

Research Article

Are Future Occupational Therapists Sufficiently Prepared to Take Care of Older Adults? Prevalence of Negative Age Stereotypes in Occupational Therapy Undergraduate Students: A Cross-sectional Study

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Received: 25 March, 2025

Accepted: 31 March, 2025

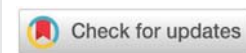
Published: 01 April, 2025

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Abstract

With the population aging, it is necessary to train future healthcare professionals to properly care for the growing number of older adults. One challenge is that age stereotypes are commonly found among healthcare professionals, making it difficult to adequately care for this population. Even so, age stereotypes among occupational therapy undergraduate students are rarely explored. Therefore, the objective of this study is to analyze the prevalence of negative age stereotypes in a sample of occupational therapy undergraduate students in Spain.

Method: 93 Spanish undergraduate students in occupational therapy completed the Negative Age Stereotypes Assessment Questionnaire (abbreviation from its Spanish name: CENVE), which consists of 15 items and 3 dimensions scale (Health, Temperament and personality and Motivation/social), to evaluate existing age stereotypes. Descriptive analyses of these stereotypes were conducted.

Results: The results reveal a high percentage of students reporting negative age stereotypes (between 12.9% and 20.4% of the sample), with negative health stereotypes were the most common dimension (33.4%), and followed by temperament and personality (30.1%) and motivation/social (19.4%).

Conclusion: The results suggest a high presence of ageist stereotypes in future occupational therapists, leading to a number of practical implications of the study.

Highlights

- 20.4% of undergraduate students in occupational therapy hold negative stereotypes towards older adults.
- The dimension of the CENVE scale with the highest prevalence was the health dimension (33.4%).
- Due to the age population, it is crucial to train future health professionals to adequately care for older adults.

Introduction

The population is ageing worldwide, posing new challenges for health systems and social care [1]. Addressing ageism (i.e., age-related stereotypes, prejudices, and discrimination) [2] should be a priority for healthcare systems. Ageist stereotypes have been found to amplify health problems and increase healthcare system costs [3]. In addition, all the studies included in the systematic review by Kang and Kim [4] showed a negative association between ageism and psychological well-being in older adults.

While ageist stereotypes can be directed toward younger people, ageism is most often against elderly individuals [5]. And ageist stereotypes can be positive [1], for example, with older adults having higher prestige or wisdom. However, the most common ageist stereotypes are negative and related to worse physical health, a decline in functional capacities, less interest and motivation, social disconnection, loneliness, and less activity [6,7]. Rather than being explicit, this ageist discrimination is often subtle and embedded in habitualized and normalized cultural, political, and economic practices [8].

In this regard, several questionnaires have been developed to measure negative stereotypes towards elderly individuals [9]. Among these, the Negative Ageing Stereotypes Assessment Questionnaire (CENVE) [10] stands out. Despite being specially developed for the Spanish cultural context, it has been used in other cultural contexts (e.g., in Mexico) [11]. This questionnaire uses items representative of the most common negative stereotypes towards old age, such as deterioration of physical and mental health, lack of motivation and vital interests, incompetence, character problems, shrinking of personality aspects, and difficulties in social interaction. The scale includes 15 items scored from 1 to 4, yielding a total score range of 15–60, two different cutoff points for the presence of negative stereotypes have been proposed in the literature for this scale. First, some authors use a score of 37.5 as a cutoff point, arguing that results above this score indicate negative stereotypes for the total scale, or scores above 12.5 indicate negative stereotypes for each of the individual dimensions [12,13]. Alternatively, Sarabía Cobo and Castanedo Pfeiffer [14] use cutoff points indicating that scores between 40 and 50 points correspond to a high presence of stereotypes and scores between 51 and 60 correspond to a very high presence of stereotypes.

It is important to note that, worryingly, the presence of these age stereotypes is quite common among healthcare professionals [15]. For example, these negative prejudices towards elderly individuals are frequent among health professionals in Spain [6]. In addition to current health professionals, ageism is prevalent among future health professionals as well. For example, 62% of nursing students in one study scored above 40 points on the CENVE scale, indicating they held a high level of ageist stereotypes [14]. In populations outside Spain, the CENVE has revealed an equally worrying prevalence of these stereotypes among healthcare professionals in training. For example, Sequeira Daza and Silva Jiménez [16] used the CENVE in Chile to measure the prevalence of stereotypes in a

population of health sciences research students. 28.7% of these students held levels of negative stereotypes above the cutoff points established by Sarabía Cobo and Castanedo Pfeiffer [14]. The most prevalent negative stereotype among these students was related to cognitive decline: “Cognitive decline is an inevitable part of old age”. Again using the Sarabía Cobo and Castanedo Pfeiffer [14] cutoff points, Rodríguez-Mora [17] found negative stereotypes had a prevalence of 45.4% in the health dimension, 53% in the motivation/social factor, and 58% in temperament and personality among university undergraduates, including psychology students. While the prevalence of ageism among health professionals broadly has been established, the prevalence of ageism specifically among professionals that work with older adults more frequently [18], such as occupational therapists, has hardly been analyzed. Previous research that has studied ageism among occupational therapy students indicates that further research is needed on this subject [19].

Therefore, since ageism has been shown to have an impact on the quality of care for older adults, affecting their physical and emotional health [4], it is important to investigate the perceptions of future healthcare professionals about age and ageing. Therefore, the aim of this study is to assess the prevalence of ageist stereotypes in undergraduate occupational therapy students in the Community of Madrid (Spain).

Methodology

A convenience sampling method was implemented to recruit undergraduate students in Occupational Therapy from the Faculty of Health Sciences at the Universidad Rey Juan Carlos in Madrid, Spain. Subsequently, a cross-sectional study was conducted with a sample of ninety-three first-year undergraduate students in Occupational Therapy from the Faculty of Health Sciences at the Universidad Rey Juan Carlos in Madrid, Spain. The Ethics Committee of Universidad Rey Juan Carlos approved the study protocol, procedures, and data protection measures for the study. All participants provided informed consent before completing the evaluation.

In addition to sex and age, the following variable was assessed:

Age stereotypes: The level of ageism and the type of stereotype were assessed using the Negative Age Stereotypes Assessment Questionnaire (CENVE), which consists of 15 items [10]. The items are grouped into three factors: a) health (e.g., “Most people over 65 have a series of disabilities that make them dependent on others”), b) motivation/social (e.g., “As people get older, they lose interest in things”), and c) temperament and personality (e.g., “As elderly individuals get older they become more rigid and inflexible”). The health factor explores deteriorating health, the appearance of disabilities, cognitive decline, and the widespread existence of mental illnesses in old age. In the motivation/social factor, the items are related to emotional deficiencies, lack of vital interests, and diminished ability to perform a work activity. And in the temperament and personality factor, statements are made about problems of emotional ability and changes in personality. Response options consist of a 4-point Likert-type response format (1 = “strongly

disagree”; 4 = “strongly agree”). The internal consistency (Cronbach’s α) of the scale in the present study was .68, .59, .69 and .83 for the health, motivation/social, and temperament and personality dimensions, and the full scale, respectively.

Data analysis

The original CENVE scale does not propose cutoff points [10]. However, as previously mentioned, Leon, et al. [12] propose the use cutoff points indicating the existence of negative stereotypes starting at 37.5 points on the full scale and 12.5 points on each dimension. In this research, the sample was classified using this cutoff point as a reference with the aim of establishing the prevalence of students who presented negative stereotypes. These cutoff criteria were chosen as they apply to both the total scale and each of the separate dimensions. In addition, the results for the general scale will also be presented using the cutoff points established by Sarabía Cobo and Castanedo Pfeiffer [14] due to the numerous articles in the previous scientific literature that use the same cutoff points. These authors differentiate the score obtained in the general scale into very low (15–28), low (29–39), high (40–50) and very high (51–60) levels of ageism. IBM SPSS Statistics v.25 software was used for data analysis.

Results

Participants reported a mean age of 19.63 years (SD = 2.29; range: 18–30), and 82.8% were women. The mean score obtained for age stereotypes was 33.18 (SD = 6.05; range: 18–44) (Table 1).

Following the classification proposal of Sarabía Cobo and Castanedo Pfeiffer [14], 20.4% of participants had very low levels, 66.7% low levels, and 12.9% high levels of ageist stereotypes. No participant showed very high levels of ageist stereotypes (Figure 1). Following the cutoff points of the study by León, et al. [12], 20.49% of total participants showed negative stereotypes. These results, as well as those mentioned below corresponding to each of the dimensions, are shown in Figure 2.

For the health dimension, the mean score of age stereotypes was 11.41 (SD = 2.33; range: 6–18). In addition, 33.4% of the sample showed negative stereotypes in this dimension a higher prevalence than in the temperament and personality or the motivation/social dimension. The item that showed the highest level of negative stereotypes was “Cognitive decline (memory loss, disorientation, confusion...) is an inevitable part of age” (Mean = 2.82; SD = 0.80). Furthermore, this item had the highest negative stereotype score in the entire study.

Table 1: Age stereotypes in the CENVE full scale and in their dimensions: health, temperament and personality, and motivation/social.

	Mean	SD	Range
Age stereotypes	33.18	6.05	18-44
Health	11.41	2.33	6-18
Temperament and personality	10.5	2.26	5-15
Motivation/social	11.25	2.60	5-18

age stereotypes

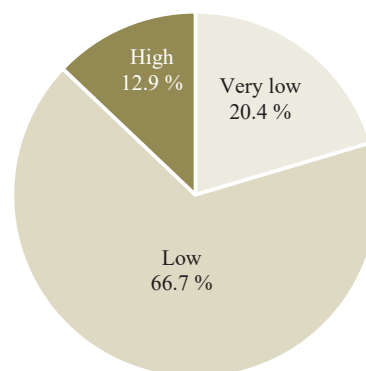


Figure 1: Prevalence of very low, low, high and very high levels of ageist stereotypes. Note: Following the cutoff points of Sarabía Cobo and Castanedo Pfeiffer [13].

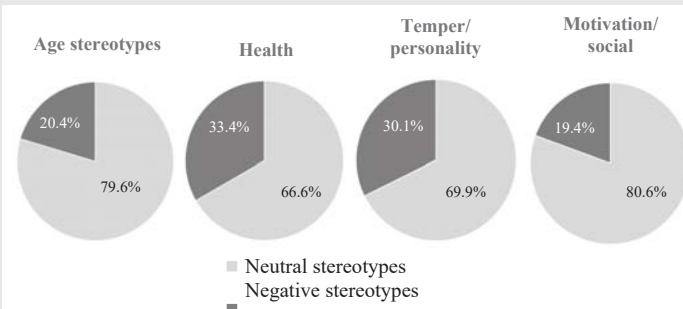


Figure 2: Prevalence of neutral and negative aging stereotypes and their dimensions: health, temperament and personality, and motivation/social. Note: Following the cutoff points of Leon, et al. [11].

Regarding the temperament and personality dimension, the mean score of age stereotypes was 10.5 (SD = 2.26; range: 5–15). In this dimension, 30.1% of the sample presented negative stereotypes. The most prevalent item of negative stereotypes was “As elderly individuals get older, they become more rigid and inflexible” (Mean = 2.59; SD = 0.78).

Finally, for the motivation/social dimension, the mean score was 11.25 (SD = 2.60; range: 5–18). This dimension had the lowest prevalence of negative stereotypes, with only 19.4% of the sample showing negative stereotypes. The item with the highest score of negative stereotypes was “Elderly individuals have less interest in sex” (Mean = 2.51; SD = 0.77).

Discussion

The aim of this study was to assess the prevalence of ageist stereotypes in undergraduate occupational therapy students in the Community of Madrid (Spain). The results show that more than 20% of the participants endorse negative stereotypes towards older people, following the cutoff point of 37.5 established by Leon, et al. [11]. Following the higher cutoff point of 40 used by Sarabía Cobo and Castanedo Pfeiffer [13], more than 12% of participants reported high levels of negative stereotypes towards elderly individuals. Although these results are somewhat lower than those found in previous studies (i.e., 29% of health sciences students) [16], they reflect a high prevalence of these stereotypes. Additionally, these results

are consistent with previous studies carried out with Health Sciences students, showing greater ageist stereotypes in the health and temperament and personality dimensions, as seen in research conducted with medical students [20]. Moreover, similar to the results obtained by Sequeira Daza and Silva Jiménez [16], this research found that the item towards which participants showed the highest level of negative stereotypes referred to the deterioration of memory and cognitive functioning.

Notably, the health dimension showed the highest prevalence of stereotypes. These findings are especially concerning since the sample was of future healthcare professionals. If not addressed, these ageist negative stereotypes could be carried into their professional activity when providing care for older adults. These findings, as suggested in previous literature, highlight the need to implement social policies and training interventions aimed at promoting greater knowledge about the age process, as this could enhance university students' perceptions of older adults [14,21].

In this context, these results suggest a need to create more "Age-Friendly Health Systems." The concept of "Age-Friendly Health Systems" was developed by Leslie Pelton, vice-president of the Institute for Healthcare Improvement, and aims to improve healthcare for elderly individuals [22]. To achieve this goal, it is necessary to begin by raising awareness and training future health professionals at the university level. Beyond age-friendly health systems, it is important to promote a more age-friendly society, as reflected in the United Nations' expansion of the 2030 Agenda for Sustainable Development in December 2020 by establishing the objective of the Decade of Healthy Ageing [23].

While the results obtained are notable, the present study has several noteworthy limitations. First, the data were self-reported, which introduces the possibility of bias affecting the accuracy and reliability of the findings. Additionally, the convenience nature and small size of the sample, prevent us from generalizing the results beyond the population of occupational therapy undergraduate students. Moreover, all participants were recruited from the same University which further restricts the generalizability of the findings. It is important to note that 82.8% of participants were women. Although this reflects the typical demographic composition of science programs, it restricts the possibility to conduct a gender-based analysis of age-related stereotypes. Consequently, suggesting that future research should aim for more balanced samples to better explore potential gender-specific variations.

Future studies should try to confirm the results obtained using larger and more diverse samples from different universities and geographical areas. Furthermore, future research could consider analyzing not only negative, but also positive stereotypes (e.g., elderly individuals are wise and sensible) [24] to determine their presence in health sciences undergraduate students and their effects on the care provided for older adults.

Despite these limitations, the results obtained reflect the presence of ageist stereotypes in future health professionals,

which have significant implications for both education and healthcare. As described in the scientific literature, the internalization of ageist stereotypes will affect the quality of healthcare through discriminatory practices that generate inequalities (e.g., lack of attention, abandonment, or neglect) [25,26]. Considering that the responsibilities of occupational therapists include geriatric rehabilitation and other activities that often require contact with older adults [27], it is necessary to intervene with this student population to reduce ageist stereotypes.

From an academic perspective, the findings highlight the need to address ageism in the training of students to ensure adequate and quality healthcare for elderly individuals. Previous research in other populations concludes that intervention programs on ageism (e.g., activities with intergenerational contact) and additional theoretical training during the university stage could positively influence the attitudes of healthcare professionals and thus improve the quality of the healthcare services offered [14,21,28,29].

In conclusion, this research reveals a high prevalence of negative age stereotypes among occupational therapy undergraduate students. This prevalence suggests the need to integrate training to reduce stereotypes and improve services provided by future occupational therapists to the older population.

Acknowledgment

The authors would like to thank all of the students for their participation in the study.

Funding

The study was supported by the Universidad Rey Juan Carlos (Innovative educational project with reference: URJC PIE24_141) and Universidad a Distancia de Madrid (Innovative educational project with reference: ID-UDIMA-2024-06).

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