SPORMETRE
The Journal of Physical Education and Sport Sciences
Beden Eğitimi ve Spor Bilimleri Dergisi

DOI: 10.33689/spormetre.1554786
Research article

Geliş Tarihi (Received): 23.09.2024 Kabul Tarihi (Accepted): 15.03.2025 Online Yayın Tarihi (Published): 30.03.2025

BENEFIT OBTAINED FROM LEISURE ACTIVITIES AND PERCEIVED WELL-BEING: A SAMPLE OF PREGNANT WOMEN

Anıl Siyahtaş[1*], Gamze Fışkın Siyahtaş[2]
[1]Türkiye Futbol Federasyonu, İstanbul, Türkiye
[2]Marmara Üniversitesi, Sağlık Bilimleri Fakültesi, İstanbul, Türkiye

Abstract: Nowadays, the importance of leisure has increased, and the efficient utilisation of this period of time has brought many benefits such as increasing motivation, psychological well-being or adaptation to vital changes. Since pregnancy is characterised as a period in which women's emotional or individual characteristics can change, it is important that they are directed to areas in which they can benefit. In this direction, this study aimed to determine the relationship between pregnant women's leisure benefits and their perceived well-being. The population of the online study designed according to the relationship screening model consisted of all pregnant women over the age of 18 in Turkey. The sample consisted of 382 pregnant women who met the inclusion criteria between May-November 2022 (n=382). Pregnant Women Information Form, Leisure Benefit Scale (LBS) and Wellness Self Perceptions Scale (WSPS) were used to collect the data. Data that did not fit the normal distribution were analysed with Mann Whitney U, Kruskal Wallis and Spearman correlation tests. According to the research results, it was determined that the leisure benefit levels (94.72±13.79) and well-being (47.69±8.36) of pregnant women with a mean age of 28.20 (±4.85) were at a high level. On the other hand, it was found that income and educational status, parity, employment status or the activities they performed affected the leisure benefits and well-being, and there was a significant relationship between these two phenomena. In the study, it was concluded that the well-being of pregnant women increased with the increase in their leisure benefit levels, and it is recommended that studies should be conducted to raise awareness and encourage leisure activities to have a healthy pregnancy period.

Keywords: Pregnant women, leisure benefits, perceived well-being

SERBEST ZAMAN AKTİVİTELERİNDEN ELDE EDİLEN FAYDA İLE ALGILANAN İYİLİK: GEBE KADINLAR ÖRNEĞİ

Öz: Günümüzde serbest zamanların önemi artmış, bu zaman diliminin verimli bir şekilde değerlendirilmesi motivasyonu arttırma, psikolojik açıdan iyi hissettirme ya da yaşamsal değişimlere adaptasyonu sağlama gibi birçok faydayı da beraberinde getirmiştir. Gebelik, kadının emosyonel ya da bireysel özelliklerinin değişebildiği bir dönem olarak nitelendirildiğinden fayda sağlayabileceği alanlara yönelmeleri önem taşımaktadır. Bu doğrultuda araştırmanın amacı gebelerin serbest zamandaki faydaları ile algıladıkları iyilik hali arasındaki ilişkinin belirlenmesidir. İlişki tarama modeline göre tasarlanan online araştırmanın evrenini Türkiye'deki 18 yaş üzerindeki tüm gebe kadınlar oluşturmaktadır. Örneklem ise; Mayıs-Kasım 2022 tarihleri arasında çalışmaya dâhil edilme kriterlerini karşılayan 382 gebeden oluşmuştur (n=382). Verilerin toplanmasında Gebe Bilgi Formu, Rekreasyon Fayda Ölçeği (RFÖ) ve İyilik Hali Kendini Algılama Ölçeği (İHKAÖ) kullanılmıştır. Normal dağılıma uymayan veriler Mann Whitney U, Kruskal Wallis ve Spearman korelasyon testleri ile analiz edilmiştir. Araştırma bulgularına göre; yaş ortalaması 28.20(±4.85) olan gebelerin serbest zaman fayda düzeylerinin (94.72±13.79) ve iyilik hallerinin (47.69±8.36) yüksek düzeyde olduğu tespit edilmiştir. Diğer yandan gelir ve eğitim durumu, gebelik sayısı, çalışma durumu ya da aktiviteleri yaptıkları kişilerin serbest zamanda elde edilen fayda ve iyilik hallerini etkilediği, bu iki olgu arasında anlamlı ilişkinin olduğu bulunmuştur. Araştırmada gebelerin serbest zaman fayda düzeylerinin artmasıyla iyilik hallerinin de arttığı sonucuna varılmış olup, sağlıklı bir gebelik dönemi geçirebilmeleri için serbest zaman etkinlikleri konusunda farkındalık yaratmaya ve teşvik etmeye yönelik çalışmaların yapılması önerilmektedir.

Anahtar Kelimeler: Gebe kadınlar, serbest zaman faydaları, algılanan iyilik

[*] *Sorumlu Yazar: Anıl Siyahtaş, E-mail: anil.siyahtas@hotmail.com*

INTRODUCTION

Pregnancy is an adaptation period in which a number of biophysiological changes are experienced to ensure that fetal development continues in good health (Fiskin et al., 2017). In this respect, various suggestions are given to women for adaptation to the changes experienced during pregnancy, to increase the level of healthiness or improve the emotional state. Among these recommendations frequently used by health professionals is the organisation of physical activity programmes (Smith et al., 2017). Although studies clearly demonstrate the potential benefits of physical activities during pregnancy on maternal and child health, pregnancy is defined as a period of increased sedentary behaviours due to physical, individual and clinical determinants (da Silva et al., 2017; Haakstad et al., 2018). Therefore, the American College of Obstetricians and Gynaecologists recommends that pregnant women who are not at risk should engage in moderate-intensity activity for an average of 20-30 minutes a day, several times a week (ACOG, 2015).

Generally, activities which are safe and beneficial for the woman and foetus and do not increase the risk of adverse pregnancy outcomes are considered to be very important activities for both physical and psychological well-being of pregnant women (da Silva et al., 2017; Lindqvist et al., 2016). Physical exercise offers benefits such as gestational weight gain control, fitness, alleviation of complaints such as low back pain, pelvic girdle pain and urinary incontinence, prevention of gestational diabetes, reduction of the risk of gestational hypertension and pre-eclampsia, and physical well-being. It can also contribute to the termination of sedentary life, which is seen as a global public health threat and ranks in the top four among the causes of mortality (da Silva et al., 2017).

As a result of hormonal and psychological fluctuations during pregnancy, women are reported to be emotionally worn out or have negative health outcomes. In order to correct this emotional state, which can cause complications such as premature birth, gestational hypertension, fetal or neonatal distress, pregnant women are more likely to engage in social, cultural or sportive activities (Rabiepour et al., 2019). Studies have shown that individuals who make leisure time activities a lifestyle have beneficial effects on psychological health such as emotional and mental well-being, self-image and mood stability (da Silva et al., 2017; Lindqvist et al., 2016; Haakstad et al., 2018).

Leisure time is defined as the time left after the fulfillment of physiological needs and obligatory work to sustain life. In other words, it is defined as the period that individuals can cope with stress, have fun, meet their needs and relax (Karaderi, 2021). In this respect, moderate exercises, weekend trips, social or cultural activities can be considered as leisure activities in pregnant women (Lindqvist et al., 2016; Haakstad et al., 2018). During leisure activities, it is expected to provide various benefits as it is aimed to provide happiness and satisfaction, reduce stress levels by getting away from problems and increase the quality of life (Cai and Davenport, 2022). Obtaining physiological as well as psychological positive benefits supports the view that leisure activities are essential for the health of the fetus and the expectant mother (da Silva et al., 2017).

The study was planned to be conducted based on the idea that the pregnancy period should be seen as an opportunity to encourage positive health behaviours, to increase awareness and to benefit the care services of health professionals. Although there were studies on the subject, the fact that there were a very limited number of studies examining the relationship between the benefit obtained and well-being is considered as the strength of this study.

METHODS

Research Design

This study, which was designed following the relational screening model, one of the quantitative research methods, was aimed to determine the relationship between the benefits of leisure activities and the perceived well-being of pregnant women. The correlational survey design is a research model that aims to determine the existence or degree of change between two or more variables (Karasar, 2020).

Universe and Sample in Research

The universe of the study consisted of all pregnant women over the age of 18 in Turkey, and the sample consisted of those who met the inclusion criteria between May and November 2022. Data were collected by convenience sampling method. According to the calculation of the unknown sample, 377 pregnant women should be included in the study with a 95% confidence interval and 5% margin of error, and 382 pregnant women were reached since it was thought that there might be data losses. It was determined that there was no data loss and the study was completed with a total of 382 pregnant women (n=382).

Inclusion and Exclusion Criteria

Questionnaires prepared through Google forms were sent online to the most preferred social media platforms across Turkey and pregnant women who met the research criteria were included in the study. The inclusion and exclusion criteria are as follows:
All pregnant women aged 18 years and older who had at least literate education, were able to perform physical activity, had internet access, and declared that they were willing to participate in the study were included in the sample. Pregnant women on bed rest and foreign nationals were not included in the study.

Data Collection Tools

The questionnaires prepared through Google Forms were distributed on the most widely used social media platforms in Turkey the data were collected online. Pregnant Women Information Form, Leisure Benefit Scale (LBS) and Wellness Self Perceptions Scale (WSPS) were used to collect the study data. Filling out the questionnaires took an approximately 10-15 minutes.

Pregnant Women Information Form: The form consisted of socio-demographic, obstetric and a total of 17 questions deemed necessary for the research. The questions were prepared by the researchers following the literature (da Silva et al., 2017; Lindqvist et al., 2016; Haakstad et al., 2018).

Leisure Benefit Scale (LBS): The scale developed by Ho (2008), and adapted into Turkish by Akgul, Karaküçük and Ertüzün in 2018, consisted of 24 items and 3 sub-dimensions: Physical, Psychological and Social (Ho, 2008; Akgul et al., 2018). The Cronbach Alpha value of the scale was calculated as .83, and the reliability coefficients of the sub-dimensions were found to be .81, .80, and .86, respectively. The scale was a 5-point Likert-type scale with a minimum score of 24 and a maximum score of 120 ('strongly disagree, disagree, agree, neutral, agree, strongly agree'). The increase in the score obtained from the scale means that the benefit gained also increases.

Wellness Self Perceptions Scale (WSPS): The Turkish validity and reliability of the scale, originally named "Wellness Self Perceptions Scale" prepared by Corbin et al. was conducted

by Odabaş (2017) (Corbin, 2005; Odabaş, 2017). The Cronbach Alpha value of the scale was calculated as .86 (Odabaş, 2017). The scale has 5 sub-dimensions: Emotional, Mental, Physical, Social and Spiritual, and each sub-dimension consisted of 3 items. The scale consisted of 15 items in total and was 4-point Likert type (strongly agree, agree, disagree, strongly disagree). A cut-off score of 6 for the subgroups and 30 for the total score was determined and graded according to these scores. As the score obtained from the scale increases, the perceived well-being also increases.

Data Analysis

The research data was analysed using SPSS 29.0 package programme. Descriptive statistics (mean, standard deviation, minimum, maximum, number and percentage) were used in the study. Since the data did not show normal distribution in the Kolmogorov Smirnov-Shapiro Wilks normality analyses, non-parametric tests were used. Mann Whitney U for independent paired groups and Kruskall Wallis tests for more than two groups were used. The relationships between variables were analysed with Spearman correlation test. The significance level was determined as $p<0.05$ and $p<0.01$ in the analyses.

Ethical Approval of the Research

It was unanimously decided that this research was ethically appropriate by the Marmara University Faculty of Health Sciences Non-Interventional Clinical Studies Ethics Committee with the approval date and number 26.05.2022/61. The permission to use the scales were obtained and the research was conducted following the ethical principles of the Declaration of Helsinki. On the first page of the online survey, there was a short information about the research for participants. Then they were asked to click on the button indicating that they agreed to participate in the research (e.g. I agreed to participate in the questionnaire).

RESULTS

Table 1. Distribution of demographic characteristics of pregnant women

Variables		**n**	**%**	**$\bar{x} \pm Sd$**
Age		382	100.0	28.20±4.85
Income Status	Income Less than Expenditure	75	19.6	
	Income Equals Expenditure	245	64.1	
	Income Exceeds Expenditure	62	16.2	
Educational Status	Secondary School	90	23.6	
	High School	198	51.8	
	University and higher	94	24.6	
Employment Status	Not working	156	40.8	
	Working	128	33.5	
	Leave of Absence	98	25.7	
Profession	Civil Servants	121	31.7	
	Private Sector	105	27.5	
	House wife	156	40.8	
Family Type	Elementary Family	129	33.8	
	Extended Family	253	66.2	
Planned Pregnancy	Yes	291	76.2	
	No	91	23.8	
Gestational Week	20 weeks and before	83	21.7	
	21 weeks and after	299	78.3	
Number of Pregnancy	Primipar	271	70.9	
	Multipar	111	29.1	
Miscarriages or Abortions	0	350	91.6	
	1 and more	32	8.4	
Advanced Maternal Age	Yes	48	12.6	
	No	334	87.4	

Table 1. Distribution of demographic characteristics of pregnant women (Continue)

Weekly Leisure Before Pregnancy	1-5 Hours	53	13.9
	6-10 Hours	110	28.8
	11 hours and more	219	57.3
Weekly Leisure After Pregnancy	1-5 Hours	113	29.6
	6-10 Hours	125	32.7
	11 hours and more	144	37.7
Do you participate in leisure activities to socialise?	Yes	286	74.9
	No	96	25.1
How your participation in leisure activities affects pregnancy?	Effects in Good Direction	259	67.8
	No effect	115	30.1
	Effects in Bad Direction	8	2.1
Activity Type	Socail and Sport	193	50.5
	Cultural and Artistic	189	49.5
Activity Person and Group	Alone, Family, Relative	207	54.2
	Organised Group	175	45.8
TOTAL		**382**	**100.0**

The mean age of the pregnant women who participated in the study was 28.20 (±4.85), and 78.3% of them were above the 20th pregnancy week. While 70.9% of the women were primiparous, 91.6% stated that they had never had a miscarriage/abortion. Moreover, 64.1% of the women had an income equal to their expenditures, 40.8% were not working and were housewives, and 66.2% lived in a large family. Although 76.2% of the pregnancies were planned, 87.4% of the women did not have advanced maternal age. While most of the participants stated that they had leisure 11 hours and more before pregnancy (57.3%), it was found that 37.7% of the participants had 11 hours or more of leisure per week after pregnancy. It was observed that 74.9% of the pregnant women participated in leisure activities for socialising and 67.8% of them thought that this situation affected their pregnancy in a good way. The rate of participation in social and sportive activities was 50.5% and the rate of participation in these activities alone or with friends/relatives was 54.2%. The distribution of demographic characteristics of pregnant participants was shown in detail in Table 1.

Table 2. Distribution of scale scores

Scales	**Scale Item Number**	**n**	**Min.**	**Max.**	**x̄**	**Sd.**
Leisure Benefit Scale (LBS)	24	382	26.00	120.00	94.72	13.79
Physical Benefit	7	382	7.00	35.00	27.99	4.58
Psychological Benefit	8	382	8.00	40.00	30.54	5.49
Social Benefit	9	382	9.00	45.00	36.18	5.97
Wellness Self Perceptions Scale (WSPS)	15	382	19.00	60.00	47.69	8.36
Emotional Wellbeing	3	382	1.00	4.00	3.11	.71
Mental Wellbeing	3	382	1.33	4.00	3.30	.67
Physical Wellbeing	3	382	1.00	4.00	3.22	.70
Social Wellbeing	3	382	1.00	4.00	3.19	.78
Spiritual Wellbeing	3	382	1.67	4.00	3.05	.57

According to the results (Table 2), the mean score obtained in the LBS was 94.72 (±13.79) and the highest mean was found to be in the social benefit sub-dimension (36.18±5.97) and the lowest mean was found to be in the physical benefit sub-dimension (27.99±4.58). It was determined that the mean determined in WSPS was 47.69 (±8.36), the highest mean was in mental well-being (3.30±.67) and the lowest mean was in spiritual well-being sub-dimension (3.05±.57).

Table 3. Results of the analyses between LBS according to variables

Variables	LBS			Physical Benefit			Psychological Benefit			Social Benefit		
	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p
Monthly Income												
Income Less than Expenditure	166.88	2		180.15	2		178.93	2		160.53	2	
Income Equals Expenditure	191.08	2	**X^2=8.766 p=.012**	188.71	2	X^2=4.097 p=.129	188.84	2	X^2=4.499 p=.105	194.22	2	**X^2=9.709 p=.008***
Income Exceeds Expenditure	222.94	2		216.27	2		217.22	2		218.21	2	
Educational Status												
Secondary School	190.07	2		188.99	2		182.09	2		197.14	2	
High School	184.90	2	X^2=2.525 p=.283	183.53	2	X^2=3.941 p=.139	180.06	2	**X^2=11.275 p=.004***	196.74	2	X^2=2.771 p=.250
University and higher	206.78	2		210.69	2		224.60	2		175.07	2	
Employment Status												
Not working	198.31	2		192.79	2		200.81	2		198.66	2	
Working	194.38	2	X^2=2.398	201.82	2	X^2=3.101	193.20	2	**X^2=**3.486	190.71	2	X^2=1.529
Leave of Absence	176.89	2	p=.301	175.96	2	p=.212	174.47	2	p=.175	181.14	2	p=.465
Profession												
Civil Servants	194.35	2		199.04	2		191.55	2		192.52	2	
Private Sector	177.22	2	X^2=2.540 p=.281	181.13	2	X^2=1.519 p=.468	177.58	2	X^2=2.802 p=.246	178.30	2	X^2=2.362 p=.307
House wife	198.93	2		192.59	2		200.89	2		199.64	2	
Family Type												
Elementary Family	196.45		Z=-.626	197.38		Z=-.746	198.79		Z=-.924	193.20		Z=-.215
Extended Family	188.98		p=.531	188.50		p=.456	187.78		p=.355	190.63		p=.829
Planned Pregnancy												
Yes	189.03		Z=-.781	187.89		Z=-1.145	190.54		Z=-.305	191.38		Z=-.039
No	199.38		p=.435	203.03		p=.252	194.57		p=.761	191.90		p=.969
Gestational Week												
20 weeks and before	195.18		Z=-.343	191.23		Z=-.025	196.24		Z=-.443	190.36		Z=-.106
21 weeks and after	190.48		p=.731	191.57		p=.980	190.18		p=.658	191.82		p=.915
Number of Pregnancy												
Primipar	183.98		**Z=-2.080**	183.41		**Z=-2.246**	178.11		**Z=-3.712**	192.84		Z=-.372
Multipar	209.85		**p=.038***	211.26		**p=.025***	224.19		**p=.000***	188.22		p=.710
Miscarriages or Abortions												
0	190.79		Z=-.416	190.42		Z=-.634	189.66		Z=-1.080	192.05		Z=-.324
1 and more	199.27		p=.678	203.31		p=.526	211.63		p=.280	185.45		p=.746
Advanced Maternal Age												
Yes	193.01		Z=-.101	203.64		Z=-.817	190.73		Z=-.052	196.28		Z=-.321
No	191.28		p=.919	189.76		p=.414	191.61		p=.959	190.81		p=.748
Weekly Leisure Before Pregnancy												
1-5 Hours	186.16	2		180.53	2		192.57	2		188.62	2	
6-10 Hours	206.90	2	X^2=3.014	205.89	2	X^2=2.783	202.35	2	X^2=1.661	209.00	2	X^2=3.989 p=.136
11 hours and more	185.05	2	p=.222	186.93	2	p=.249	185.79	2	p=.436	183.41	2	
Weekly Leisure After Pregnancy												
1-5 Hours	188.76	2		191.76	2		195.57	2		187.59	2	
6-10 Hours	199.03	2	X^2=.879	199.66	2	X^2=1.317	192.76	2	X^2=.388	200.03	2	X^2=1.113
11 hours and more	187.11	2	p=.645	184.22	2	p=.518	187.22	2	p=.824	187.17	2	p=.824
Do you participate in leisure activities to socialise?												
Yes	192.60		Z=-.336	193.73		Z=-.685	193.45		Z=-.597	189.59		Z=-.584
No	188.23		p=.737	184.84		p=.493	185.69		p=.550	197.19		p=.559

Table 3. Results of the analyses between LBS according to variables (Continue)

How your participation in leisure activities affects pregnancy?												
Effects in Good Direction	191.17	2	X^2=.301 p=.860	191.58	2	X^2=.086 p=.958	191.93	2	X^2=.053 p=.974	189.40	2	X^2=1.752 p=.416
No effect	193.62	2		192.11	2		190.07	2		199.09	2	
Effects in Bad Direction	171.75	2		180.31	2		198.19	2		150.38	2	
Activity Type												
Socail and Sport	182.78		Z=-1.560 p=.119	183.72		Z=-1.396 p=.163	182.25		Z=-1.658 p=.097	188.06		Z=-.636 p=.538
Cultural and Artistic	200.40			199.44			200.94			195.01		
Activity Person and Group												
Alone,/Family/ Relative	206.36		**Z=-2.863 p=.004***	201.59		Z=-1.948 p=.051	203.20		**Z=-2.258 p=.024***	206.26		**Z=-2.846 p=.004***
Organised Group	173.92			179.57			177.66			174.04		

Z: Mann Whitney U Test; X^2: Kruskall Wallis Test; $\bar{X}_{Rank}$: Rank Mean; FD: Freedom Degree; p<0.05; statistical significance value

The results of the analyses examining the differences between leisure benefits according to the independent variables of pregnant women were presented in Table 3. According to the results, it was understood that a significant difference emerged in leisure benefits (X^2=8.766; p=.012) and social benefit sub-dimension (X^2=9.709; p=.008) according to the income of pregnant women. When the mean differences of both sub-dimensions in which a significant difference emerged were analysed, it was seen that pregnant women whose income was more than their expenditure ($\bar{x}$=222.94; 218.21) had higher mean values than pregnant women whose income was equal to their expenditure ($\bar{x}$=191.08; 194.22) and pregnant women whose income was less than their expenditure ($\bar{x}$=166.88; 160.53). These results showed that pregnant women whose income was higher than their expenditure experienced higher leisure time benefits.

A statistically significant difference was found between the psychological benefit sub-dimension of the LBS according to the educational status of the pregnant women (X^2=11.275; p=.004). It was determined that pregnant women with university and higher education ($\bar{x}$=224.60) obtained a higher mean than the others. This result indicated that pregnant women with university and higher education obtained higher leisure benefits.

A statistically significant difference was determined between the total score (Z=-2.080; p=.038), physical (Z=-2.246; p=.025) and psychological benefit (Z=-3.712; p<.000) sub-dimensions of the LBS according to the number of pregnancies of the participants. It was found that the mean scores of the participants with multiparous pregnancy ($\bar{x}$=209.85; 211.26; 224.19) were higher than the other pregnant women ($\bar{x}$=183.98; 183.41; 178.11). The results showed that participants with multiparous pregnancies obtained higher benefits from leisure activities.

A statistically significant difference was found between the total score (Z=-2,863; p=,004), psychological (Z=-2,258; p=,024) and social benefit (Z=-2,846; p=,004) sub-dimensions of LBS according to the person and group variables in which the pregnant women participated in the activity. In the sub-dimensions where a significant difference emerged, it was understood that leisure activities performed alone, with friends and relatives resulted in higher benefits.

Table 4. Results of the analysis between WSPS according to variables

Variables	WSPS			Emotional Wellbeing			Mental Wellbeing			Physical Wellbeing			Social Wellbeing			Spiritual Wellbeing		
	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p	$\bar{X}_{Rank}$	FD.	Z/X^2 p
Income Status																		
Income Less than Expenditure	159.74	2	**X^2=7.763 p=.021***	164.66	2	X^2=5.670 p=.059	167.81	2	X^2=4.589 p=.101	163.12	2	**X^2=7.834 p=.020***	155.12	2	**X^2=10.530 p=.005***	175.31	2	X^2=2.891 p=.236
Income Equals Expenditure	198.72	2		197.68	2		198.20	2		194.72	2		199.68	2		198.30	2	
Income Exceeds Expenditure	201.40	2		199.56	2		193.68	2		213.11	2		203.17	2		184.22	2	
Educational Status																		
Secondary School	203.04	2	X^2=2.902 p=.234	194.44	2	X^2=5.006 p=.082	202.95	2	X^2=4.573 p=.102	198.44	2	X^2=3.522 p=.172	194.89	2	X^2=1.075 p=.584	213.99	2	**X^2=6.636 p=.036***
High School	193.59	2		200.35	2		195.81	2		196.97	2		194.74	2		179.00	2	
University and higher	176.04	2		170.05	2		171.46	2		173.32	2		181.42	2		196.30	2	
Employment Status																		
Not working	191.34	2	X^2=3.208 p=.201	198.33	2	X^2=3.443 p=.179	185.93	2	**X^2=7.338 p=.025***	189.19	2	X^2=1.986 p=.371	190.66	2	X^2=3.101 p=.212	199.63	2	X^2=1.517 p=.468
Working	180.11	2		176.94	2		179.17	2		184.48	2		180.98	2		184.50	2	
Leave of Absence	206.63	2		199.65	2		216.47	2		204.34	2		206.58	2		187.70	2	
Profession																		
Civil Servants	196.11	2	X^2=.388 p=.824	187.48	2	X^2=.864 p=.649	200.33	2	X^2=1.376 p=.503	190.66	2	X^2=.117 p=.943	198.47	2	X^2=.881 p=.644	194.20	2	X^2=2.356 p=.308
Private Sector	187.06	2		186.91	2		190.75	2		194.56	2		185.15	2		177.94	2	
House wife	190.88	2		197.77	2		185.05	2		190.09	2		190.32	2		198.56	2	
Family Type																		
Elementary Family	199.68		Z=-1.035 p=.301	192.43		Z=-.119 p=.905	195.24		Z=-.484 p=.628	194.10		Z=-.335 p=.738	204.84		Z=-1.716 p=.086	204.61		Z=-1.681 p=.093
Extended Family	187.33			191.03			189.59			190.18			184.70			184.81		
Planned Pregnancy																		
Yes	192.17		Z=-.212 p=.832	193.45		Z=-.623 p=.533	189.25		Z=-.728 p=.467	192.23		Z=-.234 p=.815	192.23		Z=-.236 p=.814	193.29		Z=-.575 p=.565
No	189.36			185.28			198.68			189.18			189.16			185.77		
Gestational Week																		
20 weeks and before	193.24		Z=-.162 p=.871	196.86		Z=-.506 p=.613	201.78		Z=-.981 p=.327	195.14		Z=-.346 p=.729	199.61		Z=-.769 p=.442	174.09		Z=-1.647 p=.100
21 weeks and after	191.02			190.01			188.65			190.49			189.25			196.33		

Table 4. Results of the analysis between WSPS according to variables (continue)

Number of Pregnancy																
Primipar	189.18		Z=-.641	190.76		Z=-.206	190.10		Z=-.397	192.66		Z=-.327	186.95		Z=-1.279	185.91		Z=-1.568
Multipar	197.16		p=.521	193.30		p=.837	194.92		p=.691	188.67		p=.744	202.60		p=.201	205.14		p=.117
Miscarriages or Abortions																		
0	189.22		Z=-1.337	190.57		Z=-.551	188.55		Z=-1.766	190.19		Z=-.783	189.05		Z=-1.459	189.52		Z=-1.175
1 and more	216.45		p=.181	201.67		p=.581	223.73		p=.077	205.84		p=.434	218.30		p=.145	213.14		p=.240
Advanced Maternal Age																		
Yes	189.63		Z=-.126	176.43		Z=-1.024	192.07		Z=-.039	188.88		Z=-.180	199.26		Z=-.530	195.56		Z=-.277
No	191.77		p=.900	193.67		p=.306	191.42		p=.969	191.88		p=.857	190.38		p=.596	190.92		p=.782
Weekly Leisure Before Pregnancy																		
1-5 Hours	181.04	2		190.44	2		181.75	2		181.25	2		182.30	2		184.41	2	
6-10 Hours	197.69	2	X^2=.828	193.07	2	X^2=.033	195.55	2	X^2=.589	195.76	2	X^2=.646	193.30	2	X^2=.443	204.23	2	X^2=2.133
11 hours and more	190.92	2	p=.661	190.97	2	p=.984	191.83	2	p=.745	191.84	2	p=.724	192.82	2	p=.801	186.82	2	p=.344
Weekly Leisure After Pregnancy																		
1-5 Hours	194.42	2		198.66	2		188.50	2		192.57	2		195.38	2		192.03	2	
6-10 Hours	190.65	2	X^2=.115	191.16	2	X^2=.833	189.89	2	X^2=.289	191.79	2	X^2=.026	194.49	2	X^2=.628	191.52	2	X^2=.005
11 hours and more	189.95	2	p=.944	186.17	2	p=.659	195.25	2	p=.865	190.41	2	p=.987	185.86	2	p=.730	191.06	2	p=.997
Do you participate in leisure activities to socialise?																		
Yes	194.59		Z=-.944	193.57		Z=-.639	191.66		Z=-.051	192.56		Z=-.331	193.79		Z=-.712	196.61		Z=-1.584
No	182.30		p=.345	185.34		p=.523	191.01		p=.959	188.34		p=.741	184.67		p=.476	176.28		p=.113
How your participation in leisure activities affects pregnancy?																		
Effects in Good Direction	191.73	2		188.77	2		190.53	2		189.01	2		193.27	2		196.30	2	
No effect	189.79	2	X^2=.221	195.93	2	X^2=.756	193.34	2	X^2=.070	196.49	2	X^2=.433	186.87	2	X^2=.337	180.00	2	X^2=1.855
Effects in Bad Direction	208.63	2	p=.895	216.00	2	p=.685	196.31	2	p=.966	200.25	2	p=.805	200.75	2	p=.845	201.56	2	p=.396
Activity Type																		
Socail and Sport	193.13		Z=-.293	194.30		Z=-.508	198.29		Z=-1.244	195.41		Z=-.713	188.59		Z=-.530	187.47		Z=-.732
Cultural and Artistic	189.83		p=.770	188.64		p=.612	184.56		p=.214	187.51		p=.476	194.48		p=.596	195.62		p=.464
Activity Person and Group																		
Alone,/Family/ Relative	192.41		Z=-.175	187.20		Z=-.839	189.51		Z=-.391	188.37		Z=-.614	198.84		Z=-1.436	196.64		Z=-1.003
Organised Group	190.43		p=.861	196.59		p=.401	193.85		p=.696	195.20		p=.539	182.82		p=.151	185.43		p=.316

Z: Mann Whitney U Test; X^2: Kruskall Wallis Test; $\bar{X}_{Rank}$: Rank Mean; FD: Freedom Degree; p<0.05; statistical significance value

Table 4 showed the results of the analyses examining the differences between the wellness self-perception scale according to the independent variables of the pregnant women. A statistically significant difference was found between the total score (X^2=7.763; p=.021), physical well-being (X^2=7.834; p=.020) and social well-being (X^2=10.530; p=.005) of WSPS according to the income of pregnant women. When the mean ranks of the groups were analysed, it was found that the mean ranks of pregnant women whose income was higher than their expenditure ($\bar{x}$=201.40; 213.11; 203.17) were higher than those of pregnant women with other income groups. These results showed that pregnant women whose income was higher than their expenditure perceived a higher level of well-being.

A statistically significant difference was found between the perceptions of spiritual well-being of pregnant women according to their educational status (X^2=6.636; p=.036). When the mean ranks of the groups were examined, it was determined that the mean ranks of pregnant women with secondary school education ($\bar{x}$=213.99) were higher than those of pregnant women with university and higher education ($\bar{x}$=196.30) and high school education ($\bar{x}$=179.00). This result showed that pregnant women with secondary school education perceived higher spiritual well-being than the others.

A statistically significant difference was found between the mental well-being perceptions of pregnant women according to their employment status (X^2=7.338; p=.025). When the group mean ranks were analysed, it was found that the mean ranks of pregnant women who were on leave ($\bar{x}$=216.47) were higher than the mean ranks of those who were not working ($\bar{x}$=185.93) and those who were working ($\bar{x}$=179.17).

Table 5. Correlation Results for the Scales, Sub-dimensions and Age

	F1	**F2**	**F3**	**F4**	**F5**	**F6**	**F7**	**F8**	**F9**	**F10**	**F11**
F1	1										
F2	**.802****	1									
F3	**.860****	**.669****	1								
F4	**.788****	**.418****	**.486****	1							
F5	**.144***	.088	.010	**.238****	1						
F6	.100	.036	-.025	**.214****	**.819****	1					
F7	.082	.057	-.042	**.165****	**.833****	**.617****	1				
F8	.084	.049	-.042	**.179****	**.823****	**.619****	**.644****	1			
F9	**.211****	**.130***	.076	**.289****	**.856****	**.654****	**.672****	**.605****	1		
F10	**.111***	.078	.092	**.108***	**.648****	**.388****	**.439****	**.412****	**.467****	1	
F11	.081	.044	.049	**.108***	.005	.010	.026	-.055	.028	.008	1

F1: Leisure Benefit Scale**, F2:** Physical Benefit**, F3:** Psychological Benefit**, F4:** Social Benefit**, F5:** Wellness Self-Perception Scale**, F6:** Emotional Well-Being**, F7:** Mental Well-Being**; F8:** Physical Well-Being**, F9:** Social Well-Being**, F10:** Spiritual Well-Being**, F11:** Age, ****p<,01 *p<,05**

Table 5 showed the correlation results between the scales and their sub-dimensions. According to the table, a statistically positive, weakly significant relationship was found between the Leisure Benefit Scale and the Well-being Self-Perception Scale (r=.14; p<.05). The relationships between the sub-dimensions were shown in detail in Table 5.

DISCUSSION and CONCLUSION

The main aim of the study was to determine the relationship between pregnant women's leisure benefits and their self-perceived well-being and to determine the differences according to various variables. A positive, weakly significant relationship was found between age and social benefit sub-dimension in pregnant women who participated in the study. In other words, as the age of pregnant women increases, they obtain more social benefits. In studies conducted with different sample groups, no relationship was found between age and leisure

benefit (Güldür & Yaşartürk, 2020; Korkutata & Özavci, 2020; Bülbül et al., 2021). However, in a study (87 women, 105 men) on the benefits of recreational activities in which adults aged 18 years and over participated, it was determined that adults had more physical, mental and social benefits (Akgönül et al., 2023). It is thought that the differences in the studies are due to the differences in the type, place, time and sample groups of the activities. Significant differences were found between income variables and leisure benefit (X^2=8.766; p=.012) and social benefit sub-dimension (X^2=9.709; p=.008); wellness self-perception (X^2=7.763; p=.021), physical wellness (X^2=7.834; p=.020) and social wellness sub-dimensions (X^2=10.530; p=.005). It can be said that pregnant women with higher income had higher mean scores than the other groups, in other words; leisure time benefit and well-being levels were higher. Studies have revealed that participation in leisure activities was directly related to income (Burton et al., 2003; Özşaker, 2012; Köse and Yerlisu Lapa, 2018). Kargün et al. (2018) stated that individuals with high income levels participate in leisure activities for reasons such as healthy life, socialising and wanting to increase well-being. In the study conducted by Dattilo et al. (1994), it was found that housewives with low income had lower leisure participation than those who were employed and had high income. According to these results, it can be said that income level may be related to both the effect of leisure participation and the increase in the level of benefit and well-being obtained. A significant difference was found between the educational level of pregnant women and their psychological benefit (X^2=11.275; p=.004) and spiritual well-being (X^2=6.636; p=.036). It was concluded that pregnant women with university and higher education provided higher psychological benefits in their leisure than other pregnant women. In Kim and Park's study, it was stated that the perceived benefit increased gradually with the level of education (Kim and Park, 2021). Similarly, in a study conducted by Karakullukçu (2009), it was revealed that as the education level of individuals increased, their leisure productivity also increased. In the study conducted by Kürkçü Akgönül et al. (2023), it was determined that individuals with postgraduate education provided much better benefits. The research results were in parallel with the results of the literature. Kürkçü Akgönül et al. (2023) thought that this difference emerged due to the fact that people make more conscious choices as the educational level increased. In another result, it was found that the spiritual well-being of students with secondary school education was higher than the others. This result was thought to be related to the fact that the pregnant women participating in the study had various ethnic and cultural structures. There was no statistically significant difference between LBS and its sub-dimensions according to the employment status of the pregnant women (p>0.05). This finding was not parallel to the results of the study conducted by Kürkçü Akgönül et al. (2023). This may have been due to the fact that pregnant women were completely focused on their babies to be born. A significant difference was found between the mental well-being perceptions of pregnant women according to their employment status, and it was determined that pregnant women who were on leave perceived higher well-being (X^2=7.338; p=.025). In the literature, it has been shown that leisure activities are not related to working status (Yaşartürk et al., 2016). The results differ from other studies. In this study, it was thought that career women taking leave in certain weeks due to pregnancy caused them to know the value of leisure, to participate more in activities and thus to feel better mentally. There was no statistical difference between the LBS and WSPS sub-dimensions according to the professions of pregnant women (p>0.05). The limitation of studies on the leisure time experience of pregnant women makes it difficult to compare the findings of the current study. During pregnancy, expectant mothers experience the feelings of a baby growing inside them. While this situation makes them feel a sense of responsibility, it also causes anxiety and worry. Therefore, it is thought that the reason why there is no difference between professions may be entirely due to the emotional state they experience. As with the occupation variable, it was

found that the type of family in which the pregnant women lived was not an effective factor on the LBS and WSPS sub-dimensions (p>0.05). Before the analysis, it was not thought that family type would have any effect on the leisure time utilization of pregnant women. However, a difference was expected in terms of perceived well-being. In particular, it was thought that the perceived well-being of pregnant women living in extended families would be lower. The findings supported the hypothesis in terms of leisure time benefit, but not in terms of perceived well-being. It is thought that more research is needed to comment on this variable. No difference was found between planned pregnancy or gestational week and LBS and WSPS subscales (p>0.05). The increase in tension and anxiety in the advancing gestational week may be reflected especially on the mental well-being of expectant mothers. Therefore, it was predicted that women's emotional, physical, social and mental well-being would decrease especially as the pregnancy progressed. However, no difference was found between the cases. It is recommended that comprehensive studies should be conducted in order to make comparisons on the subject so that more reliable interpretations can be made. A significant difference was found between the number of pregnancies of the participants and the total scores (Z=-2.080; p=.038), physical (Z=-2.246; p=.025) and psychological benefit (Z=-3.712; p<.000) sub-dimensions of the LBS. It was observed that the mean scores of the participants with multiparous pregnancies were higher in the scale and all sub-dimensions. The fact that vital responsibilities (child care, etc.) are high and leisure periods are limited in multiparous pregnant women may cause them to use leisure activities more efficiently. Studies in the literature supported the research result (Bulgu et al., 2007; Tatar et al., 2009; Emir et al., 2022; MacNell et al., 2022). Unlike LBS and its sub-dimensions, no significant difference was found between the number of pregnancies and WSPS and its sub-dimensions (p>0.05). When the findings of the current study were compared, no similar study was found in the literature. Therefore, further research is recommended. There was no statistically significant difference between LBS and WSPS sub-dimensions according to the number of abortion/miscarriage and advanced maternal age. Pregnancy is defined as a unique experience where all emotions are experienced. Different feelings emerge at each stage of pregnancy. In fact, considering this situation, it was thought that there might be a difference between some variables and especially perceived well-being. These two independent variables were among the factors thought to affect the cases. However, the lack of significant differences may have been due to the sample group. Similar studies can be conducted with more participants. Individuals' weekly leisure time plays an important role in providing satisfaction (Çakır, 2017). It was tested whether this situation would create a difference in terms of women's leisure time utility and perceived well-being before and after pregnancy. However, the findings showed that neither weekly leisure time before nor after pregnancy had an effect on LBS and WSPS sub-dimensions. Within the scope of the current study, pregnant women were asked questions about whether or how leisure time activities would affect sociality. There was no difference between the answers of the pregnant women in terms of leisure time benefit and perceived well-being (p>0.05). It was expected that pregnant women with positive answers would have more positive leisure time benefits and perceived well-being. However, the homogeneous distribution of the population may have affected the results of the study. No significant difference was found between LBS and WSPS sub-dimensions according to the type of activity in which pregnant women participated (p>0.05). When the researches were examined, many types of leisure time activities were reported (Bae, 2022). Each of these activities helps to protect, maintain and prevent decline in cognitive functions (Xu et al., 2022). Therefore, the fact that there was no difference in the research results may be due to this situation. A significant difference was found between the person and group variables in which the pregnant women participated in the activities and the LBS total scores (Z=-2,863; p=,004), psychological (Z=-2,258; p=,024) and social benefits (Z=-2,846; p=,004). It was

determined that individuals who spent their leisure alone, with friends or relatives provided higher recreational benefits. In the literature, there are various studies showing that individuals who spend their leisure with friends or organised groups provide a high level of satisfaction (Yazgeç, 2019). According to these results, it is understood that the person/group factor in which individuals spend their leisure varies. It has been determined that pregnant women prefer to participate in activities alone or with groups of familiar people such as friends and family members instead of organised groups and they benefit more. According to this result, it can be said that pregnant women do not do activities with groups they do not know because they want to feel safer. However, no statistically significant difference was found between WSPS and its sub-dimensions according to the participation status of pregnant women ($p>0.05$). In the study, the relationship between pregnant women's leisure benefits and their well-being was examined. Results revealed that there was a positive and weakly significant relationship between these two variables. In other words, as the benefits of pregnant women in leisure time increased, their well-being also increased. Studies in the literature (Schalock and Kiernan, 1990; Ragheb, 1993; Tsai, 2004; Wu and Tsai, 2010; Tsai et al., 2012; Wu, 2012) also support the research results. As a result of the research; it was determined that pregnant women had high levels of leisure benefits and well-being. Moreover, income, educational status, number of pregnancies, employment status, and the variable of the person or group with whom they perform activities were found to have significant effects on leisure benefits and perceived well-being. Another important result of the study was that as the leisure benefits of pregnant women increased, their perceived well-being also increased. Briefly, it can be said that pregnant women should be raised awareness about the effect of the benefits of participation in leisure activities on psychological well-being, they should be encouraged to utilise this time with activities that will provide benefits, and more comprehensive studies should be conducted on the subject.

REFERENCES

ACOG (2015). Physical activity and exercise during pregnancy and the postpartum period. *Obstet Gynecol Committee*, Opinion No. 650. *126*(6), e135–42.

Akgönül E. K., Musa M., Bozkurt Ç., & Bayansalduz, M. (2023). Investigation of leisure benefit level in adults participating in recreational activities. *Mediterranean Journal of Sports Sciences, 6* (100th Anniversary of the Republic Special Issue), 113-124. https://doi.org/10.38021/asbid.1323027.

Akgul B. M., Ertuzun, E., & Karakucuk, S. (2016). Leisure benefit scale: A study of validity and reliability. *Gazi Journal of Physical Education and Sports Sciences, 23*(1), 25-34.

Bae, M. H., (2022). Happiness levels and leisure life satisfaction for sports leisure activities participation: implication for physical education in Korea. *Iranian Journal of Public Health, 51*(9), 2007-2016.

Bulgu, N., Koca Arıtan, C., & Aşçı, F. H. (2007). Daily life, women and physical activity. *Journal of Sports Sciences, 18*(4), 167-181.

Burton, N. W., Turrell, G., & Oldenburg, B. (2003). Participation in recreational physical activity: why do socioeconomic groups differ?. *Health Education & Behavior, 30*(2), 225-244.

Bülbül, A., Ölçücü, B., & Akyol, G. (2021). Spor elemanlarının rekreasyon fayda farkındalığı ile bedenlerini beğenme düzeyleri arasındaki ilişki. *Karadeniz Uluslararası Bilimsel Dergi, 1*(50), 110-123. https://doi.org/10.17498/kdeniz.934526.

Cai, C., & Davenport, M. H. (2022). Prenatal physical activity paradox: occupational versus leisure-time physical activity. *British Journal of Sports Medicine, 56*(7), 365-366. http://dx.doi.org/10.1136/bjsports-2021-104945.

Corbin, C. B. (2005). Fundamental concepts of fitness and wellness. Boston, Mass; Toronto: Mcgraw-Hill.

Çakır, V. O. (2017). Üniversite öğrencilerin serbest zaman doyum düzeyleri ile serbest zaman yönetimleri arasındaki ilişki. *Gaziantep Üniversitesi Spor Bilimleri Dergisi, 2*(3), 17-27.

Da Silva, S. G., Ricardo, L. I., Evenson, K. R., & Hallal, P. C. (2017). Leisure-time physical activity in pregnancy and maternal-child health: a systematic review and meta-analysis of randomized controlled trials and cohort studies. *Sports Medicine, 47*(2), 295-317. https://doi.org/10.1007/s40279-016-0565-2.

Dattilo, J., Dattilo, A. M., Samdahl, D. M., & Kleiber, D. A. (1994) Leisure orientations and self-esteem in women with low incomes who are overweight. *Journal of Leisure Research, 26*(1), 23-38. https://doi.org/10.1080/00222216.1994.11969942.

Emir, E., Küçük Kılıç, S., Gürbüz, B., & Öncü, E. (2022) Participation of Turkish Women in Leisure Activities: Barriers and Facilitators. *Turkish Clinics Journal of Sports Sciences, 14*(1). DOI: 10.5336/sportsci.2021-84473.

Fiskin, G., Kaydirak, M. M., & Oskay, U. Y. (2017). Psychosocial adaptation and depressive manifestations in high-risk pregnant women: implications for clinical practice. *Worldviews on Evidence-Based Nursing, 14*(1), 55-64. DOI: 10.1111/wvn.12186

Güldür, B. B., & Yaşartürk, F. (2020). Okul öncesi öğretmenlerinin rekreasyon faaliyetlerine katılımındaki fayda ve yaşam doyum düzeyleri arasındaki ilişkinin incelenmesi. *Uluslararası Güncel Eğitim Araştırmaları Dergisi, 6*(2), 495-506.

Haakstad, L. A, Vistad, I., Sagedal, L. R., Lohne-Seiler, H., & Torstveit, M. K. (2018). How does a lifestyle intervention during pregnancy influence perceived barriers to leisure-time physical activity? The Norwegian fit for delivery study, a randomized controlled trial. *BMC Pregnancy and Childbirth, 18*(1), 1-10. https://doi.org/10.1186/s12884-018-1771-8.

Ho, T. K. (2008). *A study of leisure attitudes and benefits for senior high school students at PingTung City and country in Taiwan*. Unpublished doctoral dissertation, United States Sports Academy, Daphne, AL.

Karaderi, B. (2021). Leisure time spending tendencies of university students: the case of TRNC. *Asian Journal of University Education, 17*(3), 41-50. https://doi.org/10.24191/ajue.v17i3.14524

Karakullukçu, Ö. F. (2009). *Leisure time habits of ministry of justice employees according to their education levels*. Thesis of Master Degree. Gazi University Institute of Health Sciences.

Karasar, N. (2020). Scientific research method. Concepts, principles and techniques. Nobel Academic Publishing.

Kargün, M., Kızar, O., Ağaoğlu, Y. S., & Cenikli, A. (2018). Place of leisure and sports industry. *Journal of International Social Research, 11*(56), 1096-1100. http://dx.doi.org/10.17719/jisr.20185639075.

Kim, Y. J., & Park, Y. J. (2021). The relationship between the perceived value and leisure benefits of cultural and artistic leisure participation: Application of hierarchical regression analysis. *Revista Argentina de Clínica Psicológica, 30*(2), 49.

Korkutata, A., & Özavci, R. (2021). Turistlerin rekreasyon fayda düzeylerinin demografik değişkenler açısından incelenmesi. *Turar Turizm ve Araştırma Dergisi, 10*(1), 63-79.

Köse, E., & Lapa, T. Y. (2018). An examination of the free time physical activity restrictions of individuals benefiting from the probation law. *Spormetre Journal of Physical Education and Sports Sciences, 16*(2), 119-137.

Lindqvist, M., Lindkvist, M., Eurenius, E., Persson, M., Ivarsson, A., & Mogren, I. (2016). Leisure time physical activity among pregnant women and its associations with maternal characteristics and pregnancy outcomes. *Sexual & Reproductive Healthcare, 9*, 14-20. https://doi.org/10.1016/j.srhc.2016.03.006

MacNell, L., Hardison-Moody, A., Wyant, A., Bocarro, J. N., Elliott, S., & Bowen, S. (2022). "I have to be the example": Motherhood as a lens for understanding physical activity among low-income women. *Journal of Leisure Research, 53*(4), 575-594. https://doi.org/10.1080/00222216.2022.2051116.

Odabaş, İ. (2017). The Turkish language adaptation of the Wellness Self-Perceptions Scale: a validity and reliability study. *International Journal of Humanities and Social Science, 8*(6), 42-49.

Özşaker, M. (2012). An investigation on the reasons why young people cannot participate in free time activities. *Selcuk University Journal of Physical Education and Sports Science, 14*(1), 126-131.

Rabiepour, S., Saboory, E., & Abedi, M. (2019). The relationship between stress during pregnancy with leptin and cortisol blood concentrations and complications of pregnancy in the mother. *Journal of the Turkish German Gynecological Association, 20*(4), 218-223 doi: 10.4274/jtgga.galenos.2019.2019.0010.

Ragheb, M. G. (1993). Leisure and perceived wellness: A field investigation. *Leisure Sciences, 15*(1), 13-24. https://doi.org/10.1080/01490409309513183.

Schalock, R. L., & Kiernan, W. E. (1990). Recreation and leisure from a wellness perspective. *Habilitation Planning for Adults with Disabilities*, 83-94.

Smith, R., Shakespeare J, Williams, Z., Knight, M., & Foster, C. (2017). Physical activity for pregnant women: an infographic for healthcare professionals. *The British Journal of General Practice, 67*(663), 460. 10.3399/bjgp17X692801.

Tatar, G., Tozoğlu, E., & Pehlivan, Z. (2009) Examination of some factors affecting the sports activities of working and non-working women between the ages of 20-40 (Sivas city center example). *Journal of Physical Education and Sports Sciences, 11*(3), 28-41.

Tsai, C. Y. (2004). *The relationships between leisure participation and perceived wellness among Taiwanese adults ages 55 to 75 years*. Phd Thesis. University of the Incarnate Word.

Tsai, C. Y., Liu, L. W., & Wu, M. T. (2012). Relationship among leisure satisfaction, spiritual wellness, and self-esteem of older adults. *International Journal of Psychological and Behavioral Sciences, 6*(12), 3659-3662. https://doi.org/10.5281/zenodo.1327702.

Wu, M. (2012). Leisure and perceived wellness of nursing students: a canonical correlation analysis. *International Journal of Social, Behavioral, Educational, Economic, Business and Industrial Engineering, 6*(78), 1183-1186.

Wu, M. T., & Tsai, C. Y. (2010) The relationship of perceived wellness and leisure factors of university students. *Fu Jen Catholic University Journal of Physical Education*, (9), 84-104.

Xu, C., Wang, C., Tian, X., Wu, Y., Zhang, D., Pang, Z., Li, S., & Tan, Q. (2022). Analysis of genetic and environmental correlation between leisure activities and cognitive function in aging Chinese twins. *Aging & Mental Health, 26*(3), 493-498. https://psycnet.apa.org/doi/10.1080/13607863.2020.1856777.

Yaşartürk, F., Uzun, M., İmamoğlu, O., & Yamaner, F. (2016). Examining the obstacles to sedentary women's participation in recreational activities. *International Journal of Science Culture and Sport, 4*(3), 789-803. Doi: 10.14486/IntJSCS628.

Yazgeç, G. (2019). *Examining the leisure satisfaction and happiness levels of individuals participating in nature and adventure recreation activities: The example of Fethiye destination*. Master's Degree. Manisa Celal Bayar University Institute of Social Sciences.