



# Ageism in Nursing Education: Students' Views of Ageing

Andreia Ferreri Cerqueira <sup>1,\*</sup>, Ana Lúcia Ramos <sup>2</sup> and José Palma <sup>2</sup>

<sup>1</sup> Instituto Politécnico de Setúbal, Escola Superior de Saúde. NURSE'IN-UIESI, Campus do IPS, Estefanilha, 2914-503 Setúbal, Portugal

<sup>2</sup> Instituto Politécnico de Setúbal, Escola Superior de Tecnologia de Setúbal, Campus do IPS, Estefanilha, 2914-508 Setúbal, Portugal

\* Correspondence: andreia.cerqueira@ess.ips.pt

**Abstract:** The world is ageing, families are changing, and a new view of society is needed. Since nursing students will be the health professionals caring for older adults, working with nursing students from an early stage is critical. With this study, we intend to assess ageism levels among nursing students and analyse students' views on ageing, improving nursing education and care for older adults, and promoting well-being in society. An exploratory mixed-methods study with first-year nursing degree students was conducted. Two instruments were used: the Fraboni Scale of Ageism and a sociodemographic questionnaire with an open question: what does ageing mean to you? Sixty-four students participated in the study. A mean total ageism score of 80.05 (SD = 12.23) was found, indicating a positive attitude towards older adults. In this study, no statistically significant relationship was found between the total score of ageism and the variables age, gender, and contact with older adults. Two visions emerged regarding the "meaning of ageing": the subcategory "positive view": experience and knowledge; psychological and social growth; skills development; and good feelings/emotions. The following subcategories emerged from the subcategory "negative view": finitude; disabilities; physiological decline; and bad feelings/emotions. The results achieved allow for a more effective educational response, integrating personalised and innovative strategies in the training of nursing students. However, it is crucial to develop more studies about the educational strategies that promote a more positive view of ageing among nursing students, which may influence the way older adults are cared for in society.

**Keywords:** ageing; ageism; nursing education; older adults

**Citation:** Cerqueira, Andreia Ferreri, Ana Lúcia Ramos, and José Palma. 2023. Ageism in Nursing Education: Students' Views of Ageing. *Social Sciences* 12: 142. <https://doi.org/10.3390/socsci12030142>

Academic Editors: Jolanda Lindenberg and Elena Bendien

Received: 30 November 2022

Revised: 21 February 2023

Accepted: 22 February 2023

Published: 28 February 2023



**Copyright:** © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (<https://creativecommons.org/licenses/by/4.0/>).

## 1. Introduction

The world is ageing. Changes in "the size and age-sex structure of the population" confirm that "aside from the population decreasing in the last years" (Instituto Nacional de Estatística 2019, p. 18), the number of older adults is growing daily, as is the ageing index (Instituto Nacional de Estatística 2022; Toygar and Kardakovan 2020).

Although this is a global phenomenon, the most recent projections highlight that Portugal will lose population between 2018 and 2080, from 10.3 to 8.2 million people. The number of young people will decrease from 1.4 to around 1 million, the working-age population (from 15 to 64 years old) will decrease from 6.6 to 4.2 million, and the number of older adults will go from 2.2 to 3 million. Portugal will double its ageing index, from 159 to 300 older people, for every 100 young people, by 2080, due to a decrease in the young population and an increase in the older population (Instituto Nacional de Estatística 2020). In addition, Portugal presents a lower healthy life expectancy than the average of the European Union.

Ageing is often associated with other life transitions, such as retirement or the loss of family and friends, emphasising the fact that there is no such thing as a typical older adult (World Health Organization 2021a). To embrace this diversity, it is essential to work during the academic pathway with future health and social sector professionals, who will be a vital resource in caring for older adults.

Although there may be several ways of seeing ageing, in general, previous studies point in two directions: one positive, showing the importance of knowledge and experience that people acquire over their lifetime, and the other more negative, focusing on the decrease in some capacities, mainly physically inherent to the ageing process (Sarabia-Cobo and Pfeiffer 2015).

Ageism is the “stereotyping, prejudice and discrimination against people based on their age (...) is everywhere (...) is not widely countered” (World Health Organization 2020) and has a substantial effect on participation in society, health, and longevity (Officer and Fuente-Núñez 2018). Ageism “starts in childhood and is reinforced over time” (...), crossing different countries, contexts, and cultures, and may contribute to an increase in the risk of violence and abuse against older adults (World Health Organization 2021b).

Intervening to reduce ageism implies, at least, knowing the factors that contribute to its development in society (Molina-Luque et al. 2022). Studies revealed that negative stereotypes of older adults “lead to discrimination” (Nelson 2019). A systematic literature review to identify the critical determinants of ageism against older people (Molina-Luque et al. 2022) described fourteen determinants robustly associated with ageism. The most important determinants to reduce ageism were at the intrapersonal level: “conscientiousness and agreeableness” and the “personal degree of collectivist orientation”. At the interpersonal level, positive contact with older people is the most critical determinant of reducing ageism.

The evidence suggests a link between higher levels of education and lower levels of ageism (Officer et al 2020). Higher education institutions, especially those working on health and social care, are fundamental to planning and implementing responses that promote more and better health for persons of all ages.

This role of higher education institutions becomes critical when it is recognised that qualified and adequate preparation based on competencies can lead to better knowledge regarding the ageing process to the specific care for older adults, increasing interest in working in the field of gerontology, and culminating in the provision of better and adjusted care to the needs of older adults (Sarabia-Cobo and Pfeiffer 2015; Officer and Fuente-Núñez 2018).

Negative attitudes among health professionals can influence the choice of their working context, avoiding caring for older adults, and “can also impair the quality of care” (Van Wicklin 2020; López-Hernández et al. 2021). The major influence on the attitude against older people was the previous experience that students had with older people. In previous studies, it was evidenced that contact with institutionalised older people decreases positive attitude. On the other hand, contact with older adults in the community revealed more positive attitudes (López-Hernández et al. 2021).

Although there are studies on ageism, the results are sometimes different, highlighting ageism as a multidimensional and culturally sensitive concept. Thus, it is essential to conduct studies in specific contexts and populations.

Nursing education can positively influence attitudes and thoughts regarding older adults (Brown and Wang 2022). It can be done by teachers during the academic pathway, working early with nursing students who may be the future professionals to care for older adults. As some studies point to ageist attitudes in Portuguese nursing students and new studies are suggested in this sense (Abreu and Caldevilla 2015), this study aims to assess ageism levels among first-year Portuguese undergraduate nursing students` and analyse students` views of ageing.

The nursing programme (in which this study took place) is integrated into higher education institutions. Portuguese higher education in nursing can be characterised as public polytechnic (21 institutions), private polytechnic (18 institutions), and catholic higher education (2 institutions). The programmes are regulated by decrees of law that, among other aspects, refer to the contents to be included in the theoretical and clinical teaching component, such as “the care to be provided to the older adults and geriatrics”.

The nursing programme relies on humanist principles and evidence-based learning, providing theoretical knowledge and promoting the development of clinical skills that enable graduates to become highly competent and autonomous professionals. The nursing programme works on these two dimensions (theory and clinical) gradually over the four years, whether through increasing students' knowledge in the classroom environment (based on their prior experience and learning needs) or resulting from contact with older adults in community projects and internships.

## 2. Materials and Methods

A mixed methodological approach (qualitative and quantitative) was used. This exploratory mixed-methods study represents the findings of ageism in first-year undergraduate nursing students (two academic years) prior to teaching ageing content or gaining clinical experience. Students' answers were worked on, maintaining the ethical principles mentioned below.

All students present in the classroom were recruited and consented to participate. The ethical procedure was accomplished. The purpose of the study was explained to the students, and there was room for clarification of doubts. The confidentiality and anonymity of each student who agreed to participate were ensured. The possibility of a student withdrawing from the study without any justification or implication was assured.

The inclusion criteria for this study were first-year nursing students, informed consent, and voluntary participation in this research.

Students who agreed to participate in the study were invited to complete a form which integrated: the Fraboni Scale of Ageism; a questionnaire with sociodemographic questions (gender, age, and contact with older adults); and an open question: what does ageing mean to you? This form is available at the link in the Supplementary Material.

The Fraboni Scale of Ageism (Fraboni et al. 1990) assesses attitudes towards ageing and older adults. This scale measures the affective component of attitude and the cognitive aspect of age. It has been used and validated in several countries, confirming its suitability for the present study. It has been validated for Portugal, with good internal consistency indexes (Cronbach's alpha = 0.81) and discriminant and construct validity. This study's Cronbach alpha was 0.71, a reasonable internal consistency value.

The Fraboni Scale of Ageism consists of a 25 item scale and a 7-point Likert scale, from "1 = totally disagree" to "7 = totally agree". The total score can vary between 25 and 175 points. The score for five items had to be inverted for the correct final score on the scale, with higher scores related to more ageism attitudes.

For the quantitative data analysis, the IBM SPSS® program version 27 was used to perform the statistical analysis. In addition to the characterisation of the sample, there was a search for a relationship between the total ageism score and gender, age, and contact with older adults using statistical tests.

The variables chosen for the sociodemographic questionnaire were based on the evidence in the literature, which stated that the oldest group of students, the female gender, and the experience of contact with older adults seem to positively influence the attitude towards older adults, reducing ageism (Molina-Luque et al. 2022).

A qualitative approach was used to achieve the second objective, asking students to describe their meaning of "ageing".

Thus, all the written answers received were translated by the researchers with the support of translation software. A content analysis was used for qualitative data analysis, specifically Bardin's thematic categorical analysis (Bardin 2011). The analysis did not consider any form of quantification, assuming a qualitative nature and following the recommended phases: pre-analysis, material exploration, treatment of the results, and interpretation.

From reading the nursing students' answers to the open question (the corpus of the analysis), text units (sentences or text segments) were identified/highlighted, and grouped by similarities, making the context units emerge. Context units, in turn, were grouped into

two subcategories: being closer to a positive view of ageing or, on the other hand, closer to a negative view of ageing, “ageing” being our main category. The results were analysed and attributed meaning.

It is essential to highlight that all researchers were involved in the data analysis process. According to the expertise area, two researchers independently analysed the data. A third researcher always discussed and validated the process and results to guarantee the quality of the analysis. There were no disagreements in the interpretation of the data.

### 3. Results

According to the inclusion criteria, the sample included 64 first-year students of the nursing degree course who consented to participate in the study. The variables studied were age, gender, contact with older people, and ageism, as shown in Table 1.

**Table 1.** Variables and N.

		Age	Gender	Contact with Older Adults	Ageism Score (FSA)
N	Valid	63	64	64	60
	Missing	1	0	0	4

The mean age of the participants was 19 years (St. Error = 2.1), ranging from 18 to 30, as shown in Table 2.

**Table 2.** Variable age: statistics.

Age	
Mean	19.4127
Median	19.0000
Standard Deviation	2.09942
Range	12.00
Minimum	18.00
Maximum	30.00

Of the sample, 54 participants (84.4%) were female and 10 were male (15.6%).

Regarding contact with older adults, 90% of the students reported regular contact, and 10% reported no regular contact with older adults.

#### 3.1. Ageism of Nursing Students—Quantitative Analysis

Only participants who completed all items on the Fraboni Scale of Ageism (FSA) were considered for the sample. For this reason, the final selection for this quantitative analysis included 60 students. As shown in Table 3, the total ageism score averages 80.05 (St. Error = 12.23). The minimum score was 51, and the maximum score was 108.

**Table 3.** Ageism score statistics.

Ageism Score (FSA)	
Average	80.0500
Median	81.5000
Standard Deviation	12.23003
Minimum	51.00
Maximum	108.00
Range	57.00

Interquartile range	14.75
Asymmetry	-0.225
Kurtosis	0.146

### 3.1.1. Ageism and Gender

Most respondents were female students. In an exploratory analysis of the sample, according to the data distribution through the box plots (Figure 1), it is possible to verify that male participants had higher values of ageism (mean = 83.1; St. Error = 4.55) compared to female participants (mean = 79.4; St. Error = 1.67).

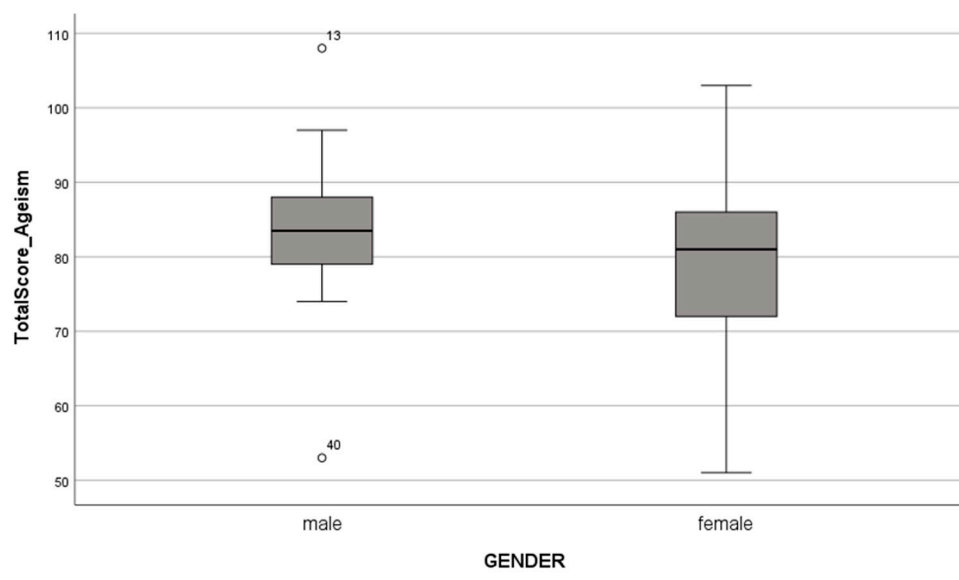


Figure 1. A box plot of the relationship between ageism score and participant gender.

We performed an explorative analysis first, see Figure 1, showing that the mean score of males and females in our sample differed, with males having higher scores ( $M = 83.1$ ,  $SE = 4.55$ ) than females ( $M = 79.4$ ,  $SE = 1.76$ ). However, given the relatively large SE of the males, these should be interpreted with caution given the small sample size. Levene’s test, t-test, and Mann–Whitney test were then performed, and both showed no significant between-group differences ( $p = 0.99$ ,  $p = 0.58$ , and  $p = 0.43$ ), perhaps also due to a lack of power given the small sample size and skewness of the sample.

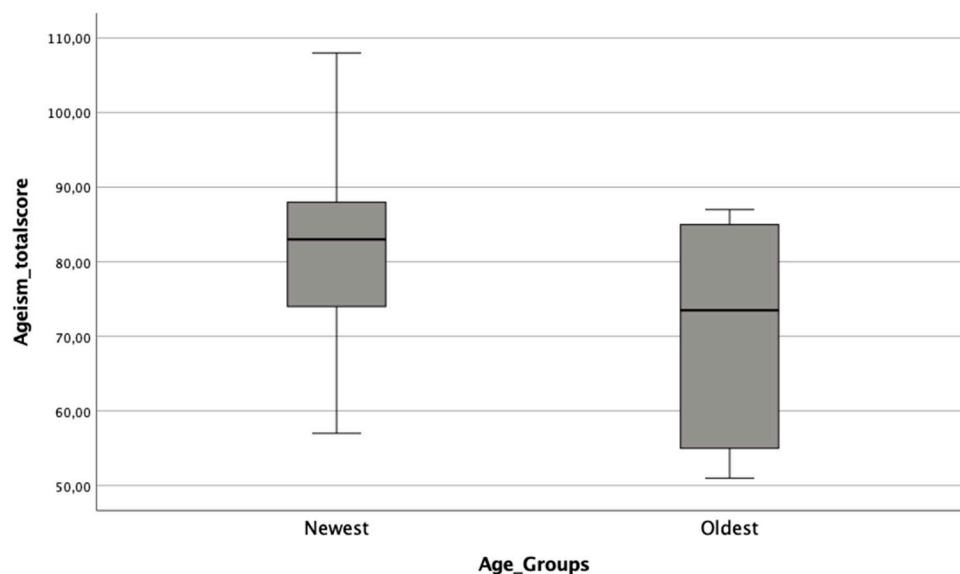
### 3.1.2. Ageism and Age

Regarding the age variable, two groups were considered: students aged from 18 to 20 (the newest) and one group including students aged 21 or older (the oldest).

The division was based on differences in the means of the ageism score observed. (Table 4 and Figure 2).

Table 4. Ageism score and age group statistics.

Age Groups	Mean	N	Std. Deviation
Newest	81.8367	49	11.27007
Oldest	71.6000	10	14.33101
Total	80.1017	59	12.32840



**Figure 2.** A box plot of the relationship between the total ageism score and the participants' age.

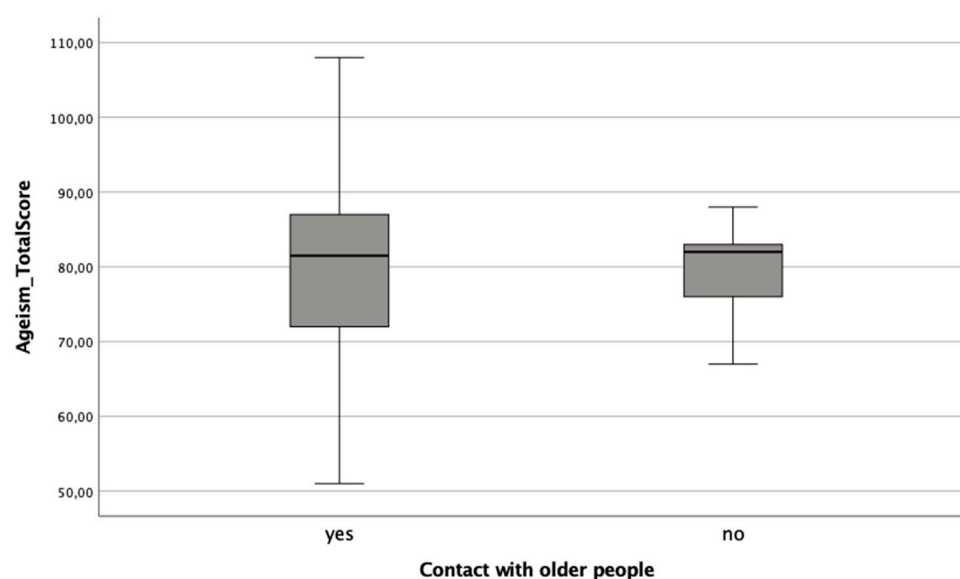
Participants aged from 18 to 20 years old (the youngest) had an average ageism score of 81.8 (St. Error = 1.61), and participants aged 21 years or more (the oldest) obtained an average of 71.6 (St. Error = 4.53).

Additionally, the variances are not significantly different in this case between the two groups, as the significance level associated with the test is 0.205. The  $p$ -value of 0.056 rejects the difference in mean age score between the groups.

### 3.1.3. Ageism and Contact with Older Adults

In the first-year class of the nursing degree course, it was found that most respondents regularly contacted older adults.

Figure 3 shows that respondents who regularly contact older adults have slightly higher values (mean = 80.09; St. Error = 1.72) than respondents who do not regularly contact older adults (mean = 79.6; St. Error = 2.98).



**Figure 3.** A box plot of the relationship between the total ageism score and the participants' contact with older adults.

Additionally, the variances are not significantly different in this case between the two groups, as the significance level associated with the test is 0.161. The  $p$ -value of 0.468 rejects the difference in mean age score between the groups with contact with older adults.

Future investigations could be conducted with the same students later in their nursing programme to understand whether the knowledge gained and their experiences have changed their perspective towards older adults and the ageing process.

### 3.2. Ageism of Nursing Students—Qualitative Analysis

A qualitative approach was used to determine the nursing students' views ( $N = 64$ ) regarding the meaning of "ageing", our category. Two subcategories emerged: "positive view" (gains) and "negative view" (losses) of ageing (Table 5). It is essential to highlight that few answers focused on just one of the views, and students generally see ageing as a process of gains and losses over time.

**Table 5.** Category, subcategory, and context units of qualitative analysis.

Category	Subcategory	Context Units
Ageing	Positive view (gains)	Experience and knowledge Psychological and social growth Skills development Good feelings/emotions
	Negative view (losses)	Finitude Disabilities Physiological decline Bad feelings/emotions

#### 3.2.1. Positive View

Regarding the subcategory "positive view" (gains), we identified four context units: (1) experience and knowledge; (2) psychological and social growth; (3) skills development; and (4) good feelings/emotions.

##### (1) Experience and knowledge

For the students surveyed, one of the most significant gains people achieve as they age is accumulating experiences and knowledge along the path taken, which is life.

"An accumulation of experiences and knowledge, a path travelled and lived";

"Lifelong acquisition of wisdom and knowledge";

"We become wiser and wiser as we collect life experiences";

"Lifelong acquisition of wisdom and knowledge".

Ageing is perceived as more than just our age; it is a story lived and enriched over time with many memories.

"Is more than age";

"Drawing a story";

"Create memories".

##### (2) Psychological and social growth

These acquired experiences and knowledge allow the person to develop/improve their psychological and social characteristics.

Experiences bring maturity, and we become more aware of ourselves and others.

"Mindset change. Young people are more impulsive, maybe due to lack of experience";

"Become more aware of attitudes and behaviours".

Having more control over our attitudes and behaviours, we are better prepared to relate to and share these achievements with the younger ones.

"Life experiences that prepare us to educate the new generations";

“Teach them values”.

### (3) Skills Development

With age and the passing of time, full of new experiences and challenges, in the understanding of students, we gain diverse skills used to improve our lives.

“Gain of skills”;

“Adapting skills to everyday life”;

One of the highlighted skills is our ability to reflect.

“Consolidation of identity and reflection on the events and actions carried out in the course of life”;

“It is a phase in which people reflect on what they have done throughout life, achievements and defeats, creating new goals and dreams”.

This ability for reflection is, in turn, related to the ability to take on responsibilities and challenges, leading to empowerment.

“Means maturing, new responsibilities and new challenges”;

“Ability to decide what to do with one’s life”.

### (4) Good feelings

From the student’s view, we tend to be flooded with good feelings and emotions, especially those arising from our relationship with our family, such as grandchildren.

“Gain of offspring, grandchildren, and great-grandchildren, which bring happiness”;

“See the family grow and meet many people”;

“Meet and interact with many people”.

### 3.2.2. Negative view

Regarding the subcategory “negative view” (losses), we also identified four context units: (1) finitude, (2) disabilities, (3) physiological decline, and (4) bad feelings/emotions.

#### (1) Finitude

Ageing, as a process, is associated by students with the end of life. As we get older, we get closer to that end. One of the participants gives meaning to ageing through a metaphor, in this case, related to the seasons “decaying in autumn to be winter forever”.

“Closer to the end”;

“Is to die slowly. I am born like spring; I live like summer; I feel myself decaying in autumn to be winter forever”.

#### (2) Disabilities

If, on the one hand, students understand ageing as an opportunity to develop skills, they also see it from an antagonistic view of the loss of some skills/capacities, associating them, for example, with disease situations.

“Greater vulnerability to certain health problems”;

“Condition that can lead to pathologies”.

These situations of disability/illness can make older adults more dependent and require greater attention from their caregivers, especially when they have more complex conditions that interfere with their daily lives, such as memory loss and/or confusion.

“Become dependent on other people”;

“Need for attention”;

“Forgetfulness and confusion”.

#### (3) Physiological decline

The physiological decline was one of the context units of the subcategory negative view (losses) most present in the student’s answers. There were some recording units associated with loss of function and physical decline.

“Lose certain functions and undergo physical changes”;

“Loss of functionality progressively and at a slow pace”.



The loss of function is directly related to the movement/action of older adults, leading to difficulties carrying out daily activities. The concept of weakness is also visible.

“Decreased motor skills”;

“Greater motor difficulties and more illness”;

“Loss of some movements, difficulties in carrying out daily activities”;

“Inability to perform certain actions”.

When we do not have as much energy to do all the activities we used to do.

“Weakening of the body over time”;

“Become weaker and in pain”.

#### (4) Bad feelings/emotions

The most common transitions experienced at this stage of life (such as the health-illness transition) often lead to increased vulnerability and negative feelings among older adults.

“It is an age of extreme vulnerability when it is more difficult to feel happiness”;

“Feeling of frustration at losing physical and mental faculties”;

“Mood swings, such as loss of patience and, in some cases, increased stubbornness”.

The feeling of loneliness is also close for many older adults, from the student’s perspective.

“Loneliness”;

“Loneliness, non-recognition, and abandonment are often present”.

## 4. Discussion

The first objective of this study was to assess the ageism level of nursing students using the Fraboni Scale of Ageism.

The participants in the study had a mean score of 80.05 on the Fraboni Ageism Scale, a value below the scale mean that indicates positive attitudes towards older adults. This result shows similar values to other studies that used the same scale (Ferreira and Neto 2012; Pereira et al. 2018).

It is noteworthy that the study participants were first-year students of the undergraduate nursing degree and responded to the Fraboni Scale of Ageism before they began learning any content related to ageing or having any contact with older adults during the course, within the scope of an integrative educational program.

Although there was no statistically significant difference between the different factors and ageism, there were some similarities and differences with results from other studies, as well as clues about the profile of the nursing students’ views of ageing, which is critical for future and effective action.

Regarding contact with older adults, participants were asked whether they had regular contact with older adults rather than the quality of their contact. Studies have revealed that good-quality contact is usually the strongest and most reliable predictor of reduced prejudice. This aspect suggests that connecting with older adults may not be sufficient to minimise ageism (Nelson 2019; Drury et al. 2016).

Therefore, the undergraduate nursing course should include opportunities for interaction with older adults. More than the number of contacts made, focusing on the quality of connections should be privileged, impacting the development of students’ skills and better care for older adults, which benefits stakeholders and society, addressing a current global need.

Regarding the second objective which was to analyse students’ views on ageing, two subcategories emerged, one positive and one negative.

Concerning the subcategory “positive view” (gains), we identified: experience and knowledge; psychological and social growth; skills development; and good feelings/emotions.

Considering the subcategory “negative view” (losses), we also identified: finitude; disabilities; physiological decline; and bad feelings/emotions.

These findings share some ageing associations with other studies, but they also add new associations that give them meaning.

The previous literature also shows these two perspectives (the positive and the negative), however, in less depth. In this sense, we consider that this study offers essential insight into nursing students’ views of ageing in a straightforward way, addressing the significance of meanings.

In the study of Wachelke and Contarello (2010, pp. 370–71), young people (from 19 to 29 years old;  $M = 22.20$  years; and  $SD = 2.10$  years) “represent [ageing] as a process, marked by general decline and a shift to strengthening family life. The proximity of death, the acquisition of wisdom, the emergence of illness and health problems, and taking part in new activities are all related conditional possibilities but do not define it”. In comparison with another Portuguese study, the first-year students associated “the old age” (the central nucleus) with “wisdom”, “older adults”, “lived experience”, and “need for help”. As more peripheral elements, it was associated with “hospital”, “disability”, and “memory loss” (Fonseca et al. 2014). In a recent study, Brown and Wang (2022) researchers explored first-semester nursing students’ perceptions of older adults’ pre- and post-learning activities. We can also find similarities with our study (positive and negative views) regarding the perceptions before learning activities. The three most used positive words to describe older adults by students were “wise, caring and kind” while the three most negative words were “fragile, slow and stubborn”.

It is relevant to add that, in this study, students revealed more positive than negative terms towards older adults after learning activities, reinforcing the relevance of education.

In this sense, future research could be conducted with the same students later in the nursing programme to understand if the knowledge acquired and their experiences changed their perspective towards older adults and the ageing process.

## 5. Conclusions

Assessing ageism levels among nursing students (quantitative data) and analysing students’ views on ageing (qualitative data) at the beginning of the nursing degree, prior to the ageing teaching content and/or internship, and sharing these results (that complement each other) with students can be an engaging pedagogical strategy for a more effective educational response.

For example, the concept of ageism can be explored through the students’ scores on the Fraboni Scale of Ageism, possibly exploring the total score or the score of each specific item.

Another example is that each aspect of ageing can be analysed based on the student’s written answers, which, although anonymous, could be highlighted and/or compared.

This study has some limitations mainly related to the sampling process, since the sample is small, asymmetric, and convenient. Integrating students from a single higher education institution limits the generalisability of the results.

The fact that the researchers were teachers of the participants may have influenced the responses. Even so, this aspect was handled by clarifying the ethical aspects and anonymising the form sent to the students. Despite these limitations, it is a starting point and, in our opinion, has enormous potential for transferability.

Some activities regarding the potential of nurses to train competent professionals and to promote ageing with quality of life and well-being were carried out: a reflection on ageing, a seminar with older adults who shared their life stories, and a debate on nurses’ interventions with and for older adults.

Although several studies address the issue of ageism in the education of health care professionals, namely nurses, the theme remains current and relevant mainly in a country with the characteristics of Portugal, with few studies that allow the comparison and application of results, highlighting the need for further studies in specific contexts.

**Supplementary Materials:** The form is available at [https://docs.google.com/forms/d/1jP5Tc4KEeCx\\_7tiDRvyAVWUYFIRHdFgCtkhK-M8EK8/prefill](https://docs.google.com/forms/d/1jP5Tc4KEeCx_7tiDRvyAVWUYFIRHdFgCtkhK-M8EK8/prefill).

**Author Contributions:** Conceptualisation, A.F.C. and A.L.R.; methodology, A.F.C. and A.L.R.; software, A.F.C. and A.L.R. and J.P.; validation, A.F.C., A.L.R. and J.P.; formal analysis, A.F.C., A.L.R. and J.P.; investigation, A.F.C. and A.L.R.; resources, A.F.C. and A.L.R.; data curation, A.F.C., A.L.R. and J.P.; writing—original draft preparation, A.F.C., A.L.R. and J.P.; writing—review and editing, A.F.C. and A.L.R.; visualisation, A.F.C. and A.L.R.; project administration, A.F.C. and A.L.R. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no specific grant from public, commercial, or not-for-profit funding agencies. This paper is financed by Instituto Politécnico de Setúbal.

**Institutional Review Board Statement:** The study was conducted following the Declaration of Helsinki. The study complied with the ethical assumptions: all participants gave their freely informed consent. They participated voluntarily and were clear about its objectives, knowing they could withdraw at any time and that participation in the study would not cause any harm.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study. Participants were informed to avoid identifying themselves.

**Data Availability Statement:** Datasets and syntax are available upon request to the authors.

**Acknowledgments:** We thank Bruno Ferreira for his collaboration on the linguistic revision of the article.

**Conflicts of Interest:** The authors declare no conflict of interest.

## References

- Abreu, Margarida, and Nilza Caldevilla. 2015. Attitudes toward aging in Portuguese nursing students. *Procedia-Social and Behavioral Sciences* 171: 961–67. <https://doi.org/10.1016/j.sbspro.2015.01.215>.
- Bardin, Lawrence. 2011. *Análise de Conteúdo*. São Paulo: Edições, vol. 70.
- Brown, Lynn Greenleaf, and Chih-Hsuan Wang. 2022. Dismantling ageism among nursing students. *Teaching and Learning in Nursing* 17: 240–44. <https://doi.org/10.1016/j.teln.2021.12.002>.
- Drury, Lisbeth, Paul Hutchison, and Dominic Abrams. 2016. Direct and extended intergenerational contact and young people's attitudes towards older adults. *British Journal of Social Psychology* 55: 522–43. <https://doi.org/10.1111/bjso.12146>.
- Ferreira, Ana Veríssimo, and Félix Neto. 2012. Quem são os mais preconceituosos em relação à idade e os mais sós: Jovens, adultos ou idosos? Influência da religiosidade. *International Journal of Developmental and Educational Psychology* 1: 115–22. Available online: <https://www.redalyc.org/articulo.oa?id=349832340011> (accessed on 14th September 2022).
- Fonseca, Ana, Ermelinda Caldeira, Manuel José Lopes, Céu Marques, and Vitória Casas-Novas. 2014. Velhice: Representações sociais construídas por estudantes de enfermagem e idosos. In *Envelhecimento, Estudos e Perspetivas*. São Paulo: Editora Martinari. Available online: <http://hdl.handle.net/10174/11892> (accessed on 14th September 2022).
- Fraboni, Maryann, Robert Saltstone, and Susan Hughes. 1990. The Fraboni Scale of Ageism (FSA): An Attempt at a More Precise Measure of Ageism. *Canadian Journal on Aging/La Revue Canadienne du Vieillessement* 9: 56–66. <https://doi.org/10.1017/S0714980800016093>.
- Instituto Nacional de Estatística. 2019. *Statistical Yearbook of Portugal—2018*. Lisboa: INE, pp. 17–18. Available online: <https://www.ine.pt/xurl/pub/381689773> (accessed on 1 June 2022).
- Instituto Nacional de Estatística. 2020. Projeções de População Residente 2018–2080. Destaque Informação à Comunicação Social, pp. 1–21. Available online: [https://www.ine.pt/ngt\\_server/attachfileu](https://www.ine.pt/ngt_server/attachfileu) (accessed on 1 June 2022).
- Instituto Nacional de Estatística. 2022. *Statistical Yearbook of Portugal—2021*. Lisboa: INE. Available online: <https://www.ine.pt/xurl/pub/6174083> (accessed on 24 August 2022).
- López-Hernández, Lourdes, Francisco Miguel Martínez-Arnau, Elena Castellano-Rioja, Marta Botella-Navas, and Pilar Pérez-Ros. 2021. Factors Affecting Attitudes towards Older People in Undergraduate Nursing Students. *Healthcare* 9: 1231.
- Molina-Luque, Fidel, Ieva Stončikaitė, Teresa Torres-González, and Paquita Sanvicen-Torné. 2022. Profiguration, Active Ageing, and Creativity: Keys for Quality of Life and Overcoming Ageism. *International Journal of Environmental Research and Public Health* 19: 1564.
- Nelson, Todd D. 2019. Reducing ageism: Which interventions work? *American Journal of Public Health* 109: 1066–67.
- Officer, Alana, and Vânia de la Fuente-Núñez. 2018. A global campaign to combat ageism. *Bulletin of the World Health Organization* 96: 295–96. <https://doi.org/10.2471/BLT.17.202424>.
- Officer, Alana, Jotheeswaran Amuthavalli Thiyagarajan, Mira Leonie Schneiders, Paul Nash, and Vânia De la Fuente-Núñez. 2020. Ageism, healthy life expectancy and population ageing: How are they related? *International Journal of Environmental Research and Public Health* 17: 3159.

- Pereira, Diane, Filomena Ponte, and Eleonora Cunha Costa. 2018. Preditores das atitudes negativas face ao envelhecimento e face à sexualidade na terceira idade. *Análise Psicológica* 36: 31–46. <https://doi.org/10.14417/ap.134>.
- Sarabia-Cobo, Carmen María., and Cristina Castanedo Pfeiffer. 2015. Changing negative stereotypes regarding aging in undergraduate nursing students. *Nurse Education Today* 35: e60–e64. <https://doi.org/10.1016/j.nedt.2015.06.006>.
- Toygar, Ismail, and Ayfer Kardakovan. 2020. Factors affecting the attitudes of nursing students toward ageism. *Nursing Practice Today* 7: 38–44.
- Van Wicklin, Sharon Ann. 2020. Ageism in Nursing. *Plastic Surgical Nursing* 40: 20–24.
- Wachelke, Joao, and Alberta Contarello. 2010. Social representations on aging: Structural differences concerning age group and cultural context. *Revista Latinoamericana de Psicología* 42: 367–80. <https://doi.org/10.14349/rlp.v42i3.579>.
- World Health Organization. 2020. Ageing: Ageism. Available online: <https://www.who.int/westernpacific/news/q-a-detail/ageing-ageism> (accessed on 1st June 2022).
- World Health Organization. 2021a. Ageing and Health. Available online: <https://www.who.int/news-room/fact-sheets/detail/ageing-and-health> (accessed on 1 June 2022).
- World Health Organization. 2021b. *Global Report on Ageism*. Geneva: World Health Organization.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.