The Effects of the Different Activities on the Depression Level of Older People

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Abstract

In modern life, the expected life at birth is improving day by day with the developing health services as well as technologies. With these possibilities, the number of older people is increasing not only in developed but also developing and under developing countries. However, the problems of older people face, today, are different and challenging than before the modern era. Growing cities are hosting more retired and older people who feel excluded in their life than rural areas where older people can do gardening and et cetera activities, visit their children, grandchildren, relatives, peers and easily join spiritual and religious activities. That's why; more activities should be encouraged and supported by giving legal and institutional opportunities for older people in cities. In this mean, active aging policies which the process of optimizing opportunities for health, participation and security in order to enhance the quality of life, are on the agenda in developed and developing countries. With the activities in the process of aging, older people can continue participation in social, economic, cultural, spiritual and civic affairs, not just the ability to be physically active or to participate in the labor force but mental activities. Older people who retire from work or live with disabilities can remain active contributors to their families, friends, environments and nations. In this sense, active aging aims to extend healthy life expectancy and quality of life for all people as they age. With this paper, older people, who are more than 60 years, are studied according to their daily life activities and their effects on their depression level. It was questioned that what kind of activities older people have. In the survey, a depression scale was implemented for 240 older people, 100 of 240 were provided by Bayrampaşa local governance in İstanbul. Their health situations, income, and education levels, whether they join any NGO, philanthropic and religious activities are asked in the survey. In addition, these variances will be compared with their depression levels.

Keywords: *Older People, Depression, Active Aging*

Farklı Aktivitelerin Yaşlıların Depresyon Seviyeleri Üzerine Etkileri

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Özet

Günümüzde, teknolojik imkânlarla beraber ilerleyen sağlık hizmetleriyle doğumda beklenen yaşam süresi günden güne artmaktadır. Bu imkânlarla, yaşlıların sayısı sadece gelişmiş ülkelerde değil ayrıca gelişmekte olan ve az gelişmiş ülkelerde de artmaktadır. Bununla birlikte, günümüzde yaşlı insanların geçmişe göre karşılaştıkları sorunlar farklı ve zorlayıcı olmaktadır. Büyüyen şehirler kendilerini yaşamlarında dışlanmış hisseden yaşlı ve emekli insanlara ev sahipliği yapmaktadır. Kırsal alanlarda ise yaşlılar, bahçe işleri ve benzeri diğer aktivitelerle, çocuklarıyla, torunlarıyla, akrabalarıyla, arkadaşlarıyla ilgilenebilmekte ve kolaylıkla dini aktivitelere katılabilmektedirler. Bundan dolayı, şehirlerde yaşlı insanlar için yasal ve kurumsal imkânlar sunarak daha çok aktivite yapmaları teşvik edilmeli ve desteklenmelidir. Bu anlamda, yaşam kalitesini artırmak amacıyla sağlık, katılım ve güvenlik için fırsatları optimize etme süreci olan aktif yaşlanma politikaları gelişmiş ve gelişmekte olan ülkelerin gündemindedir. Yaşlanma sürecindeki aktiviteler ile yaşlı insanlar fiziksel aktivite veya işgücüne katılmanın yanı sıra zihinsel aktivitelerle, sosyal, ekonomik, kültürel, dini ve vatandaşlık işlerine katılımlarını devam ettirebilirler. Çalışma hayatından emekli olan veya engelleri ile yaşayan yaşlılar ailelerine, arkadaşlarına, çevrelerine ve bulundukları topluma aktif katkıda bulunanlar olarak hayatlarını devam ettirebilirler. Bu anlamda, aktif yaşlanma, insanlar yaşlandıkça yaşam kalitesini ve sağlıklı yaşam beklentisini artırmayı amaçlamaktadır. Bu çalışma ile 60 yaşından fazla olan yaşlı insanların günlük yaşam aktiviteleri ve o aktivitelerin depresyon seviyelerine etkileri araştırılmıştır. Çalışmada yaşlı insanların ne tür aktiviteler yaptıkları sorgulanmıştır. Araştırmada 240 yaşlı üzerinde depresyon ölçeği uygulanmış olup, bunların 100'ü İstanbul Bayrampaşa Kaymakamlığı'nın yaşlılara yönelik yaptığı proje ile elde edilmiştir. Ölçekle birlikte, yaşlıların sağlık durumları, gelir ve eğitim seviyeleri, sivil toplum, hayırseverlik ve dini aktivitelere katılıp katılmadıkları sorulmuştur. İlave olarak, bu değişkenler yaşlıların depresyon seviyeleri ile analizlere tabi tutulmuştur.

Anahtar Kelimeler: *Yaşlılar, Depresyon, Aktif Yaşlanma*

Introduction

While population aging is one the success of human being, it has also some difficulties such as huge economic and social problems. Although these older people are very valuable in terms of experience and knowledge, they are neglected group which would add value to the society instead of living aside. In the countries where the measures are taken for older people to support and make them active are necessary, not extra services. The services offered to the older people must be based on human rights, requirements, capabilities and necessities.

In every country, population aging has been causing some difficulties and problems in their budgets, economics and social relations. In this sense, many countries in Europe has been incrementally spending money on their social issues such as health care, pensions and social services which excess their GDP's quarter. Also, labor markets have faced many challenges from public debt and deficits to baby-boomer retirees after 2008 financial crises. Especially, many European Welfare countries have improved services and social protection for elderly population; though there are still some problems resulted from budget must be ameliorated. That's why how can the current success of these social services and protection level be sustainable in this demographic change and economic problems is an important question of today.

Aging of population is an important issue for governments. With the increasing rate of aging population, the burden on budgets of governments is radically increasing. Aging population is not only a budget issue but also health, social, family and labor markets. That is why, how these aging people can live healthy and active in order to keep them in labor market. What kind of policies can support older peoples' health and life as well as other people? If the policies which support older people can't be produced in today's world, there will be huge financial problems in the expenses of health services and social security bodies. In order to decrease the negative effects of aging population, should the family be used as a support mechanism instead of state institutions?

With this paper, older people, who are more than 60 years, are studied according to their daily life activities and their effects on their depression level. It was questioned that what kind of activities older people have. In

the survey, a depression scale was implemented for 240 older people, 100 of 240 were provided by Bayrampaşa local governance in İstanbul. Their health situations, income, and education levels, whether they join any NGO, philanthropic and religious activities are asked in the survey. In addition, these variances will be compared with their depression levels. In the first part of the study, the literature is reviewed and in the second part, the results of the survey will be evaluated by using different statistical methods such as correlation and regression.

1. Literatur Review

1.1. Aging Population

Aging of population is one the most important issues of today's world. It is not only a public health issue but also social and economic (Gro Harlem Brundtland, 1999). Demography and population structure are the most important integral part of a country which effects and shapes its economy, social and cultural elements. Demography and population are directly not only effecting society's current and future plans but also having a role in the process of institutional working. Therefore, the aging of population influences deeply current economic and social structure, and give rise some problems, debates, and searches for solutions (Uyanık, 2017, 69).

Life expectancy at birth has increased by eight years for fifty years and related projections predict that next forty years it will step up more five-year. At the end of the technological achievement and with the increasing level of social policies, populations have been aging by changing the structure of societies. On the one hand, the aging population and increasing life expectancy can be called a success story; on the other hand it has been producing new social issues which require new approaches. While low birth rates and improving health services have been triggering the aging of population in some developed part of the world such as Europe, the lack of health services and high birth rates in some of the poor countries in Africa and Asia have different effects on their population (Eurobarometer, 2012, 3).

The number of the people who are older than 60 is increasing faster than any other population group in the world. The number of older people

in the world between 1975 and 2025 is projected to increase 694 million and 223% growth rate. The people who are older than 60 is expected to be 1.2 billion in 2025. In 2050, it is expected to be 2 billion elderly people around the world, but 80% of them will be living in developing countries (WHO, 2002, 6). In less developed countries the numbers are related to older people are not well known. Currently, about 70% of older people are hosted by developing countries. Especially, older people live in developed countries are aging more. In this sense, the number of the people over 80 years old is 69 million and the large number of this is living in developed countries. Even though, people who are 80 years old and over constitutes around 1% of the world population and 3% of the population in developed world, this is the most increasing group in the older people (WHO, 2002, 9).

The aging of population in the developed world took more time than the developing countries in which socio-economic growth has not caught up with the fast aging of people. In France, the rate of older people grew from 7% to 14% in 115 years, while the same increase will be occurred in 27 years for China. Population aging process was gradual after continuous social and economic development in many decades and generations in developed world, whereas it took just 2 or 3 ten years in the developing world. In this sense, developed world had improved before their population became old; whereas wealth rise occurred after population aging had happened in the developing world (Kalache and Keller, 2000).

1.2 Challenges of Aging Population

Senility is something that cannot be prevented and also it has different dimensions such as biologic, chronologic, and social as well as it is a pretty complex process (Özer ve Karabulut, 2003, 73). Senility is a process in which changes and losses are seen and it consists of some factors such as socio-economic, environmental, education and nutrition (Soyuer ve Soyuer, 2008, 219). Old age is defined a feeling of loss in every phase of life, individuals gradually lose their physical, psychological and social autonomy and they become more dependent in their later life (Seyyar, 2002: 672). In order to tackle demographic difficulties of today, there should be encouragement to make older people more active and contribute to the

society in which they live. European Union designated 2012 as the "Year Active Aging and Solidarity between Generations". Because European Union gives much importance to active aging, it is aimed to produce policies not only in labor markets but also in the society, family and environment in which they live (Eurobarometer, 2012, 4).

If the aging becomes common and meaningful for society, aging live and older people should be attached to sustainable services such as health, security and participation. In this sense, passive situation of senility should absolutely be prevented since it is going to take the old individual to the unhappiness. When the old individuals don't spend their time with any occupation or activity, they lose or gradually decrease their hope for life (Çolak & Özel, 2015, 118). Living healthy, by not drinking alcohol and smoking, being in fitness with exercises and living spiritual and meaningful life is going to make aging people more strong emotionally and physically and prevent their illness and problems in daily life. Following shares show the challenges that Europe has confronted.

- The share of aging populations is going up with the generation of baby-boomers, increasing life expectancy at birth and decreasing birth rates.
- The share of the people older than 65 is expected to increase from 17.4% in 2010 to 29.5% in 2060 in all Europe. The share of older people who are more than 80 years is expected to increase from 3% to 12%.
- Between 2010 and 2060, the population between 15 and 65 years old in European countries is forecasted to decrease by 14.2%. With this declining number of working people, actuarial balance in social security systems will be broken and some services such as health care and pensions will not be sustainable by 2060 in Europe (EU Commission, 2017).
- In order to sustain healthy life, an individual should have good relations with family, peer groups, neighbors and family. By attending activities to share and reach experiences, and meeting with different groups such as family and friends are very helpful for older people involved (Milner, 2013, 51).   According to Walker, all kind of activities will increase health conditions of older people. In

this sense, there can be many positive impacts of activities on well being of older people (Walker, 2012).

- Bodily exercise is beneficial for psychologies of older people
- Older people can easily strength their balance and decrease tumbles by increasing bodily activities and strengthening their muscles
- Employment opportunities in old age increases the health conditions and welfare of older people
- Not only physical activities but also mental activities will promote the life quality of older people
- The loneliness and exclusion of elderly people from social life will be decreased by active aging policies (Kavi, Koçak, 2011,174; Kavi, 2017, 4).

There should be some feelings supported by the values of individual and society to make the life more meaningful. In this sense, if there is a meaning and purpose of life people can be connected to the world and spiritual values. Some activities such as faith based individual and group activities, meditations and activities like yoga, and also some value-faith based activities such as observing the nature, philanthropic activities and upholding people who are vulnerable can be good opportunities to increase the mental and physical health of older people in the life (Milner, 2013, 51).

1.3. Active Aging

An urgent need of policies and programs which help preventing and reducing strain of elderly people emerges as average lifetime of world population grows is becoming an interest of not only developed but also developing countries. A beneficial method for decision-making is being enablement-focus rather than disablement. Because, being enablement-focus gives a direction that help older people recover, restore and empower their functions, and give them opportunity of being an actively participating member of the society. Whereas, the disablement-focus may lead older people to feel needs of isolation and dependence (WHO, 2002, 36). Perhaps, the foremost fear of policy-makers is that growing aging population will set off an uncontrollable explosion in costs of health care and social

security system. Though, increased demand via aging populations is an expected situation without a doubt, today's recent innovative changes, co-operation of all related sectors, evidence-based and culturally-appropriate policies and plans are inferences that countries will effectively manage the related costs. In other words, as long as volunteer, innovative, supportive and collaborative services are offered towards older people, healthy people will flourish, active citizens and democratic society will be more functional (Palabıyık, 2011, 91).

A new paradigm has come forth today, which treat older people as active people who actively participating the age-integrated society, and both contribute and benefit from development. In this sense, The World Health Organization decided to use the term "active aging" to explain the period to success this concept. With the active aging, old approach which saw older people more passive rather than active has changed. Also, it has modified the way treated to the older people from the need-based approach to the right based which accepts not to discriminate the older people from others in all aspects of the life. In this sense, active aging uphold older people's rights and responsibilities to use in labor life, the voluntary sector as well as other aspects of life (WHO, 2002, 11). Active aging approach must be adopted in early years of the life, but it is not too late to embrace the active aging life style in later years of the life. With the active aging, traditional approaches toward education and other life courses are changing. Old paradigms such as learning is a process during the childhood and youth, working is the responsibility of people who are between 16 and 65 years old and retirement is an phase would be begun after 65 years old have been changed by active aging paradigm. This new paradigm offers a new approach to the life in which education is not designated to a certain time but it is designated to the life course and the paradigm allows to the people to enter and exit labor markets whenever they want. Active aging also helps generations to sustain solidarity and transfer knowledge and experiences (WHO, 2002, 43). With the aging of an individual, the capacity to make emotional and physical work is decreasing. Also, functions and behaviors change of aging individuals and it becomes too difficult to comply with the new situation for aging individuals (Demirbilek, 2005, 210). Active aging approach should consist of health, labor markets, employment and education in the development of policies

and programs. Social policy makers should consider supporting active aging by reducing chronic illnesses and sudden deaths, providing an environment to enjoy their later life and producing policies to make older people more active in economic, cultural, social and politic arena (Çolak & Özel, 2015, 118).

With the active aging policies, people will be more independent or live their own life with their responsibilities as they get older by supporting their individual and societal neighborhoods in terms of economic and social activities (EU Commission, 2017). Active aging consists of three elements such as security, health and participation. Some of these elements have pretty wide approaches include different ages whereas other elements especially aim those who are older or coming closer to old age. Active aging approach requires proactive policies that are applied by many stakeholder, multilevel and horizontal governance (Rodrigues, 2013, 5). A comprehensive view may assert that older people see engaging in social, physical and cultural activities as a complementary component of quality of life as well as health, family and social networks, and economical resources (Gloria et al., 2015, p.1).

With the modern life, economy and employment has become in the center of life. In this sense, not only young and middle-aged people but also older people will have many problems such as health, family, unemployment and loss of income without employment. The inclusion of aging people in society and economy is called silver economy which is a brand-new term. In order to reach a higher quality of life, silver economy is based on the improvement of innovative policies, goods and services and more economic growth and employment. Older people have the importance since they contribute to the society and active life in creating new jobs and transferring their experiences and knowledge into new generations in the community where they live. With the experiences, knowledge and capabilities that older people have, they can have the will to support the economy and society as well as labor markets (Demirbilek, Özgür, 2017, 25). Those older people who want to work should be offered new employment opportunities according to their current skills and experiences and they should be supported as long as they can be able to work in labor markets.

Active aging strategy need to be placed into a frame which should cover all age categories of all life courses. In this sense, there shouldn't be

any age restrictions or policies shouldn't belong to any age category in active aging (Uyanık, 2017, 90). Active aging must begin during infancy and continue throughout the life. Although it doesn't usually start in early ages of life, it never will be too late to begin in the years to come. Some policies and programs should be regularly invested to prevent diseases and protect healthy individual more than treatment such as stopping smoking, doing exercises. Several strategies and plans in different states acknowledge that the lack of holistic approaches which mention prevention and protective policies in not only health services but also in social issues of individuals to make them more inclusive to the society (Eurohealth, 2012, 4):

- Regularities should encourage increasing the employment capacity of companies and offer more flexible schedule as well as healthy conditions in workplace for the older people.
- In order to sustain workability of older people, some opportunities should be given to increase their knowledge and skills and share their experiences with new generations. By doing so, older people will continue to do their work with the updated knowledge and skills, and also they can easily be involved in voluntary activities counseling.
- In today's changing environment, not only older people but also all generations should keep up with the knowledge and skills. For this reason, different training courses related to their jobs and cultural activities must be organized as life-long-learning opportunity.
- The main services such as housing, health care and mass transportation must be provided to make older people more socially and politically active in their neighbors.
- In order to support the health of older people, some physical activities should be offered and these services must be easily reachable in terms of payments, nearness and time planning.

All people are being affected with active aging policies without considering their age, social and economic positions and health situations. Especially health is considered in active aging policies in terms of different dimensions of life such as academic, mental, occupational, religious, emotional and physical (ICAA, 2013, 43). Active aging must incorporate individuals into community and by encouraging and implementing inclusion

policies. In addition, in order to promote active aging, some integration policies in different areas such as labor market, health, social security and economics should be implemented (Walker & Foster, 2013). Function and skill loss should be prevented by producing social policies in labor market, health, education, social security and economics to make older people more inclusive into the society and daily life (Foster, 2014, 15). Active aging promotes to be healthy in order to reduce the expenses of health and social issues. In addition, active aging encourages staying in labor life by offering employment opportunities to decrease retirement payment or pension costs. With active aging, older people are being preoccupied by joining some community and volunteer activities in their neighborhoods (Walker & Maltby, 2012). According to Milner active aging policies are based on nine elements may be called 9Ps (Milner, 2013, 45).

1. Populations: Different population groups of older people need customized services.
2. Perceptions: Negative approaches against aging populations has been preventing in reaching an all-embracing society.
3. People: Some individuals who are educated and determined to support older people.
4. Potential: Those groups who are aging are producing new economic opportunities with increasing demand in markets.
5. Products: The goods and services produced for older people should be done in a customized manner.
6. Promotions: The goods and services are produced in the market which is very attractive for the suppliers. In this sense, there is a growing demand from both demand and supply sides.
7. Places: Physical medium should be arranged to support different disabilities of older people as well as others.
8. Policies: As people get older they become more vulnerable. Especially, due to this sensitivity, the basic rights of older people must be secured utmost level.
9. Programs: Following different dimensions of health must support elements mentioned above in order to reach a holistic approach.

Researches show that psychological and sociological factors are very important on the wellbeing of older people. In this sense, there can be high correlation of religion, mental health, social health, social and economic

status and positive mood to deal with the challenges of older people (Archana, 2009, 2). Depression, whether seen in earlier or later life, is very spread in today's modern life. There are different factors such as genetic, personality and challenges in life increase depression level of people. That is why; many responsibilities of people together with increasing age can cause higher depression. For older people, illnesses, excessive stress, loneliness and the lack of activities and social relations are main reasons for their depression. Especially, loneliness as well as loss of relationships is going to give rise to a higher depression and negative feelings towards to the life.

With increasing age, especially in later life, on the one hand both depression and loneliness are seen in older people and become an important trouble for them. On the other hand, increasing age can offer new opportunities for older people such as establishing new relations, focusing on new volunteer organizations, using some of their time in spiritual activities and benefiting and transferring their working life experiences into the new generations by working in part time jobs (Archana, 2009, 6).

2. Method

2.1. Sampling and Procedure

As participants, 240 elderly provided data to the study which were selected using convenient sampling method, where 100 of them found through a local governance program in Bayrampaşa, Istanbul. 138 of the participants were female. Participants were interviewed face to face to ensure that questions were answered correctly. The average age of participants is 70.63 (STDSAP=1,503), and 53.3% are married. In addition, 116 of them have primary school degree, whereas 28 have secondary school, 16 have high school, 14 have bachelors, and 66 of them were non-graduated.

According to the data, 44,2% of the participants didn't have any social security. There are 43 older people who were both retired and still working, 116 older were retired but not working and 81 of them were unemployed in the sample. It was found out that 133 older people of participants had at least one chronic illness. It has been found that 23 of 240 older

people had no children and 117 of the rest had fewer than three children, while 191 of them have grandchildren.

From an economic point of view, 16,7% of older people have no any income, 40% have income less than 500 tl, 23,8% less than 1500 tl, 12,1% less than 2500 tl, 3,3% less than 4000 tl and 4,2% more than 4000 tl. According to this, the average income of the participants was approximately 854 tl. The participants were asked whether their income situation met their needs and 65.8% of the participants answered "no".

Besides, 215 older people were able to do daily care, 210 of them were able to meet face to face with their relatives and families, 93 of them have at least an activity doing in their free time, only 38 of them used alcohol or cigarettes, and 85,8% of them were interested in religious activities. It was also learned that only 6 of the older people receive home care and health service, of whom 84 live single, 37 with their children, 51 with the partner (wife or husband), and 68 with their children and the partner. In terms of their social life, only 12 of them have stated that they work in voluntary jobs such as an association or a foundation.

2.2. Measures

Depression was measured with 30-items Geriatric Depression Inventory (GDS) to capture participants depression levels. The scale scores up to 10 points represent "No Depression", 11-13 points range signals depression is likely to occur, while 14 points or more represents certain depression.

In order to measure Human Relations quality and density of Religious life of elderly people, we constructed two new scales. Participants were asked to fill a questionnaire formed of 5-Likert Scale questions (Strongly Agree=1, Strongly Disagree=5) which are reflecting their quality of Human Relations and how dense they live a Religious Life. Related items were written depending on the existing literature.

2.3. Analyses

Firstly, principal component analyses were conducted to test construct validity of constructed scales of Human Relations and Religious Life. To ensure reliabilities together with convergent and discriminant validities,

composite reliabilities and average variance extracted proportions were estimated.

Secondly, as the study contains some demographical groups, chi-square differences and one-way ANOVA tests were pursued to test group differences. Thirdly, mediation analysis was conducted using Hayes's PROCESS macro (Hayes, 2011).

2.4. Findings

2.4.1. Validity and Reliability Tests

Principal Factor Analysis is an analytical method is used to generate new k variables by combining p variables in relation to each other. A factor analysis of responses using Principal Component Analysis factor extraction and a Varimax with Kaiser Normalization rotation method revealed two distinct factors. KMO value of factor analysis s 0,592, which is higher than 0,50, meaning that factor analysis is significant (Costello & Osborne, 2005 & Kaiser, 1974). The total variance explained of data is 66,42% with two dimensions created by factor analysis. Factor loadings of these items were given in the table with values of AVE and C.R. of these dimensions.

Table 1: Factor Loadings, AVE and C.R. Values

Factors	Loadings	AVE	C.R.
Factor 1: Human Relations			
Dealing with children and grandchildren comforts me	0,791		
I love to stay with my children	0,783	0,563	0,793
Being with my friends comforts me	0,671		
Factor 2: Religious Life			
I like religious activities	0,895		
Religious practice reduces my nuisance	0,876	0,784	0,876

Two dimensions were found by principal factor analysis. Validity and reliability requires that the AVE and C.R. values of these dimensions must be considered. The AVE value of related dimension should be 0,50 or

higher. It is called as the moderate level reliability if a dimension's C.R. value is 0,60 and higher. If a dimension's C.R. value is also 0,80 and higher, it is high reliability (Hair, Hult, Ringle, & Sarstedt, 2014). The AVE values of our dimensions are 0,563 and 0,784 and therefore they are valid. Likewise, the C.R. values of our dimensions are 0,793 and 0,876, respectively, and one of them is moderate reliable, the other is highly reliable. In fact, C.R. value of the moderate reliable dimension is very close to 0,80.

Previous studies have shown that hypothesis testing requires the assumption of normality. There are tests to show that normal distribution of the variable is appropriate. Outside these tests, normality interpretation can be made through descriptive statistics such as skewness and kurtosis. That is, it is possible to have information about the normality of the variable by looking at the coefficients of skewness and kurtosis. If these coefficients are less than 3,29, interpretation can be made that the distribution of the variable is normal at 95% confidence (Kim, 2013 & Mardia, 1974). The coefficients of skewness and kurtosis of the items in the factor analysis are given in the table. Accordingly, the distributions of five-items are suitable for normal distribution as shown in the Table 2.

Table 2: Skewness and Kurtosis of Items

	Skewness	Kurtosis
Dealing with children and grandchildren comforts me	1,341	1,942
I love to stay with my children	0,989	0,604
Being with my friends comforts me	1,116	1,585
I like religious programs	0,996	0,749
It reduces my nuisance to pray	1,330	2,543

Dimension composite scores were created by the averaging all items under related dimension. Correlation analysis was used to see the interrelations among variables. Correlation analysis is a relational analysis of the linear relationship between two variables. If the correlation coefficient between two variables is zero, it means that there is no linear relation between these two variables. The correlation coefficient is a value between -1 and 1, the closer absolute of the value is 1, the stronger relationship. The sign of the correlation coefficient shows the direction of the relationship

between the two variables. That is, if the correlation coefficient is positive, there is a linear relationship in the same direction. But, if it is negative, there is a linear relationship in the opposite direction (Hair, Hult, Ringle, & Sarstedt, 2014 & Armutlulu, 2008). Accordingly, the correlation coefficient between the two variables was calculated as 0,195 (p<0,05). According to the result of correlation analysis, it can be concluded that there is a linear relationship between human relations and religious life of older people, which shows that these two variables share some proportion in variance but have unique variances as well.

In addition, the discriminant validity of the dimensions can be seen after the correlation coefficient. If the correlation coefficient is less than the square root of AVE values of the dimensions, the discriminant validity of the dimensions is ensured (Hair, Hult, Ringle, & Sarstedt, 2014). The AVE values of the dimensions in our study are lower than the correlation coefficient between each other (0,195<0,563 and 0,784). Therefore, the discriminant validity of dimensions in our study is ensured statistically.

2.4.2. Difference Tests

Chi-Square test used to investigate whether there is a relationship between the depression scores and demographic information. In the Chi-Square independence test which examines whether at least two categorical variables are independent of each other. The null hypothesis of Chi-Square is "*H_0: The Values of The Rows and The Columns are independent of Each Other*". In SPSS, p.<0,05 means that row values and column values are not independent of each other. Also, in Chi-Square tests, the expected frequency in each cell of the table must be at least five. This is necessary to use the sampling distribution of the x^2 statistics (Armutlulu, 2008).

According to Chi-Square test between depression score and marital status, the depression score of older people is not independent from marital status (x^2=37,685, p<0,05). That is, the difference between marital status is significant in terms of depression level. Single elderly people are more likely to have depression comparing to married.

Table 3: Cross Table Between Marital Status and Depression Scores

		Depression Scores			
		No Depression	Possible Depression	Definite Depression	Total
Marital Status	Married	72	17	39	128
	Single	23	12	77	112
Total		95	29	116	240

According to Chi-Square test between depression score and gender, the depression score of older people is not independent of gender (x^2=18,780, p<0,05). That is, the difference between genders is significant in terms of depression level. Female has more depression than male.

Table 4: Cross Table Between Genders and Depression Scores

		Depression Scores			
		No Depression	Possible Depression	Definite Depression	Total
Genders	Female	44	11	83	138
	Male	51	18	33	102
Total		95	29	116	240

According to Chi-Square test between depression score and social security, the depression score of older people is not independent of social security (x^2= 26,170, p<0,05). That is, the difference between social security is significant in terms of depression level.

Table 5: Cross Table Between Social Security and Depression Scores

		Depression Scores			
		No Depression	Possible Depression	Definite Depression	Total
Social Security	No	71	17	46	134
	Yes	24	12	70	106
Total		95	29	116	240

According to Chi-Square test between depression score and job status, the depression score of older people is not independent of job status (x^2=

22,843, p<0,05). That is, the difference between job status is significant in terms of depression level.

Table 6: Cross Table between Job Status and Depression Scores

		Depression Scores			
		No Depression	Possible Depression	Definite Depression	Total
Job Status	Working and Retired	30	5	8	43
	Not Working but Retired	41	12	63	116
	Unemployed	24	12	45	81
Total		95	29	116	240

ANOVA analysis was used to investigate whether the dimensions of human relations and religious life differed on demographic information. Analysis of variance (ANOVA) is used to test whether two or more groups have the same average (Armutlulu, 2008). According to the results of ANOVA, there is a difference between genders in human relations (p=0,021). The average of human relations of the male is more than female (1,997<2,203). Similarly, there is a difference in the average genders of religious life (p=0,014). According to this result, the religious life of female is more than male (1,877<2,123). The ANOVA observed that working in a society or a foundation had more human relations than those who did not work (1,417<2,152; p<0,000). However, there is no significant difference in the average of religious life between those groups who work and who do not in a society or a foundation. Moreover, both human relations and religious life of the single older people are statistically different (p<0,000 & p=0,007) and lower than married (1,872< 2,393 & 1,856<2,125).

The effects of human relations and religious life dimensions on the depression levels of older people were examined. ANOVA was used for this analysis. While religious life has no effect on the depression scores of older people (p=0,071), human relations has an effect on the depression scores of older people (p<0,000).

Table 7: ANOVA Table of Depression Levels

		Sum of Squares	df	Mean Square	F	Sig.
Human Relations	Between Groups	11,988	2	5,994	14,044	***0,000***
	Within Groups	101,156	237	0,427		
	Total	113,144	239			
Religious Life	Between Groups	3,146	2	1,573	2,682	0,071
	Within Groups	139,020	237	0,587		
	Total	142,166	239			

According to the depression scores of older people, the average of re-lations is as follows: The average of older people who have "No Depres-sion" is 1,863; the average of older people who have "Possible Depression" is 2,046; the average of older people who have "Definite Depression" is 2,339; the average of all older people is 2,115. According to this result, if score of human relations decreases, depression score decreases. That is, when human relations increases, depression score of older person de-creases (it should be forgotten that the value of strongly agree is 1 and the value of strongly disagree is 5).

Table 8: Means and Standard Deviations of Depression Scores Levels

Depression Scores	Mean	N	Std. Deviation
No Depression	1,8632	95	0,52703
Possible Depression	2,0460	29	0,75972
Definite Depression	2,3391	116	0,71557
Total	2,1153	240	0,68804

2.4.3. Mediation Test

We can also see the same result with linear regression. A mathematical equation between independent variables and dependent variable can be established by regression analysis. Generally, the least squares method is used to calculate the coefficients of independent variables and constant in linear regression analysis. The power to influence dependent variable

from independent variables can be determined. (Eti & İnel, 2016 & Hayes, 2013).

Table 9: ANOVA of Regression Model

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	22,018	1	22,018	28,002	***0,000***
1	Residual	187,144	238	0,786		
	Total	209,163	239			

In our study, depression score is the dependent variable, human relations is the independent variable. Accordingly, R^2 value of the regression analysis is 0,105. Sig. value in ANOVA table of regression is 0,000, so this model is significant.

Table 10: Coefficients of Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	1,154	0,185		6,226	0,000		
	Human Relations	0,441	0,083	0,324	5,292	0,000	1,000	1,000

a. Dependent Variable: Depression Score

The regression coefficient of Human Relations is 0,441. That is, similar to the result of ANOVA, two cases that differ by one unit on the score of human relations are estimated to differ 0,441 units on depression score. Similarly, one unit increase in score of human relations of an older people will increase 0,441 units on depression score of that person.

Table 11: ANOVA of Regression Model

|	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8,141	1	8,141	18,453	***0,000***
Within Groups	105,003	238	0,441		
Total	113,144	239			

It is known that devoting time to the religious activities positively affect one's psychology. In our study, human relations differ between those who say they took time for religious activities and those who cannot (p<0,000). That is, it can be said that those who took time for religious activities more importance to human relations (2,041<2,569).

Table 12: Means and Standard Deviations of Activities' Answers

	Mean	N	Std. Deviation
Yes	2,0405	206	0,64180
No	2,5686	34	0,78936
Total	2,1153	240	0,68804

Regression analysis also found a relationship between depression score and human relations. According to two results, It can be said that devoting time for religious activities effects positive and indirect effects on depression of older people. Accordingly, a simple mediation model can be established.

Figure 1: Mediation Analysis of Model
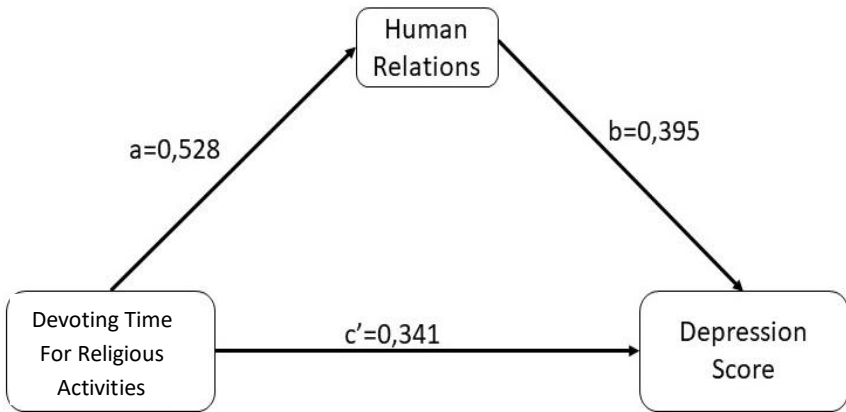
Andrew's SPSS macro, PROCESS, was used for this analysis (Hayes, 2013). According to the results of this analysis, direct effect on the depression scores of older people of devoting time for religious activities was 0,341 while the indirect effect through human relations was 0,528 * 0,395 =

0,209. For inference about indirect effect of X on Y through M, the bootstrap confidence interval has been investigated. In output of PROCESS, BOOTLLCI=0,0895 and BOOTULCI=0,3856. In the 10000 bootstrap estimates of the indirect effect, 2,5% were 0,0895 or smaller and 2,5% were 0,3856 or larger, resulting in a 95% interval estimate of 0,0895 to 0,3856. As this confidence interval does not contain and is entirely above zero, this supports the conclusion that the indirect effect is positive. The total effect of devoting time for religious activities on depression scores is 0,209+0,341=0,55.

Conclusion

Human being is a biological, psychological, social and spiritual entity. That's why it should be looked at to this entity with an integrative and holistic approach. In this meaning, studies should be focused on older people with integrative and holistic approach as well as known their psycho-social, socio-economic and spiritual strengths and weaknesses. With the active aging policies, these different dimensions of human being should be taken into consideration in order to make older people more empowered and active in their life. In this sense, there should be preventive and protective health policies to reduce the problems of disabled people, recurring illness and early deaths. Some factors should be reduced related to illnesses very risky and some factor must be increased which will prevent and protect the people during the whole period of their live. Sustainable, reasonable priced, reachable, good health and social services must be provided for aging people's problems and rights as they age. As people age, they become more vulnerable and their knowledge and experience will be obsolete. Due to these challenges, some lifelong education and training opportunities should be offered during the whole period of their life.

As people age, they should be involved in some activities such as economic processes, working life and non-profit organizations according to their necessities, priorities and capabilities. Their security, protection and respectability should be assured in terms of economics, social and physical necessities. Since the best place is home or a family life for a person, it should be fully encouraged to get involved as people get older in time.

Especially women get older, they are being faced some discriminations in general in the life and especially in the workplace. That's why; discrimination and unjustness in terms of security issues and basic rights must be decreased or eliminated against older woman.

According to the analyses, it is seen that there are direct and indirect relations between variables. Depression scores of the older people are influenced by human relationships, religious life, working status, social security, gender and marital status. Religious practices reduce the depression level in the older people. There is a positive effect. It can likely be said that if the older people do religious practices, their depression level is going to decrease. Likewise, human relations of the older people are going to increase if they do religious practices such as prayers and philanthropic activities. In other words, the more religious activities the more human relations older people will get. There are also an indirect effect between religious practices and depression scores. It can be said that due to the positive relation between religious activities and human relations, indirectly depression level can decrease. Additionally, religious activities are influential both directly and indirectly on depression level of older people. Consequently, there are direct and indirect positive effects between activities which make the older people busy, productive and spiritually strong, and depression level. That is, with the activities mentioned above, older people will have less depression or they are going to decrease their current depression with these activities.

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