



## Original Article

### Aging Educational Program to Reduce Ageism: Intergenerational Approach

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#### ABSTRACT

##### Article history

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**Introduction:** Ageing brings different experiences for individuals. Any individual learn about ageing from childhood whatever formal or informal. No matter they learn, what and how they learn is important. This study aimed to assess impact of an educational program on ageism in those people lower 20 years of age.

**Methods:** This interventional study was conducted among school and university students of Babol city, Mazandaran province, Iran. Study was carried out in two stages. First 373 participants (187 school students and 186 university undergraduate students under age of 20) who recruited from Babol department of education and Babol University of Medical Sciences went under study of assessing attitudes toward ageing. In the second stage, courses on lifespan human development were delivered in 10 workshops for 151 people. Sampling method was stratified randomly from different age groups. Workshops consisted of lecturing, discussion, watching movie, reading pamphlets and having conversations with experienced older adults. Data was gathered by a questionnaire consisting of demographic characteristics and The Fraboni Scale of Ageism.

**Results:** The mean of ageism score among school and university students were  $49.93 \pm 9.25$  and  $46.96 \pm 7.64$  respectively. There was statistically significant difference between two groups in ageism scores ( $p = 0.001$ ) so that ageism was higher among school students. However after implementation of education program, ageism score reduced for all 151 students from  $46.92 \pm 7.82$  to  $45.85 \pm 7.79$  which was statistically significant ( $p = 0.001$ ).

**Conclusion:** Educational program to reduce ageism is beneficial and could reduce the level of ageism. Suggestions for educators to combat ageism are provided.

**Keywords:** Ageing, Ageism, Education

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#### Introduction

Aging process makes different experiences for individual (1). Each individual is beginning to learn about the aging process from the childhood whether he/she has been taught or not. The important thing is that whether they learn or not; and what they learn and how (2). What children learn in the field of aging is a combination of facts and false information which have been learnt from others. Most of these false ideas are based on prejudices and stereotypes which often affect the knowledge, values and beliefs on aging, and leading to fear of aging, having negative attitudes towards aging and finally ageism that lasts till old age (1). Ageism is "to have stereotyped and discriminatory attitudes towards people just because

they are old"(3). In fact, after the racial and sexual discrimination, ageism is the third form of discrimination (ism) in the world (4). Unlike the other two types of discrimination, ageism threatens only those that live longer, which may be more common in today's society. Unlike other characteristics that may be discriminated, aging is a biological phenomenon that everyone may experience and may change social class by passing from a younger age (5). Following the ageism, usually many elderly are labeled frequently in a negative way to be as powerless, sad, lonely, poor, impotent, ill, dependent, begging and disabled (6). Unfortunately, people are usually accustomed to these social labels and thought that if

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this is true, that will happen to them that (7). Ageism is an issue that prevents people to see the positive aspects of aging and old age foresight and do not let the individual to show a positive reaction to the needs of the old age. Ageism has different forms so that at each level different behaviors may occur towards the elderly.

There are at least 9 stereotypical views that suggest a negative prejudice toward the elderly: being patient, impotent, ugliness, reduced mental capacity, mentally illness, lack of usefulness, socially isolated, poor and depressed. Ageism may emerge at two personal and organizational levels into the community (8). At the personal level, it includes items such as refusal of having contact with older people, the denial of ageing (9), making jokes of elderly, patronizing attitude of the elderly (10) and prejudice to negative attitudes and stereotypes toward the elderly. At the institutional and organizational level, ageism can include discrimination items regarding housing, employment in the new job, forced retirement, public policies against the elderly, and the lack of appropriate care in hospitals and care centers (6). The social issues of ageism include age inequality (9), age-related norms (7), ageism sentences and words (11) and age discrimination. Frequently in a variety of cases, ageism can be observed, such as greeting cards, on TV and other mass media, in jokes and in daily conversations. Some researchers believe that one reason for ageism is lack of understanding of aging process which leads to incorrect and unfavorable attitudes towards ageing (12). But where do we learn about aging? No specific educational programs are considered in this context at schools. So, we learn indirectly from the lives, interactions and connections with the elderly and others.

One way to combat ageism is education. Studies have shown that, this can reduce the stereotypical view in children towards older people and lead to positive attitude toward aging (13). One way to reduce the fear of aging can be providing life-cycle curriculum based on established methods of problem solving which may lead to higher quality of life for people in every stage of the aging process (14). If we teach children and young people that aging is a natural process of life cycle, and nurture them in such a way to understand the value and importance of the elderly in society, then the stereotypes toward the elderly and the fear of aging will eliminate (2).

Due to the increasing elderly population in the community or at work level, it seems that the importance of people's attitudes toward aging is increased. During the last fifty years, many studies have been conducted around the world in the field of ageism (2-14), but no study has been done in Iran. For example Cottle and Glover in their study entitled "Combating Ageism: Change in Student Knowledge and Attitudes" examined the ability of a lifespan course to create positive change in knowledge of, and attitudes toward aging of undergraduate students. Their findings indicated positive change in both knowledge and attitudes of the students (12). We hope that the results of this study, highlight new approaches

that can be applied to make the people's attitudes toward the elderly population more positive. The aim of this study was to evaluate ageism in different age groups among children and adolescents and investigate the effect of an educational program on reducing the ageism.

## Methods

### *Procedures*

This interventional study was conducted to assess the effect of an ageing educational program among students in Babol, Mazandaran province. Study was carried out in two stages. In the first stage, it was performed among 373 students (187 school students and 186 university undergraduate students under the age of 20) which recruited from Babol department of education and Babol University of Medical Sciences to assess students' attitudes toward ageing and their level of Ageism. School students in any level of elementary, middle and high schools recruited from department of education (being careful in the selection of schools that were located in the same urban area to ensure that students are from the same social, economic and cultural background). University undergraduate students were chosen from Babol University of Medical Sciences in different majors of medical sciences which were in the first or second year of study.

The survey method was used in the first phase. The questionnaire response time was about 10 minutes. In the second stage, lifespan human development courses were performed in 10 workshops to teach and discuss regarding ageing issues. A total of 151 cases participated in the workshops. Sampling method was stratified randomly from different age groups. Workshops consisted of lecturing, discussion, watching movie, reading pamphlets and inter-personal sharing of experiences.

### *Instruments*

For data collection, a questionnaire consisted of demographic information and The Fraboni Scale of Ageism (FSA) to assess ageism attitudes (8) was used. Demographic questions for school students included age, gender, educational level, parents' education level and occupation, whether they live with grandparents or not; and if not, how many times they have visited or called their grandparents during the past 10 days. The demographic questions for university students included age, gender, educational level, and marital status. Questions about grandparents also were asked.

FSA evaluate the ageism level of the participants. This scale was developed in 1990. The respondents are asked to answer in a 3-point Likert scale (agree, disagree and have no idea) that to what extent they agree or disagree with 29 questions in the field of ageism. In present study, the number of questions was reduced to 25 questions in order to coordinate and align Questions with subjects. Three components of this questionnaire consist of the stereotype view of the

aging, separation and the affective attitude. In this questionnaire, the questions 1 to 9, 11 and 24 are related to the first component; questions 10, 12 and 17, 19 and 20 are related to the second component, and questions 18-21-22-23 and 25 to the third component, which is the affective attitude. Also in this questionnaire, the questions 18-21-22-24-25 are reversely scored. Scores 25-75 indicated ageism, so that the higher scores indicate a higher ageism attitude. The validity and reliability of the FSA were examined and confirmed. A translation-back translation approved the appropriateness of the Persian translation. The Spearman correlation coefficient was used to assess the discriminate validity between items where the correlation between the item and subscale scores was examined ( $P < 0.05$ ). A two weeks test-retest on 30 subjects approved the reliability of the scale (0.86), and a Cronbach's alpha of 0.78 indicated the acceptable internal consistency.

#### Statistical analysis

SPSS software was used to analyze the data. Analysis included a descriptive analysis (frequency, mean, standard deviation and percentage), two-parameter analysis including ANOVA, independent and paired *t*-test, Pearson and Spearman correlation and multivariate analysis including multivariate regression to determine the predictive factors of ageism.

#### Ethical considerations

The study was approved by the Ethics Committee affiliated Babol University of Medical Sciences. All respondents' information was anonymous and only a reference number (along with the date and time of questionnaire completion) was used as identifiers. All participants had the option to withdraw from the study at any time. The purpose of the study was explained to the participants individually and written consent was obtained from those who agreed to participate in the study.

#### Results

The mean age of school students was  $13.52 \pm 1.7$  years, 49.2% girls and 50.8% boys. More than one third (35.3%) was studying in high school. Most of their parents had high school level of education (40.6% fathers and 39% mothers). The majority of fathers were self-employed (62.6%) and most of their mothers' were housewives (78.6%). The majority of students (89.3%) did not live with their grandparents, among which 72.4% have talked to their grandparents several times over the last 10 days and 57.1% have visited them several times during this period.

The mean age of university students was  $19.16 \pm 0.7$ , among which 54.5% were female and 43.5% were male. Field of Study in 24.5% of students was public health, and 21.7% medical students. 93% were married. Only 11 cases lived with their grandparents.

Among those who did not live with their grandparents, 49.4% have not visited them during the last 10 days, 18.8% only once and 31.8% have visited several times. Of these students, 58% stated that during the last 10 days have not called their grandparents.

There was no significant difference between the viewpoints of students in most options (Table 1). The mean score of the ageism in school students was  $49.93 \pm 9.25$  and in university students was  $46.96 \pm 7.64$  (scores ranged 25 to 75). Independent *t*-test showed a statistically significant difference between the level of ageism among school and university students before the educational workshop ( $t = 3.36$ ,  $p = 0.001$ ). The mean distribution of ageism sub-factors showed that school students had somewhat higher ageism (Table 2). However, the independent *t*-test showed that the only statistically significant difference was observed in affective attitude between the school and university students ( $t = 6.13$ ,  $p = 0.001$ ) that was higher in school students.

The results of total respondents indicated that there was a statistically significant relationship between age and ageism, as ageism decreased by increasing the age ( $r = -0.160$ ,  $p = 0.002$ ). In school students there was a significant association between the ageism and their educational level ( $r = -0.148$ ,  $p = 0.04$ ), so that it was lower in the high school students than others.

In terms of relationships between university students' demographic characteristics and the level of ageism, results showed that there was a significant relationship between the ageism and their educational discipline; so that, it was higher in the medical and nursing students, and lower in the public health and anesthesia students ( $r = -0.150$ ,  $p = 0.042$ ). Also, ageism was significantly lower in those who lived with their grandparents ( $r = -0.185$ ,  $p = 0.016$ ). Multiple regression analysis showed that none of the demographic variables predict ageism.

Paired samples *t*-test showed that after educational intervention, a statistically significant decrease observed in the level of ageism (Table 3).

#### Discussion

The aim of this study was to determine the level of ageism and the impact of implementing an educational program on it. Results showed the mean score of ageism in the school students was higher than their university counterparts; the greatest difference was observed in the affective attitude domain of ageism. To determine this domain, some questions were asked such as "old people should be encouraged to speak out politically" and "old people deserve the same rights and freedoms as do other members of our society". Perhaps the reason for this difference is passing the time; to make or change attitude towards something passing time seems crucial. Our attitudes begin to develop in childhood and constantly evolve and change over the years through day-to-day interactions and experiences.

**Table 1. Distribution of participants' responses to FAS items**

Items	School students			University students		
	Disagree	No idea	Agree	Disagree	No idea	Agree
Many old people are stingy and hoard their money and possessions	27.3	21.9	50.8	34.1	32.4	33.5
Many old people are not interested in making new friends, preferring instead the circle of friends they have had for years	41.2	28.9	29.9	27.4	30.2	42.5
Many old people just live in the past	34.4	34.4	31.2	20.7	33.5	45.8
Most old people should not be trusted to take care of infants	44.1	30.7	25.3	23.3	32.8	43.9
Many old people are happiest when they are with people their own age	72.6	19.4	8.1	21.2	26.8	52
Most old people would be considered to have poor personal hygiene	35.3	39.1	25.7	35.8	30.7	33.5
Most old people can be irritating because they tell the same stories over and over again	29.9	30.4	39.6	33	28	39
Old people complain more than other people do	44.4	35.3	20.3	23.2	24.9	52
Teenage suicide is more tragic than suicide among the old	56.1	25.6	18.2	26	26.6	47.5
Most old people should not be allowed to renew their drivers licenses	38.5	30.5	31	40.4	28.1	31.5
Old people do not need much money to meet their needs	31.6	37.4	31	47.2	30.9	21.9
I sometimes avoid eye contact with old people when I see them	13.9	29.9	56.1	58.9	24.4	16.7
I don't like it when old people try to make conversation with me	17.6	22.5	59.9	59.4	23.9	16.7
Complex and interesting conversation cannot be expected from most old people	28	27.9	44.1	50.8	27.4	21.8
Feeling depressed when around old people is probably a common feeling	30.5	33.2	36.4	43	29.6	27.4
Old people should find friends their own age	60.8	23.6	15.6	33.7	23	43.3
Old people don't really need to use our community sports facilities	12.4	18.8	68.8	73	12.9	14
It is sad to hear about the plight of the old in our society these days	10.2	16.5	73.3	57.1	21.7	21.1
It is best that old people live where they won't bother anyone	28.9	26.2	44.9	24.7	44.3	31
I would prefer not to live with an old person	29	38.1	32.8	9.9	40.7	49.4
The company of most old people is quite enjoyable	10.3	22.1	67.76	1.7	9	89.3
Old people should be encouraged to speak out politically	25.1	35.3	39.6	10.8	39.8	49.4
I personally would not want to spend much time with an old person	21.9	34.8	43.3	33.3	34.5	32.2
Old people deserve the same rights and freedoms as do other members of our society	10.2	21	68.8	2.3	11.9	85.9
Old people can be very creative	9.6	18.1	72.2	7.9	27.7	64.4

**Table 2. Mean and standard deviation of ageism components before educational intervention**

Components of ageism	Possible score range	School students		University students		p
		Mean	SD	Mean	SD	
<b>Stereotype viewpoint towards aging</b>	11-33	23.28	4.46	22.52	4.38	> 0.05
<b>Separation</b>	9-27	17.32	4.53	16.68	3.6	> 0.05
<b>Affective attitude</b>	5-15	9.31	2.79	7.77	1.75	0.001

**Table 3. Distribution of ageism score of students before and after educational intervention**

Time	Mean $\pm$ SD	Mean differences	df	t	p
<b>Before</b>	46.92 $\pm$ 7.82				
<b>After</b>	45.85 $\pm$ 7.79	-1.07	150	-3.8	0.001



The results indicate a correlation between level of education and age of the respondents with ageism. Students had mostly less than 14 years old ages that still were not able to think critically well and fully analyze issues may not been able to have a proper analysis of the questions.

Ageism behavior may be inadvertent, unconscious or even mandated (15). In this term, many situations and process may produce or reinforce ageism. For instance, commercial advertisements may boost stereotypical attitudes towards elderly (16). As an example, TV has an important role in the development and expansion of the negative image of elderly. Commercial advertisements show 80-year-old grandmothers (today there are a lot of 40 years old grandmothers) in an old-fashioned clothing picture. In most cases, they are shown buying laxatives or dentures detergents. In the commercial advertisements elderly diapers are shown beside infant diapers for their incontinence problem which leads to humiliation and reduction of self-confidence. In most movie shows, the majority of elderly live in nursing homes (17). These factors not only may undermine their dignity, but also produce the image of elderly people for children as those with disabilities, weaknesses and dependency that may lead to ageism belief in them.

The findings also showed that there was a significant correlation between educational discipline and ageism as it was more prominent in the medical and nursing students. These groups of students are directly involved with patients more than other disciplines and their clients are more elderly. Studies showed age discrimination in various professions. A study on 69 graduate students in the fields of social workers, law, and medicine showed that even one of them did not choose to work with older people as their first option (18). Now, health care workers often have negative attitudes toward aging. To prevent the spread of this viewpoint, the attitude towards aging should change (19). It is sobering that needs consideration.

What has been said so far indicates that the aging population has a major impact on today's medical students' professional. Therefore, educating the principles of geriatric medicine might be very important for the future physicians. There is no doubt that entering geriatric medicine subjects in the process of medical education is essential. Literature show that the attitudes of healthcare professionals to the elderly population influence the quality of the care that elderly people receive. So there is a need for education, intervention to understand aging concept and related issues from childhood and adolescence, and in University students.

The study revealed that people's attitude toward aging depends on their age and their contact with old people. This was confirmed in a study by O'Hanlon and Brookover, as higher level students not only learn more about aging, but also they have better understanding toward aging (20). Courtney et al. in a literature review concluded that older nursing students and those who experienced taking care of the elderly during their education have higher understanding and more positive attitude toward aging (21). In

Schwartz's and Simmons study, the results showed that the quality of contacts with older people can be a strong predictor of attitudes toward aging (15).

As the findings of this study expressed, educational program has positive impact on the reduction of ageism. The role of training in moderating the negative attitude towards older people has been shown in many studies (21, 22) who reported participating in workshops mainly in the field of ageing can significantly improve attitude towards ageing. However, how to implement the educational process seems very important. For example, previous studies have shown that one-day interventions have an impact on high school students and it is better to start this workshop from primary school in a longer session (2). Knapp and Stubblefield reported that participation of students in gerontology classes leads to improved knowledge and attitudes toward ageing (22). The results of the O'Hanlon and Brookover also confirmed this result (20). A study on the role of the educational programs conducted by Varkey et al. a group of first-year medical students have been provided educational workshops about aging; at the end of program, the attitude and empathy of students for elderly people was significantly improved (23).

Various groups that are somehow related to elderly health, including medical students, rehabilitation, physiotherapy, occupational therapy, nursing, psychology and social work students need to be trained in the field of gerontology (24). Therefore, to ensure that this group of students will properly respond to the needs of the elderly in their future career; it is necessary to adjust the factors which interest them to work with elderly people. One of the most important factors is their attitude toward aging that will lead to ageism (25). The role of formal education in schools and universities is very strong and should be emphasized. As the results of the study showed, educational classes for children, teens and even all the people in the community can be a suitable way to reduce ageism.

## Conclusion

Ageism attitude is common in student and is more common among the school students than University students. Some other demographic variables such as age, education level, and educational discipline may also play a role in ageism attitude among students. Moreover, educational program to reduce ageism is beneficial and could reduce the level of ageism.

## Study limitations

The study carried out among under 20 years old student and the results could not be generalized to senior university students. Moreover, FAS is a self-report questionnaire which is subject to response bias that should be addressed in using the results of the study.

### Conflict of interest

There is no conflict of interest between the authors.

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