; Sanhueza, 2014).

Currently, due to the ageing population, it is foreseeable that there will be a greater demand for health care services for older adults, which also means that a larger number of professionals in the educational and socio-health sector will be working with an older population. These future professionals are influenced by the social image created of old age, which is full of negative nuances that can condition the attitudes and behaviors of anyone who, in one way or another, will work with this age group. Studies by Levy (2003) found that doctors and psychiatrists who worked with older adults had a tendency to disparagingly attribute various problems to old age (such as depression, insomnia, lack of motivation, and loss of capabilities), instead of trying to treat them as they would treat a younger person. This tendency poses a challenge for higher education institutions, especially those that offer programs in the area of health sciences, as Mehrotra, Townsend, and Berkman noted (2009).

As stated above, stereotypes are a structured view accepted by most people. In relation to old age and the elderly, these ideas are usually associated with negative and pathological aspects of old age, such as the idea that the elderly are fragile, stubborn, or dependent (Bousfield & Hutchison, 2010). These types of attitudes, beliefs, or perceptions that students (future professionals) have about older adults can play an important role in the way they will later work with people in this age group (Zambrini, Moraru, Hanna, Kalache & Nuñez, 2008). Hence, the objectives of this study are to assess the presence of ageism in university students in different fields of university training, and find out if there are differences in the ageism levels depending on the university degree being studied.

Method

Design

This is a cross-sectional study using natural groups and non-randomized sampling.

Participants

The study was composed of 262 participants with a mean age of 21.29 years (SD = 3.47). With regard to gender, 18.6% of the participants were men, and 81.4% were women. All of them were students in private universities, from the first to the fourth year of the degree they were studying. As far as their fields of study are concerned, 43.3% were studying Psychology, 19% Education, and 15.6% professions with possible contact with older adults (Social Education, Pedagogy, and Sport and Physical Activity Sciences). In addition, 22.1% were studying healthcare degrees and would

be working with older people in the future (Physiotherapy, Nursing, Podiatry, Dentistry and Occupational Therapy). The inclusion criteria were that they had to be enrolled in undergraduate university studies and give their consent to participate in the study. Students who were informed and did not give their written consent to participate were excluded from the study.

Instruments

All the participants answered sociodemographic questions (sex, age, and current studies) and completed the Negative Stereotypes towards Ageing Questionnaire (CENVE) (Blanca, Sánchez & Trianes, 2005). This scale consists of 15 items with negative and stereotyped content about ageing and older people. Its authors recommend calculating three subscales on negative stereotypes related to health, the socio-motivational area, and character and personality, which are calculated using factorial analysis. Each dimension is composed of 5 items. The scores on the dimensions range between 5 and 20 points, and a score between 12.5 and 20 indicates a high degree of ageism in that dimension. This test has been employed in other studies using both the total score and scale scores (León, et al., 2015, Sarabia & Castanedo, 2015). Cronbach's alpha coefficients for the scales in the present study were satisfactory, with the lowest one referring to the health dimension. (Cenve Total $\alpha = .895$, health dimension $\alpha = .668$, social motivation dimension α = .774, personality dimension α = .758).

Procedure

To collect the sample, students were first informed about the study, its objective, and how to proceed if they wanted to participate. All those students who wanted to participate voluntarily gave their written consent to later respond to the questionnaire anonymously and collectively. Participants filled out the questionnaire in the classrooms where their courses were taught. The questionnaire took approximately 20 minutes to complete.

Analysis

Descriptive analyses (central tendency and dispersion) of the scores obtained on negative stereotypes, analyses, and comparisons were carried out with the IBMSPSS program 23. An ANOVA (Rubio & Berlanga, 2012) was conducted to analyze whether there were differences in the ageism levels depending on the degree studied. The findings were considered significant at the 5% level. In addition, post hoc tests (Tukey) were performed to identify which degrees showed differences.

Results

Before indicating the differences found in both the total scale score and the subscales, depending on the degree studied, it is important to point out that all of the degrees presented ageism to a certain extent.

After analyzing the normality and homogeneity of variance test results with the Kolmogorov-Smirnov test (total CENVE normality (KS = 0.051, p = 0.092), the social motivation dimension (KS = 0.053, p = 0.089), health (KS = 0.043; p = 0.085) and personality (KS = 0.053; p = 0.091)) and the Levene test (homogeneity of variances (total CENVE (Levene _{3,258} = 0.477, p = 0.698), the social motivation dimension (Levene _{3,258} = 0.124); p = 0.946), health (Levene _{3,258} = 0,160; p = 0.923), and personality (Levene _{3,258} = 0,561 p = 0,642)), simple ANOVAs showed significant differences among the different degrees on the total CENVE (F_{3,259} = 3.574; p = 0.015, η^2 = 0.040), the social motivation dimension (F_{3,259} = 3.697, p = 0.012, η^2 = 0.002; η^2 = 0.057); no significant differences were found for the health dimension (F_{3,259} = 1.194, p =, 0.313, η^2 = 0.014).

When performing the post hoc tests for the CENVE total score, statistically significant differences were obtained between the group of healthcare degrees and the psychology (p = 0.026) and education (p = 0.001) degrees. Table 1 shows the means obtained for each of these degrees, with the healthcare group showing the least ageism.

Table1

Descriptive	for	total	CENVE
-------------	-----	-------	-------

1 0		
Degree	Mean	Standard deviation
Psychology	37.66	7.83
Education	39.84	7.00
Healthcare	34.03	8.64
Possibly related	36.90	8.51

When performing the post hoc tests for the social motivation dimension, significant differences were observed between the health care degrees and psychology (p=0.004) and education (p=0.002). In this dimension, the healthcare group did not show any ageism stereotypes, whereas the education and psychology groups showed more ageism. Table 2 shows the means obtained by the groups.

Table 2.

Descriptive for social motivation dimension

Degree	Mean	Standard deviation
Psychology	12.95	2.98
Education	13.42	2.77
Healthcare	11.27	3.25
Possibly related	12.29	3.31

Finally, with regard to the personality dimension, differences were found between the group of healthcare degrees and the rest of the groups (psychology (p = 0.001), education (p = 0.001), and degrees with possible relationships (p = 0.050)), with the healthcare group showing no ageism, in contrast to the other groups. Table 3 shows the scores obtained for the groups.

Table3.

Descriptive for personality dimension

1 0 1	-	
Degree	Mean	Standard deviation
Psychology	12.81	2.92
Education	13.84	2.73
Healthcare	10.84	3.25
Possibly related	12.43	3.25

Although there are no statistically significant differences in the health dimension, the means obtained for all the established groups are presented.

Tabla 4.

Degree	Mean	Standard deviation
Psychology	11.89	2.84
Education	12.58	2.58
Healthcare	11.91	2.87

Discussion

This study presents evidence of ageism in students who are studying university degrees related to the healthcare field and others not related to it, and it also shows differences in stereotypes depending on the degree pursued.

Regarding the differences found in stereotypes, statistically significant differences were observed that were similar to results from other studies (Chamorro, 2014). Specifically, differences were found between the group of healthcare degrees and the psychology and education degrees.

The healthcare group was the only one that showed low scores on ageism. On the one hand, these data were somewhat surprising because these students are in professions related to treatment and rehabilitation in aging processes that can be considered pathological, and this contact with negative aspects of old age associated with disease and deterioration means that the students in these degrees could have a more negative image of older people. This idea that contact with dependent elderly people reinforces the social stereotype of disease and impairment associated with age (Aristizábal-Vallejo, Morales, Camila & Marcela, 2009) can be observed in several studies. For example, the study by Sandoval, Galindo, Figueroa, Pulido and Ruvalcaba (2016) finds more negative stereotypes in students in careers involving direct contact with the elderly (or in careers related to health, such as nursing (Duran-Badillo, et al., 2016; Sarabia & Castanedo, 2015) or dentistry (Fernández, Monardes, Díaz, Fuentes & Padilla, 2017).

However, the absence of ageism in the group of healthcare degrees may have to do with the students' lack of preprofessional contact and intervention with older people with pathologies because they are just beginning their training. Although no negative aging stereotypes appeared in this group, it is important to continue working in this direction. Due to demographic changes, the demand for health services is expected to be affected by the larger number of older adults, which means that students who enter careers in the healthcare field will largely work with the elderly.

Education students make up the next group, and they do demonstrate ageism, perhaps because these students are interested in the early stages of life, and not in ageing. Nevertheless, it is important to take teachers' beliefs into account because they are the main socializing agents in the school, and some aspects of the ideas they have about society, life, and people will influence their students' education.

Continuing with the results, students of psychology, a degree that was not included in the strict healthcare category, show more ageism than students in healthcare degrees. Psychologists can work in the field of ageing from different perspectives (healthy, active, positive, and pathological, among others). Specifically, in the field of psychology, Losada (2004) found that ageism has three components: cognitive, emotional, and behavioral; and that negative stereotypes about ageing favor a negative description of this population, as well as engagement in discriminatory professional practices due to this bias. Regarding the cognitive area, where the psychologist can have a great influence, studies indicate that university students have difficulty discriminating between "myths" and "realities" related to cognitive problems that may occur with age, and there is a tendency to homogenize older adults around an idea of inevitable and universal pathological, cognitive deterioration. Prioritizing the cognitive aspects of ageing relegates psychological pathologies of an emotional nature that occur in any stage of the life cycle to a secondary role. This priority is reflected in the lack of studies on the efficacy of psychotherapies in older adults (Márquez-González, 2010).

Focusing on the subscales of the Stereotype Questionnaire (CENVE), significant differences were also found between the group of healthcare degree students and the rest of the degrees on two of the subscales, social motivation and personality.

Surprisingly, on the health subscale, defined as the onset of disability, cognitive deterioration, and the generalized existence of mental illness in old age, no significant differences were found between the groups. However, the scores indicate that the healthcare group presents less ageism, leading to imagine that receiving training in ageing, even from a pathological perspective, offers a broader view of the variability in ageing, which protects students from the prejudices observed in other degrees.

The findings for the CENVE social motivation dimension, related to affective deficiency, lack of vital interests, and a reduced capacity to perform a work activity, showed differences between healthcare degrees, whose scores show a low level of ageism, and the rest of the degrees, with the exception of degrees that may have possible contact with older people. Specifically, the group of education students presents the most negative stereotypes, an aspect that should be taken into account in their training, given that they will be transmitting values and beliefs to their students, and that negative prejudices begin to form in childhood. These students (future teachers) have the idea that older people have problems with socializing. This result is striking because grandparents have an increasingly important participatory role in today's schools and are important socializing agents for their grandchildren (Sanz, Mula & Moril, 2011).

It is noteworthy that, after the group of future teachers, the psychology group held more beliefs about older people being unable to solve problems, losing interest in things, and having fewer friendships. However, the psychology curriculum emphasizes the human capacity to adapt to change. Although older people face many situations that have an element of loss, and they find themselves in a context over which they have no personal control, some authors (Carver & Connor-Smith, 2010) indicate that, as people get older, they acquire a greater ability to adapt by using emotion-focused coping strategies. These authors point out that, as individuals age, they tend to distance themselves in a stressful situation, think carefully, know their own emotions better than young people, and develop better and more appropriate strategies to act effectively in conflictive situations. In addition, in the psychology degree curriculum (in psychosocial development and other subjects), a change at a social level can also be seen in old age. It is true that this type of activity declines (Charles & Carstensen, 2009), but there is a tendency to carefully select social contacts as early as middle age. Therefore, this decline in social activity is quite selective, especially affecting the most superficial contacts, whereas the closest relationships and sources of support basically remain intact with age (Meléndez, Tomás & Navarro, 2007).

Finally, with regard to the personality dimension, which refers to emotional lability problems and personality changes such as rigidity, the findings of this study suggest that students in healthcare careers show less ageism in this dimension, which may influence their form of intervention, diagnosis, and attitude toward working with older adults in the future. Negative stereotypes in this dimension were found in the students belonging to the other degrees, with the group of education students having the highest scores, followed by the group with a possible relationship with older people (such as students majoring in Social Education and Physical Education), and, lastly, the group of psychology students.

Again, it is noteworthy that the psychology group shows stereotypes on the personality subscale because this profession studies the development of personality. This level of training in the area of personality can be quite specific; therefore, if content dealing specifically with the idiosyncrasy of aging is not offered, students can acquire prejudices that focus on personality characteristics.

As mentioned above, a higher level of training in old age and ageing reduces ageism (Sarabia & Castanedo, 2015), which makes it necessary, as Sandoval, et al, (2016) noted, to review the training programs in current university degrees and introduce aspects related to ageing, old age, and the elderly.

Ageing affects all aspects of human life, not only health, and older people are present in all spheres of society. Thus, it is important for professionals to have adequate training and a realistic image of older people, without prejudices.

Training and subsequent professional development can influence the relationship with and care of the elderly; in addition, noting the presence of ageism in students can provide clues about where to direct interventions to curb these stereotypes.

Study limitations include the size of the sample and the degrees analyzed. Future studies should add more degrees related and not related to old age and health, with a similar number of participants in each group. Moreover, the small effect size is also important because it indicates that the degree is only one variable that differentiates or predicts ageism. Another possible future line of research would be to develop intervention programs for psychology students because the demographic and social future requires psychologists to have a realistic and updated vision of old age. In addition, programs should be developed for other degrees whose graduates will directly or indirectly work with older adults.

References

Abellán, A. y Esparza, C. (2011). Un perfil de las personas mayores en España, 2011. Indicadores demográficos básicos.
[A profile of the elderly in Spain, 2011. Basic demographic indicators] Madrid: IMSERSO.

- Abreu, M., &Caldevilla, N. (2015). Attitudes toward aging in portuguese nursing students. *Procedia-Social and Behavioral Sciences*, 171, 961-967. DOI: 10.1016/j. sbspro.2015.01.215
- Aristizábal-Vallejo N, Morales A, Camila B, Marcela A. (2009) Estereotipos negativos hacia los adultos mayores en estudiantes universitarios. [Negative stereotypes towards older adults in university students.] Cuadernos Hispanoamericanos de Psicología, 9, 44-48.
- Ayalon, L. (2013). Feelings towards older vs. younger adults: results from the European social survey. *Educational Gerontology*, 39, 888-901.
- Barón. R., y Byrne, D. (2005). *Psicología social*. [Social Psychology, Spain] Marid: Prentice Hall.
- Blanca, M. Sánchez, C. y Trianes, M. (2005). Cuestionario de evaluación de estereotipos negativos hacia la vejez. [Questionnaire for the evaluation of negative stereotypes towards old age] *Revista Multidisciplinar de Gerontología*, 15, 212-221
- Bousfield, C., & Hutchison, P. (2010). Contact, anxiety, and young people's attitudes and behavioral intentions towards the elderly. *Educational Gerontology*, *36*, 451-466. DOI: 10.1080/03601270903324362
- Bustillos, A., & Fernández-Ballesteros, R. (2013). Attributions of competence mediate the behaviors of caregivers and older adults. *GeroPsych: The Journal of Gerontopsychology and Geriatric Psychiatry*, 26, 211. DOI: 10.1024/1662-9647/ a000089
- Butler, R. N. (1980). Ageism: A foreword. Journal of Social Issues, 36, 8-11.
- Campos, M. y Salgado, E. (2013) Percepción sobre la tercera edad en estudiantes de primer nivel de la Facultad de Psicología de ULACIT y su relación con el desarrollo de competencias profesionales para el trabajo con adultos mayores. [Perception about the third age in first level students of the Faculty of Psychology of ULACIT and its relation with the development of professional competencies to work with older adults] *Revista Rhombus, 10*, 1-30.
- Carver, C.S. y Connor-Smith, J. (2010). Personality and coping. Annual Review of Psychology, 61, 679-704. DOI: 10.1146/ annurev.psych.093008.100352
- Casado, J. M. R., Bustillos, A., Vaquero, A. I. G., Casal, C. H., & Fernández-Ballesteros, R. (2016). ¿Se discrimina a los mayores en función de su edad? Visión del profesional. [Are the elderly discriminated according to their age? Professional's vision] *Revista Española de Geriatría y Gerontología*, 51, 270-275. DOI: 10.1016/j.regg.2016.03.005
- Chalabaev, A., Emile, M., Corrion, K., Stephan, Y., Clément-Guillotin, C., Pradier, C., & d'Arripe-Longueville, F. (2013). Development and validation of the aging stereotypes and exercise scale. *Journal of aging and physical activity*, 21(3), 319-334.
- Chamorro, J. S. (2014). Imágenes sobre la vejez en jóvenes estudiantes universitarios según área del conocimiento: Un

estudio exploratorio. [Images on old age in young university students by area of knowledge: An exploratory study] *Acciones e Investigaciones Sociales, 34*, 105-124.

- Charles, S. T., & Carstensen, L. L. (2009). Socioemotional selectivity theory. *Encyclopedia of Human Relationships*, 1578-1581.
- Chrisler, J. C., Barney, A. and Palatino, B. (2017), Ageism can be hazardous to women's health: ageism, sexism, and stereotypes of older women in the healthcare system. *Journal* of Social Issues, 72: 86-104. doi:10.1111/josi.12157
- Duran-Badillo, T., Miranda-Posadas, C., Cruz-Barrera, L. G., Martínez-Aguilar, M., Gutiérrez-Sánchez, G., & Aguilar-Hernández, R. M. (2016). Estereotipos negativos sobre la vejez en estudiantes universitarios de enfermería. [Negative stereotypes about elderly in university nursing students] *Revista de Enfermería del Instituto Mexicano del Seguro Social, 24*, 205-209
- Fernández, E., Monardes, H., Díaz, C., Fuentes, F., & Padilla, P. (2017). «Ageism» as social problem in geriatrics: Regarding the measurement of ageism in dentistry students. *Revista Española de Geriatría y Gerontología*, 52, 109. DOI: 10.1016/j.regg.2016.08.003
- Fernández-Ballesteros, R., Olmos, R., Santacreu, M., Bustillos, A., & Molina, M. A. (2017). The role of perceived discrimination on active aging. *Archives of Gerontology and Geriatrics*, 71, 14-20. DOI: 10.1016/j.archger.2017.02.004
- Fuentes, C. L. C. (2014). Análisis de la relación entre las actitudes hacia la vejez y el envejecimiento y los índices de bienestar en una muestra de personas mayores. [Analysis of the relationship between attitudes towards old age and aging and welfare indices in a sample of elderly people] *Revista Española de Geriatría y Gerontología, 49*, 108-114. DOI: 10.1016/j.regg.2013.06.001
- Gázquez, J. J., Pérez-Fuentes, M.C., Fernández, M., González, L., Ruiz, I. & Díaz, A. (2009). Old-age stereotypes related to the gerontology education: an intergenerational study. *European Journal of Education and Psychology*, 2,263-273.
- Kornadt, A., & Rothermund, K. (2015). Views on aging: Domainspecific approaches and implications for developmental regulation. *Annual Review of Gerontology and Geriatrics*, 35(1), 121–144, Doi: 10.1891/0198-8794.35.121.
- Kydd, A., & Fleming, A. (2015). Ageism and age discrimination in health care: Fact or fiction? A narrative review of the literature. *Maturitas*, 81(4), 432-438. DOI: 10.1016/j. maturitas.2015.05.002
- León, S., Correa-Beltrán, G., & Giacaman, R. A. (2015). Negative ageing stereotypes in students and faculty members from three health science schools. *Gerodontology*, 32, 141-148. DOI: 10.1111/ger.12065
- Levy, B. R. (2003). Mind matters: Cognitive and physical effects of aging self-stereotypes. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 58, 203-211. DOI: 10.1093/geronb/58.4. P203

- Losada Baltar, A. (2004). Edadismo: consecuencias de los estereotipos, del prejuicio y la discriminación en la atención a las personas mayores. Algunas pautas para la intervención. [Ageism: consequences of stereotypes, prejudice and discrimination in the care of the elderly. Some guidelines for intervention] *Madrid, Portal Mayores, Informes Portal Mayores, 14.*
- Márquez-González, M. (2010). Nuevas herramientas para la intervención psicológica con personas mayores: la tercera generación de terapias conductuales. [New tools for psychological intervention with older people: the third generation of behavioral therapies] *Revista Española de Geriatría y Gerontología, 45*, 247-249.
- Mayordomo, T., Sales, A., Satorres, E., & Meléndez, J. C. (2016). Bienestar psicológico en función de la etapa de vida, el sexo y su interacción. *Pensamiento Psicológico*, 14, 101-112.
- Mehrotra, C. Townsend, A. Berkman, B. (2009). Enhancing research capacity in gerontologicalsocial work. *Educational Gerontology*, 35,146-163. DOI: 10.1080/03 601270802421376
- Meléndez-Moral, J. C., Tomás-Miguel, J. M., & Navarro-Pardo, E. (2007). Análisis de las redes sociales en la vejez a través de la entrevista Manheim. [Analysis of social networks in old age through the Manheim interview] Salud Pública de México, 49, 408-414.
- Montorio Cerrato, I., & Márquez González, M., & Losada Baltar, A., & Fernández De Trocóniz, M. (2003). Barreras para el acceso a los servicios de intervención psicosocial por parte de las personas mayores. *Psychosocial Intervention*, 12 (3), 301-324.
- Nelson , T. D. (2005). Ageism: Prejudice against our feared future self. *Journal of Social Issues*, 61, 207-221.
- Rivera, L.M., & Paredez, S. M. (2014). Stereotypes can "get under the skin": Testing a self-stereotyping and psychological resource model of overweight and obesity. *Journal of Social Issues*, 70, 226-240. Doi: 10.1111/josi.12057.
- Robinson, S., Briggs, R., &O'Neill, D. (2012). Cognitive aging, geriatric text books, and unintentional ageism. *Journal of the American Geriatric Society*, 60, 2183–2185.

- Rubio Hurtado, M. J., & Berlanga Silvente, V. (2012). Cómo aplicar las pruebas paramétricas bivariadas t de Student y ANOVA en SPSS. REIRE. *Revista d'Innovació i Recerca* en Educació, 5, 83-100
- Sandoval, W. D., Galindo, M. C. E., Figueroa, D. G. I., Pulido, M. S. V., & Ruvalcaba, N. M. M. (2016). Ideas sobre la vejez en estudiantes de Ciencias de la Salud del Centro Universitario de Tonalá. [Ideas about old age in students of Health Sciences of the University Center of Tonalá] *Investigación y Práctica en Psicología del Desarrollo, 1*, 237-244.
- Sanhueza, J. (2014). Estereotipos sociales sobre la vejez en estudiantes mayores: un estudio de caso. [Social stereotypes about old age in older students: a case study] *Revista Internacional de Educación para la Justicia Social. RIEJS* [Internet], 3(1), 217-229
- Sanz, R., Mula, J.M. y Moril, R. (2011). La relación abuelosnietos-escuela: una excusa o una necesidad. En: Conferencia llevada a cabo en el XII Congreso Internacional de Teoría de la Educación. Barcelona.
- Sarabia Cobo, C. M., & Castanedo Pfeiffer, C. (2015). Modificación de estereotipos negativos en la vejez en estudiantes de enfermería. [Modification of negative stereotypes about the elderly in nursing students] *Gerokomos, 26*, 10-12. DOI: 10.4321/S1134-928X2015000100003
- Teixeira, M. C. T. V., Settembre, F. M., & Leal, S. B. (2007). A survey of women's social representations of aging and rejuvenation. The Spanish Journal of Psychology, 10, 104-114.
- United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision, Key Findings and Advance Tables. Working Paper No. ESA/P/WP/248.
- Zambrini, D. A. B., Moraru, M., Hanna, M., Kalache, A., & Nuñez, J. F. M. (2008). Attitudes toward the elderly among students of health care related studies at the University of Salamanca, Spain. *Journal of Continuing Education in the Health Professions, 28*, 86-90. DOI: 10.1002/chp.162