
The Role of Knowledge about Aging in Creating Young People's Attitudes to the Elderly

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Life expectancy in the last few decades has been extensively prolonged. This prolongation in contemporary Western societies, especially in Europe, has led to large and unexpected structural changes in the population. The number of elderly people is growing intensively, while there are fewer and fewer children and adolescents. According to the UN (United Nations, 2015), in 1980 6.4 % of the population was older than 65 years; in 2015 their number increased to 10 %. Ditch (1994: pp. 74) realized that in the countries of the European Union, the number of people aged over 60 has risen by nearly 50 % in the last 30 years, which represents one fifth of the total population, i.e. 70 million, and that demographic forecasts indicate that the number of elderly people in Europe will have risen to 57 % between 2010 and 2030. The forecast is that the fastest growing group of people is the group of people older than 85 years of age, and this should not be ignored. This is also the part of the population that needs extensive social and medical care.

Thus, as never before, we are faced with an (im)balance between the young, middle and older generations regarding their number. In the coming decades, an even greater disparity can be expected, in 2050 it is projected to grow to as much as 20.5 %. Baldock (1993, in Renner, 1997: pp. 41) points out that there are sufficient grounds for the thesis, which many authors write about, that aging and the aging society and the relation of other generations towards the elderly will become central social problems. The author (*ibid.*) therefore asks whether we are, and how we are, as a society, prepared for an old age and aging society, since both aging and old age, like childhood and youth, are largely social constructs, regulated by the

institutional process. Dremelj (2003: pp. 149) points out that the particular circumstances of modern society promote individualization, as well as the erosion of social family networks, relatives and friends. Above all, in developing young people's attitudes to the elderly population, solidarity within the family and the context of family life have at least two important implications. The first is the issue of care for the elderly, which focuses on the relationship between the state and the family, especially when it comes to their division of responsibilities for older people, since informal family care for the elderly also covers the sphere of family life and the gendered division of labour: care for the elderly, family and kinship ties, are all still considered typical women's roles. The second implication relates to the fact that older people play an important role in "providing assistance" in family life, primarily in providing child care. Thus, the aging of the population plays a key role in intergenerational relationships and relationships within the family, as well as in cooperation between the generations (Hvalič Touzery, 2009: pp. 54–57).

Slovenia is confronted with circumstances similar to those found in modern Western societies, mainly because of persistently low fertility and increased longevity: while the proportion of newborn babies is being reduced, the share of the people who work longer is growing.

Intensive aging and longevity require the creation of new relationships between the generations and changed positive intergenerational cooperation, especially between the younger and older generations. Social changes, including modernization, have not only created longer lives, but also changed the attitude towards older people even to the extent that the elderly have become a social problem, the target of ageist behaviour by younger people and the subject of gerontophobia. Beck (2007) in his "risk society" theory, realized that the transition to an industrial society created a society prone to productivity, and in accordance with its own interests creates the image of older people as not independent, but as dependent on others, unproductive and inactive members of society. The prevailing stereotypes about old age in society create a general negative attitude to age and affect the perception of old age in human beings, which exerts a negative effect on their self-esteem. Therefore, their expectations and requirements are also low.

Nevertheless, all people are getting older, and by the time we also become older (if we live long enough), this completely natural process has become a taboo, and older people are stereotyped with ageist and paternalistic views. When we talk about the old age taboo, we should not overlook the importance of ageism. The impact of ageism began in the mid-1980s, at a time when the Americans developed a set of prejudices about

and discrimination against older people (Palmore, 1999: pp. 4). Ageism was first defined by Butler (1969: pp. 243) as a “process of systematic stereotyping and discrimination against older people.” The author noted that ageism consists of three constituent elements:

- prejudice against age, aging and older people;
- discrimination against older people, especially in the working environment, as well as in the social environment;
- institutional policies and procedures that perpetuate stereotyped beliefs about older people, and reduce opportunities for older generations to live satisfactory lives, diminishing their personal dignity (Butler, 1980: pp. 8).

Palmore (1999: pp. 4) has expanded the definition of ageism, since he understands it “as any prejudice or discrimination against or in favor of any age group”: i.e. judging people based on age, and at the same time highlighting its negative and/or positive aspects. Some authors (Butler, 2005; Levy and Banaji, 2002; Nelson, 2002; Palmore, 2001) even conclude that ageism is a frequent and widespread phenomenon in post-modern society, even among the young. Angus and Reeve (2006) add that, despite the global aging of the population and the introduction of positive terms such as “successful aging” and “active aging,” ageism in the 21st century is still a “widespread and widely accepted and largely ignored” social phenomenon, very complex and hard to deal with, and difficult to understand.

The reasons behind the increase in ageism, are located by some authors (e.g. Bodner, 2009; Cuddy, Norton and Fiske, 2005; Levy and Banaji, 2002; Palmore, 1999) in the intensive growth of the elderly population in Western societies. Most people are becoming increasingly worried about the growth of the older generation in comparison with the rest of the population. The increasing number of old people raises concern for the issues of retirement, income security, and provision of health care to this growing and vulnerable social group. Ageism is definitely discrimination based on calendar age, which determines an individual’s ability and their role. It means stereotyping and discrimination against older people, simply because they are old. While Pečjak (2007) points out that ageism is deeply rooted in the human spirit, even though many people remain unaware of it, Schirrmcher (2007) adds that it is not only that older people are discriminated against by the younger generation, but that older people also have negative attitudes towards the elderly.

Besides a growing political concern about ageism, there are also personal consequences of this socially undesirable process (e.g. demoralisa-

tion, loss of self-esteem, inactivity, physical and mental decline); it therefore becomes an important ethical and social issue. Kristančič (2005: pp. 42) points out that not only is age in postmodern society tabooed, but there can also be gerontophobia, which often causes feelings of anger towards aging, and fear and insecurity among individuals over their own aging and (even) hostility to older people. Even the elderly themselves often deny that they are old, while among young people, any recognition that they will themselves become old, is relegated to the subconscious.

Most of older people find it difficult to cope with their age because of prevailing stereotypes and ageism in society. Instead of fighting against stereotypes, they prefer to live the lifestyle of younger people, for as long as possible. Laymen's perceptions or patterns are full of stereotypes, presenting the older population as a uniform and homogeneous social group that gets ill, is completely dependent on other social groups, and will soon die. Stereotypes and beliefs about aging not only affect the behaviour and handling of the elderly, but may have a significant impact on an individual's experience of aging (Ward, 1979: pp. 128-156). Ward (1979) also believes that an individual's state of health plays a key role in the fear of aging experienced by the elderly, with specific reference to self-esteem. This is also because self-esteem in old age is a complex phenomenon that depends on the interaction between personal integration, the self, as perceived by others, and the socially constructed image of the old person.

For prevention of ageism, and maintenance of a positive attitude towards older people, along with positive acceptance of one's own aging, attitudes and knowledge regarding aging, especially among children and young people, as well as other age groups, must be positive and without stereotypical views about old age and older people.

To prevent ageism, various authors have investigated the relation between knowledge about aging and attitudes to the elderly. The findings of their studies are not unambiguous, since, on the one hand, the authors Cottle and Glover (2007: pp. 507), Harris and Dollinger (2001: pp. 663) and Narayan (2008: pp. 786) found that knowledge has no direct influence on attitudes to the elderly. Palmore (1998) noted a weak correlation between knowledge about aging and the level of education. On the other hand, research by Alford et al. (2001), Allan and Johnson (2009: pp. 9), Braithwaite (2002), Butler (2005), Funderburk, Damron-Rodriguez, Storms and Solomon (2006: pp. 457), O'Hanlon, Camp and Osofsky (1993: pp. 762), Stuart-Hamilton and Mahoney (2003) have established the exact opposite: that better understanding of aging contributes to a more positive attitude towards older people. Moreover, Braithwaite (2002: pp. 331) adds that an appropriate educational approach with guidelines for

life quality improvements at every stage of the aging process, could help in solving problems with aging, and help reduce the fear of aging throughout life. Therefore, he suggests an appropriate model for education on aging and prevention of ageism, with an accent on the improvement of inter-generational understanding and relations. Even Alford and colleagues (2001) estimate that knowledge about aging itself is associated with attitudes towards aging and is considered one of the most effective methods in changing attitudes among individuals.

Given the globally aging population, there is also a growing need for qualified individuals with relevant knowledge about aging and a thorough understanding of the aging process (Gellis, Sherman, and Lawrence, 2003). Therefore, Anderson (2000), Kaya et al. (2014) and Olson (2007) estimate that education on aging should be incorporated into the school curriculum at all levels of education, as has been confirmed by the studies of Knapp and Stubblefield (2000), O'Hanlon and Brookover (2002), O'Hanlon, Camp and Osofsky (1993) and Stuart-Hamilton and Mahoney (2003), who all explored the changes in knowledge of and attitudes towards the elderly as a result of curriculum interventions. The results of those studies have shown a positive change in knowledge about and attitudes towards the elderly as a result of participation in a course or workshop focused exclusively on issues related to the elderly. The inclusion of such content in curricula could improve both knowledge about aging and older people, as well as the attitude towards them, since we note that ageism could also be a consequence of the lack of understanding of individual aging.

Although, there are indications that stereotypes about aging and older people can be reduced by deliberately trying to resolve this problem through education, it has been found that another effective way to combat stereotypes, prejudices and discriminatory behaviour (besides other social factors) is the establishment of permanent links between individuals from different social groups. This means that, for the elimination of ageism, prejudice and stereotypes it is of essential importance to establish stable and continuous interaction between the different generations. The duration of this interaction process has an important critical dimension, observe Hagestad and Uhlenberg (2005), stating that inter-generational programs which connect younger and older people can help resolve those adverse social phenomena. Also, appropriate early contacts between children and the elderly can prevent the development of stereotypes about and prejudices towards the elderly, as acknowledged by Meford and McGuire (2007), who state that it is easier to learn than to re-

learn. Thus, it is easier to change already adopted ageist observations in children when they are not so deeply rooted.

The Present Study

The primary purpose of the study was to examine the knowledge about aging and attitudes towards older people on a sample of Slovenian secondary school students. At the same time, we wanted to determine whether there was a negative correlation between knowledge about and attitudes toward aging and the elderly among school students. We were also interested in the impact of existing gerontological content in the curriculum in shaping the relationship between high school students and the elderly.

In this study, the elderly person is defined as a person aged 65 years and older.

Method

Participants

The questionnaire was opened by 1002 respondents; the response rate was 61 %. The non-randomized convenience sample 1 included 609 secondary school adolescents from 3 secondary grammar schools and 3 vocational schools in Maribor, aged 15 to 19 years; i.e. high school students in the first, second, third and fourth years; 43.2 % female and 56.8 % male. The survey population consisted of 75.1 % secondary grammar school students and 24.9 % students from vocational school programs.

Respondents were selected on the basis of probability; nevertheless, given some lack of cooperation and other “mistakes”, the demographic characteristics of the selected sample do deviate slightly from the characteristics of the target population. In the interest of better representativeness of the sample data, we weighted cases to approximate the data to the target population. Representativeness of the sample was guaranteed on the basis of gender. On the basis of the data before and after weighting (Figure 1), it can be concluded that we chose a relatively appropriate sample. Deviations from the sample of the target population are relatively small, which was also confirmed by the minor lag between weights (minimum weight is 0.76; maximum 1.73).

1 A non-randomized convenience sample are less desirable than randomized convenience sample and does not involve random selection. The main consequence of this lack of information is that we can't generalize the results with statistical precision (Kalton and Vehovar, 2001: pp. 169-170).

	The population of 15-19 years old ²	The selected sample without weights	The selected model with weights
Male (%)	43	25	43.2
Female (%)	57	75	56.8
Total	100	100	100

Figure 1: A comparison of the characteristics of young people by gender with the weighted and nonweighted case²

Instruments

For the measurement of ageism, we used 11 variables from the Fraboni Scale of Ageism (Fraboni, et al., 1990; Rupp et al., 2005): “A lot of older people are mean and hang on to their money and property”; “Many elderly people can not be trusted to take care of babies”; “Many older people are happier when they are in the company of people their own age”; “Many older people have poor personal hygiene”; “Teen suicide is more tragic than suicide among the elderly”; “Sometimes I avoid eye contact with older people”; “It is best for older people to live where they do not disturb anybody”; “It is sad to hear about the suffering of older people in Slovenian society”; “Older people should be encouraged to express their political point of view”; “Driving licenses should not be renewed for most elderly people”; “I would rather not live with an older person” and “Older people do not need a lot of money to meet their needs.” Respondents to the four-level scale expressed agreement or disagreement with each of the 11 claims (1 = strongly disagree to 4 = totally agree). The adequacy of this composite variable was confirmed to have a satisfactory level of internal consistency ($\alpha = 0.70$).

The basis of the knowledge measurement about aging is Palmore’s “Facts on Aging Quiz” (Palmore, 1977), containing 25 (correct and incorrect) statements, which measures actual level of knowledge about aging. The measurement scale was modified in accordance with the needs of the Slovenian population, by which 10 relevant arguments were selected. For each correct answer, respondents get one point, so they can collect a maximum of 10 points. It was assumed that respondents who collected from 0 to 4 points had “poor” knowledge about aging; those with 5 to 7 points had ‘average’ knowledge, and respondents with 8 to 10 points, good knowledge about aging.

The following answers are considered correct: “The five senses (sight, hearing, taste, touch, smell) all tend to weaken in old age”, “Older people usually take longer to learn something new”, “The elderly tend to react

2 We acquired the data from the Ministry of Education, Science and Sport.

more slowly than young people”, “More than 15 % of the Slovenian population is older than 65 years” and “The average net pension is less than € 570 in 2014, which is below the poverty line (as defined by the Slovenian government)”. All other claims are incorrect. The internal consistency of the measurement scale is low ($\alpha = 0.62$), but still satisfactory.

Procedure

Data were collected through online survey (iKA). The measuring instrument was rationally and empirically tested and supplemented and amended in accordance with the findings. Before sampling, we sent principals of the secondary schools in Maribor a letter of consent and asked them for help in motivating students to complete the online survey. School counsellors provided a link to e-classrooms, where students filled out the online survey; teachers also forwarded the online survey to students during Informatics lessons within their regular classes. We used a quantitative survey research method, which contained questions of closed and open type and a Likert Scale. The questionnaire comprised three sets of questions relating to ageism, knowledge about aging and socio-demographic data.

Statistical Analyses

The data were statistically analysed in accordance with the purposes and research predictions, using the statistical software package SPSS 21. Quantitative data analysis was based on descriptive statistics (frequencies, means, standard deviations), and bivariate analysis (Mann-Whitney U-test and Spearman's Correlation). Internal consistency of the scales was measured by Cronbach's Alpha.

Results

Firstly, the extent of knowledge about aging among the high school students in the survey was determined. The data in Figure 2 show that only 22.9 % of respondents have “good” knowledge on aging, while most of them (71.3 %) have “average” knowledge about aging and 5.8 % “poor” knowledge on aging.

Regarding the quantity and characteristics of knowledge about aging among young people, unlike some previous studies (Allan and Johnson, 2009; Palmore, 1998; Scott, Minichiello and Browning, 1998), who reported young people's poor knowledge about old age, we found that the majority of these young people (71.3 %) had an average level of knowledge about aging.

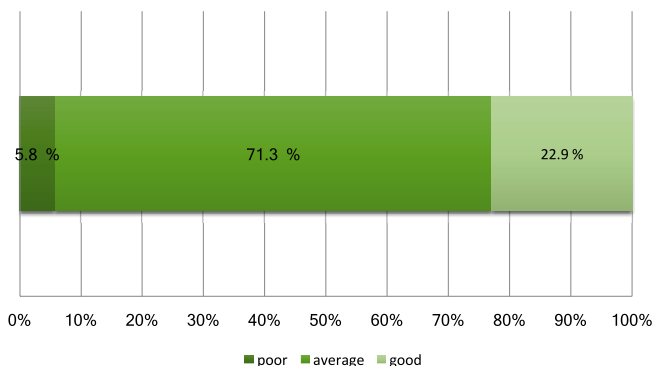


Figure 2: Scope of knowledge about aging among high school students

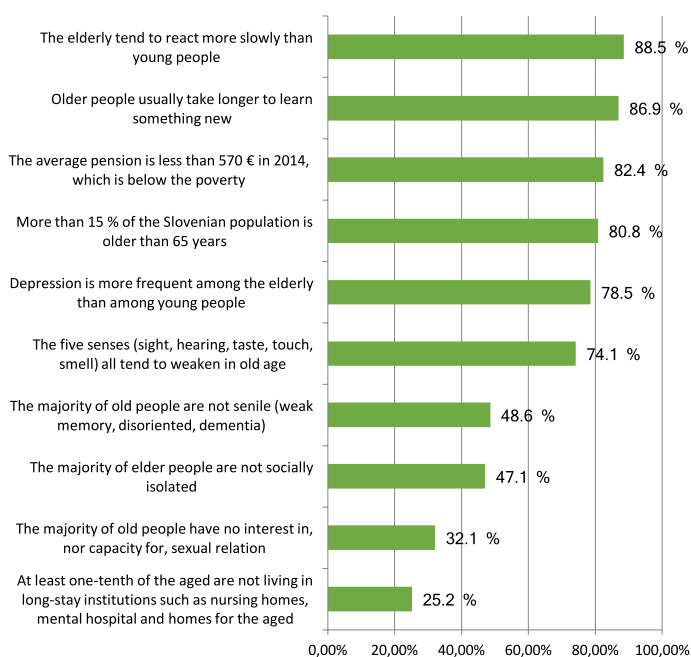


Figure 3: Proportion of knowledge of individual facts about the elderly among the high school students

At this point, we present the knowledge of these young people about the particular facts about the elderly (Figure 3). For better transparency, incorrect answers were recoded to correct answers.

Based on the empirical data thus obtained, we find that the mistaken beliefs of these high school students about the elderly, relate primarily to the following statements: "At least one-tenth of the aged are living in long-stay institutions such as nursing homes, mental hospital and homes for the aged"; "The majority of old people have no interest in, nor capacity for, sexual relation"; "The majority of elder people are socially isolated" and "The majority of old people are senile". The data should be considered in school curriculum planning.

Furthermore, we found some of the characteristics of the respondents in terms of knowledge about aging.

Regarding knowledge about aging, there are no statistically significant differences between the genders ($U = 64760$, $p = 0.567$). Statistically significant differences ($U = 40443.5$, $p < 0.01$) are found in the secondary school program; grammar school students ($M = 6.57$, $SD = 1.32$) have more accurate knowledge compared to the students in professional programs ($M = 6.15$, $SD = 1.44$).

Spearman's coefficient showed a statistically significant negative correlation ($\rho = -0.239$, $p < 0.01$) between knowledge and ageism, which means that the lower respondents' knowledge about aging is, the more often they develop negative attitudes towards older people.

We were interested in the proportion of respondents whose curriculum contained topics on age and the elderly, and whether there were statistical differences in ageist observations regarding the presence or absence of these topics. U-test results showed that there are statistically significant differences ($U = 59356$, $p < 0.05$) among those respondents who have incorporated content on aging and the elderly ($M = 2.23$, $SD = 0.37$) and those who had not encountered these topics ($M = 2.32$, $SD = 0.32$).

The proportion of respondents (21.3 %) whose curriculum contained subjects on aging and the elderly during their education was lower than the proportion of respondents (78.7 %) who did not receive this kind of instruction, because it was not included in the curriculum. The high school students in the survey obtained knowledge about gerontology within lessons in Biology, Geography, Ethics and Society, Sociology and Psychology.

At this point we agree with the findings of Van Dussel and Weaver (2009: pp. 343), who state that young people have little opportunity to learn about the realities of aging and older people through formal teaching of gerontology content. In helping to change our traditional educational system to a more lifelong educational system, gerontology should be part of the school curriculum, so that young people become equipped with proper knowledge, skills, resources and positive attitudes towards

aging, to be able to better perceive and accept their own aging and the aging of society at large.

The presumption of a negative correlation between ageism and knowledge about aging ($\rho = -0.239$), which is partially derived from the theory of social development (Wisdom et al. 2014: pp. 12), was confirmed. The lack of knowledge about the aging process among these secondary school students is significantly associated with their displaying higher levels of ageism. Similar findings were reported by other researchers, for example; Allan and Johnson (2009: pp. 9), Boswell (2012: pp. 738) and Harris Dollinger (2001: pp. 663), O'Hanlon and Brookover (2002: pp. 721), Palmore (1998) and Wisdom and colleagues (2014: pp. 17). Allan and Johnson (2009: pp. 9) add that this is conditioned by the indirect effect of experiencing fear of aging. Young people with more knowledge are less concerned about aging, which reduces their fear of aging and, albeit indirectly, reduces the negative attitude towards older people.

This leads to the conclusion that education about aging is extremely important for reducing ageism, though not all participants in the education system are sufficiently aware of that fact. A better understanding of aging and age lowers stereotypes about older people and promotes a positive attitude towards them, among children (Kroutil and Wasyliv, 2002; McGuire, 1993) and those in other age groups (Aday, Sims and Evans, 1991; Goriup, 2014: pp. 86; Mesh and McGlynn 2004: pp. 476; Olsson, 2007: pp. 986; Randler, et al., 2014: pp. 236). Similarly, Davis-Berman and Robinson (1989; according to Kalavar, 2001: pp. 512) suggest that the best way to change the attitude towards the elderly and aging is information dissemination on aging and age, as well as ensuring opportunities for old people to express themselves. If this is included in the educational process sufficiently early, it will undoubtedly be reflected in the merit, diversity and benefits of the third generation (*ibid.*). In order to prevent the reduction of positive attitudes towards the elderly, Braithwaite (2002: pp. 315) and Randler et al (2014: pp. 236) propose the implementation of inter-generational educational programs, which should start in primary school, as estimated by Gilbert and Ricketts (2008: pp. 582).

Conclusions

Despite many improvements to the integration of older and elderly people in society, many of them are still being faced with gerontophobia, stereotypes, age segregation, marginalization and social stigma. These factors enhance their helplessness, dependency and self-reliance/autonomy, since they largely affect their social inclusion or exclusion, which is conditioned by the knowledge of younger generations about the aging and elderly population.

Acts of institutionalisation of the elderly in its essence represent a product of social construction which contributes to the legitimacy of the social distance between the elderly and younger generations. Although the proportion of the elderly population has been growing rapidly and inevitably, leading to demographic aging, in Slovenian society, the cultural and social importance of aging is changing slowly, partly because of myths about aging and an absence of content on aging and the elderly population in the school curriculum. An intergenerational approach to education on aging and guidelines for improving quality of life can significantly help overcome prejudices and reduce the fear of aging at every stage of the aging process.

The study confirmed the negative influence of ignorance about age and ageism and fear of aging, which means that the lack of knowledge about the aging process is significantly associated with a greater degree of ageism and fear of aging among young people. Since the relation between knowledge and beliefs about aging holds important implications for young people, it is necessary to include gerontology content in education (Anderson, 2000; Butler, 2005; Boswell, 2012; Kay et al., 2014; Olson, 2007). The focus should thus fall on the importance and role of intergenerational learning, which enables young people (and other members of the various generations) to develop their interests and character traits, while (re)shaping values and attitudes towards themselves and others, adds Goriup (2014: pp. 86).

According to the theory of social development (Vygotsky, 1978), the basis for the development of ageism may begin very early in life, so it is important that educational content dealing with old age and aging are involved in early childhood education. It must be added that intergenerational programs are already underway in most Slovenian kindergartens (e.g. the program "Grandma Tells"). Kindergarten educators, in cooperation with their administrators, are trying to cultivate a sense of tolerance and understanding for the older generation, while stimulating children's active and positive cooperation with them.

We propose the integration of educational content on age and aging into the first educational stage within lessons on Learning Environment; at the second educational stage of primary school within the subject Society; and at the third educational stage within the subjects Biology, Patriotic and Civic Culture and Ethics. In secondary school, we propose the integration of similar material into the subjects of Sociology, Psychology and Biology, and at the tertiary level of education within the Social Sciences, Andragogy and bio-medical subjects. During their education, the young should have the opportunity to participate in and build (quali-

ty) contacts with the older generation, as this is one of the paths leading to the establishment of education for tolerance, mutual understanding and the development of a positive image of aging and older people in society.

If we want pupils, to absorb sufficient knowledge about old age and aging, we must offer the educational program providers (and, ultimately, the wider society) enough quality material from the field of social gerontology. In doing so, we have in mind primarily higher education institutions, which should take greater responsibility for providing the general public with more detailed technical information on the aging and elderly population, and, ultimately, for increased gerontology content and the possibility of intergenerational cooperation, particularly between the younger and older population.

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