

# Journal of Experimental and Clinical Medicine https://dergipark.org.tr/omujecm



#### Research Article

J Exp Clin Med 2024; 41(3): 713-717 **doi:** 10.52142/omujecm.41.4.5

# Relationship between burden, well-being, time use and leisure satisfaction of formal elderly caregivers

Ercan TURAL<sup>1</sup>, Onur ALTUNTAS<sup>2</sup>, Hatice Nilden ARSLAN<sup>3</sup>,\*

<sup>1</sup>Department of Physiotherapy and Rehabilitation, Faculty of Health Sciences, Ondokuz Mayıs University, Samsun, Türkiye 
<sup>2</sup>Department of Occupational Therapy, Faculty of Health Sciences, Hacettepe University, Ankara, Türkiye 
<sup>3</sup>Department of Public Health, Faculty of Medicine, Ondokuz Mayıs University, Samsun, Türkiye

Received: 12.12.2024 • Accepted/Published Online: 23.12.2024 • Final Version: 31.12.2024

#### Abstract

This study was aimed to examine the relationship between burden, well-being, time management and leisure satisfaction among formal caregivers of elderly people. This study was conducted at Havza Nursing Home and Rehabilitation Center in Turkey with 136 formal caregivers. Data were collected by face to face interview. Zarit Burden Interview (ZBI), Care Giver Well-Being Scale (CWS), Time Management Inventory (TMI), Leisure Time Satisfaction Scale (LDS) were administered to individuals. There was positive statistically significant correlation between leisure satisfaction and wellbeing (p<0.05). A positive statistically significant correlation between caregiving burden and time management (p<0.05). There was negative statistically significant correlation was detected between total wellbeing and time management (p<0.05). There was negative statistically significant correlation between leisure satisfaction and time management (p<0.05). The relationship between caregiving burden and well being was not statistically significant (p>0.05). According to our findings, while leisure activities and time management gain importance in protecting the well-being of caregivers, it is also important to provide time management in preventing burden of caregivers.

Keywords: burden, caregivers, elderly, well-being, formal care

# 1. Introduction

Formal caregivers are people who provide care at a person's home or in a nursing home for a fee (1). Formal caregivers are faced with many issues that affect their psychological and mental well-being. Generally, they suffer from high levels of stress and frustration. They show a higher level of depression than the general population (2). They neglect their own care (they have lower self-care and preventive health behaviors than others) (3). The heavy burden of the caregivers who provide institutional care service, their work atmosphere, their relationships with their elderly people and their willingness to help can sometimes lead to tiredness, energy-losing stress, and exhaustion. The feelings and thoughts of professionals who provide institutional care affect the quality of the service, it's structure and also it's content (2,4).

Leisure is the time remaining from the work that an individual has to do in order to survive. This time can be devoted to socializing, building and maintaining relationships (friendship and close relationships), all kinds of entertainment, sports, hobbies, participation in political and social life, and volunteering (5). Leisure can be used for relaxation, leisure or personal growth. It also contributes to positive emotions, self-

preservation, creating meaning and purpose and subjective well-being (6,7). Leisure satisfaction has been defined by Beard and Ragheb as the positive satisfaction or emotions an individual in leisure activitie (8).

Findings reported in the literature are the hours that caregivers devote to care tasks (9). It is stated that working status has an effect on satisfaction with the use of time. It is also stated that an increase in responsibilities and working in difficult jobs cause a decrease in the time of the people and this causes less satisfaction with life. Additionally, working hours affect the balance of work life and the amount of free time allocated for leisure activities. Accordingly, there is a negative relationship between the average weekly hours spent at work and satisfaction with leisure use (9,10).

Research has also shown that individuals are negatively affected in many areas because of providing care other than psychosocial impact. It has been found that caregivers have lower general health levels and experience more emotional problems compared to non-caregivers (11,12). Caregiving significantly reduces opportunities to have a leisure lifestyle. (13). So, we planned this study to answer the question of how

time management and leisure time satisfaction are in the lives of caregivers who carry out this difficult task for salary, and whether there is a relationship between burnout and well-being. Our study findings can help the use of helpful facilities that motivate health professionals working with elderly individuals to participate in leisure activities, maintain their well-being and use their time effectively. Additionally, it can help understand the difficulties, problems and negative life events influencing caregivers and develop strategies to help in solving these problems.

# 2. Material and methods

# 2.1. The model of the research

This research is a cross-sectional study aimed at revealing the current situation.

# 2.2. Sample

This research was done in the Ministry of Family, Labor and Social Services of Samsun Provincial Directorate, Havza Nursing Home and Rehabilitation Center. One hundred and thirty six caregivers were included in the study to obtain a 95% confidence limit for the sample size and 80% test power. The inclusion criteria were being literate, caring for the elderly, and agreeing to participate after being informed. Exclusion criteria were having a physical or psychological illness that precluded understanding of the study and not agreeing to participate. Data were collected from interviews with caregivers between January and May 2019. Written informed consent was obtained from the participants for the study and approved by the local ethics committee (Decision No 2018/400).

#### 2.3. Measures

Demographic characteristics of participants included age, gender, marriage status, education level and also job satisfaction. Zarit Burden Interview was developed by Zarit and Zarit (14), translated and approved for Turkish culture (15). This scale objectively assesses the perceived impact of care on physical and emotional health, social activities, and financial status. Responses to twenty-two items were given on a five-point scale describing how each statement affected the individual. The total score ranges from 0 to 88. The higher the score, the greater the perception of maintenance-related load. According to the study of Smith et al. (16), heavy load scores between 61 and 88; moderate to severe, 41 to 60, moderate to mild, 21 to 40; and no load, scores are under 21 points 13.Berg-Weger was developed the Caregiver Well-Being Scale to measure the level of caregivers to meet their basic needs and fulfill their activities of living (Berg-Weger et al., 2000). Scale is made up of two subscales, namely, basic needs and activities of living. One of the subscales was physical needs like sleeping and eating but they also involve other kinds of needs like relaxing and personal development. The second sub-scale, activities of living, included some daily activities such as buying food, which a person has to do during the day, as well as leisure activities such as enjoying a hobby (17). The Turkish validity of the scale was done (18). An increase in the score obtained from the caregiver well-being scale means that the basic needs of the person are met and the level of fulfillment of their activities of living increases (17,18).

Britton and Tesser was developed Time Management Inventory (TMI) was used to determine time management skills (19). The inventory validated by Alay and Koçak (20) for the Turkish population. TMI consist of 27 bullet points with three subscales. They included 16 bullet points about time planning (TP), 4 bullet points about time-wasters (TW) and 7 bullet points about Time attitudes (TA). As in the original survey, each bullet point was scaled over 5 and there are five choices, which were always, often, sometimes, rarely and never. TP subscale in TMI represents long and short duration planning (for 1 day or week). It was reported that people who get a high score from this part are among the ones who use their time better and also the ones who are conscious of their time management. TA subscale involves bullet points about what does one do about his or her time management. It was accepted that people who get a high score from this part of the survey have good time management skills and they think about everything in a long duration. The total point taken these three parts gives the score of TMI. The maximum score can be taken from TMI is 135 and the minimum is 27 (19,20).

Leisure Satisfaction Scale (LSS) involves 51 bullet points consisting of six subscales, was used as a data collecting tool (8). Six subscales were psychological, educational, social, relaxation, physiological and aesthetic. A five-point Likert scale is used in the evaluation of scale items. (1= I don't really agree, 2= I rarely agree, 3= I sometimes agree, 4= I often agree, I almost always agree with that). The Cronbach alpha coefficient of the total scale was decided as 92. The Turkish validity of the scale was done by Karlı et al (21). The total point taken these six parts gives the score of LSS (8,21).

# 2.4. Data analysis

The socio-demographic information was analyzed through descriptive statistical methods. Qualitative data were expressed as numbers and percentages, and quantitative continuous groups were expressed as X±SD. Pearson's correlation coefficient was calculated to evaluate the relationship between various variables. A p value of 0.05 was considered statistically significant.

# 3. Results

There were 136 participants between the ages of 21 and 61 years. The average age of caregivers is 41.44±8.44 years. Among 136 people 77 (56.7%) were female and 59 (43.3%)was male. Participants sociodemographic datas were seen in Table 1.

The mean score of caregivers'burden was  $36.97 \pm 15.77$ . The mean total score of the caregivers'well-being was  $154.78\pm24.02$ , the score of basic needs subscale was  $77.62\pm13.49$  and the score of living activities subscale was  $76.87\pm12.54$ . The average score of leisure satisfaction was  $169.51\pm34.03$ . It was determined that the highest arithmetic mean value of the participants was in the psychological

dimension  $(40.49 \pm 7.08)$  and the lowest arithmetic mean was in the aesthetic dimension  $(17.00 \pm 4.79)$ . The total TMI score of the participants was  $77.46 \pm 13.40$ . In terms of sub-scales, the TP score was  $45.51 \pm 10.33$ , the TA score was  $19.26 \pm 3.90$ , and the TW score was  $12.34 \pm 3.39$ .

Table 1. Distribution of caregivers according to socio-demographic characteristics

	X±SS	
Age	41.44±8.44	
The Duration of Giving Care	8.43±5.36	
	n	%
Gender		
Female	77	56.7
Male	59	43.3
EducationStatus		
Primary School	64	47
High School	42	30.88
College	30	22.05
Marital Status		
Married	104	82.35
Single	24	17.64
Job Satisfaction		
Yes	126	92.64
No	10	7.35

There was no correlation between caregiving burden and caregivers' well-being (p>0.05). Additionally, there was no correlation between caregiving burden and leisure satisfaction. But a significant positive correlation was found between caregiving burden and time management (r: 0.301; p<0.05).

Table 2 shows the correlation between caregivers' well-being and leisure satisfaction. There was a significant moderate positive correlation between total LSS score and basic needs and living activities (r= 0.479 p<0.05; r=538 p<0.05, respectively). Significant positive correlation was found between basics needs subscale of wellbeing and psychological and physiological dimension (r=0.338p<0.05; r=0.475 p<0.05, respectively). There was a significant, moderate positive

correlation between living activities subscale of wellbeing and psychological, education, social and relaxing dimension (r= 0.497 p<0.05; r= 0.399 p<0.05; r= 0.324 p<0.05; r= 0.347p<0.05, respectively).

Table 3 shows the correlation between the caregivers' well-being and time management. There was a significant moderate negative correlation between total wellbeing and TMI, TP and TW scores (r-0.453p<0.05; r=-0.414p<0.05; r=-0.304p<0.05,respectively), and a significant, moderate negative correlation between basic needs subscale of wellbeing and TMI, TP and TW (r=-0.493 p<0.05; r=-0.442 p<0.05; r=-0.368 p<0.05,respectively). There was a significant, moderate negative correlation between living activities subscale of wellbeing and TMI and TP(r=-0.346 p<0.05; r=-0.315 p<0.05,respectively).

**Table 2.** The correlation between caregivers' well-being and leisure satisfaction

	Caregivers' Wellbeing	Scale
Leisure Satisfaction Scale	<b>Basic Needs</b>	Activities of Living
Psychological dimension	r= 0.338 p<0.05*	r= 0.497 p<0.05*
<b>Education dimension</b>	r= 0.270 p> 0.05	r= 0.399 p< 0.05*
Social Dimension	r= 0.226 p> 0.05	r= 0.324 p< 0.05*
Relaxing Dimension	r= 0.223 p> 0.05	r= 0.347 p< 0.05*
Physiological Dimension	r= 0.475 p< 0.05*	r= 0.409 p> 0.05
Aesthetic Dimension	r= 0.120 p> 0.05	r= 0.278 p> 0.05
Total Leisure Satisfaction Scale	r= 0.479 p< 0.05*	r= 0.538 p< 0.05*

<sup>\*</sup> p< 0.05

Table 4 shows the correlation between time management and the leisure satisfaction of caregivers. There was a significant negative correlation between leisure satisfaction and TMI, TP(r=-0.507 p=0.019; r=-0.523 p=0.015).

 Table 3. The correlation between the caregivers' well-being and time management

	Time Management Inventory				
Caregiver'Wellbeing Scale	Time Planning	Time Attitude	Time Wasters	Total Score	
Basic Needs	r= -0.442	r= -0.244	r= -0.368	r= -0.493	
	p< 0.05*	p> 0.05	p< 0.05*	p< 0.05*	
Living Activity	r= -0.315	r= -0.203	r= -0.215	r= -0.346	
	p< 0.05*	p> 0.05	p> 0.05	p< 0.05*	
Total Well-Being	r= -0.414	r= -0.236	r= -0.304	r= -0.453	
	p< 0.05*	p> 0.05	p< 0.05*	p< 0.05*	

<sup>\*</sup> p< 0.05

Table 4. The correlation between time management and leisure satisfaction

-0.507 0.019*	
r= -0.523 p= 0.015*	

<sup>\*</sup> p< 0.05

#### 4. Discussion

We investigated relation between caregiving burden, well-being, leisure satisfaction and time management of caregivers in nursing homes. It was found that there was no significant relationship between caregiver burden and wellbeing, leisure satisfaction. However, it was also decided that there was a relationship between caregiving burden and time management. It was also observed that there is a relationship between caregivers' wellbeing and time management and also leisure satisfactions. It also observed that there was a negative relationship between caregivers' time management and leisure satisfaction.

Results showed that mean score of the caregiving burden was found to be at a moderate to severe level and the mean score for well-being was at a good level. When previous studies were examined, a high burden of caregiving was identified in many studies (2, 16, 22). However, it was observed that caregiving burden was reported to be at a moderate level in three studies performed in Turkey, and caregiving burden was found to be low in the studies which were conducted in China, and India that have traditional values such as Turkey. Demirtepe and Bozo (18) was determined that well-being level of the caregivers was lower compared to noncaregivers, but our study revealed that well-being of the caregivers was at a good level. Caregiving is an act that is usually realized as a result of love. Respecting, committing and protecting elderly are among the important attitudes in Turkish traditions. You learn this behavior in childhood and apply it for the whole life. It was thought that even if they felt a caregiving burden, people who provided care could not express themselves because of respect toward the elderly or because of the traditional acts.

In a study, which is done by Or (23), the relationship between well-being and caregivers' burden is analyzed, it is seen that according to correlation analysis the relationship between well-being and burden of caregiver, there is a statistically negative relationship between them. Previous studies observed that the burden has a negative effect on well-being of caregivers (24, 25). In our research there was no relation between well-being and burden of caregivers'.

In our study, there was a negative relationship between time planning, time wasters and total time management and there is also a negative relationship between living activities, time planning and total time management. This result shows that there is an increase in basic needs of caregivers and there is a decline in time planning and general time management skills. Our results show that as time-wasters increase, caregivers become less likely to meet their basic needs and these effect well-beings of caregivers badly.

Freedom and leisure are products which can barely be experienced by caregivers. In a research which studies the caregivers' burden who take care of dementia patients, Zarit et al. (26) found that the biggest problem about providing care is the lack of sleep and lack personal time (a time which they spend for themselves). The US Aging Selection Committee said that caregivers tend to double their responsibilities and shorten their leisure to perform all maintenance tasks (27). Lack leisure personal time increases the burden of being a caregiver (25). In our study there is no significant relationship between the leisure satisfaction and caregiving burden. The exhaustion level of caregivers who participated our study, is low and because of that it is thought that their participation to social activities is not affected negatively. However, there is a positive relationship between living activities and leisure satisfaction in terms of psychology, education, social life, relaxing and this shows that people who do not have a heavy burden give more importance to their leisure and this effect their well-being in a positive way. Stevens (28) found that there is a relationship between leisure time satisfaction and wellbeing.

The limitations of the study are concerned, it should be borne in mind that the cross-sectional design and sample size may restrict the generalizability of the results. Caregiver's leisure satisfaction and time management was measured through self-report, and this may fail to reflect the objective nature of those variable in caregivers' day-to-day reality.

In our studies, it is emphasized that caregivers, who are among the relationship between the well-being of caregivers, their leisure satisfaction and time management, must keep their lives in balance in order to avoid burden. If people can maintain balance in their work and social lives and feel happy and feel good while doing that job, burden decreases at that rate. It is thought that it would be beneficial to adopt supportive approaches for these caregivers to achieve this balance. In further studies, it is thought that it will be useful to study caregivers' balance of social activities and the effectiveness of parameters.

# **Conflict of interest**

The authors declared no conflict of interest.

#### **Funding**

No funding was used for the study.

# Acknowledgments

None to declare.

#### **Authors' contributions**

Concept: E.T., O.A., Design: E.T., O.A., H.N.A., Data Collection or Processing: E.T., O.A., Analysis or Interpretation: E.T., O.A., H.N.A., Literature Search: E.T., O.A., H.N.A., Writing: E.T., O.A., H.N.A.

#### **Ethical statement**

The study was conducted in accordance with the Declaration of Helsinki 1975, revised in Hong Kong 1989. All the study procedures were approved by the Clinical Research Ethics Committee (OMUKAEK 2018/400) of Ondokuz Mayis University. Written informed consent was obtained from all participants in the screening program.

#### References

- Family Caregiver Alliance. Caregiver Statistics: Work and Caregiving. Accessed Nov 20th 2020. Available from: https://www.caregiver.org/resource/caregiver-statistics-work-and-caregiving/
- United States Department of Health & Human Services. Office on Women's health. Caregiver stress. Accessed Nov 24th 2020. Available from: https://www.womenshealth.gov/a-z-topics/caregiver-stress
- 3. Cynkar P. Mendes, E. More than one in six American workers also act as caregivers. Low-income, less educated Americans more likely to be caregivers. 2011, Available from: https://news.gallup.com/poll/148640/one-six-american-workers-act-caregivers.aspx
- 4. Day T. Guide to long term care plan. National care planning council long term care. 2014 Available from: https://www.longtermcarelink.net/article-2014-7-30.htm
- Davaki K. Differences in men's and women's work, care and leisure time European Parliament, FEMM Committee, Brussels. 2016.Availableat:https://www.europarl.europa.eu/RegData/etude s/STUD/2016/556933/IPOL STU(2016)556933 EN.pdf
- 6. Qian XL, Yarnal CM, Almeida DM. Does leisure time moderate or mediate the effect of daily stress on positive affect? An examination using eight-day diary data. J Leis Res. 2014;46(1):106-124.
- Brown JL, MacDonald R, Mitchell R. Are people who participate in cultural activities more satisfied with life? Social Indicators ResearchAn International and Interdisciplinary Journal for Quality of life Measurement. 2015; 122(1): 135-146.
- 8. Beard JG, Ragheb MG. Measuring leisure satisfaction. Journal of Leisure Research. 1980; 12(1), 20-33. doi: 10.1080/00222216.1980.11969416
- Gallant MP, Connell CM. Predictors of decreased self-care among spouse caregivers of older adults with dementing illnesses. J Aging Health. 1997 Aug;9(3):373-95. doi: 10.1177/089826439700900306. PMID: 10182399.
- 10. Schulz R, Beach SR. Caregiving as a risk factor for mortality: the Caregiver Health Effects Study. JAMA. 1999 Dec 15;282(23):2215-9.
- Brummett BH, Babyak MA, Siegler IC, Vitaliano PP, Ballard EL, Gwyther LP, Williams RB. Associations among perceptions of

- social support, negative affect, and quality of sleep in caregivers and noncaregivers. Health Psychol. 2006 Mar;25(2):220-5.
- Vitaliano PP, Zhang J, Scanlan JM. Is caregiving hazardous to one's physical health? A meta-analysis. Psychol Bull. 2003 Nov;129(6):946-72.
- 13. Dunn NJ, Strain LA. Caregivers at Risk? Changes in Leisure Participation. Journal of Leisure Research. .2001; 33(1):32-55.
- **14.** Zarit SH, Zarit JM. The memory and behavior problems checklist and the burden interview (technical report) University Park: Pennsylvania State University; 19 87.
- **15.** İnci F, Erdem M. Validity and Reliability of The Burden Interview and İts Adaptation to Turkish. Journal of Anatolia Nursing and Health Sciences. 2010;11(4):85-9.
- 16. Smith KJ, George C, Ferreira N. Factors emerging from the "Zarit Burden Interview" and predictive variables in a UK sample of caregivers for people with dementia- CORRIGENDUM. Int Psychogeriatr. 2019 Mar;31(3):437.
- 17. Berg-Weger M, Rubio DM, Tebb SS. The Caregiver Well-Being Scale revisited. Health Soc Work. 2000 Nov;25(4):255-63.
- **18.** Demirtepe D, Bozo Ö. Caregiver Well-being Scale: A study of validity and reliability. Turkish Psychological Articles. 2009; 12(23): 28-37.
- **19.** Britton BK, Tesser A. Effects of time management practices on college grades. Journal of Educational Psychology. 1991; 83(3): 405-10.
- **20.** Alay S, Koçak S. Validity and reliability of time management questionnaire. Journal of The Faculty of Education of Hacettepe University. 2002; 22(2): 9-13.
- Karlı Ü, Polat E, Yılmaz B, Koçak S. Reliability and validity study of leisure satisfaction scale (LSS-Long Version). Hacettepe J. of Sport Sciences. 2008; 19(2): 80-91.
- **22.** Pearlin LI, Mullan JT, Semple SJ, Skaff MM. Caregiving and the stress process: an overview of concepts and their measures. Gerontologist. 1990 Oct;30(5):583-94.
- 23. Or R. Yaşlıya Bakım veren aile bireylerinin bakım verme yükü ve bakım verenin iyilik hali (Yüksek Lisans Tezi). Pamukkale Üniversitesi Sağlık Bilimler Enstitüsü, 2013, Denizli.
- **24.** Stull DE, Kosloski K, Kercher K. Caregiver burden and generic well-being: opposite sides of the same coin? Gerontologist. 1994 Feb;34(1):88-94.
- **25.** Lopez-Anuarbe M, Kohli P. Understanding Male Caregivers' Emotional, Financial, and Physical Burden in the United States. Healthcare (Basel). 2019 May 22;7(2):72.
- **26.** Zarit SH, Reever KE, Bach-Peterson J. Relatives of the impaired elderly: correlates of feelings of burden. Gerontologist. 1980 Dec;20(6):649-55.
- 27. U.S. Select Committee on Aging. Exploding the myths: Caregiving in America (Committee Publication 99-611). Washington, DC: U.S. Government Printing Office. 1988. Available from: https://digitalcommons.usu.edu/govdocs/75/
- 28. Stevens AB, Coon D, Wisniewski S, Vance D, Arguelles S, Belle S, Mendelsohn A, Ory M, Haley W. Measurement of leisure time satisfaction in family caregivers. Aging Ment Health. 2004 Sep;8(5):450-9.