

An Investigation of the Effects of Mindfulness Practices on Depression, Anxiety and Stress Outcomes of Older Adults*

Esin TÜCCAR** Ali Haydar ŞAR***

Abstract. This study will investigate whether mindfulness-based group work affects the depression, anxiety and stress outcomes of older adults. Thus, the importance of continuous research in the field of gerontology is emphasized and suggestions for future research are offered. The target population consists of 12 individuals aged 60 and over. The data were obtained through the parents of kindergarten students aged 0-6 years attending a preschool in Bayrampaşa district of Istanbul province. The grandmothers of the students constitute the participants. The sessions, which lasted approximately 80 minutes for 8 weeks, focused on breathing exercises, focusing on the present, daily life assignments and experiences. In the study, an experimental research method was applied. According to repeated measures ANOVA analysis, DASS depression scores differ significantly between before and after the Mindfulness practices. It is maintained that the increase in the quality of life of the older adults and the decrease in their depression, anxiety and stress scores will contribute positively to their relations with their families and grandchildren. Therefore, further studies regarding the well being of older adults are encouraged.

Keywords: Mindfulness, older adults, Depression Anxiety Stress Scales(DASS).

* Ethics committee approval for this study was obtained from Sakarya University ethics committee with the decision dated 08.06.2022 and numbered 08.

** Orcid ID: <https://orcid.org/0000-0002-8349-6042>, Turkey, esimtuccar@hotmail.com

*** Orcid ID: <https://orcid.org/0000-0001-7086-4021>, Prof. Dr., Sakarya University, Department of Educational Sciences, Turkey, asar@sakarya.edu.tr

1. INTRODUCTION

Aging is a natural and irreversible process. 13% of the world's population and 10% of Turkey's population are currently over 65 years old. The proportion of the population over the age of 65 in the total is increasing. It is predicted that this rate will exceed 13% in Turkey in 2023.

Aging is accepted as a physical and mental regression, and it is known that humans, like all living things, lose their physical and psychological powers at this stage (Arpacı, 2005, p.22). Koşar (1996) defines aging as a phenomenon of stagnation, regression, and finally decline or descent until the death of the biological organism after the growth, development, and maturation stages of a life-long process that starts with biological fertilization. It is acknowledged that aging is a physical and mental regression. Accordingly, this period is the weakening of the power to establish internal and external balance, as well as the loss of physical powers of humans, as all living things experience (Bilginer et al. 1996,168).

Erikson (1963) claims that the last step of life includes the psychological crisis around integrity versus despair. Integrity means accepting the reality of one's own life and facing death without overwhelming fear. Namely, being compatible with one's own actualities is to be satisfied with the condition he/she is in. The opposite of integrity is despair. Despair is shaped by regretting one's past and a desire to have done things differently.

Aging can be perceived positively and negatively in different societies. However, it has been predicted that the specific cultural meaning of being at older ages has gained "transnational similarities" in the process of modernization (Tufan, 2003, p.21). This is due to the living conditions in the post-industrial era that have become resembling all over the world. Various cultural features of the older age process have been eliminated, and the elderly has become a globalized phenomenon. The whole world is facing a new period called global aging, in which the ratio of the individuals of older ages in the total population is increasing rapidly. Regarding the definition of the United Nations, if the ratio of the elderly in the country is between 8% and 10% of the total population, it means that the population is old, and if this ratio is above 10%, it means that the population is very old.

Several concerns arise with the rapid increase in the proportion of the elderly. Cognitive deterioration and physical problems in older ages lead to serious social and economic burdens. Particularly, living in limited multi-story buildings coming with modern life, and in small rooms restricts life for the individuals at older ages and can present major challenges to their psychosocial and physical well-being. Hence, practices for improving quality of life are of vital importance.

The rapid increase in aging in our country, as in the whole world, necessitates considering the issue seriously from a psychological, social, economical, and political point of view. In order to provide practical solutions, the issue should be treated with a multidisciplinary approach. Therefore, mindfulness practices have become a common

approach to ensure and maintain the psychological and emotional well-being of older adults.

Mindfulness is to heighten one's awareness by focusing on the present. This term has been used in many fields of study in recent years. It can be briefly defined as focusing on the present with a non-oppressive and non-judgmental approach. Psychologists, psychiatrists, and educational scientists focus on this concept and carry out several research.

In mindfulness practices, the aim is to feel the happenings without trying to control them. Therefore, mindfulness is somewhat similar to exposure and self-control techniques (Wlodarczyk et al., 2016). In general, the evidence shows that practices regarding mindfulness have positive significant effects on a wide variety of problems and psychological processes.

Meta-analyses of mindfulness studies show that mindfulness-based practices regarding mood, anxiety and stress-related disorders present statistically significant improvements (Sampath, et al, 2019; Khoury et al., 2013; Vollestad, Nielsen, & Nielsen, 2012). Some attitudes in mindfulness have a role that increases or hinders success in the learning process. Kabat-Zinn (2001) states that mindfulness includes being patient, letting go, not being biased, trusting, being generous, being strong, being modest, and concentrating. Despite natural declines in physical and cognitive function, individuals at older ages report greater emotional resilience and emotional well-being than younger adults (Charles & Carstensen, 2019).

Raes et al. (2015) found that age-related reductions in negative affect were mediated by self-reported mindfulness. Other studies have associated self-reported mindfulness of individuals of older ages with cognitive and emotional well-being (Fiocca & Mallya, 2015), successful aging (de Frias, 2013), and protection against stress (de Frias & Whyne, 2015). Geiger et al. 2016). Other studies have associated self-reported mindfulness of individuals of older ages with cognitive and emotional well-being (Fiocca & Mallya, 2015), successful aging (de Frias, 2013), and protection against stress (de Frias & Whyne, 2015) (Geiger et al. 2016).

The studies investigating mindfulness in the young population are overwhelming. However, despite the increasing interest in the concept of mindfulness in the last 20 years, research concerning mindfulness in individuals of older ages is underresearched. Thus, the present study intends (1) to examine the effects of practices regarding mindfulness on depression, anxiety, and stress outcomes in older adults, (2) to emphasize the importance of continuing work in gerontology, and (3) to offer suggestions for future research. Moreover, it is aimed that the gap in the literature regarding the extent to which older adults are affected by mindfulness practices will be plugged. Examining the effects of mindfulness-based practices on the depression, anxiety, and stress outcomes of older adults is essential in that there will be an arrangement of psychological support programs to be given to older adults and raise awareness in the society.

2. METHOD

In this study, semi-structured experimental method was applied. 8-week sessions of approximately 80 minutes are planned with 12 participants over the age of 60. The effects of the mindfulness practice as an independent variable were examined. Thus, the depression, anxiety and stress scale was performed as a pretest in the first week before the sessions, and the same scale was performed as a posttest at the end of the study.

Participants

In this study, in which a convenience sampling model is conducted, the target population is individuals aged 60 and over. The participants are reached through the parents of 0-6 years old children attending the preschool in the Bayrampaşa district of Istanbul province. The grandparents of the students attending the school constitute the participants. A program has been planned with 15 grandparents over the age of 60. 12 of them declared that they could attend the program regularly. Of the participants, 12 grandmothers and 1 grandfather approved that they would participate. However, the grandfather did not accept attending the group work because he stated that he would not feel comfortable as the only man in the group.

The mean age of 12 participants was 67.67 (2.19). Regarding the level of education, 41.7% (n=5) of the participants are literate, 41.7% (n=5) are primary school graduates and 16.7% (n=2) are high school graduates. 25% (n=3) of the participants informed that they had a psychological disorder, and 9% (n=9) stated that they did not have any. While 66.7% (n=8) of the participants had physiological discomfort, 33.3% (n=4) did not. 16.7% (n=2) of the participants stated that their income is low, 58.3% (n=7) of them said that their income level is average, and 25% (n=3) of them stated that they have a high income. The distribution of the participants according to their demographic data is presented in Table 1.

Table 1

Distribution of Participants by Demographic Characteristics

Variable	n	%	\bar{x} (Ss)
Age	12	100,0	67,67 (2,1)
Level of Education			
Literate	5	41,7	
Primary	5	41,7	
Secondary	2	16,7	

Psychological Disorder		
Yes	3	25,0
No	9	75,0
Physiological Discomfort		
Yes	8	66,7
No	4	33,3
Level of Income		
Low	2	16,7
Average	7	58,3
High	3	25,0
Total	12	100,0

Data Collection Tools

Demographic Information Form which has been formed for this study, DASS Pretest and Posttest have been conducted.

Demographic Information Form

The Demographic Information Form has been prepared by the researcher to collect the data regarding the demographic information of the participants. The scale includes closed-ended and multiple-choice questions. Demographic information about the age, marital status, economic status, education level, province/district where the participant lived, and with whom he/she lived has been obtained.

DASS

The Depression Anxiety Stress Scale developed by Lovibond and Lovibond (1995) has been conducted before (Pretest) and after (Posttest) the mindfulness practice so that the effect of the mindfulness practices on the participants can be examined.

Data Collection and Analysis

Participants attended this study voluntarily. They have been ensured the confidentiality of the personal information they provided during the study. The data have been obtained in different sessions before and after the program on mindfulness practice.

The data have been analyzed using the SPSS 25 statistical package program. The analysis was based on a 95% confidence level. Quantitative The t-test, which is two independent variable tests, was conducted to analyze the difference between the two parametric groups in comparing the data. One-Way Analysis of Variance (ANOVA) test was employed to analyze the difference between parametric multigroup in comparison to quantitative data. The relationship between the scales was tested with Pearson Correlation analysis.

3. FINDINGS

Data analysis on the differences in the outcomes of participants regarding depression, anxiety, and stress has been conducted before and after the mindfulness practice by employing the SPSS 25 statistical package program. While the depression sub-dimension average has been calculated as 13.83 (2.92) before the practice, this score decreased to 3 (2.0) after the practice. Before the practice, the mean of anxiety sub-dimension was 11.83 (3.24). However, this score dropped to 1.92 (1.08) after the mindfulness practice. Regarding the stress sub-dimension, the mean before the practice was 13.58 (3.70). The score decreased to 1.58 (1.56) after the practice. Descriptive statistics of DASS scores are presented in Table 2.

Table 2

Descriptive Statistics of Participants' DASS Scores Before and After the Mindfulness Practice

Variable	Before the Practice			After the Practice		
	n	\bar{x}	Ss	n	\bar{x}	Ss
DASS-Depression	12	13,83	2,92	12	3,00	2,00
DASS-Anxiety	12	11,83	3,24	12	1,92	1,08
DASS-Stress	12	13,58	3,70	12	1,58	1,56

According to repeated measures ANOVA analysis, DASS depression scores indicated a significant difference between scores before and after the mindfulness practice, $F(1,11)=107,831$, $p<0.05$. Scores regarding depression decreased significantly after the practice. DASS anxiety scores before and after the mindfulness practice differ significantly. $F(1, 11)=114,960$, $p<0.05$. Anxiety scores decreased significantly after the practice. There is a significant change between DASS stress scores before and after the mindfulness practice $F(1, 11)=115.902$, $p<0.05$. Stress scores decreased significantly after the practice. The results of the comparison of the DASS scores of the participants before and after the mindfulness practice with the Repeated Measures ANOVA analysis are presented in Table 3.

Table 3

Results of Repeated Measurements ANOVA Analysis Before and After the mindfulness practice

Variable	F	sd	Estimation Error	p	Partial Eta Square
DASS-Depression	107,831	1	11	,00	,907
DASS-Anxiety	114,960	1	11	,00	,913
DASS-Stress	115,902	1	11	,00	,913

4. RESULTS, DISCUSSIONS AND SUGGESTIONS

In this study, the effects of mindfulness-based practices on the depression, anxiety, and stress outcomes of individuals of older adults have been examined. The data of this study were obtained as a result of the pre-test and post-test with the DASS scale applied to the grandmothers of 12 students aged 0-6 attending a preschool in Bayrampaşa district. T-test, ANOVA, and Pearson correlation methods have been conducted in the analysis of data. The findings of this study presented the effects of mindfulness-based practices on individuals on older adults. In addition, the results shed light on the regulations and further studies on this subject.

This study was conducted with parents with older ages. Parents were reached through the institution that provides education and care services for children with the 2-6 age group. Within the scope of this study, it has been aimed to carry out mindfulness and breathing exercises in order to enhance the living comfort and psychological well-being of older parents in the lives of children in the 2-6 age group. The 8-session program has been named as the mindfulness practice. During the 8-week session, breathing, focusing at the moment, safe place exercises are emphasized. Feedback on the practice of mindfulness in daily life was shared.

There is a significant difference between the depression, anxiety and stress scores of the participants before and after the mindfulness practice. Likewise, according to repeated measures ANOVA analysis, DASS depression, anxiety, and stress scores show significant differences between before and after the program. Since there is a significant positive difference between the depression sub-dimension mean score before (2.92) and after the program (2.0), it has been concluded that the mindfulness-based practice has a positive effect on the depression outcomes. This shows that the level of depression experienced by older adults can be reduced with mindfulness-based practices. In addition, these practices significantly reduce anxiety and stress scores. Therefore, it can be inferred that older adults who apply mindfulness practices in their lives have better psychological well-being than those who do not.

Aging is accepted as a physical and mental regression. It is thought that this period, as in all living things, is the weakening of the power to establish internal and external balance (Bilginer et al. 1996,168). Psycho-social support is of vital importance in this period when there is a multifaceted loss of power in human life. One of the many fields of study that will increase the well-being of the individuals with older ages and increase the quality of life is psycho-social support. Mindfulness practices also help individuals who deal with the feelings of anxiety and regret focusing on the moment (Demir ,2014 ; Germer, 2005 ;Gilbert,2005 ; Ginnivan ,2016 ;Ögel ,2012) Modern life is closely related to change and it is considered important to strengthen older adults who are struggling to adapt to daily life. The improvement in the quality of life of older adults, who play an essential role in intergenerational communication, and the decrease in depression, anxiety and stress levels make a positive contribution to themselves and then to their close family and grandchildren. Thus, it is recommended to increase the number of such practices for older adults. It is maintained that planning, implementing and disseminating similar studies by reaching these individuals through institutions and organizations such as schools, kindergartens, social care centers, nursing homes and social service centers. It is recommended for future studies to investigate the subject with children and adults.

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Ethics committee approval for this study was obtained from Sakarya University ethics committee with the decision dated 08.06.2022 and numbered 08.

Statement of Contribution of Researchers to the Article:
The authors contributed equally to the research and writing of the article.
Conflict of Interest Statement
There is no conflict of interest
Statement of Financial Support or Acknowledgment:
No financial support was received from any institution for this study. No Acknowledgment.