Original Research

The Relationship between Time Management and Leisure Time Satisfaction in Health Sciences Students

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Abstract

Objectives: The aim of the study is to examine time management and leisure time satisfaction in university students.

Materials and Methods: This study was conducted with 325 students. Time Management Inventory and Leisure Time Satisfaction Scale were used to assess students' time management and leisure activity satisfaction. Students' time management and leisure time satisfaction were compared according to accommodation, grade, and gender. Mann Whitney U test and Spearman Correlation Coefficient were used in statistical analyses.

Results: Time management scores were very moderately high and leisure time satisfaction scores were very high in students. Time management scores showed positive correlation with leisure time satisfaction score (p<0.05). The female students achieved higher scores in time management and leisure time satisfaction (p<0.05). The grade of the students did not significantly affect the leisure time satisfaction and time management scores of participants (p>0.05). Accommodation types of the participants make statistically significant difference in time management (p<0.05).

Conclusion: It is recommended that male students be encouraged to participate actively in both time management and leisure activities. Considering the accommodation types of the participants in time management trainings will also increase the applicability of the suggestions to be given. Studies in terms of increasing time management skills may be helpful.

Keywords: students, time management, leisure time, activities, life management

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Introduction

Time is a process that events come from past to present and follow each other to the future and it is an almost indescribable abstract concept that is felt by everyone, but cannot be touched (Passig, 2003). This concept has been involved in a number of fields like philosophy, psychology, education, physics and administration throughout history (Yavas et al., 2012). Time is an important resource that everyone has equally but spends in different ways (Paşa, 2002). As a relative concept, time management styles of people differ from each other (Bayramlı, 2006). Time management is the planning of our time in such a way to conduct activities that comprise our objectives, goals, social life and tastes all together (Özgen, 2000). Time management is very important and it may affect individual's overall performance and achievements (Nasrullah and Khan, 2015). A good time management will provide opportunities for individuals such as career planning and preparing for a better future, reading and learning more, closely following new developments and technology, allocating more time for family and other people, taking a rest, having fun, thinking, creating new ideas and launching new projects (Çağlıyan and Güral, 2009). On the other hand, failure in time management will decrease academic achievement, disable individuals to allocate sufficient time for other personal and social activities, and decrease life satisfaction (Campbell et al., 1992). Crist, Davis, and Coffin stated a good time management organization between leisure, self-care, and work is the base of a mentally healthy and active community (Crist et al., 2000).

Leisure is the time when individuals are free to enjoy their time as they wish, independent of efforts and actions that are compulsory for sustaining their life and reaching a higher level within their social structure. Activities that are performed in leisure period are considered to be very important for individuals to be happy in their lives and/or enjoy life. Thus, these activities could be performed by individuals themselves or with the involvement of other people in many ways (outdoor or indoor, active or passive participation, paid or unpaid (Kalkan, 2012). Many people that participate in these activities state that their recreative life is more pleasing than their business lives. A number of studies indicate a significant and positive relationship between the participation of individuals in leisure activities and their leisure time satisfaction (Turgut, 2012). Beard and Raghep (1980) state that leisure activities have a dynamic role in the life of individuals and they embrace the mental, physical, and social achievement, and overall happiness in their personal lives in relation with these activities. These researchers indicate that satisfaction of all known, defined and/or unknown, undefined expectations positively affects overall life satisfaction and leisure

time satisfaction of individuals. Life changes as growing old, attending a university, employment etc. alter an individual's time management strategies, force one's self to cope with new roles, responsibilities and adapt into new occupational balance.

Occupational therapists are concerned with the dynamic relationship between the person, environment, and occupation components of an individual's occupational performance (Law, Polatajko, Baptiste, et al., 1997). Person-centered intervention focuses on all three areas of occupation: self-care, productivity, and leisure. Individuals make their own choices about what to do in their spare time. In addition, satisfaction with these choices is determined individually. Therefore, in order to fully examine individuals' leisure pursuits, occupational therapists must evaluate not only the activities people participate in, but also their level of personal satisfaction with the chosen activities (Knox, 1998). The purpose of time management is not to increase the limited time, but to increase the quality of the activities done in the current time (Erdem, 1999). For this reason, it is possible for the individual to know himself/herself well in order to use the time well. The person will be able to use time effectively when he/she knows what his/her goals and objectives are and determines what to do and what not to do in planning. Time will be used effectively when it does not waste time on details and acts in accordance with the plan (Baltas and Baltas, 1987). Being able to manage time well, ensuring that it is efficient and effective will also make a difference in terms of the time people spend on resting, leisure time activities, and meeting their biological and physiological needs by affecting their whole life. Using time effectively and acting smartly and efficiently will also play a primary role in one's success (Canan, 1997).

Universities are required to educate individuals to be good at their professions and thus be useful to the society, because university students are candidates to set the future of their nation with their advanced education levels and qualified future positions. Thus, encouraging university students to participate in activities that are professionally, socially, physically and mentally necessary will make important contributions to being happier in education today and in business life in the future (Mansuroglu, 2002). Students that receive university education not only attend lessons, but also conduct a number of activities like doing research in regard to these lessons, organizing the results acquired through these studies, presenting the results in a report, preparing for their exams and taking these exams.

Attending a university can be a stressful experience for university students. The first stress resource is the transition from adolescent to adulthood (Dyson and Renk 2006). Arnett (2000) described this transition as emerging adulthood. Individuals ranged in 18 to 25 years

old tend to search their new identity relying to their transition; thus, they take many roles as full-time employment and university education. One of the stressors of university students is to arrange their time use throughout their new and increased roles.

In current literature, studies emphasize that time management and leisure time satisfaction are important for the lives of university students (Nasrullah et al, 2015; Beard et al., 1980; Turgut, 2012). However, there are limited studies on examining their relationship with each other. The purpose of this study was to investigate the association between time management and leisure time satisfaction and related variables such as gender, grade and accommodation.

Materials and Methods

This descriptive study was conducted with the purpose of determining time management and leisure time satisfaction of university students. The study was conducted among volunteer students from 1st, 2nd, 3rd and 4th grades of a public university in Ankara. Brochures explaining the study were hung in the different areas of the university, such as cafeterias and library. Volunteering students who fit the inclusion criteria were then selected for the study. Forms were filled in through face-to-face interviews with the students who agreed to participate in the study. The inclusion criteria were being a university student and volunteering to participate in the study. Exclusion criteria was determined as the absence of written consent. In order to conduct the study, a permission was obtained from the Ethical Committee of Hacettepe University Non-interventional Clinical Investigations and signed consent forms were taken from all participants.

Within the scope of the study, Socio-demographic Information Form was used for gathering information about the age, gender, grades and accommodation of students and Time Management Inventory for assessing time management skills; and Leisure Time Satisfaction Scale for evaluating the degree of satisfaction in leisure time usage.

Time Management Inventory (TMI) was developed by Britton and Tesser in 1991 (Britton and Tesser 1991). The TMI was tested in terms of validity and reliability by Alay and Koçak (2002). Cronbach alpha coefficient for TMI was 0.87 (Alay et al., 2002). This questionnaire involves 3 lower dimensions: Time planning, time attitudes and time spenders and a total of 27 items. Each item was graded on the basis of a five point likert scale involving the options "always, frequently, sometimes, rarely and never". Besides, as the items in the lower dimension of time spenders were "negative items"; the scoring has been reversed while

entering the data. High score obtained from this scale shows that time management applications are good. The score that can be obtained from the TMI varies between 27-135

(Britton et al., 1991; Alay et al., 2002; Basak, Uzun, Arslan, 2008).

The Leisure Time Satisfaction Scale (LSS) was developed by Beard and Ragheb to identify the leisure time satisfaction levels of the people in 1980. LSS has 51 items in its original form and the scale consists of 6 sub-dimensions (Beard and Ragheb, 1980). LSS added to Turkish literature after being conducted of validity and reliability studies by Karlı et al in 2008 that includes 39 questions and six sub-dimensions (psychologic, education, social, relaxation, physiologic, and aesthetic) (Karlı, Polat, Yılmaz, 2008). Cronbach alpha coefficient for LSS was 0.92. LSS was a five point Likert type scale (1 = Almost never valid for me, 2 = Rarely valid for me, 3 = Sometimes valid for me, 4 = Frequently valid for me, 5 = Almost always valid for me) and the highest point to be got from the scale was 195 and the lowest point was 39 (Beard et al., 1980; Karlı, et al., 2008).

Statistical Analyses

Statistical analyses were performed using the SPSS Windows Software Version 22.0. Variables were studied using visual (histograms, probability plots) and analytical methods (Kolmagorov-Simirnov or Shapiro-Wilk's test) to determine the distribution. According to the visual and analytical methods, the data showed no normal distribution. Statistical comparisons of the gathered data were conducted according to gender, grades and accommodation. Kruskal-Wallis test was used to analyze the difference between groups. In case of statistical difference between groups, Mann-Whitney U Test, which is used to determine the difference cause, and Bonferonni correction were added to determine statistical level of significance (this equals to division of p=0.05 with number of groups). Correlation coefficients for relations between parameters and statistical significance were calculated using Spearman test.

Results

Among 325 people that participated in our study, 223 (68.6%) were female and 102 (31.4%) were male. 36.0% of individuals (117) were in the 1st grade, 12.3% (40) in the 2nd grade, 29.5% (96) in the 3rd grade and 22.2% (72) in the 4th grade. Examining in terms of accommodation, on the other hand, it was determined that 12.3% of participants (40) were living in their homes with their families, 9.5% (31) living at home alone, 22.5% (73) stay in a

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state dormitory, 32.9% (107) living at home with their friends, 11.1% (36) stay in a private dormitory and 11.7% (38) stay in the university dormitory.

The total score in terms of time management of 325 participants was found to be 83.75±15.11. The total score of leisure time satisfaction of all participants was found 178.01±32.88.

Time management and leisure time satisfaction of participants with reference to their grades was compared and there was no statistically significant difference between the grades (p>0.05). Table 1 shows the comparison between the time management and leisure time satisfaction values according to grades.

Table 1. Comparison between Time Management and Leisure Time Satisfaction Values according to Grades.

	1st Grade	2 nd Grade	3 rd Grade	4 th Grade	р
	(n=117)	(n=40)	(n=96)	(n=72)	
Leisure time	170.35 ± 41.20	179.60 ± 23.02	184.03 ± 24.08	181.56 ± 30.56	0.90
satisfaction					
scale					
Time	82.55 ± 16.13	85.70 ± 11.93	84.78 ± 13.46	83.20 ± 17.03	0.09
management					
inventory					

Comparing time management and leisure time satisfaction and of participants in relation to accommodation, it was determined that there was a difference only in terms of time management and no statistically significant difference in terms of the other parameters (p>0.05). According to the Mann Whitney U test, it was determined that this difference in terms of time management was caused by students who live in a house with their friends and stay in another state dormitory (p<0.008) and live with their family and live with their friends (p<0.008). Table 2 shows the comparison between the time management and leisure time satisfaction values in terms of accommodation.

Table 2. Comparison between the Time Management and Leisure Time Satisfaction Values according to Accommodation.

	Live with	Live in a	Stay in	Live in a	Stay in the	Stay in the	p
	my	house	another	house with	private	university	
	parents	alone	state	my friends	dormitory	dormitory	
	(n=40)	(n=31)	dormitory	(n=107)	(n=36)	(n=38)	
			(n=73)				
Time	90.00 ±	79.16 ±	81.31 ±	82.60 ±	86.22 ±	86.42 ± 13.06	0.03*
Management	11.73	19.03	20.06	12.45	12.45		
Inventory							
Leisure Time	$187.10 \pm$	$179.96 \pm$	$174.13 \pm$	175.23	$179.55 \pm$	180.71 \pm	0.76
Satisfaction	25.77	26.78	43.30	± 32.66	26.73	25.49	
Scale							

^{*}p<0.05

Comparing the time management and leisure time satisfaction of participants according to gender, it was determined that there was a difference between genders in terms of time management and leisure time satisfaction (p<0.05). Table 3 shows the comparison between the time management and leisure time satisfaction values according to gender.

Table 3. Comparison between the Time Management and Leisure Time Satisfaction Values according to Gender.

	Female	Male	p	
	(n=223)	(n=102)		
Time management	84.65 ± 16.17	81.75 ± 12.34	0.02*	
inventory				
Leisure time satisfaction	180.60 ± 33.17	172.36 ± 31.66	0.009*	
Scale				

^{*}p<0.05

Considering the relationship between all parameters in terms of time management, leisure time satisfaction, age and grade; a positively weak relationship was determined between time management and leisure time satisfaction (r: 0.391; p: 0.001). It was also determined that there was a positively weak relationship between leisure time satisfaction and

grade (r. 0.157; p: 0.001). Table 4 shows the relationship between time management, leisure time satisfaction, and socio-demographic information.

Table 4. Relationship between Time Management, Leisure Time Satisfaction, Age and School Grade.

		Time	Leisure time	
	management		satisfaction	
Age	rho	036	.029	
-	p	.513	.590	
Grade	rho	.028	.157	
	р	.617	.001*	
	rho	-	.391	
Time -	p	-	.001*	

^{*}p<0.05

Discussion

The purpose of this research is examining the correlations between university students' time management and leisure time satisfaction. In addition, the research tests whether there are significant differences between university students' time management and leisure time satisfaction in terms of gender, grade and accommodation state. The study findings show that there is a positive relationship between the time management and leisure time satisfaction of university students. Assessing the study results within the time management, a significant difference has been observed gender and accommodation state variables. Examining the study results within the leisure time satisfaction, a significant difference has been observed gender variables.

In our study, it was seen that the scores (83.75 \pm 15.11) obtained by the students in TMI was similar to other time management studies conducted with university students (Altuntaş, Kayıhan, 2013; Alay et al., 2003; Başak et al., 2008; Eldeleklioğlu, 2008; Yavaş et al., 2012). The total score obtained by the students from the overall TMI is at a moderate level and it can be stated that students need to improve their time management skills. In the current study, the scores (178.01 \pm 32.88) obtained from the LSS, it can be said that the students got high scores in terms of the general average of the scale. This indicates that the participants'

leisure time satisfaction is high. This result is similar to the results of other studies on this subject (Kocaman-Karoğlu, Atasoy, 2018; Cetinkaya, Nese Sahin, Yariz, 2017).

It was determined that student grades did not have any effect on time management and leisure time satisfaction. It has been determined that the time management and leisure satisfaction levels of all students are similar on a grade basis. In a study conducted by İşcan (2008), it is stated that there is no difference between the time management skill levels of students at different grade levels. Dikmetaş, Erdem, and Pirinçci (2003) found that students' time management scores did not differ according to the class variable. In our study, although there was no difference between the classes, it was seen that the students studying in the first grade had the lowest level of time management and leisure time satisfaction. It can be argued that especially first-year students' new acquaintance with the environment they live in, encountering a social environment they have never been to before, and not leaving their families recently are effective in this process (Çağlıyan et al., 2009). The protective attitude of families causes difficulties in children's adaptation to the environment in the first years of university (Bülbül, Güvendir, 2014). When they are in their senior years, this adaptation skill is improved, but at this time the stress of job seeking, worries about professional life after graduation emerges.

As a result of our study, it was determined that there was a difference in the time management skills of the participants according to the type of accommodation. There was also a difference between students living in their homes with their families and in a home with their friends, which is thought to be associated with the parental expectation in the Turkish culture from children to finish their school and thus take a job as soon as possible as well as the maximum support that is provided for students living with their families. Similarly, the difference between students who live in their homes with their families and in a state dorm was in favor of students who live with their families, which is believed to be associated with family support. According to the results obtained, it is considered beneficial to plan awareness training both for families and students to help them use time more efficiently and to emphasize the importance of activities that can be done in their leisure times. In a study conducted by Başak et al. (2008), it was stated that students who stay with their families are more successful in time management. In a study conducted by Gümüş (2021), it was stated that there was no significant relationship between living place and time management. Ocak and Boyraz (2016) stated in their study that there was no significant relationship between accommodation and time management.

Another significant result is that accommodation is not very effective upon leisure time satisfaction, which is thought to be astonishing, because it was determined that there was no difference between students who live at home with their families and at home alone in terms of leisure time satisfaction. Examining a number of studies, it can be indicated that family is an important factor affecting the participation in leisure time activities. According to the model developed by Crawford and Godbey (1987), interfamily relations is one of the factors that affects participation in leisure time physical. In their study, Altergoot and Mccreedy (1993) determined that family structure and gender played an important role among factors that affect the participation of individuals in leisure time activities.

In terms of gender, female students were able to manage time much better and thus, satisfy their leisure time more efficiently. It could be concluded that female students are more successful in general time management, which shows a parallelism with the study findings of Macan et al. (1990) and Nelson and Nelson (2003). Both studies suggest that female students manage time better than male students. The findings of Trueman and Hartley (1996) revealed that female students reported considerably greater time management skills than male students. As a result of a study that was conducted by Eldelikoğlu (2008), it was determined that female students had significantly higher levels of time management skills than male students (Eldelikoğlu, 2008). In our study, it was determined that there was a difference between genders in terms of leisure time satisfaction and women had better levels of leisure time satisfaction compared to men. It is thought that the female students participating in our study have better time management skills and more efficient time management, allowing them to spend more time on leisure activities. As a result of his study, Kabanoff (1982) stated that women had a higher need for leisure time especially concerning social interaction, whereas men had a more dominant level of leisure time satisfaction compared to women. In contrast with the findings of our study, Ardahan et al. (2010) revealed that there was no difference between the leisure time satisfaction levels of female and male participants according to gender. Misra and Mckean (2000) stated that male students had a higher level of satisfaction in leisure time activities compared to female students. As a result of a study that was conducted by Lu and Hu (2005), it was determined that female and male participants showed no difference in terms of leisure time satisfaction according to gender (Lu and Hu 2005).

It was determined that, as the grades of students who participated in our study increased, it was seen that they satisfied their leisure time better, which is associated with students' adaptation to both the school and friends in the course of time. However,

considering the issue of time management, no relationship was determined between grades, age, and time management of students that participated in our study. As a consequence, it is recommended that further studies that will investigate the reasons for this condition be conducted.

In their study, Başak et al. (2008) suggest that there is no relationship between time management of students in terms of their grades; however, the older they get, the better they manage time. Eldeleklioğlu determined that time management skills showed no significant difference according to age. Misra and Mc Kean (2000) conducted a study with university students, which indicated that time management skills show a tendency to increase with age and grade.

The limitation of this study is that academic achievements of individuals that participated in the study were not recorded. In studies concerning leisure time satisfaction, it is observed that students consider leisure time activities a waste of time and thus, they prefer not to participate in such activities on the plea of having no time. In our study, on the other hand, it was observed that individuals with better time management skills had better participation in such activities. If academic achievements of these students had also been recorded, the awareness could have been increased by giving more concrete information about how the participation in such activities would affect academic achievement.

Conclusion

As a consequence, it is observed that there is a positive relationship between time management skills and leisure time satisfaction of university students. It is thought that it would be beneficial to prepare programs that will encourage male students to participate in both time management and leisure time activities. It is thought that considering the accommodation status of the students participating in the time management trainings to be prepared for university students will be supportive in the implementation of the suggestions to be given. It is also thought that if communities/clubs in universities organize activities that will boost time management skills. At the same time, our suggestion is that students in various departments who are trained in time management planning be encouraged by the university administrations to get peer support and organize activities together and prepare appropriate conditions for it.

References

- Alay, S., & Kocak, S. (2002). Validity and reliability of time management questionnaire. *Hacettepe University Faculty of Education Journal*, 22(22), 9-13.
- Altergott, K., & McCreedy, C.C. (1993). Gender and family status across the life course: constraints on five types of leisure. *Loisir et Société/Society and Leisure*, 16(1), 151-179.
- Altuntaş, O., &Kayıhan, H. (2013). Üniversite öğrencilerinin zaman yönetimi farkındalıklarının incelenmesi. *Ergoterapi ve Rehabilitasyon Dergisi*, 1(2), 47-53.
- Ardahan, F., & Lapa, T. Y. (2010). Üniversite öğrencilerinin serbest zaman tatmin düzeylerinin cinsiyete ve gelire göre incelenmesi. *Hacettepe Spor Bilimleri Dergisi*, 21(4), 129-136.
- Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist*, 55(5), 469-480.
- Baltaş, A., & Baltaş, Z. (1987). *Başarılı ve sağlıklı olmak için stres ve başarma yolları*. 5. Baskı, Remzi Kitapevi, İstanbul.
- Başak, T., Uzun, Ş., & Arslan, F. (2008). Hemşirelik yüksek okulu öğrencilerinin zaman yönetimi becerileri. *TAF Preventive Medicine Bulletin*, 7(5), 429-434.
- Bayramlı, Ü. Ü. (2006). Zaman Yönetimi. Ankara: Nobel Yayın.
- Beard, J. G., & Ragheb, M. G. (1980). Measuring leisure satisfaction. *Journal of Leisure Research*, 12(1), 20-33.
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83(3), 405-410.
- Bülbül, T., & Güvendir, M. A. (2014). Üniversite birinci sınıf öğrencilerinin yükseköğretim yaşamına uyum düzeylerinin incelenmesi. *Eğitim Bilimleri Araştırmaları Dergisi*, 4(1), 397-418.
- Campbell, R.L., Svenson, L.W., & Jarvis, G. K. (1992). Perceived level of stress among university undergraduate students in Edmonton, Canada. *Perceptual and Motor Skills*, 75(2), 552-554.
- Canan, İ. (1997). Vakti en iyi değerlendirme: İslam'da zaman tanzimi. İstanbul: Cihan Yayınları.
- Cetinkaya, G., Nese Sahin, F., & Yariz, K. (2017). Leisure satisfaction level of active and passive participation in outdoor recreation activities and its relationship with public health. *Acta Medica Mediterranea*, 33, 191-196.
- Crawford, D. W., & Godbey, G. (1987). Reconceptualizing barriers to family leisure. *Leisure Sciences*, 9(2), 119-127.
- Crist, P. H., Davis, C. G., & Coffin, P. S. (2000). The effects of employment and mental health status on the balance of work, play/leisure, self-care, and rest. *Occupational Therapy in Mental Health*, 15(1), 27-42.
- Çağlıyan, V., & Güral, R. (2009). Zaman yönetimi becerileri: meslek yüksek okulu öğrencileri üzerine bir değerlendirme. *Karamanoğlu Mehmetbey Üniversitesi Sosyal ve Ekonomik Araştırmalar Dergisi*, (2), 174-189.
- Dikmetaş, E., Erdem, R., & Pirinçci, E. (2004). Üniversite öğrencilerinin zaman yönetimi davranışları ve bu davranışların akademik başarı ile ilişkisi. *Manas Üniversitesi Sosyal Bilimler Dergisi*, http://yordam.manas.kg/ekitap/pdf/Manasdergi
- Dyson, R., & Renk, K. (2006). Freshmen adaptation to university life: depressive symptoms, stress and coping. *Journal of Clinical Psychology*, 62(10), 1231–1244.
- Eldeleklioğlu, J. (2008). Investigation of adolescents' time-management skills in terms of anxiety, age and gender variables. *Elementary Education Online*, 7(3), 656-663.
- Erdem, R. (1999). Yöneticiler için zaman yönetimi. Modern Hastane Yönetimi Dergisi, 3(7), 26-31.
- Kabanoff, B. (1982). Occupational and sex differences in leisure needs and leisure satisfaction. *Journal of Organizational Behavior*, 3(3), 233-245.
- Gümüş, A. (2021). Zaman yönetimi becerileri ile akademik başarı arasındaki ilişki: Van Yüzüncü Yıl Üniversitesi Örneği. *Uluslararası Akademik Birikim Dergisi*, 4(1).
- İşcan, S. (2008). Pamukkale Üniversitesi öğrencilerinin zaman yönetimi becerilerinin akademik başarıları üzerindeki etkisi (Yüksek lisans tezi). Pamukkale Üniversitesi Sosyal Bilimler

- Enstitüsü Yüksek Lisans Tezi Eğitim Bilimleri Anabilim Dalı Eğitim Yönetimi Denetimi Planlaması ve Ekonomisi Bilim Dalı, Denizli.
- Kalkan, A. (2012). Açık alan rekreasyonu, doğa sporlari yapan bireylerin bu sporları yapma nedenleri: Antalya örneği (Yüksek Lisans tezi). Akdeniz Üniversitesi Sosyal Bilimler Enstitüsü, Spor Yöneticiliği Ana Bilim Dalı, Antalya.
- Karlı, Ü., Polat, E., Yılmaz, B., & Koçak, S. (2008). Serbest Zaman Tatmin Ölçeği'nin (SZTÖ-Uzun versiyon) geçerlilik ve güvenilirlik çalışması. *Spor Bilimleri Dergisi*, 19(2), 80-91.
- Kocaman-Karoğlu, A., & Atasoy, B. (2018). Sosyal medya kullanımı ile serbest zaman tatmini arasındaki ilişki. *Mersin Üniversitesi Eğitim Fakültesi Dergisi*, 14 (2), 826-839.
- Knox, S.H. (1998). *Treatment through play and leisure*. In ME Neistadt, EB Crepeau (eds). Willard and Spackman's Occupational Therapy (9th edition). Philadelphia, PA: Lippincott, pp. 382–90.
- Law, M., Polatajko, H., Baptiste, S., & Townsend, E. (1997). *Core concepts of occupational therapy*. In Canadian Association of Occupational Therapists, Enabling Occupation: An Occupational Therapy Perspective. Ottawa, ON: CAOT Publications ACE, pp. 29–56.
- Lu, L., & Hu, C. H. (2005). Personality, leisure experiences and happiness. *Journal of Happiness Studies*, 3, 325-342.
- Macan, T. H. (1994). Time management: Test of a process model. *Journal of Applied Psychology*, 79(3), 381-391.
- Mansuroglu, S. (2002). Determination of leisure characteristics and outdoor recreation tendencies for students of Akdeniz University. *Akdeniz University Journal of Faculty of Agriculture*, 15(2), 53-62.
- Misra, R., & McKean, M. (2000). College students'academic stress and its relation to their anxiety, time management, and leisure satisfaction. *American Journal of Health Studies*, 16(1), 41-51.
- Nasrullah, S., & Saqib Khan, M. (2015). The impact of time management on the students' academic achievements. *Journal of Literature, Languages, and Linguistics*, 11(1), 66–71.
- Nelson, D. B., & Nelson, K. W. (2003). Emotional intelligence skills: Significant factors in freshmen achievement and retention. 1-22. The American Counseling Association Conference, March 21-25, 2003 (Oral presentation), Anaheim, CA. https://files.eric.ed.gov/fulltext/ED476121.pdf
- Ocak, G., & Boyraz, S. (2016). Examination of the relation between academic procrastination and time management skills of undergraduate students in terms of some variables. *Journal of Education and Training Studies*, 4(5), 76-84.
- Özgen, C. (2000). Etkili Zaman Yönetimi. Ankara: Bilkent Üniversitesi Yayınları.
- Sabuncuoğlu, Z., & Paşa, M. (2002). Zaman Yönetimi. Bursa: Ezgi Kitapevi.
- Trueman, M., & Hartley, J. (1996). A comparison between the time-management skills and academic performance of mature and traditional-entry university students. *Higher Education*, 32(2), 199-215.
- Turgut, T. (2012). Suya dayalı rekreasyon ve Antalya ilinde suya dayalı rekreasyon alanında faaliyet gösteren işletmelerin profillerini belirlemeye yönelik bir uygulama (Yayınlanmamış Yüksek Lisans Tezi). Akdeniz Üniversitesi Sosyal Bilimler Enstitüsü, Antalya.
- Yavaş, Ü., Öztürk, G., Açıkel, C. H., & Özer, M. (2012). Tıp fakültesi öğrencilerinin zaman yönetimi becerilerinin değerlendirilmesi. *TAF Preventive Medicine Bulletin*, 11(1), 5-10.