THE EFFECTS OF INTERGENERATIONAL RELATIONS AND AGEING ANXIETY ON ATTITUDES TOWARD AGEISM

Fikriye Yılmaz[1], Meriç Yavuz Çolak[2]

Department of Health Care Management, Faculty of Health Sciences,
Baskent University, TURKEY.

[1]fyilmaz@baskent.edu.tr, [2]meric@baskent.edu.tr

ABSTRACT

Few studies have been conducted in Turkey on the effects of intergenerational relations and ageing anxiety on attitudes toward ageism in young adults. We aimed to investigate the effects of intergenerational relations and ageing anxiety on attitudes toward ageism in university students. We administered a questionnaire to 617 young adults, aged 18-24 years, being university students in Ankara. The questionnaire covered questions related to the socio-demographic characteristics and intergenerational relations of participants, Anxiety about Ageing Scale, and Ageism Attitude Scale. Data were analyzed using independent samples t-tests, one-way analysis of variance, Pearson correlation coefficient and binary logistic regression analysis. The total score average of the participants in the Ageism Attitude Scale was calculated as 67.84 ± 6.31. The analyses showed that the most important factors for positive ageism were gender, age, living together with family, living with grandparents in the same house before, desire to live with parents after marriage, more contact with grandparents face to face (p < 0.05). In addition, as more fear of old people, psychological concerns, physical appearance and generally more ageing anxiety, positive ageism decrease more (p < 0.05). Consequently, intergenerational relations and ageing anxiety are among the important determinants of ageism of young adults in Turkey.

Keywords: ageism, anxiety, intergenerational relations, young adults

INTRODUCTION

Demographical ageing is an important phenomenon experienced in all the countries of the world, especially developed countries nowadays. Owing to the developments in the medicine, improvements in health care services and living standards, people live longer and this trend is anticipated to accelerate further in the next 30-40 years. In line with the trends in the world, the elderly population in Turkey has reached to 8.2% in 2015. It is estimated that this rate will reach to 10.2% in 2023 and Turkey will be listed among the "very old" population countries [Turkish Statistical Institute, 2015].

With the increased elderly population, the perspective of societies about ageing changes. The changed perspectives reflect on attitudes and behaviors in all interactions with the elderly. In this case, we face with ageism [Bulut and Cilingir, 2016].

"Ageism" was defined for the first time as "an ideology type that could develop toward actions including ageism, racial discrimination and gender discrimination" in 1969 by Robert Butler, the Head of American National Ageing Institute [Akdemir et al. 2007; Vefikulucay Yılmaz and Terzioglu, 2011]. Elderly discrimination includes all positive and negative attitudes towards elderly people. Most of the studies conducted on ageing reported that the people who displayed ageism were generally the young [Usta Yildirim et al., 2010; Yilmaz et al., 2012].

As a result of the "World Values Survey" conducted by the World Health Organization (WHO) on more than 83.000 participants in 57 countries, it was determined that 60% of the participants stated that elderly people were not respected [WHO, 2016]. A research conducted in Europe revealed that ageism was the most common type of discrimination [Drury et al., 2016]. It was found in a research conducted in Istanbul, Turkey that 51.7% of persons at the age of 65 and over thought that there was discrimination based on ageing in the society [Senturk and Ceylan, 2015].

Considering the rapidly ageing population and prevalance of ageism, improvement of attitudes towards ageing has been assessed as a significant tool for improving participation and contribution of the elderly in the society. Hence, it is important to understand the factors affecting attitudes towards ageing. Sociodemographic factors such as age, gender and ethnic diversity are seen as the important predictors that need to be considered for assessment of attitudes towards ageing [Kishita et al., 2015]. Nevertheless, Shenkin et al. [2014] reported in their study that the mechanisms for development of ageing perceptions by individuals were more complex than realized. Thus, it is very important that in addition to socio-demographic factors, the other factors leading to development and sustainment of attitudes towards ageing are understood as well. Beyond the acception that intergenerational relations and ageing anxiety are crucial factors affecting ageism, they are considered as important intervention areas for developing positive attitudes towards ageing [Allan and Johnson, 2008; Drury et al., 2016; Jarrott and Savla, 2016; Kishita et al., 2015; Levy, 2016; Smith et al., 2016; Wagner and Luger, 2016; Wisdom et al., 2014].

The intergenerational relations concept indicates social relationships between individuals belonging to different generations. Both objective conditions and subjective perceptions affect these relationships and the intergenerational relations in the family develop under their influence [Tufan and Yazici, 2009]. Recently, a series of studies were conducted considering that the intergenerational relations in the family, in other words grandparent and grandchildren relationships were significant to determine the attitudes of the young people towards the elderly [Drury et al., 2016; Jarrott and Savla, 2016; Levy, 2016; Wagner and Luger, 2016; Yilmaz et al., 2012]. Cross-sectional researches illustrated that the grandparent-grandchildren relations were effective to reduce prejudices. It was found that the higher the quality of the relationship of an individual with his/her grandparents, his/her attitude towards the elderly was the more positive generally [Harwood et al., 2005].

On the other hand, ageing as a biological process may lead to ageing anxiety and fear. Ageing anxiety is defined as "expectations and anxiety about experiencing unfavorable losses in parallel to ageing". It is considered that ageing anxiety occurs because individuals do not have adequate knowledge about ageing and ageing process [Allan and Johnson, 2008] or because of the lack of quality interactions with the elderly [Lasher and Faulkender, 1993]. In these cases, it was stated that individuals who had anxiety about ageing in the future focused on negative information and so they accepted negative opinions about the elderly and based on these, had a tendency to have negative ageism more [Drury et al., 2016; Harris and Dollinger, 2001; Kishita et al., 2015].

Although, the number of studies focused on determining the attitudes of young people towards aging and the factors affecting them have increased in recent years in Turkey [Akdemir et al., 2007; Usta Yildirim et al., 2010; Vefikulucay Yilmaz and Terzioglu, 2011; Yilmaz et al., 2012], in the written sources, there were no studies which assessed the combined effects of the intergenerational relations and ageing anxiety. In this framework, the aim of the study was to investigate the effects of the ageing anxiety and intergenerational relations of young adults on their attitudes towards ageing.

METHOD

This study was planned as a cross-sectional field study. The study population was 7.920 undergraduate students enrolled at a foundation university in Ankara, Turkey. The study samples were estimated at approximately 615 students for 80% power, in a rate of 0.50 and 90% of a confidence level and 5% of an effect size. The number of students who needed to be reached according to the faculties was determined by using the stratified sampling method. 615 startified students included in the sampling were selected from each faculty by using the convenience sampling method, one of the improbable sampling methods.

The questionnaire consisted of three sections. The first part included questions on demographic characteristics, socio-economic status of family and the intergenerational relations. The second part consisted of the Anxiety about Ageing Scale (AAAS) to determine the level of anxiety about ageing. *Ageism* Attitude *Scale (AAS) was in the last part of the questionnaire to evaluate the elderly discrimination.*

Anxiety about Aging Scale (AAAS) was developed by Lasher and Faulkender [1993]. The AAAS includes 20 items in four sub-dimensions consisting of fear of old people, psychological concern about aging**,** concern about physical appearance **and** fear of losses**.** The items are rated on a five-point Likert-type scale with scores ranging from 1 (strongly disagree) to 5 (strongly agree). The sub-dimension scores were computed by the sum of the item scores in the dimension. A total AAAS score was calculated as the sum of the sub-dimension scores. In AAAS total score and sub-dimension scores, lower scores indicate less anxiety about ageing. The validity and reliability of the Turkish version of AAAS has been established by Onol [2013].

Ageism Attitude Scale (AAS) was developed by Vefikulucay Yilmaz and Terzioglu [2011]. The scale includes 23 items and comprises of 3 factors: restricting life of elderly, positive ageism and negative ageism. The items are responded on a Likert-type scale ranging from 1 (absolutely disagree) to 5 (completely agree). Total score of "restricting life of elderly" and "positive ageism" dimensions were calculated as the sum of the item scores in the dimension. The items of "negative ageism" dimension were scored conversely. A total AAS score was calculated as the sum of the sub-dimension scores. The higher scores from the survey indicated that the students had more positive attitudes towards ageism.

Data were obtained from March to May 2016. Statistical analysis was performed with PASW Statistics for Windows, Version 18.0 (SPSS Inc., Chicago, IL). The total and sub-dimension scores for the AAAS and AAS were calculated and expressed as mean ± standard deviation. While the dependent variable of the study was the total scores of AAS; demographic characteristics, socio-economic status of family, intergenerational relations and the total score of AAAS were investigated as independent variables. Data normality was evaluated with the Kolmogorov-Smirnov test. The Independent Samples T-Test and One-Way Analysis of Variance (ANOVA) were used to compare the scores of AAS of participants with respect to their categorical independent variables. Pearson correlation coefficient was calculated to determine the relation between the scores of AAS and AAAS. To determine the total effects of independent variables on attitude towards elderly, a regression model was developed using binary logistic regression analysis with the backward linear method depending on the likelihood ratio. In the model, participants were divided into two groups according to their AAS scores (negative or positive ageism). As their results were normally distributed, the arithmetic mean was used as the cut-off point. The participants' mean score was approximately 68; those who scored below 68 were defined as having "negative ageism", and those with scores above 68 were defined as having "positive ageism". In the model to determine factors affecting attitude towards ageism, the level of AAS was regarded as the dependent variable, whereas demographic characteristics, socio-economic status of family,

intergenerational relations, and the score of AAAS statistically associated with the score of AAS were covariates. All covariates were included respectively in versions of the model. Multicollinearity among independent variables was assessed by estimating VIF (Variance Inflation Factor) and it was accepted that a VIF value of 5 to 10 indicated the existence of multiple correlation [O'Brien, 2007]. In all analyses, the significance level was set at $p < 0.05$.

FINDINGS

Socio-Demographic Characteristics

The university students who participated in the study were at the ages of 18 to 26, and their age average was calculated as 21.07±1.56 years. 63.1% of the participants were women. 47.3% of the participants enrolled at health and psychology-related departments. 62% of the participants lived with their family or one of their family members and the others lived at a dormitory or with their friends. Parents of 5.5% of the students were divorced or lived separately. 7.8% of the participants stated that they were the only child and the number of the siblings of 567 students ranged between 1 to 8 and its average was calculated as 1.77±1.27 persons. 52% of the participants stated that their families' economic status was well. 5.7% of the participants expressed that they spent most of their lives in a county or village and 94.3% said that they spent most of their lives in a city.

Intergenerational Relations

The distribution of the participants based on their intergenerational relations is shown in Table 1. The students were asked to answer the questions assessing their communication with their grandparents by considering either one of them.

Ageing Anxiety

Table 1. The distribution of the participants based on their intergenerational relations

	Number (n)	Percentage (%)
Living with grandparents in the same house before		
Yes	194	31,5
No	421	68,5
Desire to live with parents after marriage		
Yes	63	10,2
No	552	89,8
Visited nursing home before		
Yes	179	29,1
No	436	70,9
The place which grandparents lived[a]		
The same city	226	38,0
A different city	374	62,0
Meeting with grandparents face to face[a]		
More frequent than once a month	307	50,9
Less than once a month	296	49,1
Talking on the phone with grandparent[a]		
More frequent than once a month	290	48,1
Less than once a month	313	51,9
Relationship with grandparent[a]		
Poor	249	41,3
High	354	58,7
TOTAL	**615**	**100,0**

[a]12 participants whose none of their grandparents is alive did not answer the marked questions.

The total score average in the AAAS of the participants was estimated as 62.35±13.25. The lowest score was get from the "physical appearance" dimension (14.89±4.23) and the highest score was get from the "psychological concerns" dimension (16.35±3.15). The total scores and the sub dimension average scores of the participants in the AAAS were compared in terms of their socio-demographic characteristics and intergenerational relations. The analyses showed that the women, those who enrolled in departments other than the health and psychology departments, those who lived with their family and had two and less siblings and stated that the economic status of their family was poor, those who lived with their grandparents in the same house before, visited nursing homes, lived in the same city with their grandparents, met with their grandparents face to face at least once a month, talked with their grandparents on the phone at least once a month scored higher in the AAAS, in other words their anxiety was more severe ($p < 0.05$).

The Attitudes Towards the Elderly

The total average score of the participants in the AAS was found as 67.84±6.31. The lowest score was found in the "negative ageism towards the elderly" dimension (19.39±4.25) and the highest score was get in the "positive ageism towards the elderly" dimension (26.27±6.31). It was analyzed whether there were differences between the average scores of the participants in the AAS, in terms of their socio-demographic characteristics and intergenerational relations. The average scores in the AAS based on their characteristics which were different statistically are shown in Table 2.

Table 2. The average ageism attitude scores of the participants

	Restricting the elderly's lives	Positive ageism	Negative ageism	Total AAS
Total	**22.16 ± 5.12**	**26.27 ± 6.31**	**19.39 ± 4.25**	**67.82 ± 6.31**
Gender				
Female	22.34 ± 4.88	26.77 ± 5.69	19.16 ± 3.91	68.27 ± 5.89
Male	21.86 ± 5.51	25.42 ± 7.18	19.78 ± 4.76	67.06 ± 6.91
p	*0.064*	*0.010**	*0.080*	*0.022**
Age				
<21	22.13 ± 5.27	27.26 ± 6.06	19.22 ± 4.28	68.61 ± 6.11
≥21	22.21 ± 4.91	24.82 ± 6.40	19.63 ± 4.21	66.67 ± 6.42
p	*0.836*	*0.000**	*0.234*	*0.000**
Living together with				
Family	21.89 ± 5.44	27.14 ± 6.97	19.28 ± 4.57	68.31 ± 6.62
Other	22.60 ± 4.53	24.86 ± 4.73	19.56 ± 3.68	67.02 ± 5.68
p	*0.097*	*0.000**	*0.442*	*0.013**
Living with grandparents in the same house before				
Yes	22.86 ± 5.47	28.05 ± 5.52	17.86 ± 3.70	68.76 ± 6.13
No	21.84 ± 4.93	25.46 ± 6.48	20.09 ± 4.31	67.39 ± 6.35
p	*0.021**	*0.000**	*0.000**	*0.012**
Desire to live with parents after marriage				
Yes	20.75 ± 5.25	31.46 ± 5.36	17.46 ± 3.62	69.67 ± 6.27
No	22.32 ± 5.09	25.68 ± 6.14	19.61 ± 4.27	67.61 ± 6.29
p	*0.021**	*0.000**	*0.000**	*0.014**
Meeting with grandparents face to face				
More often than once a month	22.40 ± 5.62	27.75 ± 6.70	18.23 ± 4.07	68.38 ± 6.81
Less than once a month	21.92 ± 4.56	24.80 ± 5.52	20.54 ± 4.11	67.26 ± 5.72
p	*0.241*	*0.000**	*0.000**	*0.027**

*$p < 0.05$

As seen in Table 2, the analyses showed that the women, those who were younger than 21 years of age, lived with their family, lived with their grandparents before, desire to live with their parents after marriage and met with their grandparents face to face at least once a month scored higher in the AAS, in other words they had more positive attitudes towards ageism (p<0.05).

The Pearson correlation coefficient (r) between the AAAS and AAS scores of the participants is calculated as – 0.745. There was a statistically significant negative and strong relationship between the scores of the participants in the scale of ageing anxiety and their scores in the scale of ageism attitudes (p<0.05).

Table 3 showed logistic regression analysis of the independent variables associated with a positive ageism in university students. Only statistically significant independent variables were included in the logistic regresison analysis. Examination of the data revealed no significant multicollinearity among variables as no values approached or exceeded the limits in any of the regression models (highest VIF=4.74).

As observed in Table 3, the first version of the model comprised socio demographic characteristics that caused alterations in the participants' attitudes toward ageism, whereas the second version of the model comprised intergenerational relations and ageing anxiety variables together with the socio demographic characteristics. The Nagelkerke test results (Table 3) define the degree of the effects of the independent variables included in the model on alterations of the dependent variable (attitude toward ageism). The last column of the table shows the correct classification possibilities of variables within the developed versions of the model. The second version of the model (Table 3) shows that the independent variables explained approximately 79% of the variations in attitude toward ageism, and the correct classification percentages of the variables was 68.4%. The model showed that those living with grandparents before (compared with those not living with grandparents before) (p<0.05), contact often (compared with those not contact often) had a higher percentage of being included in the positive ageism (p < 0.05). In addition, as more fear of old people, psychological concerns, physical appearance and generally more ageing anxiety, positive ageism decrease more.

Table 3. Logistic Regression Analysis of the Independent Variables Associated with a Positive Ageism in Unıversity Students

Positive Ageism	OR	95% CI	p	Nagelkerke R^2	Correct Classification
Version 1				*0.25*	*55.8%*
Gender (Female)	1.559	1.120 - 2.170	0.009*		
Who living together (family)	1.409	1.014 - 1.957	0.041*		
Version 2				*0.79*	*68.4%*
Living with grandparents (Yes)	1.421	1.088 - 2.409	0.017*		
Contact (Often)	1.597	1.086 - 2.348	0.001*		
Fear of old people	0.932	0.918 - 0.972	0.000*		
Psychological concerns	0.831	0.820 - 0.940	0.000*		
Physical appearance	0.740	0.661 - 0.995	0.066		
Ageing anxiety	0.919	0.871 - 0.969	0.002*		

*p<0.05, OR: odds ratio, CI: confidence interval.

DISCUSSION

This study aimed to investigate the effect of intergenerational relations and ageing anxiety on attitude toward ageism of Turkish university students. To the best of our knowledge, this is

the first field study evaluating the combined effects of intergenerational relations and ageing anxiety on attitude toward ageism in university students in Turkey. The attitude toward ageism evaluations showed following main findings.

The average of total AAS scores of the participants was found as 67.84±6.31 in the study. The average scores of the students were lower than the scores estimated in the studies of Vefikulucay Yilmaz and Terzioglu [2011], Sahin [2015], Ucun et al. [2015], Unsar et al. [2015], and they were higher than the scores estimated in the study of Kose et al. [2015]. It is considered that the difference between the AAS average scores in the researches is due to the differences in the samples. Furthermore, it can be concluded that the scores of the university students declined over the years generally. Despite it was reported in the written resources that positive ageism towards the elderly was more prevalent in Turkish culture based on its cultural structure [Guven et al., 2012; Ozdemir, 2009; Soyuer et al., 2010], there were concerns about the escalation of negative attitudes of the young people towards the elderly [European Commission, 2012; Adibelli et al., 2013]. The low average AAS scores of the university illustrate that these concerns are not unjust.

It was determined that the total score of the female students in the scale of ageism attitude was higher (p<0.05). Some researches conducted in Turkey and other countries concluded that women displayed more positive attitudes towards the elderly [Guven et al., 2012; Koc et al., 2013; Usta Yildirim et al., 2010; Bodner and Lazar, 2008]. This result illustrates that female students are under the influence of the caring roles of women in Turkish society traditionally.

In the study, it was showed that the average AAS scores of the students who lived in the same house with their grandparents before were higher than those of the students who did not (p<0.05). Respect for the elderly is an important cultural value in Turkish culture. Prior studies showed that the individuals who lived with their grandparents had more positive attitudes towards the elderly [McConatha et al., 2004; Smith et al., 2016; Sahin, 2015; Vefikulucay and Terzioğlu, 2011]. This result can be explained by the positive perspective gain of the young people towards the elderly owing to the positive communication developed by sharing the same house with the elderly.

In the study, the average AAS scores of the participants who met with their grandparents face to face at least once a month were higher (p<0.05). The prior studies concluded that the quality and quantity of the intergenerational relations in the family context were influential on the attitude towards the elderly [Harwood et al., 2005; Smith et al., 2016; Wisdom et al., 2014].

The result extracted in the study about the negative relation between ageing anxiety and attitude towards the elderly is in line with the literature [Allan and Johnson, 2008; Boswell, 2012; Drury et al., 2016; Harris and Dollinger, 2001; Harwood et al., 2005; Wisdom et al., 2014].

The regression analyses results that the intergenerational relations and ageing anxiety are more crucial than the demographic characteristics including age, gender and family structure. This conclusion can be assessed as promising for development of positive attitude towards the elderly since it shows that interventions for developing intergenerational relations and moderating ageing anxiety of the young people can be beneficial.

Considering the study results as a whole, it is seen that direct and indirect interventions for development of intergenerational relations for the university students to develop positive attitude about ageing can be beneficial. According to Happell [2002] and Lookinland and Anson [1995], in case it is ensured that the young people display more positive attitude

towards the elderly, services provided for the elderly will have higher quality. Universities are the places where the young adults can strengthen their positive attitude towards the elderly. Similarly, it is anticipated that the ageing anxiety of young people and their attitude towards the elderly will change positively by receiving trainings about ageing [Duyan and Gelbal, 2013].

It would be just to assess the above discussed results of the study within some limitations. First, it is not feasible to generalize the study results for all university students in Turkey due to sampling size and selection method. Secondly, since the findings of the study are based on cross-sectional survey data, it is not possible to draw clear conclusions about causal relationships. Finally, the intergenerational relations of young adults were assessed only for a grandparent whom they chose. For this reason, the results of "intergenerational relations" show the best possible conclusion. More objective results can be extracted in the future studies by assessing all grandmother/grandfather relations of the young people.

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