

Content On Active Ageing In University Degrees: A Study In Spain And Portugal

Contenidos sobre envejecimiento activo en titulaciones universitarias: un estudio en España y Portugal

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ABSTRACT

Background: to analyse the study plans of undergraduate and postgraduate degrees at the University of Huelva, the Beja Polytechnic Institute and the Algarve University, to identify content on attention to diversity, ageing and the four pillars of the World Health Organisation for this population.

Methods: mixed design. A quantitative phase of data analysis was carried out with the statistical program SPSS. In the second phase of the work, and in a qualitative way, carried out an analysis of the content of the program collected in the syllabuses.

Results: of the total of the 54 degrees analyzed, only in those related to the disciplines of Physical Activity, Psychology, Social Sciences, Gerontology, Nursing and Special Education, the contents related to the objective of the study were identified.

Conclusions: many professionals who have contact with the senior population do not receive the necessary training to respond to the particular needs of individuals in this age group.

KEYWORDS

Higher education; professional training; healthy aging; health care; public health; social sciences

RESUMEN

Antecedentes: analizar los planes de estudio de grado y posgrado de la Universidad de Huelva, el Instituto Politécnico de Beja y la Universidad del Algarve, para identificar contenidos sobre atención a la diversidad, envejecimiento y los cuatro pilares de la Organización Mundial de la Salud enfocados para población de tercera edad.

Métodos: diseño mixto. Se llevó a cabo una fase cuantitativa de análisis de datos con el programa estadístico SPSS. En la segunda fase del trabajo, y de forma cualitativa, se realizó un análisis del contenido de los planes de estudios.

Resultados: del total de los 54 grados analizados, solo en los relacionados con las disciplinas de Actividad Física, Psicología, Ciencias Sociales, Gerontología, Enfermería y Educación Especial, se identificaron los contenidos relacionados con el objetivo del estudio.

Conclusiones: muchos profesionales que tienen contacto con la población mayor no reciben la formación necesaria para dar respuesta a las necesidades particulares de estas personas.

PALABRAS CLAVE

Educación superior; entrenamiento profesional; envejecimiento saludable; cuidados de la salud; salud pública; ciencias sociales.

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1. Introduction

Achieving longevity is a desire of humanity, evident throughout its history and across different peoples and cultures. In this sense, aging can be considered an achievement to which scientific and technical advances have greatly contributed. However, paradoxically, aging has posed unexpected challenges to contemporary societies, challenges that require urgent changes in paradigms, namely regarding training in higher education.

According to the National Statistics Institute (2019), Spain has an average life expectancy of 81.1 years for men and 86.7 years for women. According to the newspaper *Datos Macro* (2022), Portugal has a life expectancy of 78.7 years for men and 84.8 years for women.

As we have already underlined, longevity presents unprecedented challenges for policymakers in general, and for citizens. Levels of social and economic security must be maintained, as well as the provision of health and other services to a segment of the population due to age.

Among the global demographic changes, we cannot forget the economic and social changes that affect many sectors of the population, such as, among others, the development of life with good health, regional differences in the proportion of older people, feminisation of old age, growing urbanisation, globalisation of the economy, migrations altering the demography of populations, technological revolution, climate change, armed conflicts, poverty and social

inequalities or the evolution of human rights (Moreno-Sánchez & Mendoza-Sierra, 2020).

These issues can be grouped into the six determining types of active ageing that the World Health Organization (2002) distinguishes, such as those related to social and health services, behaviors, personal factors, physical environment, social environment and economic.

In this scenario, the training and education of people who will work in the future with the elderly population is essential to improve their interpersonal skills. These have a marked attitudinal character, being essential for the qualification and construction of professionals who must work as a team and be an active part within an organization (Palomino, 2018) that acts with people with their own characteristics and needs.

When reflecting on how to provide professionals with the quality training that responds to the needs on which they must act, the role of teachers as agents of change and, ultimately, their necessary social commitment (Reyes, 2020), is not always considered. It is important to train professionals to be aware of the social impact of their work, of undertaking their obligations as educational agents in whose hands rests the viability of an education that compensates for social inequalities (Reyes, 2020).

In this line, the term active ageing should be mentioned. For the WHO (2019), active ageing is the process of making the most of opportunities for physical, mental, and social well-being throughout a person's life. The objective is to ensure quality of life,

productivity, and extend life expectancy at advanced ages and with the minimum prevalence of disability. It is important to remain active in all three areas (physical, social, and mental) through life-long participation in recreational and leisure activities, volunteering or paid activities, cultural, political, and social activities, educational and training activities, and commitment to community and to one's own family.

Active ageing is, therefore, a phenomenon that has its origin in a set of multifactorial effects, which from the psychosocial point of view, not only contemplates ageing from a medical point of view, but also incorporates factors from the economic and behavioural areas, the sociocultural and educational environments that benefit one's ageing process (Fernández-Ballesteros, 2009). It is a basic health-promoting strategy, which is guided by the United Nations principles for the elderly, according to which independent health, participation, care, and safety are the basis of social interventions, aimed at reducing risk factors (personal, behavioural, and environmental), where protective factors are strengthened so that people enjoy more years and with better quality of life.

For all these reasons, it is necessary to train professionals in the active and healthy-ageing model; as well as in the person-centred care model from a theoretical-practical approach. The first step is initial training in university degrees through explicit and/or transversal content. In addition, basic and applied research in any aspect related to the ageing process should be promoted.

As a result of these two processes, educational institutions and, in this case, universities, can also promote the dissemination of approaches that promote healthy habits and active ageing. University curricula with content on aging train future professionals to effectively address active ageing, the prevention of dependency and the increase in quality of life in older people. For this reason, its presence in the University at a multidisciplinary level is essential (Walker, 2008).

To carry out these actions, orientation towards educational policies and programs that are based on the guidelines that have been enumerated is required, since this would allow action and contribute to the fact that there are more people enjoying a positive quality of life as they age, that actively participate in the social, cultural, economic and political spheres of society, continue to perform paid and unpaid work, and improve their participation in domestic, family and community life (World Health Organization, 2002). For this, it is a priority to have qualified personnel who are aware and who act as agents of change.

This work seeks to gain understanding of how professionals who are going to work with older people are trained. To enable this, a case study of cross-border universities in Spain and Portugal was carried out given the parity between the two countries, which increasingly have an ageing population, so it is necessary to promote factors that improve social conditions and health in this group of people. To do this, the following objectives were set: To analyse the ob-

jectives and contents of different disciplines of undergraduate and graduate university degrees, in two universities in Portugal and one university in Spain, to identify whether issues related to ageing arise; Detect if there are topics with specific content on older people and active and healthy ageing; Identify if the disciplines analysed have content on the four pillars of WHO: health, safety, continuous learning, participation.

The findings of this study will benefit two nearby geographical areas with similar characteristics in terms of climate, economy, lifestyle, or average life expectancy, among many other common needs.

Ultimately, this cross-border case study answers several questions. The first is that because Portugal is a country that, apart from having common characteristics with Spain, presents very close challenges and opportunities. Another of the reasons underlying this study initiative is that both Spain and Portugal are countries with a high life expectancy rate which, together with the low birth rate, gives rise to the existence of an ageing population.

2. Materials and Methods

This study is based on a qualitative design based on the use of secondary sources (documentary analysis of study plans) that incorporated a qualitative analysis and quantitative. The teaching guides of the University of Huelva (Spain), University of Algarve (Portugal) and University of Beja (Portugal) have been analysed. A methodology based on descriptive design has been used, which

is an observational scientific method that allows classifying results in relation to a specific topic, without influencing or intervening in them. The data was collected in an Excel table in which all topics were analysed. In this methodology, a qualitative method has been used where we rely on documentary analysis to know the reality that we want to observe. Specifically, we carried out a unique study of a secondary source such as the teaching guides, which are publicly available information documents. The approval of the study by an ethics committee was not necessary, because it is a comparison between curricular units of schools and courses.

2.1. Instruments

A record sheet designed ad hoc has been used for the content analysis of the teaching guides. In this research, the object of study has been segmented into different units to be analysed later. The data were obtained from the Universities' web pages in the section of each university degree.

2.2. Study sample

The study sample was made up of the curricula of the selected degrees at the three Universities, and the sample is made up of the degrees detailed in Table 1. The study plans of the different degrees of the 3 universities cover a large number of subjects and a multitude of contents. There are university careers that train future professionals in which, in principle, it can be thought that they would never work with the elder-

ly, however, at the professional level, there could be a specific field in which they work with these people. Therefore, no university degree from the universities selected in the analysis was excluded.

The study plans analyzed were those corresponding to the academic year 2021/2022. The contents were evaluated at a quantitative level (number of credits) and at a qualitative level (content program) to establish what contents were developed.

2.2.1. Inclusion criteria

Compulsory subjects for all students: core subjects and compulsory subjects.

2.2.2. Exclusion criteria

Optional enrolment subjects or free choice by students.

2.3. Process

The study plans of the University of Huelva (Spain), University of Algarve (Portugal) and University of Beja (Portugal) were ana-

Table 1
Degrees analysed

CENTER/UNIVERSITY/ COUNTRY	DEGREE
Faculty of Education, Psychology and Sport Sciences, University of Huelva, Spain	Master's degrees Communication and Audio-visual Education. Special education. Pedagogical Innovation and Educational Leadership. Psychosocial Research and Intervention in Diverse Contexts. Research in Physical Education and Sports Sciences. Research in the Teaching and Learning of Experimental, Social and Mathematical Sciences. Teachers of Compulsory Secondary Education and Baccalaureate, Vocational Training and Language Teaching. Health Psychology.
	Degrees Social Education. Early Childhood Education. Elementary education. Psychology. Physical Activity and Sports Sciences.
School of Education of the Polytechnic Institute of Beja, Portugal	Master's degrees Social and Community Gerontology. Community Development. Social Services-Social Risks and Local Development. Physical and Health Activity. Special Education - Specialization in Cognitive and Motor Domain
	Degrees Social Service Degree in Basic Education Degree in Sports Degree in Audio-visual and Multimedia
	Higher Technical Professional Course Psychogerontology Sound and Image Sport, Leisure, and Wellness

University of Algarve, School of Health, School of Education and Communication, Portugal	Degrees
	Biomedical and Laboratory Sciences Diet and nutrition Nursing Pharmacy Physiotherapy Medical Imaging and Radiotherapy Orthoprosthetics Communication Sciences Communication Design Sport Basic education Social education Animated image
	Postgraduate
	Specialization Course in Community Health Nursing
	Master's degree
	Social Gerontology Security and health at work Emergency Nursing and Critical Care - Erasmus Mundus Management and Evaluation of Health Technologies Communication Design for Tourism and Culture Recreation Sport Preschool education Teaching English - 1st Cycle of Basic Education Teaching of Portuguese and English - 2nd Cycle of Basic Education Teaching of the 1st Cycle of Basic Education and Mathematics and Natural Sciences 2nd Cycle of Basic Education Teaching of the 1st Cycle of Basic Education and Portuguese and History and Geography of Portugal in the 2nd Cycle of Basic Education. Special Education - Cognitive and Motor Domain Social Education School Management and Administration

lyzed. It is a documentary analysis, of which an analysis is carried out of frequency, and a content analysis. The subject teaching guide is used as a document of analysis, which is available on the website of each degree. The elements that the guide must include are: identification data of the degree; faculty data; competencies; learning outcomes; activities formative; teaching methodologies; contents; and evaluation systems. Then, a frequency analysis of the corresponding number of subjects and credits was performed using an observation sheet. Finally, the content analysis of the subjects was

performed to describe in depth what is being developed with respect to the study contents.

To organise and analyse the data, the Excel program has been used through the creation of an observation sheet of all the subjects of the degrees selected for the study.

With the use of this method for the research work, the variables cannot be influenced. Only the data is collected, thus responding to whether these variables appear within the plans of each subject or if, on the contrary, they are not considered within

the competencies, objectives, methodology or contents.

The research has been carried out from December 2021 to July 2022. For the selection of variables to analyse, the study has been based on detailed information in previous similar studies (Walker, 2008).

2.4. Study variables

The variables analysed in the different degrees/subjects were, objectives of attention to diversity, content on ageing and the four basic pillars of the WHO [3], such as health, safety, continuous learning, and participation, related to active ageing (Table 2).

2.5. Analysis of data

Analysis was carried out in each of the three Universities, to determine whether the proposed variables appear in the teaching guides, which are the following elements: objectives on attention to diversity; content on ageing and content on advanced age. It was also checked if they had content on the four pillars of WHO: health, safety, continuous learning, and participation.

The data source was an observation sheet, and the nature of the analysis quantitative

and qualitative. A documentary analysis was carried out, for which a perform a qualitative analysis of the sources of information. In order to represent the presence of the contents in the different subjects, carried out quantitative analyses, whose data were recorded using a Microsoft Excel spreadsheet. The statistical program SPSS v20 was used for the calculation of percentages and frequencies.

3. Results

3.1. Analysis of variables at the University of Huelva (Spain)

3.1.1. Analysis of variables in master's degrees

In the first place, for the variable of "objectives on attention to diversity", it is evident that, of the 10 master's degrees analysed at the University of Huelva, seven have objectives of this type. The master's in special education stands out with 100% of subjects that contemplate this objective. The university postgraduates in which no subject with these contents were found were the master's degree in physical education and sports sciences, the master's degree in research of teaching and learning of experimental sci-

Table 2
Variables analysed

Diversity attention objectives	
Content on ageing	
WHO pillar contents:	
1.	Health
2.	Security
3.	Continuous learning
4.	Participation

ences, social sciences and mathematics, and the master's degree in research and analysis of flamenco (Table 3).

As for the content on ageing, only three master's degrees have content of this type and in a single subject each of them. The three master's degrees that include these contents are the master's degree in physical education and sports sciences, the master's degree in general psychology and the master's degree in research and psychosocial intervention in various contexts (Table 3).

Lastly, regarding the pillars of the WHO, 6 of the 10 master's degrees analysed have contents of this type, highlighting the Master's in Physical Education and Sports Sciences and the Master's in General Psychology as the degrees with the highest proportion of subjects with this content, above all, with the health pillar (100% and 83.3% respectively). The titles in which no subjects were found that included these contents were the master's degree in communication and audiovisual education, the master's degree in environmental education, the master's degree in research of teaching and learning of experimental sciences, social sciences and mathematics and master's degree in research and analysis of flamenco (Table 3).

3.1.2. Analysis of degree variables

When analysing the study variables in the five university degrees studied at the University of Huelva, it is observed that they all have objectives on attention to diversity, with the Degree in Primary Education having the most subjects with this type of

objective (33.33%) and the Degree in Physical Activity and Sports Sciences having the least (11.7%) (Table 4). On the other hand, the only degree in which no content was observed in its topics about ageing was the Degree in Early Childhood Education. The other undergraduate degrees have at least one subject related to these contents except for the Degree in Psychology, which has two, and the Degree in Social Education, which has five (Table 4).

Regarding the contents related to the WHO pillars, the "continuous learning" pillar is not present in any subject of any of the degrees analysed. With regard to the other pillars, there is evidence of presence in the subjects, except for the security pillar in the Early Childhood Education Degree (0%) and the participation pillar in the Primary Education Degree (0%). It should be noted that all the degrees have subjects that include content related to the health pillar, especially the physical activity and sports sciences degree (56.86%) and the Psychology degree (44%) (Table 4).

3.2. Analysis of variables at the University of Beja (Portugal)

3.2.1. Analysis of variables in Master's degrees

When studying the objectives on attention to diversity in the master's degrees of the University of Beja, all the degrees analysed contemplate this type of objective in their subjects. The postgraduate course with the largest number of subjects is the Master's Degree in Special Education - Speciali-

Table 3
 Statistics for study variables of master's degrees from the University of Huelva

Degree / Credits	Statistics		Variables				
	Objectives on attention to diversity	Content on ageing	WHO (Health)	WHO (Security)	WHO (Continuous Learning)	WHO (Participation)	
MASTER'S DEGREE IN COMMUNICATION AND AUDIO-VISUAL EDUCATION / 60	f 2 %	0 14.29	0 0	0 0	0 0	0 0	
MASTER'S DEGREE IN ENVIRONMENTAL EDUCATION / 60	f 3 %	0 17.65	0 0	0 0	0 0	0 0	
MASTER'S DEGREE IN SPECIAL EDUCATION / 60	f 18 %	0 100	14 77.78	0 0	0 0	0 0	
MASTER'S DEGREE IN PHYSICAL EDUCATION AND SPORTS SCIENCES / 60	f 0 %	1 9.09	12 100	0 0	0 0	4 36.36	
MASTER'S DEGREE IN TEACHING IN COMPULSORY SECONDARY EDUCATION, BACCALAUREATE, VOCATIONAL TRAINING AND LANGUAGE EDUCATION / 60	f 8,33 %	0 0	25 0	0 0	0 0	0 0	
MASTER'S DEGREE IN RESEARCH OF TEACHING AND LEARNING OF EXPERIMENTAL SCIENCES, SOCIAL SCIENCES AND MATHEMATICS / 60	f 4 %	1 22.22	15 83.33	5 27.77	1 5.55	4 22.22	
MASTER'S DEGREE IN GENERAL PSYCHOLOGY / 60	f 3 %	0 0	1 6.66	1 6.66	2 13.33	2 13.33	
MASTER'S DEGREE IN PEDAGOGICAL INNOVATION AND EDUCATIONAL LEADERSHIP / 60	f 20 %	0 0	3 15	7 38.88	1 5.55	0 0	
MASTER'S DEGREE IN RESEARCH AND PSYCHOSOCIAL INTERVENTION IN VARIOUS CONTEXTS / 60	f 9 %	1 5.55	3 16.66	7 38.88	1 5.55	0 0	
MASTER'S DEGREE IN RESEARCH AND ANALYSIS OF FLAMENCO / 60	f 0 %	0 0	0 0	0 0	0 0	0 0	

Table 4

Statistics for study variables of undergraduate degrees at the University of Huelva

Degree	Statistics		Variables				
	Objectives on attention to diversity	Content on ageing	WHO (Health)	WHO (Security)	WHO (Continuous Learning)	WHO (Participation)	
DEGREE IN PRIMARY EDUCATION	% 33.33	1.96	15.68	3.92	0	0	
DEGREE IN EARLY CHILDHOOD EDUCATION	% 27.08	0	14.58	0	0	2.08	
DEGREE IN PHYSICAL ACTIVITY AND SPORTS SCIENCES	% 11.7	1.96	56.86	1.69	0	5.88	
DEGREE IN SOCIAL EDUCATION	% 29.54	5.68	10.22	1.13	0	6.81	
DEGREE IN PSYCHOLOGY	% 20	4	44	4	0	22	

Table 5

Statistics for study variables of Master's degrees from the University of Beja

Degree	Statistics		Variables				
	Objectives on attention to diversity	Content on ageing	WHO (Health)	WHO (Security)	WHO (Continuous Learning)	WHO (Participation)	
MASTER IN SOCIAL AND COMMUNITY GERONTOLOGY	% 44.44	100	100	66.66	55.55	22.22	
MASTER IN PHYSICAL ACTIVITY AND HEALTH	% 46.15	15.38	92.3	27.03	0	0	
MASTER IN SPECIAL EDUCATION – SPECIALIZATION IN THE COGNITIVE AND MOTOR DOMAIN	% 90.9	0	81.81	0	0	0	
MASTER IN SOCIAL WORK - SOCIAL RISKS AND LOCAL DEVELOPMENT	% 69.23	7.69	7.69	23.07	0	0	
MASTER IN COMMUNITY DEVELOPMENT AND ENTREPRENEURSHIP	% 30	0	20	0	0	0	

sation in the Cognitive and Motor Domain (90.9%), and the course with the least number of subjects is the Master's Degree in Community Development and Entrepreneurship (30%) (Table 5).

Regarding the presence of content related to ageing, the master's degrees that have this type of content are the master's in social and community gerontology (100%), the master's in physical activity and health (15.38%), and the master's in social work - social risks and social development (7.69%). The degrees that do not have this type of content in their subjects are the master's degree in Community Development and Entrepreneurship (0%) and the master's degree in Special Education – Specialisation in the Cognitive and Motor Domain (0%) (Table 5).

Finally, when analysing whether the degrees contemplate the pillars of the WHO, all of them have health content present in one or several of their subjects. Three of the five master's degrees have content related to safety, these were the master's in social and community gerontology (66.66%), the master's in physical activity and health (23.07%), and the master's in social work - social risks and local development (23.07%). Only the Master's in Social and Community Gerontology presents subjects with continuous learning content (55.5%) and participation (22.22%) (Table 5).

3.2.2. Analysis of variables in Bachelor's degrees

Regarding the objectives of attention to diversity, it is evident that three of the four

university degrees analysed have subjects with these types of objectives, these are the degree in sports (32.55%), the degree in infantil and primary education (14%) and the degree in social services (34.37%). In the degree in Audio-visuals and Multimedia, no subject with these objectives was evidenced (Table 4). On the other hand, when analysing the presence of content on ageing, only the degree in Social Services presented subjects with this type of content (9.37%; 18.9 credits) (Table 6).

When studying the presence of the basic pillars of the WHO in the different subjects of these degrees, all the degrees analysed had at least two of the four pillars in some of their subjects, except the Degree in Audio-visual and Multimedia, which did not show any subject with these contents. Of the three degrees in which contents on basic pillars were evidenced, in the degree in sports, contents related to the health pillar (65.11), the safety pillar (4.65) and the participation pillar (13.95) were observed, in the degree in infant and primary education, contents were observed related to the health pillar (18%) and the safety pillar (6%) and in the degree in social services, contents related to the four pillars were evidenced (health: 12.5%; safety: 9.37%; continuous learning: 3.12%; participation: 6.25%) (Table 6).

3.2.3. Analysis of variables in university degrees offered by the University of Beja

When analysing the university courses offered by the University of Beja, it was ob-

Table 6

Statistics for study variables of Degrees of the University of Beja

Degree / Credits	Statistics		Variables				
	Objectives of attention to diversity	Content on aging	WHO (Health)	WHO (Security)	WHO (Continuous Learning)	WHO (Participation)	
DEGREE IN AUDIOVISUALS AND MULTIMEDIA / 240	fi	0	0	0	0	0	
	%	0	0	0	0	0	
DEGREE IN SPORTS / 240	fi	14	0	28	2	6	
	%	32.55	0	65.11	4.65	13.95	
DEGREE IN INFANT AND PRIMARY EDUCATION / 240	fi	7	0	9	3	0	
	%	14	0	18	6	0	
DEGREE IN SOCIAL SERVICES / 240	fi	11	3	4	3	1	
	%	34.37	9.37	12.5	9.37	3.12	

Table 7

Statistics for study variables of university degree courses from the University of Beja

Degree / Credits	Statistics		Variables				
	Objectives of attention to diversity	Content on aging	WHO (Health)	WHO (Security)	WHO (Continuous Learning)	WHO (Participation)	
HIGHER PROFESSIONAL TECHNICAL COURSE IN PSY-CHOGERONTOLOGY / 120	fi	10	12	14	5	0	
	%	45.45	54.54	63.63	22.72	0	
SUPERIOR COURSE IN SOUND AND IMAGE / 120	fi	0	0	0	0	0	
	%	0	0	0	0	0	

served that in the Higher Professional Technical Course in Psycho-gerontology all the study variables analysed in some of its subjects were present, except for the continuous learning pillar of the WHO, from which no data was found (Table 7). However, in the Higher Course in Sound and Image, none of the study variables was evidenced in any of its subjects (Table 7).

3.3. Analysis of variables at the University of the Algarve (Portugal)

3.3.1. Analysis of variables in Master's and Bachelor's degrees

When analysing the presence of objectives on attention to diversity in the different degrees of the University of the Algarve, 17 of the 21 studied, presented this type of objective in some of their subjects. The degrees in which these objectives were not evidenced were the Master's Degree in Communication Design for Tourism and Culture, the Postgraduate Specialisation Course in Community Health Nursing, the Master's Degree in Safety and Health at Work and the Bachelor's Degree in Biomedical and Laboratory Sciences. It should be noted that in the Master's degrees in Basic Education 1st Cycle, Mathematics and Natural Sciences 2nd Cycle, and in the Master's Degree in Portuguese and English Teaching (2nd Cycle, Basic Education) the study found that 100% of their subjects had objectives of attention to diversity (Table 8).

In terms of content on ageing, only seven degrees out of the twenty-one analysed have subjects related to these topics. The

degrees that have these contents in some of their subjects are Degree in Dietetics and Nutrition Degree (10.80%; 26 credits), Degree in Biomedical and Laboratory Sciences (8.69%; 20.5 credits), Degree in Basic Education (2.27%; 5 credits), Degree in Social Education (5.88%; 11.5 credits), Master's Degree in Preschool Education (6.66%; 6 credits), Master's Degree in Social Education (13.33%; 16 credits) and Master's Degree in Social Gerontology (57.14%; 51.5 credits) (Table 8).

Finally, when analysing the presence of the four pillars of the WHO, it was observed that the pillars of continuous learning and participation were present in at least one subject in all the degree programs analysed. The health pillar was evidenced in subjects of ten of the twenty-one-degree program studied, these were the master's degree in social gerontology (35.71%), the master's degree in special education - cognitive and motor domain (33.33%), the degree in social education (26.47%), the degree in basic education (4.54%), the degree in sports (100%), the master's degree in safety and health at work (6.66%), the degree in biomedical and laboratory sciences (100%), degree in nursing (73.52%), degree in pharmacy (100%) and degree in medical image and radiotherapy (100%). The security pillar was observed only in subjects of eight degrees, these were the degree in basic education (15.90%), degree in sports (3.44%), postgraduate course specialization in community health nursing (87.5%), master's degree in safety and health at work (6.66%), degree in biomedical and laboratory sciences

(13.04%), degree in nursing (2.94%), degree in pharmacy (2.70%) and degree in medical image and radiotherapy (2.27%) (Table 8).

4. Discussion

The general objective of this research has been to analyse different university degree programs in three universities of two cross-border countries, to study the presence of contents in attention to diversity, ageing, and the four basic pillars of the WHO (2002): health, safety, continuous learning, and participation.

The findings obtained show that in the three Universities, the degree programs that offer a higher number of subjects related to ageing and attention to diversity, are those concerning Physical Activity, Social Sciences, Gerontology, Psychology and Nursing. The Social Education degree also addresses this content but is only offered at the University of the Algarve. From these findings, we can conclude that the approach to ageing in the study plans (courses content) is mostly contemplated according to the biopsychosocial concept of the term ageing (Martín, 2001; Toronjo-Gómez, 2007), without considering other perspectives that essential in the care of elderly. It is vitally important that individuals that are trained to be teachers, also have an approach to ageing in their study plans, since there is currently a wide variety of training options for approaching dealing with the elderly, and all the benefits of transgenerational activities. Kane (1992) defines professional competence as the degree of use of the knowledge, skills and good

judgment associated with the profession, in all situations that may be confronted in the exercise of professional practice. In this definition, which is one of the most dynamic and complete, there is a dimension that is fundamental: the professional's ability to use good judgment; that is, to be able to reason adequately to make decisions as long as he has sufficient knowledge. In addition, the university also has a task of social involvement, that is, taking into account that the strictly theoretical knowledge that is transmitted is not enough, the university must commit to making structural changes in its four basic pillars, which are, its organization, teaching staff, students and administrative staff (Vallaey, 2007). For this reason, in addition to including content on active aging in the teaching guides that require it, a transversal management of content should also be promoted, transferring responsibility in this type of training to all teachers (OEI, 2021). In addition, it is necessary to promote educational activities that allow students to discuss and reason and thus acquire knowledges of this segment of the population (Souza, Silva & Barros, 2021).

It would also be interesting in training programmes to include contact with the elderly in addition to theoretical training. Contents that include intergenerational contact practices reduce stereotypes related to motivational and social aspects of aging (Lorente-Martínez, Brotons-Rodes & Sitges-Maciá, 2010). Therefore, it is necessary to change the conventional model of training on content related to aging, methodologies

Table 8

Statistics for study variables of degrees from the University of Algarve

Degree / Credits	Statistics	Objectives of attention to diversity	Variables				
			Content on aging	WHO (Health)	WHO (Security)	WHO (Continuous Learning)	WHO (Participation)
MASTER'S DEGREE IN SOCIAL GERONTOLOGY / 120	fi	45	8	5	0	15	15
	%	50	57.14	35.71	0	100	100
MASTER'S DEGREE IN SOCIAL EDUCATION / 120	fi	8	2	0	0	12	12
	%	6.66	13.33	0	0	80	80
MASTER'S DEGREE IN SPECIAL EDUCATION – COGNITIVE AND MOTOR DOMAIN / 120	fi	96	0	5	0	16	16
	%	80	0	33.33	0	100	100
MASTER'S DEGREE IN BASIC EDUCATION 1ST CYCLE fi	fi	82	0	0	0	20	20
AND PORTUGUESE, HISTORY AND GEOGRAPHY OF PORTUGAL IN 2ND CYCLE / 120	%	68.42	0	0	0	100	100
MASTER'S DEGREE IN BASIC EDUCATION 1ST CYCLE fi	fi	120	0	0	0	20	20
MATHEMATICS AND NATURAL SCIENCES 2ND CYCLE / 120	%	100	0	0	0	100	100
MASTER'S DEGREE IN PORTUGUESE AND ENGLISH TEACHING (2nd CYCLE BASIC EDUCATION) / 120	Fi	120	0	0	0	21	21
	%	100	0	0	0	100	100
MASTER'S DEGREE IN PRE-SCHOOL EDUCATION / 120	fi	36	1	0	0	16	16
	%	40	6.66	0	0	100	100
MASTER'S DEGREE IN COMMUNICATION DESIGN FOR TOURISM AND CULTURE / 120	fi	0	0	0	0	14	14
	%	0	0	0	0	100	100
DEGREE IN ANIMATED IMAGE / 240	fi	17.6	0	0	0	27	27
	%	8.1	0	0	0	72.97	72.97
DEGREE IN SOCIAL EDUCATION / 240	fi	11.7	2	9	0	33	33
	%	5.68	5.88	26.47	0	97.05	97.05
DEGREE IN BASIC EDUCATION / 240	fi	20.3	2	2	7	45	45
	%	9.09	4.54	4.54	15.90	100	100
DEGREE IN SPORTS / 240	fi	26.2	0	29	1	30	30
	%	13.79	0	100	3.44	100	100
DEGREE IN COMMUNICATION DESIGN / 240	fi	33.4	0	0	0	39	39
	%	15.78	0	0	0	100	100

DEGREE IN COMMUNICATION SCIENCES / 240	fi	246	0	0	0	0	0	0	37	37
	%	89.18	0	0	0	0	0	0	100	100
POSTGRADUATE COURSE SPECIALIZATION IN COMMUNITY HEALTH NURSING / 60	fi	0	0	0	0	7	0	0	7	0
	%	0	0	0	0	87.5	0	0	87.5	0
MASTER'S DEGREE IN SAFETY AND HEALTH AT WORK / 120	fi	0	0	0	1	1	0	0	1	0
	%	0	0	6.66	6.66	6.66	0	0	6.66	0
DEGREE IN BIOMEDICAL AND LABORATORY SCIENCES / 240	fi	0	4	47	6	6	47	47	47	47
	%	0	8.69	100	13.04	13.04	100	100	100	100
DEGREE IN DIETETICS AND NUTRITION / 240	fi	53	4	0	0	0	0	36	36	37
	%	22.07	10.80	0	0	0	0	97.29	97.29	100
DEGREE IN NURSING / 240	fi	77.6	6	25	1	1	25	34	34	34
	%	32.35	17.64	73.52	2.94	2.94	100	100	100	100
DEGREE IN PHARMACY / 240	fi	6.5	3	38	1	1	38	38	38	38
	%	2.7	8.10	100	2.70	2.70	100	100	100	100
DEGREE IN MEDICAL IMAGE AND RADIOTHERAPY / 240	fi	16.3	1	45	1	1	45	45	45	45
	%	6.81	2.27	100	2.27	2.27	100	100	100	100

must be established to confirm a reflective professional practice with older people (Sáez-Carrera, 1996).

As for the four major pillars that the WHO (2002) points out within the actions in which all activities that respond to different needs with the aim of promoting active, happy, and healthy ageing must be framed, of which one of them is health, it has also been shown that in general they are addressed in the three Universities in degree programs related to Psychology, Social Sciences, Physical Activity, Gerontology and Nursing. In the same way, the degree programs that most address these contents from the WHO pillar of safety have been Psychology, Gerontology and Physical Activity. Finally, for the continuous learning block, the degrees in Physical Education, Nursing, Social Education, Special Education and Psychology stand out as they clearly show this topic in their study plans.

To analyse the meaning and impact of these results, it must be taken into account that the professional competencies based on the WHO pillars refer to the attitudes and capacities necessary to solve community problems effectively and efficiently (Segura, Larizgoitia & Benavides, 2003). The diversity of competencies in relation to the basic pillars of the WHO (2002) suggests that there are many professionals who have training for this. This explains why being multidisciplinary is one of the differential characteristics (Consell Catalá d'Especialitats en Ciències de la Salut, 2000), and why training in this area has spread from the health profes-

sions to other degrees. However, there are few degree programs analysed that have addressed these pillars in their different subjects. Perhaps the problem is also teacher training (Ribera, 2001), traditionally there was a generalized and negative thought towards older people, as a social group, and towards old age as a stage of life (Butler, 1994). The current reality is that there are very few chairs of geriatrics (Ribera, 2001). If teachers do not have adequate preparation, they will not be able to teach the contents related to active aging effectively, and there is a risk of continuing in a negative view of aging, and may even lead to situations of discrimination against the collective (Palmore, 1999). Therefore, it is necessary to transform the situation, the circumstances that have generated it and, above all, develop potentialities from a positive perspective (Acero, 2003). To solve this problem, it could be considered the adaptation of degrees to the European Higher Education Area (EHEA), providing the opportunity to reorganise the courses content taught in European universities in undergraduate and postgraduate programs, thus following the philosophy of European convergence of adapting them to the different professional profiles (Ronda, Davo & Alvarez-Dardet, 2005). Another argument that reinforces the inclusion of these contents in university curricula is Resolution 46/91, of December 16, of the United Nations, which recognizes the importance of active aging for the elderly through the principles of independence, participation, care and self-realization (Resolución 46/91,

de 16 de diciembre, de las Naciones Unidas, 2022).

In the rest of the subjects of the total of the 54 degrees studied, it can be deduced that ageing is not dealt with in a visible or explicit way, but this does not imply that it is not dealt with transversally in the class sessions.

Despite the richness and impact of the data obtained, the study described here has certain limitations and strengths. This is a pilot investigation, therefore, the objectives set are very general, it is intended to continue along the same lines with increasingly specific objectives. One of the strengths of this study is that it provides new information regarding content on aging in many university degrees that, until now, have been scarcely studied. This updated information could help develop future lines of intervention and future study plans.

5. Conclusions

There is a popular saying that “those who really love life are those who are getting old”. This idea is what should stimulate institutions to act in the face of people’s old age.

To conclude this work, it is necessary to highlight that there are currently some university training courses where the contents on active and healthy aging are explicitly addressed in cross-border universities. However, it should be noted that, in general, professionals in the various areas of intervention (social, community, health, cultural, communication) are not properly trained to

respond to the needs of the senior population, with quality interventions.

The results show that the study plans of the different levels of university degrees need a new approach, where university students are prepared and trained in a more holistic perspective to work with and for senior citizens. It is essential that these students have the qualifications that respond to the needs which are demanded in their future as professionals who are going to work with the elderly, for the transformation of society in an egalitarian context, and with quality of life for all people.

For all these reasons, it is necessary to reorient the University Study Plans to train future professionals to work with the challenges that await them, namely population aging. These curricula must include work aimed at this segment of the population (China, Frank, da Silva, de Almeida & da Silva, 2021). In addition, we must not forget that this preparation covers the whole of society, not just those who will carry out their professional activity directly with the elderly.

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