Research Square

Preprints are preliminary reports that have not undergone peer review.
They should not be considered conclusive, used to inform clinical practice,
or referenced by the media as validated information.

Attitudes towards Ageing among Psychologists Working with Older Adults Across Europe: Does Geropsychological Training and Education Make a Difference?

Olga Zamalijeva

olga.zamalijeva@fsf.vu.lt

Vilnius University

Jasminka Despot Lučanin

Croatian Psychological Association

Erika Borella

University of Padua

Constantina Demosthenous

Cyprus Psychologists' Association

Magdalena Zadworna

University of Łódź

Alicia Salvador

University of Valencia

Reinhard Guss

British Psychological Society

Isabelle Albert

University of Luxembourg

Frieder R. Lang

Friedrich-Alexander University Erlangen-Nürnberg

Research Article

Keywords: Geropsychological training, Attitudes toward ageing, Older adults, Psychologists, Ageism

Posted Date: April 20th, 2026

DOI: https://doi.org/10.21203/rs.3.rs-9300846/v1

License: This work is licensed under a Creative Commons Attribution 4.0 International License. Read Full License

Additional Declarations: No competing interests reported.

Abstract

Background. The demand for high-quality professional mental health services in the field of ageing is growing. However, not much is known about the pathways to education and training in ageing psychology across Europe and how this affects attitudes towards work with older adults. The present research examines in what ways attitudes toward older clients are associated with geropsychological training in three European regions (Western, Southern, and Central-Eastern).

Methods. Using a snowball sampling strategy, 371 psychologists (mean age 44,8, 87,3% female) from 10 European countries participated in the survey. The self-report data on educational background and specialised training in the field of ageing and geropsychology, as well as positive and negative attitudes toward older adults, were collected.

Results. The results suggest notable cross-country variability in the proportion of psychologists who had received theoretical and practical training in geropsychology, with the lowest rates in Central-Eastern Europe (i.e., Czechia, Croatia, Lithuania). Notably, across all countries, professional psychologists who received specialised training in the field of ageing expressed less negative and more positive attitudes toward older clients.

Conclusions. Findings need to be interpreted with caution as the samples are not representative of the respective countries. However, it is suggested that more geropsychological education and training may eventually contribute to a better professional attitude towards clients among professional psychologists working in the field of ageing.

Background

The ongoing demographic shift in the global population has led to a steady increase in the number of older adults within healthcare systems, highlighting the urgent need for healthcare services and providers to address the complex and diverse needs of this population [1]. This trend does not bypass psychologists, as the demand for specialized psychological services as well as the need for specialized training and education in the field of ageing is growing to provide and ensure high-quality professional mental health services (see [2]). Against this backdrop of rapid population ageing and increasing demands on healthcare and psychological services, it becomes crucial to consider the broader social context in which older adults are perceived and treated, including the pervasive role of ageism in shaping attitudes toward ageing and older people.

Ageism, understood as stereotypes, prejudices, and discriminatory behaviours directed toward older adults, is a prevalent social phenomenon with demonstrable negative effects on individual well-being and health [3, 4]. It does not always take the form of hostility that threatens physical existence as a result of violence directed at an older person, but can take softer forms, such as disregard, condescension, and even overprotectiveness [5]. According

to stereotype embodiment theory [6], observations of how older adults are treated and how age-related beliefs are expressed in the culture are often internalised early in life and subsequently reinforced over time, often without awareness. Ageist beliefs – such as assumptions that all older people are cognitively impaired, socially disengaged, or physically frail – may contribute to both a higher prevalence of health conditions and increased healthcare costs [7]. General societal attitudes toward ageing also shape older individuals' personal attitudes toward their own ageing, influencing how they perceive and experience the ageing process [8]. At the individual level, perceived age discrimination has been linked to elevated depressive symptoms, reduced life satisfaction, and increased stress and anxiety among older adults [9]. Further, ageist attitudes in wider society contribute to social exclusion and reduced engagement in preventive health behaviours, amplifying health inequities across the lifespan. Collectively, this body of evidence positions ageism as not only a matter of social bias but also a critical determinant of psychological and physical health outcomes in older populations.

Ageist beliefs and stereotypes prevalent in the general population permeate institutional settings, including healthcare systems and the professional attitudes of those providing care to older adults. Persistent ageist attitudes towards older adults within the healthcare community remain a major barrier for health equality, affecting the accessibility and quality of care provided. A systematic review within healthcare systems revealed that older patients often face limited access to certain medical procedures and treatments and remain largely underrepresented in clinical trials, resulting in poorer health outcomes [10]. Additionally, older patients experience negative attitudes from healthcare professionals, with healthcare workers within geriatric units expressing higher ageism scores: such an attitude seems to be related to the paucity of internship, knowledge and experience with ageing process in its complexity, which encompasses also the psychological level [11].

In the field of mental health care, research indicates that psychologists and trainees often show ambivalence or reluctance to work with older adults, partly due to enduring negative age stereotypes (e.g., regarding cognitive decline, mental rigidity, lack of psychological mindedness in old age, and therapeutic pessimism regarding treatment efficacy and prognosis in older clients) as well as personal concerns about aging, such as death anxiety and fear of ageing [12–14]. It is also important to note that many mental health professionals report insufficient knowledge about age-related psychological changes and limited training and competency in working with older adults [15], which may reinforce ageist attitudes and, in turn, reduce interest in working in this field [16]. Mental health care providers' 'age bias' continues to be a problematic factor in psychotherapy with older adults, even in experienced therapists, requiring continuous ageism management during the treatment process and an "age-aware education" for psychotherapists [17, 18].

Conversely, empirical evidence shows that adequate training or specialization in geropsychology and direct experience with older clients foster more adequate and positive

attitudes and greater competence among psychologists working with older adults [19]. In most research, several factors that could generate more positive views of aging in mental health professionals have appeared dominant. The gerontological or geropsychological education and training building knowledge-based competency – at graduate and postgraduate levels, the research providing insight on the psychological interventions benefits for older adult clients, and the exposure to older adults (clinical and personal) all seem to be critical factors shaping professionals' attitudes [11, 20–22] as also recommended by the American Psychological Association [2]. Postgraduate specialization continues to be crucial in establishing and growing the discipline of geropsychology. Even the simple exposure to geropsychology experts seems to increase the profession's visibility and attract potential students. Providing access to mentors in the field may facilitate interest in future work with older adults even more strongly [23, 24]. Taken together, these findings, along with initial evidence supporting the effectiveness of interventions aimed at improving attitudes toward older adults [25], underscore the importance of providing healthcare professionals with continuous education and training that challenge ageist assumptions and fosters greater contact with older people, to ensure equitable, person-centered, and high-quality mental health care.

It is important to note that there is evidence strongly suggesting that specialised training in healthcare settings as well as mental health services results in more favourable attitudes towards older clients, though the majority of research is conducted in the nursing area [20]. However, there is very little data on the prevalence of the ageist attitudes among mental health professionals in different European regions. To date only inferences from other fields, like labour market (e.g. [26]), can be made about the possible regional differences in the level of ageism among mental healthcare professionals, including psychologists and psychotherapists. There is also no data regarding in how far psychologists working with older people in different European countries have received formal education and specialised training in the field of geropsychology of ageing. This paper is the first step attempting to bridge this knowledge gap. Thus, this research has two main aims, that is 1) to examine the patterns of specialized education and clinical training in the field of psychology of ageing as well as the attitudes toward older adults among psychologists in three European regions (Western, Southern and Central-Eastern), and 2) to explore the associations between the attitudes toward older adults and geropsychological education and training.

Methods

Survey participants

Using the snowball sampling strategy, an invitation to participate in this survey and share it with other colleagues was distributed through the national associations of psychologists and other professional groups or organizations. The invitation not only targeted psychologists who currently provided services exclusively to older adults, but also specialists with

background in psychology (e.g. practitioner psychologists, psychotherapists, human resource managers, researchers) who encountered older adults in their practice and/or were involved in ageing research. A total of 371 respondents (mean age 44,8; 87,3% female) from 10 European countries provided sufficient information to be included in the analysis. Demographic characteristics of survey participants by country and region are presented in Table 1.

Table 1
Main demographic characteristics of survey respondents

Country / Region	Count	Age	Gender (female)
	N	M (SD)	N (%)
Belgium (BE)	45	41,27 (12,64)	36 (80,0%)
Germany (DE)	16	43,69 (10,90)	16 (100,0%)
Luxembourg (LU)	34	41,50 (12,19)	30 (88,2%)
United Kingdom (UK)	23	44,87 (11,29)	20 (87,0%)
Cyprus (CY)	27	40,48 (9,02)	24 (88,9%)
Italy (IT)	44	39,70 (13,80)	41 (93,2%)
Spain (ES)	110	48,34 (12,99)	87 (80,6%)
Croatia (HR)	30	52,63 (10,59)	29 (96,7%)
Czech Republic (CZ)	15	45,67 (17,03)	13 (86,7%)
Lithuania (LT)	27	44,30 (13,40)	26 (96,3%)
Western Europe (BE DE LU UK)	118	42,36 (11,97)	102 (86,4%)
Southern Europe (CY IT ES)	181	45,07 (13,27)	152 (84,9%)
Central Eastern Europe (HR CZ LT)	72	48,06 (13,57)	68 (94,4%)
Total	371	44,79 (13,05)	322 (87,3%)

Collected data were grouped based on geographic region: 1) Belgium, Germany, Luxembourg, and the United Kingdom were grouped to represent Western Europe; 2) Cyprus, Italy, and Spain represented Southern Europe; 3) Croatia, Czech Republic and Lithuania - Central-Eastern European grouping.

Measures

The survey used in this research consisted of several parts, including basic demographic information, information regarding education and practice, followed by self-reported attitudes toward older adults in general and attitudes toward older clients.

Educational background and experience in the field

Respondents were asked to report on their educational background and the extent of specialised and clinical training in the field of ageing and geropsychology they have received. First of all, they were asked to indicate whether they had special education or training in the field of old age, for instance, in Geropsychology, Gerontology, Psychology of Aging or similar (1 - “yes”, 0 - “no”).

Other training related questions were based on the European Cooperation in Science and Technology (COST) Action 21122, PROmoting GeRiAtric Medicine in countries where it is still eMergING (PROGRAMMING) survey [27]. These questions referred to 1) respondents' participation in a specific course of lectures in geropsychology as part of formal professional or undergraduate education, 2) having had at least 6-week long internships or clinical training with older people, as well as 3) having done any volunteer work with older people. These questions had 3 answer options, which for the purpose of this analysis were grouped into “Yes” and “No/unsure”.

Attitudes toward ageing

Positive and negative attitudes toward older adults in general were adapted from Round 4 of the European Social Survey [28]. Using selected items, on a scale from 0 to 10 the survey respondents were asked to rate: 1) their beliefs regarding the significance of the burden people over the age of 70 are placing on their country’s health services, where 0 indicated “no burden” and 10 – “a great burden”; 2) their beliefs about the impact people over the age of 70 are generally having on their country’s customs and way of life, where 0 indicated “extremely bad effect” and 10 – “an extremely good effect”; 3) their beliefs regarding the economic contribution of people over 70, where 0 indicated “contribute very little economically” and 10 – “contribute a great deal economically”.

In order to assess Attitudes Toward Older Clients, we drew on items from existing measures that were selected to represent both positive and negative characteristics. This newly compiled scale includes 12 items that are rated based on respondents’ agreement with 5 statements describing positive characteristics and 7 negative characteristics associated with the older population. Six negatively worded items were derived from the Ageist Myths about Psychotherapy Questionnaire (AMPQ) developed by López et al. [29]. These items included topics of limited capacity to learn, rigidity of thinking, being naturally depressed, having health problems, low cost-benefit ratio, and overall negative attitude toward the ageing process. Four positively worded items were adapted from Henderson et al. [30] and included statements about being valued for wisdom, being a source of knowledge, passing on traditions and being caring of others. Two items were adapted from the 14-item Geriatrics Attitudes Scale by Reuben et al. [31], where one of the items regards preference of working with younger populations and the other - the interest in listening to older people. All

statements were rated on a 5-point Likert-type scale with 1 indicating “strongly disagree” and 5 - “strongly agree”.

Principal component analysis with Varimax rotation was performed in order to assess the structure of this newly compiled scale. Based on recommendations by [32], analysis is considered appropriate when the Kaiser-Meyer-Olkin (KMO) value is $> 0,70$ and Bartlett’s test of sphericity is significant, while factor loadings of $0,4 - 0,6$ are considered moderately high. Results showed that the data were suitable for the analysis ($KMO = 0,78$; Bartlett’s test of sphericity $p < 0,001$) and yielded 2 factors accounting for 40% of total variance. Based on the content of items, one of the factors can be described as representing negative attitudes toward older clients and the other one positive attitudes. Factor loadings in the “negative attitude” dimension ranged from 0,51 to 0,69, and in the “positive attitude” factor, the range was $0,37 - 0,77$. Internal consistency was better for the Negative attitude scale (Cronbach’s $alpha = 0,73$), but still sufficient for the Positive attitude factor (Cronbach’s $alpha = 0,58$). For easier interpretation, the total scores of these subscales will be presented in z-scores, with higher scores indicating a more expressed positive or negative attitudes.

Data analysis

Statistical analysis was performed using IBM SPSS Statistics 29.0. Descriptive statistics were used to analyse the characteristics of training background and experience of working with older adults among the study participants. Exploratory factor analysis was performed to evaluate the factor structure of the Attitudes Toward Older Clients Scale and internal consistency was measured with Cronbach’s alpha. An independent samples t-test was performed to evaluate the differences in attitudes towards older adults among psychologists with different educational backgrounds and experience of working with the older adult population. Cohen’s d was calculated to assess the effect size of potential group differences. Based on the most common practice, Cohen’s d of 0,2 is interpreted as small, 0,5 as medium, and 0,8 as large effects [33]. ANOVA with Bonferroni correction was, then, used to compare the attitudes across three regions, with η^2 calculated to evaluate the effect size (0.01 indicates small, 0.06 – medium, 0.14 – large effect)[34]. Results are considered statistically significant at $p < 0,05$.

Results

Results suggest notable cross-country variability in the proportion of psychologists who had received theoretical and practical training in geropsychology. Psychologists from Central-Eastern Europe (i.e., Czechia, Croatia, Lithuania) reported the lowest rate of specialised training, whereas professionals in Western Europe (Belgium, Germany, Luxembourg, United Kingdom) were in the middle, while psychology practitioners from Southern Europe (Italy, Spain, Cyprus) reported the highest rates of specialised training. Visualisation of results is presented in Fig. 1.

Results obtained from the analysis of variance (see Table 3) show that there are significant differences across regions on three measures: negative as well as positive attitudes about older clients, and perception of older adults' economic contribution. No significant differences were observed regarding the attitudes of the psychologists participating in the survey concerning healthcare burden and the positive effect on traditions between regions.

Table 3
Comparison of attitudes toward older adults across regions

	Western Europe (BE DE LU UK)		Southern Europe (IT ES CY)		Central-Eastern Europe (CZ HR LT)					
	M	SD	M	SD	M	SD	F	df	p	η^2
Negative attitudes about older clients (z-score)	-0,21	0,88	-0,07	1,00	0,51	1,02	13,290	2	< 0,001	0,067
Positive attitudes about older clients (z-score)	-0,12	1,02	0,24	0,93	-0,40	0,99	12,418	2	< 0,001	0,063
Older adults considered a burden on healthcare services	5,74	2,51	5,58	2,69	6,03	2,61	0,686	2	0,505	0,004
Older adults having positive effect on traditions	7,01	1,86	7,30	1,95	6,78	1,63	1,802	2	0,167	0,011
Older adults' economic contribution	4,59	2,47	6,00	2,54	3,48	2,55	24,978	2	< 0,001	0,134

Post hoc analysis with Bonferroni correction showed that negative attitudes about older clients are more prominent in the Central-Eastern European region, as respondents from Central-Eastern Europe expressed significantly stronger negative attitudes toward older clients compared to Western and Southern Europe, while the latter two regions did not differ significantly. Results also reveal that Southern European respondents expressed significantly more positive attitudes not only compared to Central-Eastern, but also to Western European counterparts, yet the level of positive attitudes in Central-Eastern and

Western European regions was similar. Finally, the comparison of the perception of the economic contribution of older adults resulted in significant differences across all three regions: Southern European respondents were the most likely to see older adults as contributing a great deal economically, Western European respondents averaged in the middle, while respondents from Central-Eastern Europe viewed older adults as contributing very little.

An independent samples t-test was performed to compare the attitudes toward older clients or older adults in general among professional psychologists who had specialised training or volunteer experience and those who didn’t (see Table 4). Notably, across all countries, respondents who received specialised training in the field of old age expressed lower levels of negative attitudes compared to those without such training, indicating medium-to large effect size, and higher levels of positive attitudes with low-to-medium effect size. Having a course of lectures in Geropsychology yielded similar results as specialized training, but with notably smaller effect sizes. Practical experience shows varying results, depending on the context. Respondents who had an internship or clinical training indicated less negative attitudes and more positive attitudes about older clients, with effect sizes comparable to the specialized training results, but volunteering experience resulted only in differing negative attitudes with small effect size. Respondents who received specialized training, course of lectures and clinical training were more likely to view people over the age of 70 as contributing more economically, but volunteer work experience was not associated with significant difference in this measure. No differences were found regarding consideration of older adults as a burden to society or having a positive effect on traditions.

Table 4
Comparison of attitudes toward older adults among specialists with different training

	Had special education/training in the field of old age (Geropsychology, Gerontology, etc.)							
	Yes		**No**					
Attitude	**M**	**SD**	**M**	**SD**	**t**	**df**	**p**	**Cohen's d**
Negative attitudes about older clients (z-score)	-0,38	0,87	0,26	1,00	-6,317	368	**< 0,001**	-0,667
Positive attitudes about older clients (z-score)	0,21	0,91	-0,15	1,04	3,501	368	**< 0,001**	0,370
Older adults considered a burden on healthcare services	5,70	2,52	5,72	2,70	-0,084	334	0,933	-0,009
Older adults having positive effect on traditions	7,31	1,95	6,98	1,82	1,515	312	0,131	0,172
Older adults' economic contribution	5,88	2,60	4,41	2,61	5,068	323	**< 0,001**	0,566
	Had a course of lectures in Geropsychology as part of formal education							
	Yes		No/Unsure					
Attitude	**M**	**SD**	**M**	**SD**	**t**	**df**	**p**	**Cohen's d**
Negative attitudes about older clients (z-score)	-0,17	1,01	0,23	0,95	-3,868	369	**< 0,001**	-0,406
Positive attitudes about older clients (z-score)	0,13	0,92	-0,17	1,07	2,922	369	**0,004**	0,307
Older adults considered a burden on healthcare services	5,73	2,56	5,70	2,70	0,107	335	0,915	0,012
Older adults having positive	7,13	1,96	7,11	1,74	0,106	313	0,916	0,012

	Had special education/training in the field of old age (Geropsychology, Gerontology, etc.)							
	Yes		**No**					
effect on traditions								
Older adults' economic contribution	5,31	2,69	4,71	2,68	1,997	324	**0,047**	0,225
	Had internship/clinical training with older people (6 + weeks)							
	Yes		No/Unsure					
Attitude	**M**	**SD**	**M**	**SD**	**t**	**df**	**p**	**Cohen's d**
Negative attitudes about older clients (z-score)	-0,34	0,89	0,28	1,01	-6,187	369	**< 0,001**	-0,646
Positive attitudes about older clients (z-score)	0,18	0,91	-0,15	1,04	3,225	369	**0,001**	0,337
Older adults considered a burden on healthcare services	5,85	2,43	5,61	2,76	0,842	334,84	0,400	0,091
Older adults having positive effect on traditions	7,23	1,94	7,02	1,82	0,955	313	0,340	0,108
Older adults' economic contribution	5,56	2,53	4,62	2,77	3,173	324	**0,002**	0,352
	Had volunteer work experience with older adults							
	Yes		No/Unsure					
Attitude	**M**	**SD**	**M**	**SD**	**t**	**df**	**p**	**Cohen's d**
Negative attitudes about older clients (z-score)	-0,14	0,93	0,13	1,04	-2,624	369	**0,009**	-0,273
Positive attitudes about older clients (z-score)	0,10	1,04	-0,09	0,95	1,830	369	0,068	0,190

	Had special education/training in the field of old age (Geropsychology, Gerontology, etc.)							
	Yes		No					
Older adults considered a burden on healthcare services	5,84	2,44	5,61	2,77	0,813	334,53	0,417	0,088
Older adults having positive effect on traditions	7,18	2,06	7,07	1,70	0,523	291,51	0,602	0,059
Older adults' economic contribution	5,29	2,63	4,87	2,75	1,404	324	0,161	0,156

It is also important to note that multiple comparisons were performed in this study (the total sum of t-tests was 20), which subsequently increased the Type-I error of identifying significant results that are not actually there. One of the strategies to solve this is to implement corrections to the significance level, i.e. Bonferroni adjustment. Since Bonferroni adjustment has both advantages and disadvantages [35], this adjustment is presented for transparency as an alternative assessment for obtained results. In this study, based on the common recommendations, the significance level was reduced by dividing it by the number of comparisons, thus the adjusted significance level was set to 0.002 (= 0.05 / 20). After this adjustment, results show that having had experience in volunteer work is no longer associated with less negative attitudes toward older clients. Applying adjustment has also resulted in non-significant outcome when comparing positive attitude toward older clients and economic contribution of older adults between study participants who have or haven’t attended a course of lectures on Geropsychology during their formal education.

Discussion

This study that involved psychologists, the vast majority of whom are currently working with older clients or ageing issues, had several main objectives. First of all, the practices related to geropsychological training across three European regions were examined. Then the attitudes toward older clients and older adults in general were compared among psychologists who had different training experience and across different regions. Overall, the main results indicate regional differences in training as well as attitudes toward older people and also support the notion of existing association between training and professional’s beliefs about older clients.

Despite being actively involved in working with older populations, according to the results of this study, psychologists from Central-Eastern Europe reported receiving the least amount of

specialised training in the field of geropsychology and old age, possibly resulting from differences in psychological training programs across European countries. However, this result does not necessarily indicate that practitioners in Central-Eastern Europe are unqualified and consequently unable to address the needs of older clients, as they could have just as well gained required knowledge through autonomous learning and continuing education. However, from the results obtained in this survey we can also see a trend in attitudes across regions that can be seen as repeating the pattern of reported formal training in the field of geropsychology, i.e. in regions where formal training is more prevalent, the attitudes are more favourable. It may be that the relative lack of training opportunities partly reflects broader societal narratives about ageing, including subtle and often implicit ageist assumptions. Analysis conducted in the field of labour market has shown that in Eastern and Central European countries, including Czech Republic, Croatia and Lithuania, people are the least comfortable working with older colleagues [26], signalling a higher level of ageism in the region. It is just as possible that the individuals responsible for the creation and implementation of the study programmes are not immune to subtle but common biases, thus leaving this issue neglected and forgoing specialised geropsychology courses during formal education. At the same time, regional differences in training opportunities may also reflect structural and historical variations in higher education systems, differences in welfare regimes, and the varying pace of institutional development of geropsychology as a recognised subspecialty [27, 36]. Although the observed regional effects were in the small-to-moderate range, their consistency across both negative and positive attitude dimensions suggests a systematic pattern.

Overall, results indicate that psychologists who received specialised training or had practice-oriented internships of working with older adults have more favourable attitudes toward older clients and older population in general. This result goes in line with the strong body of literature advocating for culture-sensitive, inclusivity, disability-informed, and diversity-oriented training of specialists who in their practice may encounter representatives from various, including vulnerable, backgrounds [37] and supports the conclusion that insufficient training in ageing is associated with ageist beliefs and even discriminatory behaviours towards older adults in healthcare [20]. Theoretical and practical training that is able to foster appropriate attitudes towards specific populations is expected to decrease the risk of prejudice or discrimination of clients from diverse backgrounds [38], including behaving towards older clients with dignity and respect as well as avoiding bias [2].

Moreover, a rather interesting observation can be deduced from results related to volunteer work experience. Some studies show that volunteering with a specific group may result in favourable attitude change among nursing students [39, 40] or greater contact with older adults is linked to less ageist attitudes [11]. However, in this survey receiving specialised geropsychological training, attending a course or having clinical training was associated not only with lower negative attitudes, but also with more expressed positive attitudes towards older clients, while volunteering was only associated with a small difference in the negative

attitudes about older clients. Though requiring further investigation, this outcome may be comparable with the results of meta-analysis by Leaune and colleagues [41] and suggesting that specialised training should be favoured over simple promotion of student volunteering, as it seems like formal training may have greater impact.

In the current study, across different forms of formal training, the associations were consistently stronger for lower negative attitudes than for higher positive attitudes toward older clients. This distinction is theoretically relevant, as reducing negative bias does not automatically translate into increased positive evaluations [38, 42]. The observed pattern may thus indicate the development of more balanced professional perspectives toward older clients. Importantly, given the cross-sectional nature of the present data, it remains unclear whether specialised training shapes attitudes toward older clients or whether psychologists with more favourable pre-existing attitudes are more inclined to pursue geropsychological education [16].

Practical implication

This study suggests that formal specialised training is associated with a more favourable attitude towards older clients, which may decrease the risk of ageist or biased treatment in psychological practice. Just a little over 10 years ago EuroPsy certificate was introduced as an attempt to standardise the training principles of psychologists across Europe [36]. A similar approach to some extent can be applied by developing guidelines related to training needed in the field of ageing. These guidelines, setting up greater harmonization of rules and regulations regarding training in ageing related fields in different European countries, would be useful not only to psychology students planning to work with older adults, but relevant to all psychologists in training working in an ageing society.

Limitations and future directions

The main strength of this study is providing the first glance into the regional training differences and the role of specialised training in attitudes toward older adults among psychologists working in the field of ageing across Europe, that has not been systematically addressed before. At the same time this study has some limitations and the findings need to be interpreted with caution. The principal limitation is the lack of representativeness in the sample for the respective countries, which strongly limits the generalisability of the obtained results. The number of study participants in the Central-Eastern and Western European regions are more similarly distributed between countries, while participants from Spain are dominating in the Southern European region, thus having a much greater weight in outlining the results of this region. Hence, it is utmost important to further explore the role of training in the attitudes of professionals toward older clients in each country and Europe as a whole in order to establish the most cost-effective training approaches, by surveying more

representative samples of psychologists working in the field and taking more into consideration cultural and social aspects.

Though an anonymous survey design facilitates sincere responses, social desirability remains probable when it comes to the sensitive topic of attitudes or prejudice toward specific populations. Social desirability is also rather likely among professionals who are expected to be tolerant, empathetic, and unbiased. Therefore, psychologists who have undergone specialised training may be merely more knowledgeable of the socially desirable answers rather than reporting the expression of their actual attitude. Future research should consider the inclusion of attitude measures that are less obvious or direct. Also, the subscale representing the positive attitudes toward the older clients has relatively low internal consistency. Internal consistency measured with Cronbach's alpha $> 0,7$ is generally considered acceptable, however, estimates reaching 0,6 are also considered satisfactory [43]. This was expected given the small number of items in this particular subscale, yet the results involving this measure should be interpreted with additional caution. Future research should attempt to expand this subscale by adding more items to improve reliability.

Finally, when interpreting the findings it needs to be considered that the presented data do not allow for interpretations of the differences between regions, and may also reflect differences on a more societal level, e.g. in welfare state regimes (including economic support for older people, health care system, etc.) as well as differences in population structure (age structure, wealth and power distribution among different age groups, etc.). Furthermore, job opportunities for psychologists specialised in working with older adults may be considerably different in different European regions. For example, the scarcity of jobs in this field could be related to the psychologists' low expectations of working with older adults, leading to low interest in such work and resulting in more negative attitudes. These are just preliminary findings that may be taken into account in some expanded future research and further exploration of the interaction between training and regional or state-level variables may provide valuable insights for ensuring the quality of psychological services for the fast-growing older adult population all over Europe.

Conclusions

There are several pivotal conclusions that can be drawn from these preliminary results. Notable differences were found across European regions in the extent psychologists working with older populations are actually formally trained to work in the field of geropsychology. There are also regional differences in a way psychologists see older clients. Moreover, results also indicate that formal training is associated with more favourable attitudes toward older clients and older populations in general. Since formal geropsychological education and training result in more positive attitudes towards ageing or older adults, this may eventually contribute to better services that address the needs of older clients without bias and

prejudice. Finally, in order to promote the quality of psychological services for older adults in Europe, standardised training guidelines should be developed.

Declarations

Ethics approval and consent to participate

The survey was evaluated and approved by the Ethics Committee at Friedrich-Alexander University (Nr. 24-378-S; October 1st, 2024, Erlangen). The study was conducted in accordance with the Declaration of Helsinki. Informed consent to participate was obtained from all of the participants in the study and participants were able to retract this consent at any moment.

Consent for publication

Not applicable.

Data availability statement

The data supporting the findings of this study will be made available to research institution affiliated researchers upon a reasonable request.

Competing interest

The authors do not have any competing interests.

Funding

This study received no external funding.

CRediT author contributions

OZ – Conceptualization, Methodology, Investigation, Formal analysis, Writing - Original Draft, Writing - Review & Editing; JDL - Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing - Review & Editing; EB - Conceptualization, Investigation, Writing - Original Draft, Writing - Review & Editing; CD - Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing - Review & Editing; MZ - Conceptualization, Writing - Original Draft, Writing - Review & Editing; AS - Conceptualization, Investigation, Writing - Original Draft, Writing - Review & Editing; RG - Conceptualization, Investigation, Writing - Original Draft, Writing - Review & Editing; IA - Conceptualization, Methodology, Investigation, Writing - Original Draft, Writing - Review & Editing; FRL - Conceptualization, Methodology, Supervision, Writing - Original Draft, Writing - Review & Editing;

Acknowledgements

This survey was conceptualized and conducted as a result of the joint effort and the spirit of the Standing Committee on Ageing within the European Federation of Psychologists' Associations (EFPA) that until the summer of 2025 was working toward the key purpose of providing sound research-based knowledge about the diverse psychological processes underlying human ageing as well as expertise about specialists' training, education and interventions. Heartfelt thank you goes to all committee members that at some point contributed to developing the idea of this survey and supported the data collection in their country: Gerald Gatterer (Austria), Lars Larsen (Denmark), Christian Borg-Xiuereb (Malta), Constança Paul (Portugal), Hana Georgi (Czech Republic), Ana Kraljevic (Croatia), Matthias Kligel (Switzerland) Lars Petter Lopez-Røed (Norway) and Elisabeth Holck-Steen (Norway). The authors would like to thank their national psychological associations and EFPA for supporting the survey and all the participants for their time. Special thanks to the Institute of Psychogerontology at Friedrich-Alexander-University Erlangen-Nuremberg for the technical support and assistance that made this study possible.

References

1. Khan HTA, Addo KM, Findlay H. Public Health Challenges and Responses to the Growing Ageing Populations. Public Health Challenges. 2024;3:e213. https://doi.org/10.1002/puh2.213.
2. Guidelines for Psychological Practice With Older Adults. American Psychological Association; 2024.
3. Butler RN, Age-Ism. Another Form of Bigotry. Gerontologist. 1969;9(4 Part 1):243–6. https://doi.org/10.1093/geront/9.4_Part_1.243.
4. Global Report on Ageism. 1st ed. Geneva: World Health Organization; 2021.
5. Urbaniak B, Chałas M, Szukalski P, Zimny R, Błaszczak R, Zadworna M. Trwałość i zmienność procesów starzenia się i starości. Wydawnictwo Uniwersytetu Łódzkiego; 2021. https://doi.org/10.18778/8220-491-9
6. Levy B. Stereotype Embodiment: A Psychosocial Approach to Aging. Curr Dir Psychol Sci. 2009;18:332–6. https://doi.org/10.1111/j.1467-8721.2009.01662.x.
7. Levy BR, Slade MD, Chang E-S, Kannoth S, Wang S-Y. Ageism Amplifies Cost and Prevalence of Health Conditions. Gerontologist. 2020;60:174–81. https://doi.org/10.1093/geront/gny131.
8. Zadworna M, Brudek PJ, Laidlaw K. Assessing losses and gains with ageing: the psychometric properties of the Polish version of the Attitudes to Ageing Questionnaire. Health Psychol Rep. 2024. https://doi.org/10.5114/hpr/177270.
9. Kang H, Kim H. Ageism and Psychological Well-Being Among Older Adults: A Systematic Review. Gerontol Geriatric Med. 2022;8:23337214221087023. https://doi.org/10.1177/23337214221087023.

10. Chang E-S, Kannoth S, Levy S, Wang S-Y, Lee JE, Levy BR. Global reach of ageism on older persons' health: A systematic review. PLoS ONE. 2020;15:e0220857. https://doi.org/10.1371/journal.pone.0220857.
11. Caskie GIL, Voelkner A, Sutton M, Canell A, Root E, AGEISM, CONTACT, AND, OLDER ADULT ADLS RELATE, TO MENTAL HEALTH TRAINEES' INTEREST IN GEROPSYCHOLOGY. Innovation in Aging. 2022;6 Supplement_1:475–6. https://doi.org/10.1093/geroni/igac059.1840
12. Chonody JM, Webb SN, Ranzijn R, Bryan J. Working with Older Adults: Predictors of Attitudes Towards Ageing in Psychology and Social Work Students, Faculty, and Practitioners. Australian Psychol. 2014;49:374–83. https://doi.org/10.1111/ap.12056.
13. Graham KL, Moye J. Training in Aging as a Diversity Factor: Education, Knowledge, and Attitudes Amongst Psychology Doctoral Students. Psychol Learn Teach. 2023;22:39–54. https://doi.org/10.1177/14757257221130483.
14. Lee KM, Volans PJ, Gregory N. Attitudes towards psychotherapy with older people among trainee clinical psychologists. Aging Ment Health. 2003;7:133–41. https://doi.org/10.1080/1360786031000072303.
15. Qualls SH, Segal DL, Norman S, Niederehe G, Gallagher-Thompson D. Psychologists in practice with older adults: Current patterns, sources of training, and need for continuing education. Prof Psychology: Res Pract. 2002;33:435–42. https://doi.org/10.1037/0735-7028.33.5.435.
16. Koder D-A, Helmes E. Predictors of Interest in Working with Older Adults: A Survey of Postgraduate Trainee Psychologists. Gerontol Geriatr Educ. 2008;29:158–71. https://doi.org/10.1080/02701960802223233.
17. Kessler E-M, Blachetta C. Age cues in patients' descriptions influence treatment attitudes. Aging Ment Health. 2018;24:193–6. https://doi.org/10.1080/13607863.2018.1515889.
18. Lederman S, Shefler G. Psychotherapy with older adults: Ageism and the therapeutic process. Psychother Res. 2023;33:350–61. https://doi.org/10.1080/10503307.2022.2094298.
19. Yarhouse MA, DeVries HM. When Psychologists Work with Older Adults: A Survey of Ethical Beliefs and Practices. J Clin Geropsychology. 2000;6:149–63. https://doi.org/10.1023/A:1009514630963.
20. Fernández-Puerta L, Caballero-Bonafé A, de-Moya-Romero JR, Martínez-Sabater A, Valera-Lloris R. Ageism and Associated Factors in Healthcare Workers: A Systematic Review. Nurs Rep. 2024;14:4039–59. https://doi.org/10.3390/nursrep14040295.
21. Fullen MC. Ageism and the Counseling Profession: Causes, Consequences, and Methods for Counteraction. TPC. 2018;8:104–14. https://doi.org/10.15241/mcf.8.2.104.
22. Kim J. Healthcare Professionals' Perceptions and Experiences of Ageism: A Qualitative Study. IJERPH. 2025;22:350. https://doi.org/10.3390/ijerph22030350.

23. Graham KL, King KD. Evaluating the Working With Older Adults Scale With Clinical Psychology Doctoral Students. Gerontologist. 2022;62:1217–25. https://doi.org/10.1093/geront/gnac044.
24. King K, Graham K. Geropsychology Training Innovations: Understanding Ageism and Adultism in Students and New Training Initiatives. Innovation in Aging. 2020;4 Supplement_1:594–594. https://doi.org/10.1093/geroni/igaa057.1995
25. Martínez-Arnau FM, López-Hernández L, Castellano-Rioja E, Botella-Navas M, Pérez-Ros P. Interventions to improve attitudes toward older people in undergraduate health and social sciences students. A systematic review and meta-analysis. Nurse Educ Today. 2022;110:105269. https://doi.org/10.1016/j.nedt.2022.105269.
26. Abuladze L, Perek-Białas J. Measures of Ageism in the Labour Market in International Social Studies. In: Ayalon L, Tesch-Römer C, editors. Contemporary Perspectives on Ageism. Cham: Springer International Publishing; 2018. pp. 461–91. https://doi.org/10.1007/978-3-319-73820-8_28.
27. Ogliari G, Masud T, Herghelegiu AM, Pavic T, Wissendorff Ekdahl A, Piotrowicz K, et al. Educational Needs in Geriatric Medicine Among Health Care Professionals and Medical Students in COST Action 21122 PROGRAMMING: Mixed-Methods Survey Protocol. JMIR Res Protoc. 2025;14:e64985. https://doi.org/10.2196/64985.
28. European Social Survey ERIC (ESS ERIC). European Social Survey (ESS), Round 4–2008. 2009. https://doi.org/10.21338/NSD-ESS4-2008.
29. López J, Noriega C, Giner M. Development and validation of ageist myths in a psychotherapy questionnaire (AMPQ): professional ageism among psychology graduate students. Educ Gerontol. 2020;46:642–52. https://doi.org/10.1080/03601277.2020.1801705.
30. Henderson J, Xiao L, Siegloff L, Kelton M, Paterson J. Older people have lived their lives': First year nursing students' attitudes towards older people. Contemp Nurse. 2008;30:32–45. https://doi.org/10.5172/conu.673.30.1.32.
31. Reuben DB, Lee M, Davis JW, Eslami MS, Osterweil DG, Melchiore S, et al. Development and Validation of a Geriatrics Attitudes Scale for Primary Care Residents. J Am Geriatr Soc. 1998;46:1425–30. https://doi.org/10.1111/j.1532-5415.1998.tb06012.x.
32. Watkins MW. Exploratory Factor Analysis: A Guide to Best Practice. J Black Psychol. 2018;44:219–46. https://doi.org/10.1177/0095798418771807.
33. Cohen J. A power primer. Psychol Bull. 1992;112:155–9. https://doi.org/10.1037/0033-2909.112.1.155.
34. Richardson JTE. Eta squared and partial eta squared as measures of effect size in educational research. Educational Res Rev. 2011;6:135–47. https://doi.org/10.1016/j.edurev.2010.12.001.
35. García-Pérez MA. Use and misuse of corrections for multiple testing. Methods Psychol. 2023;8:100120. https://doi.org/10.1016/j.metip.2023.100120.

36. Lunt I, Peiró JM, Poortinga Y, Roe RA, EuroPsy. Standards and Quality in Education for Psychologists. Hogrefe Publishing; 2014. https://doi.org/10.1027/00438-000.
37. Multicultural Guidelines. An Ecological Approach to Context, Identity, and Intersectionality. American Psychological Association; 2017. https://doi.org/10.1037/e501962018-001.
38. Paluck EL, Green DP. Prejudice Reduction: What Works? A Review and Assessment of Research and Practice. Annu Rev Psychol. 2009;60:339–67. https://doi.org/10.1146/annurev.psych.60.110707.163607.
39. Finkelstein A, Orr Z. Does volunteering change attitudes towards people with disabilities? A qualitative study of the experience of orthodox Jewish nursing students. Nurse Educ Pract. 2021;55:103141. https://doi.org/10.1016/j.nepr.2021.103141.
40. Juliá-Sanchis R, Sanjuan-Quiles Á, Richart-Martínez M, Cabrero-García J. The impact of volunteering in mental health settings on nursing students' attitudes. Nurse Educ Pract. 2020;44:102726. https://doi.org/10.1016/j.nepr.2020.102726.
41. Leaune E, Rey-Cadilhac V, Oufker S, Grot S, Strowd R, Rode G, et al. Medical students attitudes toward and intention to work with the underserved: a systematic review and meta-analysis. BMC Med Educ. 2021;21:129. https://doi.org/10.1186/s12909-021-02517-x.
42. Cary LA, Chasteen AL, Remedios J. The Ambivalent Ageism Scale: Developing and Validating a Scale to Measure Benevolent and Hostile Ageism. Gerontologist. 2017;57:e27–36. https://doi.org/10.1093/geront/gnw118.
43. Taber KS. The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. Res Sci Educ. 2018;48:1273–96. https://doi.org/10.1007/s11165-016-9602-2.

Figures

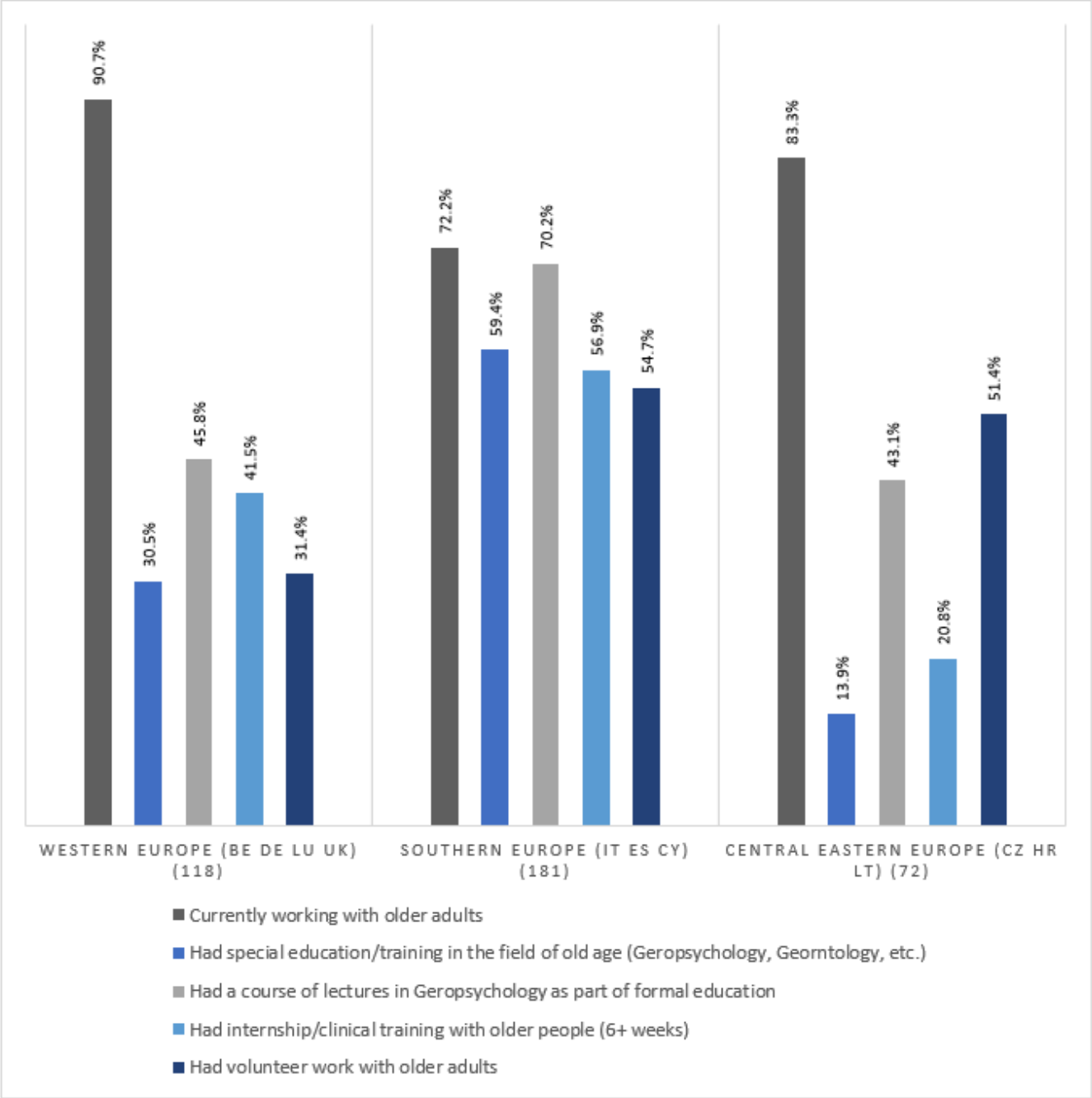


Figure 1

Characteristics of training and experience of psychologists in the field of ageing across regions