

İstanbul Üniversitesi Sosyoloji Dergisi

DOI: https://doi.org/10.26650/SJ.2021.41.2.0035 http://iusd.istanbul.edu.tr

> Submitted: 1 May 2021 Revision Requested: 6 September 2021 Last Revision Received: 6 October 2021

Accepted: 29 December 2021
Online Published: 18 January 2022

RESEARCH ARTICLE

Wellness in Older Adults from a Gerontological Perspective

Nazmive Tuğba Bahar 1 . Hasan Hüsevin Basıbüvük 2 .

Abstract

The aim of this study is to evaluate from a gerontological point of view the effects of health promoting lifestyles and sociodemographic factors on the wellness of older individuals aged 60 or older living in Antalya. The study also aims to determine the extent of the impacts from the factors affecting these individuals' wellness. A total of 211 female and 189 male participants were interviewed. The study uses the probability sampling technique. The interviews were conducted on a voluntary basis in public places in the districts, such as parks, gardens, marketplaces, bazaars, and households. Data were collected using a sociodemographic information form, the Health Promoting Lifestyle Profile II (Walker & Hill-Polerecky; adapted to Turkish by Bahar et al., 2008), and the Flourishing Scale (Diener et al., 2009). The data were analyzed for descriptive statistics. The independent samples t-test was used for two independent groups, and one-way analysis of variance (ANOVA) was used for multiple comparisons and correlation tests for intergroup relationships. A p < .05 has been accepted as the level of significance. Tukey HSD values were examined in order to identify any meaningful differences between groups. As a result of the study, gender, educational status, perceived income status, and adopting health promoting lifestyle behaviors were found to be related to wellness. A scheme was suggested on how to reach wellness from a gerontological perspective.

Keywords: Wellness • Health promoting lifestyles • Sociodemographic factors • Aging • Gerontological perspective

To cite this article: Bahar, N. T., & Başıbüyük, H. H. (2021). Wellness in older adults from a gerontological perspective. İstanbul Üniversitesi Sosyoloji Dergisi, 41, 243-260. https://doi.org/10.26650/SJ.2021.41.2.0035



¹ Correspondence to: Nazmiye Tuğba Bahar (Lec.), Elderly Care Program, Department of Health Care Services, Vocational School of Health Services, Giresun University, Giresun, Turkiye. Email: tugba.bahar@giresun.edu.tr ORCID: 0000-0002-1248-7560

² Hasan Hüseyin Başıbüyük (Prof.), Gerontology Department, Health Science Faculty, Akdeniz University, Antalya, Turkiye. Email: hbasibuyuk@akdeniz.edu.tr ORCID: 0000-0001-6504-6139

Introduction

Developments in increasing awareness levels regarding protecting and maintaining health, the increase in job opportunities through industrialization, better education, the modernization of societies, and better living standards have increased life expectancy at birth (Tufan, 2016a; Başıbüyük, 2017; Saeidlou et al., 2019). Due to demographic changes and transformations, changes have also occurred regarding the notions of population and aging, and rapid population growth has been observed in underdeveloped and developing societies. At the same time, the concept of advanced old age has emerged. In developed countries, the concept of aging has rapidly gained importance with increased life expectancy at birth rates and decreases in population growth rates (Aktan, 2008).

The emergence of the concept of wellness dates back to the 1950s, with Dunn making the first academic definition. According to Dunn, wellness is a condition in which a person reaches their maximum potential by being healthy and increasing their capacity to use their abilities and skills (Myers & Williard, 2003). This definition was improved by Hettler (1980), Ardell (1998), and many other authors (Korkut Owen et al., 2017a). Hatfield and Hatfield (1992, p. 164) defined wellness as "a conscious and purposeful process aimed at strengthening people's wellbeing in all intellectual, physical, social, emotional, professional, and spiritual aspects" (as cited in Kasapoğlu, 2013).

Wellness can be achieved by protecting and maintaining health and adopting a healthy lifestyle. In this respect, healthiness can be considered as an intermediate step in achieving wellness (see Figure 1).

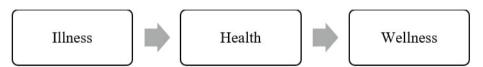


Figure 1. Relationship between health and wellness (redrawn from Els & De la Rey, 2006).

The common point that emerges from studies on wellness is that just being healthy is not enough for an individual to achieve wellness. Wellness is also associated with social, psychological, and spiritual affections (Myers et al., 2000). Subjective and psychological wellness, life satisfaction, quality of life, happiness, and a healthy lifestyle have been shown to be associated with the concept of wellness (Roysamb et al., 2002). Wellness should importantly be noted to be able to be gained and modified when one adopts a healthy lifestyle (Myers et al., 2000). According to one study (Demirbaş-Çelik & Korkut-Owen, 2017), 68% of people's wellness is due to health promoting lifestyles. Therefore, a healthy lifestyle is one of the most important factors

in achieving wellness at an individual and society level (Doğan, 2008; Gür & Sunal, 2019; Korkut Owen & Demirbaş Çelik, 2018). As individuals surpass healthiness, they will experience a decrease in factors that negatively impact quality of life (e.g., decrease rates for chronic diseases, depression, loneliness, and unhappiness).

Health promoting lifestyles have started to gain importance alongside the concept of improving health. In general, adequate and balanced nutrition, adequate sleep, being responsible for one's health, interest in interpersonal communications, regular physical activity, stress management, and spiritual relationships appear as main components of health promoting lifestyles (Pender et al., 1992; Walker & Hill-Polerecky, 1996).

Wellness from the Gerontological Perspective

"Gerontology deals with the description, explanation, and modification of the bodily, psychic, social, historical, and cultural aspects of aging and old age. These include circles and social institutions that are important in terms of aging and structure old age" (Baltes & Baltes, 1992, p. 8 as cited in Tufan, 2016b).

The gerontological point of view suggests conducting research on needs in accordance with individual wants and goals by considering the structural changes occurring in old age (Tufan, 2019b). In this way, the perception of a fragile, weak, or even crying face of old age and aging may change. Briefly mentioning the concept of gerontological life situation, intervention gerontology, and Tufan's wheel model, which involve important trajectories in older individuals' wellness (see Figure 2), would be appropriate here.

The concept of gerontological life situation focuses on issues related to the humanenvironment relationship that affect the individual and place them in crisis. However, unlike problem management, the concept deals with how individuals manage opportunities, facilities, and environment of self-realization (Tufan et al., 2017). The individual is the one who is important in the concept of gerontological life situation. The environment of self-realization refer to the living areas where an individual can act as they want and perform their actions according to their own plans. Creating services for individual needs, preparing resources, and giving the individual the opportunity to realize themself forms the basis for the concept of gerontological life situation (Tufan, 2016a). Environmental factors such as one's health status and place of residence, traffic systems, and available services also affect the individual's environment of self-realization. From this perspective, individual resources and the adequacy of these resources (e.g., daily life competencies, cognitive competencies, and mental competencies) in one's environment must be balanced with contextual resources (e.g., economic, infrastructural, social. (Tufan, 2016b; Tufan et al., 2017). If this concept is systematically implemented in all areas, then optimal management regarding prevention, rehabilitation, and irreversible changes for the current state of the individual can be applied spontaneously within the frame of intervention gerontology.

Intervention gerontology is a sub-branch of gerontology, the foundation of which is based on theoretical knowledge (Tufan, 2005) and covers gerontological initiatives associated with planned behavioral changes (Tufan, 2018, 2019a). According to Lehr (1979), gerontological intervention involves individuals feeling good psychologically in their old age (i.e., they are able to reach old age by achieving psychological wellness). Intervention gerontology involves the individual's life reserves and works to optimize individual living conditions (optimalization), prevent loss of abilities (i.e., geroprophylaxis/prevention), recovery, strengthening or replacing lost abilities (i.e., rehabilitation and therapy), and securing existing abilities (i.e., managing irreversible changes).

Some systematic plans are required in order to create service models for meeting needs. Tufan's wheel model can be implemented for this. According to this model, the cycle will be completed by accessing information through field studies, evaluating information and determining needs, making plans based on the weights of the mentioned needs, determining the target group in accordance with the plans, providing service models, and repeating field studies to determine new needs with changing conditions (Tufan, 2016a).

This study investigates the impact of sociodemographic factors and health promoting lifestyles on the wellness of older individuals. The study aims to describe the factors causing differences between individuals' wellness levels as well as the impact from each factor. As far as is known, only one study is found to have dealt with the wellness of older people over these variables in Turkey (Bahar & Başıbüyük, 2019). The study also attempts to discuss its findings over a broader gerontological context. Because Antalya is a city preferred for living in after retirement, a holistic gerontological perspective is believed to be able to contribute to developing service models that enable older people to achieve wellness.

Materials and Methods

Subject of Research

This study evaluates from a gerontological perspective the impact of health promoting lifestyles and sociodemographic factors on the wellness of older people. The study assesses the reasons for differences between wellness levels for individuals 60 years or older living in Antalya's city center, determines the factors affecting these differences, and investigates the impact of health promoting lifestyles and demographic factors.

Universe and Sample of Research

The study's sample consists of 400 participants aged 60 or older living in the central neighborhoods of Konyaaltı, Kepez, and Muratpaşa, three major districts in Antalya Province. The number of individuals over the age of 60 who make up the universe of

the study was obtained using data from the Turkish Statistical Institute (TurkStat, 2018) and has been calculated as 138,436. Using the sample size formula with a known universe, *N* was determined at a 5% margin of error over a 95% confidence interval. As a result of the calculation, the sample size was determined to be 384, and this number increased to 400 to increase the reliability of the research. This study selected the stratified sampling technique, a probabilistic sampling method. In this context, the ratio of each district to its known population of those over 60 was calculated. The number of participants was determined as 211 women and 189 men, including 64 (31 males, 33 females) for Konyaaltı, 137 (66 males, 71 females) for Kepez, and 199 (92 males, 107 females) for Muratpaşa. The interviews were conducted in public areas of the districts such as in parks, gardens, marketplaces, and bazaars, and in some cases in households. The researcher conducted the face-to-face interviews on a voluntary basis, which lasted an average of 15 minutes.

Data Collection Tools and Analysis

Because this study will examine the relationships among variables such as health promoting lifestyles and sociodemographic factors in conjunction with wellness, it uses the quantitative research design and the commonly preferred questionnaire technique for collecting the data. The participants were presented with an informed consent form describing the purpose of the research.

The sociodemographic information form was developed to include questions on gender, age, marital status, educational status, perceived income status, and perceived health status and tested over a sample of 96 people as part of the pilot study. The Flourishing Scale's (Diener et al., 2009) validity and reliability for the Turkish version were conducted by Fidan and Usta (2013). Although the scale consists of 8 items, the conducted studies and explanatory factor analyses have revealed the items to be assembled under one dimension that explains 47% of the total variance with factor loadings ranging between .60 and .78. Cronbach's alpha of internal consistency for the Flourishing Scale was also found as .83. The scale's items use a 7-point Likert-type system varying from 1 = strongly disagree to 7 = fully agree. The Flourishing Scale has no reverse-scored items. An overall wellness score is obtained by collecting the scores from all items included in the scale. The highest achievable score is 56, and the lowest is 8 (Fidan & Usta, 2013).

The Health Promoting Lifestyle Profile II's (HPLP II) validity and reliability over a Turkish population has been tested (Bahar et al., 2008). The HPLP II consists of 52 questions and 6 sub-sections: nutrition, health responsibility, physical activity, stress management, interpersonal communication, and spiritual development. Cronbach's alpha of reliability for the overall scale is 0.94 and ranges between .79 and .87 for the sub-factors. The questions included in the scale are scored from 1 = Never to 4 =

Regularly. The HPLP II contains no reverse-scored items. The highest possible score is 208, and the lowest possible score is 52 (Bahar et. al. 2008).

Prior to the data analyses, exploratory data analysis and a data record check were conducted. The statistical analyses were performed using the program Statistical Package for the Social Sciences25 (SPSS 25.0). Because the number of participants is 400, nonparametric tests were preferred regardless of distribution. The data were analyzed for descriptive statistics, with the independent samples t-test being conducted for two independent groups, one-way ANOVA for multiple comparisons, and correlation tests for intergroup relationships. A p < .05 has been accepted as the level of significance. Tukey HSD values were studied to determine which groups showed significant differences.

Results

The sociodemographic information form was used to categorically consider variables such as gender, place of residence, marital status, educational status, perceived income, and presence of social security and to create the participants' sociodemographic profiles. This part of the research involves the variables that have been found to be related to wellness. The differences regarding the sociodemographic factor of gender were analyzed in terms of wellness using the independent samples t-test.

Table 1
Average Wellness Scores According to Gender

Gender	n	average score
Female	211	5.4840
Male	189	5.0311

According to the results from the independent samples t-test, a statistically significant difference exists between gender and wellness ($p = 0.001 \ t = 3.498$). The analysis has revealed the average wellness score to be 5.48 for females and 5.03 for males. Thus, females have higher wellness levels compared to males (Table 1). The difference between educational status and wellness has been tested using ANOVA.

Table 2
Average Wellness Scores According to Education Level

Education Level	n	average score	SD
Primary	132	5.0758	1.30268
High school	125	5.2310	1.31668
University	143	5. 4834	1.29073
Total	400	5.2700	1.31077

A statistically significant difference is found between the participants' educational status and wellness levels (p = 0.033, F = 3.441; see Table 2). Differences exist among

the primary, high school, and university education level groups, so the Tukey HSD test was performed to discover the differences between each group (Table 3).

Table 3
Tukey HSD^{a,b} Results for Differences in Average Wellness Scores Among Groups According to Educational Status

Educational Level	n	Subgroups for Alpha = 0.05		
		1	2	
Primary	132	5.0758		
High school	125	5.2310	5.2310	
University	143		5.4834	
Significance		.595	.256	

Note. Tools are displayed for groups in homogeneous subgroups.

The greatest difference between groups is seen to result between the primary school education level and university graduate education level groups. The average wellness score for university graduates is higher than for the primary school graduates. No statistically significant difference is found between the primary school education level and high school education level groups, nor between the high school education level and university education level groups (Table 3). The difference between perceived income and wellness was tested using ANOVA.

Table 4
Participants' Average Wellness Scores According to Perceived Income Level

Perceived Income Level	n	average score	SD
My income exceeds my expenses	43	5.2500	1.42626
My income equals my expenses	208	5.5192	1.18767
My expenses exceed my income	149	4.9279	1.36986
Total	400	5.2700	1.31077

A statistically significant difference exists between participants' perceived income status and wellness (p = 0.000 F = 9.205; see Table 4). Differences are found between the "My income exceeds my expenses," "My income equals my expenses," and "My expenses exceed my income" groups. The Tukey HSD test has been performed to discover between which groups the differences occur.

a. A harmonic size = 132.927.

b. Group sizes were unequal. The harmonic means of group sizes was used. Type i error levels were not guaranteed.

Table 5
Tukey HSD^{a,b} Results for Average Wellness Score Differences Among Groups According to Perceived Income Level

Danasia d Income	n	Subgroups for Alpha = 0.05	
Perceived Income		1	2
My expenses exceed my income	149	4.9279	
My income exceeds my expenses	43	5.2500	5.2500
My income equals my expenses	208		5.5192
Significance value (p)		.227	.354

Note. Tools are displayed for groups in homogeneous subgroups.

The greatest difference between groups occurred between the "My expenses exceed my income" and "My income equals my expenses" groups. The individuals whose income equals their expenses have higher wellness scores compared to those whose expenses exceed their income. No statistically significant difference exists between the "My expenses exceed my income" and "My income exceeds my expenses" groups, nor between the "My income exceeds my expenses" and "My income equals my expenses" groups (see Table 5).

Next, a correlation test is performed to see the relationship between health promoting lifestyles and wellness.

Table 6
Average Wellness Scores According to Health Promoting Lifestyle Behaviors

		average score
Health muomatina lifastrilas	Pearson correlation (r)	.370**
Health-promoting lifestyles	Significance value (p)	.000

^{**} Correlation is significant at the p < 0.01 level (double-tailed test)

A statistically significant, positive, but weak relationship exists between health promoting lifestyles and wellness (p = 0.0001, r = 0.370; see Table 6). Health promoting lifestyles consist of six sub-factors: health responsibility, physical activity, nutrition, spiritual development, interpersonal relationships, and stress management. The correlation test between sub-factors and wellness was reconducted to identify sub-factors resulted in this relationship.

a. Average harmonic size = 86.269

b. Group sizes were unequal. The harmonic means of group sizes was used. Type i error levels were not guaranteed.

Table 7
Participants' Health Promoting Lifestyles with Respect to the Sub-Factors of Wellness

		average score
II141. D	r	.246**
Health Responsibility	p	.000
Diaminal Antimian	r	.154**
Physical Activity	p	.002
Nutrion	r	.166**
	p	.001
G : ' 1D 1	r	.446**
Spiritual Development	p	.000
Interpersonal Communication	r	.385**
	p	.000
	r	.290**
Stress Management	p	.000

^{**} Correlation is significant at the p < 0.01 level (double-tailed test)

A statistically significant association exists between the sub-factors of health promoting lifestyles and wellness (see Table 7). Statistically significant, positive, and weak relationships exist between health responsibility and wellness (p = 0.0001, r = 0.246) and between physical activity and wellness (p = 0.002, r = 0.154); a positive relationship exists between spiritual development and wellness (p = 0.0001, r = 0.446); and positive but weak relationships exist between nutrition and wellness (p = 0.0001, r = 0.166), between interpersonal communication and wellness (p = 0.0001, r = 0.385), and between stress management and wellness (p = 0.0001 r = 0.290).

Discussion and Conclusion

A statistically significant difference was found between participants' wellness scores in terms of gender. Female participants had higher wellness scores than the male participants (see Table 1). This finding is consistent with published studies that have suggested wellness levels to differ by gender. Oleckno and Blacconiere (1990) reported women to have higher overall wellness levels than men. Likewise, Bishop and Yardley's (2010) is consistent with these findings, as they also revealed women to have higher scores than men with regard to wellness. Yang et al. (2021) revealed women to have higher scores compared to men in their study on the wellness and mental health levels of older people living in the rural and urban areas of China. Studies have shown not only older but also younger women to have higher wellness scores. For example, Makinson (2001) found girls' overall wellness to be higher compared to boys in a study conducted with teenage individuals. Doğan and Yıldırım's (2006) study on university students reported the dimensions of friendship and love to be more present in female students, and women's wellness levels to be higher than men's as a result.

Askegaard (2000) reported women to have higher stress management and nutrition sub-dimension scores, whereas men had higher physical activity sub-dimension scores. Similarly, studies in the field of subjective, psychological, and general wellness have shown individuals to have significantly different scores for various sub-dimensions with regard to gender (Dixon-Rayle & Myers, 2004; Doğan, 2006; Korkut-Owen et al., 2018; Rootman et al., 2003). Therefore, wellness and its sub-dimensions can be concluded to differ in terms of gender (Onuoha & Olaseni, 2021). Some studies conducted on relatively small and specific groups, such as the students of Tazelenme University (a University of the Third Age), have reported no significant difference between wellness and gender. For example, Kurtkapan's (2019) research on the wellness of retired individuals over 55 years of age found no difference in terms of gender. The senior students of Antalya's age 60-and-over Tazelenme University showed no significant differences in terms of gender (Bahar & Başıbüyük, 2019; Tufan et al., 2018).

The study found a statistically significant difference for older individuals' wellness scores with respect to their educational status (Table 2). The greatest difference between groups occurred between primary education level and university graduate level participants. In other words, significant differences occurred in areas such as health promoting lifestyles, perspectives on life, and life satisfaction in terms of education level between primary school graduates and university graduates, while no significant difference was found between university graduates and high school graduates (see Table 3). Current research in the field suggests wellness levels to increases in parallel with education level (Bahar & Başıbüyük, 2019; Çolak et al., 2018; Korkut-Owen et al., 2017b). Cummins (2000) also found a weak positive relationship between wellness and education that he attributed to the increase in individuals' income levels along with their education and to individuals' income positively contributing to wellness and affecting many factors such as health, nutrition, physical activity, and increased purchasing power. Nagaraj and Nithyanandan (2019) emphasized education level to have a greater impact on psychological wellness compared to other demographic variables. Kasapoğlu (2014) reported higher education levels to positively impact individuals' overall well-being and self-esteem levels through longer leisure time, a sub-factor of wellness. However, no differences occurred in factors such as selfmanagement, spirituality, or social relations. Although the current study found significant differences in wellness in terms of educational status, studies are found that do not support this result (Gill, 2005; Tufan, et al., 2018). These inconsistencies are assumed to possibly result from the fact that numerous factors affect wellness and one factor on its own is insufficient for explaining wellness.

A statistically significant difference occurred between perceived income status and wellness (Table 4). The greatest difference between groups occurred between participants who stated their expenses to exceed their income and participants who

stated their income to equal their expenses (see Table 5). The individuals who had difficulty meeting their basic needs had lower wellness scores compared to individuals who were able to meet their needs relatively more comfortably. The reason for the lack of difference between individuals whose income equals their expenses and individuals whose income exceeds their expenses is that both groups meet their basic needs, and these individuals are satisfied with their current situation. Current studies in the field support this. According to Brandt et al. (2021), socioeconomic inequalities negatively affect individual wellbeing, with wellbeing levels increasing as income levels increase. Similarly, Kwon's (2019) study on older people living alone stated individuals with low income to be more affected by disease and to have lower psychological wellbeing levels. Individuals with low educational attainment and income were also found to have lower psychological health and wellness levels (Rueda et al., 2008).

Diener et al. (1999) stated that income to be a necessary resource for meeting individuals' basic needs, with poorer individuals' well-being increasing alongside increases in their income. In another study, Diener and Diener (1996) noted increases in income to have less of an impact on wellness once their income reaches a certain level. In this respect, an individual's income level can be said to influences their wellness, with this increase diminishing and even stopping at higher income levels (Biswas & Dean, 2007; Dost, 2004; Kasser & Ryan, 1993). These findings are partially different from other studies at the longitudinal level, and the presence of studies supporting these findings is quite striking and important for the concept of wellness (Çallı, 2014; Özen, 2005; Tuzgöl Dost, 2010; Yavuz Güler & İşmen Gazioğlu, 2008). However, Kurtkapan (2019) and Tufan et al. (2018) found no relationship to exist for individuals' economic status or perceived income with wellness.

A weak, positive but statistically significant relationship was observed between health promoting lifestyles and wellness (see Table 6). Meanwhile, studies that have addressed the health promoting lifestyles of older people in conjunction with their wellness are rare. Bahar and Başıbüyük's (2019) is one of these and also reported similar findings. Demirbaş-Çelik and Korkut-Owen (2017) stated health promoting lifestyles to explain 68% of the variance in wellness levels. Apart from these studies, there is no studies dealing with the impact of the healthy lifestyle and wellness in Turkish older population. Nevertheless, studies on health promoting lifestyles and quality of life have suggested adopting health promoting lifestyles to improve quality of life. A positive relationship has frequently been reported between health promoting lifestyles and quality of life (Bayrak Ozarslan, 2013; Koçoğlu & Akın, 2009).

When examining the sub-factors' effect on individuals' wellness, a weak positive correlation was found for individuals' responsibility for their health, physical activity,

nutrition, interpersonal communication, and stress management with their wellness (see Table 7). Nagaraj and Nithyanandan (2019) claimed physical activity and physical health to positively affect individuals' overall well-being. Meanwhile, a moderately positive relationship has been found between spiritual development and wellness. Bahar and Başıbüyük (2019) reported spiritual development and interpersonal communication to potently affect individuals' wellness, while other sub-factors do not. The limited number of studies on this subject makes comparing the findings and drawing a sound conclusion difficult. However, this study assumes wellness to be able to be raised through individuals' efforts. Different physical, social, and mental experiences; regular and healthy eating; appropriate physical activity; harmonious social relationships; and activities that make older adults feel good constitute the foundation for improving wellness. Moreover, awareness regarding responsibility for one's health, identifying one's own body and being able to notice negative conditions, early detection and treatment, and having regular health check-ups are also variables that positively affect individual wellness. People are more likely to achieve wellness if they adopt health promoting lifestyles and make these an integral part of their lives.

While evaluating individual wellness from a gerontological perspective, individuals' current situation should first be determined by considering the principles of aging. One should realize that each person has different needs and interests and that appropriate environments must be prepared in order for individuals to be able to realize their potential (Tufan, 2016b) The concept of life situation and Tufan's wheel model can be implemented to identify older person's situation (i.e., the information phase). Consequently, needs can be identified (i.e., requirements phase), and service models may be suggested based on individual needs and conditions (i.e., planning and service). Thus, appropriate self-realization fields can be offered for each individual to realize themself. An individual's life course is continuously monitored in Tufan's wheel model. New needs may arise for an individual, and the cycle should restart from the beginning study in order to realize them. This also helps individuals adopt health promoting lifestyles to achieve wellness (see Figure 2).

Meanwhile, intervention gerontology focuses on creating favorable environments for individuals to reach wellness in their early stage of life (i.e., optimization). Thus, physical and cognitive impairments and losses that occur when aging should be prevented (i.e., prevention); lost skills should be replaced with new ones, and existing skills should be preserved (i.e., rehabilitation and therapy). Finally, individuals must be taught methods for coping with incurable conditions. Following such a route will contribute to individuals' health and wellness in the early stages of life and allow them to continue their lives in a systematic and planned manner during old age.

Suggestions

This study has determined the factors affecting the wellness of older people. Improving individuals' wellness levels is believed to be possible using the service models offered from a holistic gerontological perspective:

- A statistically significant difference was found between individuals' educational levels and wellness. Thus, adopting lifelong education and trainings such as the University of the Third Age and the 60+ Tazelenme University need to be popularized.
- A statistically significant relationship was found between individuals' perceived income status and wellness. Therefore, policies aimed at preventing poverty in old age should be implemented by local and central governments.
- A meaningful relationship exists between individuals' adoption of health promoting lifestyles and their wellness. Individuals should be enlightened on how to achieve health promoting lifestyles. These trainings should be given not only to older individuals but also to families of older individuals, public institutions and organizations, and central and local government employees. Evidently, the life course is an ensemble of successive phases; therefore, providing similar training in the pre-retirement period would be beneficial.
- Adopting health promoting lifestyles at an early age means building a healthier
 old age and a healthier society. Education on health promoting lifestyles,
 wellness, and old age should be included in primary school curricula in order
 to be able to help combat the fragile perceptions of old age in society and to
 also contribute to adopting health promoting lifestyles at an early age.
- Factors affecting the wellness of older individuals should be identified, and service models should be planned for the accompanying needs by a multidisciplinary team in which gerontologists should play a central role.
- Benefitting from a gerontological viewpoint in the services to be created for contributing to individuals' wellness is considered to be appropriate.
- In conclusion, a simple scheme is suggested for older individuals to reach wellness in light of the above discussion. First, individuals should be encouraged to adopt health promoting lifestyles from a very early age. Second, the concept of life situation, intervention gerontology, and Tufan's wheel model as the three pillars of the scheme should be considered in conjunction for identifying, preserving, and maintaining resources as well as for identifying the needs and required services. As a result, individuals will be able to reach a state of wellness by delivering these needs and required services (see Figure 2).

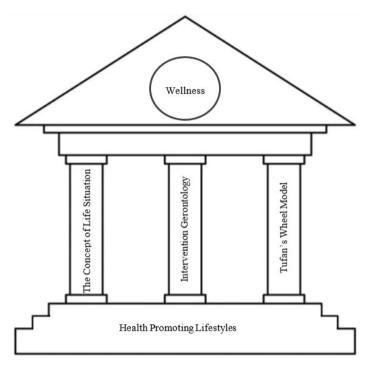


Figure 2. Wellness from a gerontological perspective.

Acknowledgment: This research; It was produced from a master's thesis on "The Relationships of Healthy Lifestyle Behaviours and Socio-Demographic Factors to Wellness: A Study on Antalya Population".

Peer-review: Externally peer-reviewed.

Conflict of Interest: The authors declare no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Grant Support: This research was supported by the Scientific Research Projects Coordination Unit of Akdeniz University with the project number TYL-2019-4799. The authors received no financial support authorship, and/or publication of this article.

References

Aktan, C. C. (2008). Yeni değişim dinamikleri ve devletin yeni rolü. http://www.canaktan.org/yeni-trendler/devlet-felsefe/degisim-devletin-rolu.html

Ardell, D. B. (1998). The history of wellness. Ardell Wellness Report, 50, 3-11.

Askegaard, M. L. (2000). *The impact of college wellness course on wellness knowledge, attitude, and behavior* (Doctoral dissertation). University of North Dakota, ND, USA.

Bahar, N. T., & Başıbüyük, H. H. (2019). Antalya 60+ Tazelenme Üniversitesi öğrencilerinin iyilik halinin değerlendirilmesi. *Ankara Sağlık Bilimleri Dergisi*, 8(1), 160–173.

Bahar, Z., Beşer, A., Gördes, N., Ersin, F., & Kıssal, A. (2008). Sağlıklı Yaşam Biçimi Davranışları Ölçeği II'nin geçerlik ve güvenilirlik çalışması. *Cumhuriyet Hemşirelik Dergisi*, *12*(1), 1–13.

Baltes, P. B., & Baltes, M. M. (1992). Gerontologie: Begriff, Herausforderung und Brennpunkte. In P. B. Baltes, J. Mittelstrass, & U.M. Staudinger (Eds.), *Alter und altern* (pp. 1–34). De Gruyter.

- Başıbüyük, H. H. (2017). Biyogerontolojide güncel gelişmeler: Yeni araştırma perspektifleri. *Yaşlı Sorunları Araştırma Dergisi Elderly Issues Research Journal*, 10(1), 51–59.
- Bayrak Özarslan, Ö. (2013). Diyabetik koroner arter hastalarında sağlıklı yaşam biçimi davranışları ve yaşam kalitesinin belirlenmesi (Master's thesis). Hacettepe Üniversitesi Sağlık Bilimleri Enstitüsü, Ankara, Turkey.
- Bishop, F., & Yardley, L. (2010). The development and initial validation of a new measure of lay definitions of health: The Wellness Beliefs Scale. *Psychology and Health*, 25(3), 271–287.
- Biswas Diener, R., & Dean, B. (2007). Positive psychology coaching putting the ccintific happiness to work for your clients. John Wiley & Sons, Inc.
- Brandt, M., Kaschowitz, J., & Quashie, T. (2021). Socioeconomic inequalities in the wellbeing of informal caregivers across Europe. *Aging & Mental Health*. https://dx.doi.org/10.1080/1360786 3.2021.1926425
- Cummins, R. A. (2000). Personal income and subjective wellness: A review. *Journal of Happiness Studies*, 1, 133–158.
- Çallı, D. (2014). *Tip 2 diyabetli hastaların diyabet yönetimine ilişkin öz-etkililik algısı ve iyilik halinin değerlendirilmesi* (Master's thesis). Pamukkale Üniversitesi Sağlık Bilimleri Enstitüsü, Denizli, Turkey.
- Çolak, F. D., Akyürek, G., Abaoğlu, H., & Bumin, G. (2018). Üniversite öğrencilerinde zaman yönetimi becerileri ile iyilik hali arasındaki ilişkinin incelenmesi. *Ergoterapi ve Rehabilitasyon Dergisi*, 6(1), 43–48.
- Demirbaş Çelik, N., & Korkut Owen, F. (2017). Sağlıklı yaşam biçimi davranışlarının iyilik halini yordayıcılığı. *Journal of Strategic Research in Social Science*, 3, 69–88.
- Diener, E., & Diener, C. (1996). Most people are happy. Psychological Science, 7, 181–185.
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective wellness: Three decades of progress. *Psychological Bulletin*, *125*(2), 276–302.
- Diener, E., Wirtz, D., Tov, W., Kim-Prieto, C., Choi, D., Oishi, S., & Biswas-Diener, R. (2009). New measures of well-being: Flourishing and positive and negative feelings. *Social Indicators Research*, 39, 247–266.
- Dixon-Rayle, A., & Myers, J. E. (2004). Counseling adolescents toward wellness: The roles of ethnic identity, acculturation, and mattering. *Professional School Counseling*, 8, 81–90.
- Doğan, T. (2006). Üniversite öğrencilerinin iyilik halinin incelenmesi. *Hacettepe Üniversitesi Eğitim Fakültesi Dergisi*, 30, 120–129.
- Doğan T. (2008). Psikolojik belirtilerin yordayıcısı olarak sosyal destek ve iyilik hali. Türk PDR Dergisi, 26, 30–44.
- Doğan, T., & Yıldırım, İ. (2006). Üniversite öğrencilerinin iyilik halinin "arkadaşlık" ve "sevgi" boyutlarının incelenmesi. *Eğitim Araştırmaları*, 24, 77–86.
- Dost, T. M. (2004). *Üniversite öğrencilerinin öznel iyi oluş düzeyleri* (Doctoral dissertation). Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Doktora Tezi, Ankara, Turkey.
- Dunn, H. (1958). Significance of levels of wellness in aging. *Geriatrics*, 13, 51–57.
- Els, D. A., & De la Rey, R. P. (2006). Developing a holistic wellness model. *SA Journal of Human Resource Management*, 4(2), 46–56.
- Fidan, M., & Usta, F. (2013). İyilik hali ölçeğinin Türkçe formunun güvenirlik ve geçerliğinin incelenmesi. *Eğitim ve Öğretim Araştırmaları Dergisi*, 2(3), 265–269.

- Gill, C. (2005). The relationship among spirituality, religiosity, and wellness for poor, rural women (Doctoral dissertation). University of North Carolina, USA.
- Gür, G., & Sunal, N. (2019). Koroner arter hastalarında sağlık algısı ve sağlıklı yaşam biçimi davranışlarının belirlenmesi. *Sağlık Bilimleri ve Meslekleri Dergisi*, 6(2), 1–12.
- Hatfield, T., & Hatfield, S. R. (1992). As if your life depended on it: Promoting cognitive development to promote wellness. *Journal of Counseling and Development*, 71(2), 164-167.
- Hettler, B. (1980). Wellness promotion on a university campus. *Family & Community Health*, 3(1), 77–95.
- Kasapoğlu, F. (2013). Üniversite öğrencilerinde iyilik hali ile özgecilik arasındaki ilişkinin incelenmesi (Master's thesis). İnönü Üniversitesi Eğitim Bilimleri Enstitüsü, Malatya, Turkey.
- Kasapoğlu, F. (2014). İyilik hali ile özgecilik arasındaki ilişkinin incelenmesi. *Hikmet Yurdu Düşünce-Yorum Sosyal Bilimler Araştırma Dergisi*, 7(13), 271–288.
- Kasser, T, & Ryan, R. (1993). A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65(2), 410–422.
- Koçoğlu, D., & Akın, B. (2009). Sosyoekonomik eşitsizliklerin sağlıklı yaşam biçimi davranışları ve yaşam kalitesi ile ilişkisi. *Dokuz Eylül Üniversitesi Hemşirelik Yüksekokulu Elektronik Dergisi*, 2(4), 145–154.
- Korkut Owen, F., & Demirbaş Çelik, N. (2018). Yaşam boyu sağlıklı yaşam ve iyilik hali. *Psikiyatride Güncel Yaklaşımlar*, 10(4), 440–453.
- Korkut Owen, F., Demirbaş Çelik, N., & Doğan, T. (2017a). Üniversite öğrencilerinde iyilik halinin yordayıcısı olarak psikolojik sağlamlık. Electronic Journal of Social Sciences, 16(64), 1461–1479.
- Korkut Owen, F., Demirbaş Çelik, N., & Doğan T. (2017b). Yetişkinlerde iyilik hali. *Journal of International Social Research*, 10(53), 600–611.
- Korkut Owen, F., Demirbaş Çelik, N., & Doğan T. (2018). Yaş, cinsiyet ve yaşam doyumlarına göre ortaöğretim öğrencilerinde iyilik hali. *Journal of History Culture and Art Research*, 7(1), 379–397. http://dx.doi.org/10.7596/taksad.v7i1.1222
- Kurtkapan, H. (2019). Kentte yaşayan emeklilerin iyi oluş halleri: İstanbul örneği. *Turkish Studies Social Sciences*, *14*(1), 119–131.
- Kwon, M. (2019). factors influencing quality of life elderly who live alone, depending on gender. *Journal of Digital Convergence*, 17(1), 365–373.
- Makinson, L. S. (2001). The relationship of moral identity, social interest, gender, and wellness among adolescents. US: ProQuest Information and Learning. Dissertation Abstracts International Section A: *Humanities and Social Sciences*, 62(6), 2037.
- Myers, J. E., Sweeney, T. J., & Witmer, J. M. (2000). The wheel of wellness counseling for wellness: A holistic model for treatment planning. *Journal of Counseling and Development*, 78, 251–266.
- Myers, J. E., & Williard, K. (2003). Integrating spirituality into counselor preparation: A developmental approach. Counseling and Values, 47, 142–155.
- Nagaraj, M., & Nithyanandan, D. V. (2019). Death anxiety and psychological wellbeing of institutionalized elderly: Relationship, association, and influences of demography. *Indian Journal* of Gerontology, 33(3), 255–267.
- Oleckno, W. A., & Blacconiere, M. J. (1990). Wellness of college students and differences by gender, race, and class standing. *College Student Journal*, 24(4), 421–429.

- Onuoha, C. U., & Olasen, J. T. (2021). Explaining psychological wellbeing in old age: Do gender and perceived social support matter? IFE PsychologIA: An International Journal, 29(1), 95–104.
- Özen, Ö. (2005). *Ergenlerin öznel iyi oluş düzeyleri* (Master's thesis). Hacettepe Üniversitesi Sosyal Bilimler Enstitüsü, Ankara, Turkey.
- Pender, N. J., Barkauskas, V. H., Hayman, L., Rice, V. H., & Anderson, E. T. (1992). Health promotion and disease prevention: Toward excellence in nursing practice and education. *Nursing Outlook*, 40(3), 106–112.
- Roothman, B., Kirsten, D. K, & Wissing, M. (2003). Gender differences in aspects of psychological well being. South African Journal of Psychology, 33(4), 212–218.
- Roysamb, E., Harris, J. R., Magnus, P., Vitterso, J., & Tambs, K. (2002). Subjective wellness sex specific effects of genetic and environmental factors. *Personality and Individual Differences*, 32(2), 211–223.
- Rueda, S., Artazcoz, L., & Navarro, V. (2008). Health inequalities among the elderly in Western Europe. *Journal of Epidemiology & Community Health*, 62(6), 492–498. https://dx.doi.org/10.1136/ jech.2006.059279
- Saeidlou, S., Bektaş, Y., Bahar, N. T., Akkaya, D., & Özgün-Başıbüyük, G. (2019, April). 21.yüzyılda toplum yaşlanması. Paper presented at the 1st International Cappadochia Philosophy & Social Sciences Congress (pp. 111–116). Nevşehir, Turkey.
- Tufan İ. (2005). Gerontolojik müdahale: Türkiye'de neden gereklidir, nasıl olmalıdır? *GeroPape1r*, 2: 1–5.
- Tufan İ. (2016a). *Bakıma muhtaç Türkiye'de Alzheimer hastası yaşlıların bakımı*. Koç Üniversitesi Yayınları.
- Tufan, İ. (2016b). Antik çağ'dan günümüze yaşlılık ve yaşlanma. Nobel Yayıncılık.
- Tufan İ. (2018). İntervensiyon gerontolojisi. http://itgevakiftr.com/2018/10/17/intervensiyon-gerontolojisi/
- Tufan İ. (2019a). Gerontolojik önlemlere neden ihtiyacımız var? http://itgevakiftr.com/2019/04/20/gerontolojik-onlemlere-nicin-ihtiyacimiz-var/
- Tufan İ. (2019b). *Yaşlanma ve yaşlılığa gerontolojik bakış*. http://itgevakiftr.com/2019/04/28/yaslanma-ve-yasligagerontolojik-bakis%ef%bb%bf/
- Tufan, İ., Seeberger, B., & Şahin, S. (2017). Türkiye'de ileri yaşlılar. In İ. Tufan & M. Durak (Eds.), *Gerontoloji* (Cilt I). Nobel Yayıncılık.
- Tufan, İ., Yurcu, G., Aybar, H., & Akıncı, Z. (2018). The effect of gero-recreational activities on psychological wellness. Paper presented at the 8th International Social and Applied Gerontology Symposium (pp. 66–76). Antalya, Türkiye.
- Tuzgöl Dost, M. (2010). Güney Afrika ve Türkiye'deki üniversite öğrencilerinin bazı değişkenlere göre öznel iyi oluş ve yaşam doyumlarının incelenmesi. *Eğitim ve Bilim*, *35*(158), 75–89.
- Turkish Statistical Insitute. (2018). Yıllara, yaş grubuna ve cinsiyete göre nüfus; nüfus projeksiyonları, 2018-2080. http://www.tuik.gov.tr
- Turkish Statistical Institute. (2019). Adrese dayalı nüfus kayıt sistemi. https://biruni.tuik.gov.tr/medas/?kn=95&locale=tr
- Walker, S., & Hill-Polerecky, D. (1996). *Psychometric evaluation of the Health-Promoting Lifestyle Profile II* (Unpublished manuscript). Omaha, University of Nebraska Medical Center.

- Yang, L., Wang, L., & Dai, X. (2021). Rural-urban and gender differences in the association between community care services and elderly individuals' mental health: A case from Shaanxi Province, China. *BMC Health Services Research*, 21(1), 1–12.
- Yavuz Güler, Ç., & İşmen Gazioğlu, A. E. (2008). Rehberlik ve psikolojik danışmanlık öğrencilerinde öznel iyi olma hali, psikiyatrik belirtiler ve bazı kişilik özellikleri: Karşılaştırmalı bir çalışma. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, 23, 115–131.