

Leisure Management and Mental Well-Being: A Study of Recreational Athletes

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ABSTRACT

Study aim(s): The aim of this study is to investigate the effect of leisure time management on mental well-being among individuals engaged in recreational sports and to examine whether this relationship differs according to gender, marital status, education level, and purpose of recreational participation.

Methods: A correlational survey model was employed. The study sample consisted of 391 individuals participating in recreational sports (193 women and 198 men). Data were collected using a Demographic Information Form, the Leisure Time Management Scale, and the Warwick-Edinburgh Mental Well-Being Scale. Descriptive statistics, independent samples t-test, ANOVA, Pearson correlation, and regression analysis were performed.

Results: Women reported higher levels of leisure time management and mental well-being compared to men. Married individuals scored higher than single individuals on both variables. Participants with postgraduate education demonstrated higher leisure time management scores than all other educational groups and higher mental those well-being scores than those with high school or undergraduate education. Individuals who participated in recreational activities for mental health purposes have higher leisure time management levels than other groups, whereas those participating for physical health purposes had the lowest scores. Leisure time management was found to explain 41.7% of the variance in mental well-being.

Conclusion: Leisure time management has a strong and positive impact on individuals' mental well-being. Higher levels are particularly observed among women, married individuals, and postgraduate graduates. Participation in recreational activities for the purpose of mental well-being is more advantageous than for other purposes. These findings show that effective leisure time management is an important factor in supporting mental health and that recreation-based interventions can be used to enhance mental well-being.

Keywords: Leisure Time, Time Management, Mental Well-Being, Recreational Sports

INTRODUCTION

Twenty-seven percent of adults do not meet the recommended level of physical activity [1]. Currently, the Ipsos World Mental Health 2024 survey, conducted across 31 countries, indicates that 62% of adults report experiencing stress that has negatively impacted their daily lives at least once [2]. These data suggest that physical inactivity and stress are widespread, placing individuals' mental well-being at risk. Participation in regular sports and recreational activities plays a key role in reducing stress, enhancing physical health, strengthening social interactions, and supporting overall mental well-being [3, 4, 5]. However, the intense pace of modern life makes it increasingly difficult for individuals to plan and use their leisure time effectively [6, 7]. Spending leisure time in an unplanned and passive manner weakens mental well-being [8, 9]. This situation highlights the need to develop effective leisure time management skills among individuals and to ensure broad access to regular recreational activities at the societal level. In this regard, understanding individuals' leisure time management strategies is important for enhancing their mental well-being.

Leisure time management is a process in which individuals consciously plan their free time and engage in activities that provide physical, mental, and social benefits [10, 11]. Sport and recreational activities, in particular, are considered a functional part of leisure time management, supporting individuals' physical health while enhancing their capacity to cope with stress and their overall mental well-being [12, 13, 14]. Including sports activities in an individual's leisure time promotes more meaningful use of time and the development of mental resilience [15, 16, 17]. When supported by effective leisure time management, such participation further contributes to the self-actualization, psychological renewal, and the enhancement of overall mental well-being [18, 19].

At this point, Macan's Time Management Behavior Model provides a theoretical framework for understanding the impact of leisure time management on individuals' mental well-being. According to Macan [20], time management involves setting goals, establishing priorities, acting in a planned manner, and exercising control over time. The theory states that these skills can enhance life satisfaction and mental well-being by reducing an individual's stress levels. Individuals who are able to manage their time effectively are also likely to experience higher perceptions of control and greater self-efficacy [21, 20]. In particular, the planned and purposeful use of free time has been found to enhance mental relaxation and promote feelings of satisfaction [22, 20]. This, in turn, can support an individual's overall mental well-being. Therefore, this theoretical framework can contribute to understanding the predictive role of leisure time management in influencing individuals' mental well-being.

Leisure time management has become a prominent topic in sports science and social science literature, particularly since the early 21st century [23, 24, 25, 26, 27]. The increasing pace of modern life, especially with urbanization, has led individuals to view leisure time not only as a period of rest but also as an opportunity for mental recovery and renewal [28, 29]. With the integration of digital technologies into daily life and the growing emphasis on work-life balance, individuals' awareness of the importance of leisure time management has also increased [30, 31]. In this context, sports recreation has become an important tool for leisure time management, supporting mental well-being by promoting physical renewal, positive emotional state, psychological resilience, and enhanced social capital [32]. However, no studies in the current literature have examined the effects of leisure time management on mental well-being among individuals participating in sports recreation activities. While existing research has generally focused on the relationship between leisure

time management and life satisfaction [33, 34, 35], it is important to examine its effects on mental well-being more comprehensively to address gaps in the literature.

This study aims to make significant contributions both academically and practically by thoroughly examining the impact of leisure time management on mental well-being among individuals who participate in recreational sports. From an academic perspective, although the benefits of recreational sports on leisure time management are widely recognized, there remain significant gaps in the literature regarding how these benefits translate specifically to mental well-being. This study aims to address this gap by examining the effects of leisure time management on mental well-being among individuals who engage in recreational sports. From a practical perspective, the findings are expected to serve as a guide for both individual awareness and the design of recreational programs offered by institutions, enabling individuals to manage their leisure time more effectively and enhance their mental health. Thus, the study can contribute to improving program implementation by providing a scientific basis for leisure- and mental health-focused initiatives offered by universities, municipalities, and sports organizations. In this context, the aim of the study is to examine the effect of leisure time management levels on the mental well-being of individuals who engage in recreational sports.

METHODS

Research model

In this study, the effect of leisure time management on mental well-being among individuals who participate in recreational sports was examined using the relational survey model, a quantitative research approach. The relational survey model is designed to investigate the relationship between variables without any external influence [36].

Study group

The study population consisted of individuals participating in recreational sports activities. The sample was selected based on the principle of convenience to optimize time and resources, a method that allows researchers to access the target data quickly [37]. Accordingly, data were collected from 384 recreational athletes who were identified using the convenience sampling method and participated in the study on a voluntary basis.

Data collection tools

Data were collected using a Demographic Information Form, the Leisure Time Management Scale, and the Warnick-Edinburgh Mental Well-Being Scale.

Demographic Information Form

The Demographic Information Form, developed by the researcher to determine the participants' characteristics includes four variables: gender, marital status, educational level, and purpose of participation.

Leisure Management Scale

In this study, the Leisure Time Management Scale, originally developed by Wang et al. [38] and adapted into Turkish by Akgül and Karaküçük [39], was used as a data collection tool. The scale consists of four subscales: Goal Setting and Method, Evaluation, Attitude Toward Leisure Time, and Planning, comprising a total of 15 items. It employs a 5-point Likert-type format, with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). Higher scores on the scale indicate a greater level of leisure time management skills. In this study, analyses were conducted using the total score obtained from the scale. In the study by Akgül and Karaküçük [39], the reliability coefficient for the total scale was reported as

0.83. Validity and reliability analyses were also conducted for the current study sample, with the Cronbach's alpha coefficient found to be 0.89, indicating high internal consistency.

Warwick-Edinburgh Mental Well-Being Scale

In this study, the Warwick-Edinburgh Mental Well-Being Scale, developed by Tennant et al. [40] and adapted into Turkish by Keldal [41], was used as a data collection tool. The scale consists of a single dimension and 14 items. It employs a 5-point Likert-type format, with responses ranging from "Strongly Disagree" (1) to "Strongly Agree" (5). Higher scores on the scale indicate greater levels of mental well-being. In the study conducted by Keldal [41], the reliability coefficient of the scale was reported as 0.89. Validity and reliability analyses were also conducted for the current study sample, with the Cronbach's alpha coefficient determined to be 0.93, indicating excellent internal consistency.

FINDINGS

Table 1. Demographic characteristics of study participants

Variables	Age $\bar{X} \pm SS$	Categories	F	%
Gender	26.36±6.95	Female	193	49.4
		Male	198	50.6
Marital Status		Married	132	33.8
		Single	259	66.2
Educational Status		High School and Below	72	18.4
		Associate Degree	125	32.0
		Bachelor degree	121	30.9
		Postgraduate	73	18.7
		Socialization	161	41.2
Purpose of Participation		Physical Health	107	27.4
		Mental Health	123	31.5
		Total	391	100

A total of 391 individuals who participated in recreational sports were included in the study. The mean age of the participants was 26.36 years (SD=6.95). Regarding gender, 50.6% were male and 49.4% were female. In terms of marital status, 66.2% of participants were single, while 33.8% were married.

Data analysis

Data were collected by the researchers using an online survey method. The data collection form was administered to individuals who agreed to participate and who engaged in recreational sports. Data analysis was conducted using SPSS version 27 software. To determine whether the data were normally distributed, skewness and kurtosis values were examined. These values were considered acceptable if they fell within the range of +2 to -2 [42]. The examination indicated that the data were normally distributed. Accordingly, the frequency and percentage distributions of the demographic variables were first calculated. Since the data met the conditions of normal distribution, descriptive statistics, t-test, Pearson correlation analysis, and regression analysis were subsequently performed

Regarding educational level, 32.0% of participants held an associate's degree, 30.9% a bachelor's degree, 18.7% a postgraduate degree, and 18.4% a high school diploma or lower. In terms of the participation purpose, the largest number of individuals (41.2%) reported engaging in activities for socialization,

followed by 31.5% for mental health and 27.4% for physical health.

Table 2. Independent Samples T-Test Results for Scale Scores by Gender

Scales	Gender	N	$\bar{X} \pm SD$	t	p
Leisure Time Management	Female	193	4.01 \pm .54	4.925	.001
	Male	198	3.75 \pm .54		
Mental Well-Being	Female	193	3.98 \pm .70	3.032	.003
	Male	198	3.78 \pm .65		

* $p < .05$, N: Number of people, \bar{X} : Average, SS: Standard deviation

Significant gender differences were observed between female and male participants in both leisure time management and mental well-being. Women scored higher on the Leisure Time Management Scale ($\bar{x}=4.01$; $SS=.54$) compared to men ($\bar{x}=3.75$; $SS=.54$;

$t=4.925$; $p<.001$). Similarly, women's mental well-being scores ($\bar{x}=3.98$; $SD=.70$) were significantly higher than those of men ($\bar{x}=3.78$; $SD=.65$) ($t=3.032$; $p=.003$).

Table 3. Independent Samples T-Test Results for Scale Scores by Marital Status

Scales	Marital Status	N	$\bar{X} \pm SD$	t	p
Leisure Time Management	Married	132	4.17 \pm .58	8.070	.001
	Single	259	3.73 \pm .47		
Mental Well-Being	Married	132	4.10 \pm .75	4.665	.001
	Single	259	3.77 \pm .61		

* $p < .05$, N: number of people, \bar{X} : Average, SS: Standard deviation

Comparisons based on marital status revealed significant differences in both leisure time management and mental well-being. Married individuals scored higher on the Leisure Time Management Scale ($\bar{x}=4.17$; $SS=.58$) than single

individuals ($\bar{x}=3.73$; $SS=.47$) ($t=8.070$; $p<.001$). Similarly, married participants' mental well-being scores ($\bar{x}=4.10$; $SD=.75$) were significantly higher than those of single participants ($\bar{x}=3.77$; $SD=.61$) ($t=4.665$; $p<.001$).

Table 4. One-Way ANOVA Results for the Mean Score Obtained from the Scales According to Education Status

Scales	Educational Status	N	$\bar{X} \pm SD$	F	p	Bonferroni
Leisure Time Management	High School and Below ^a	72	3.85 \pm .59	7.942	.001	d>abc
	Associate Degree ^b	125	3.80 \pm .49			
	Bachelor degree ^c	121	3.81 \pm .48			
	Postgraduate ^d	73	4.15 \pm .64			
Mental Well-Being	High School and Below ^a	72	3.75 \pm .91	3.874	.009	d>ac
	Associate Degree ^b	125	3.87 \pm .58			
	Bachelor degree ^c	121	3.84 \pm .54			
	Postgraduate ^d	73	4.11 \pm .73			

* $p < .05$, N: Number of people, \bar{X} : Average, SS: Standard deviation, Bonferroni: Differences between four groups

As a result of the variance analyses conducted according to educational status, statistically significant differences were found in both leisure time management and mental well-being levels ($p<.001$).

According to the Bonferroni multiple comparison test, the mean leisure time management scores of participants with a postgraduate degree ($\bar{x}=4.15$; $SS=.64$) were significantly higher than those of

participants with a high school education or below ($\bar{x}=3.85$; $SS=.59$), an associate degree ($\bar{x}=3.80$; $SS=.49$), or a bachelor degree ($\bar{x}=3.81$; $SS=.48$). Similarly, the mental well-being scores of participants

with graduate degree ($\bar{x}=4.11$; $SS=.73$) were found to be significantly higher than those of individuals with a high school education or below ($\bar{x}=3.75$; $SS=.91$) and those with a bachelor's degree ($\bar{x}=3.84$; $SS=.54$).

Table 5. One-Way ANOVA Results for the Average Score Obtained from the Scales According to the Participation Purpose Variable

Scales	Purpose of Participation	N	$\bar{X} \pm SD$	F	p	Bonferroni
Leisure Time Management	Socialization ^a	161	3.80±.43	8.147	.001	c>ab
	Physical Health ^b	107	3.80±.63			
	Mental Health ^c	123	4.04±.59			
Mental Well-Being	Socialization ^a	161	3.90±.61	7.260	.001	b<ac
	Physical Health ^b	107	3.69±.80			
	Mental Health ^c	123	4.02±.61			

* $p<.05$, N: Number of people, \bar{X} : Average, SS: Standard deviation, Bonferroni: Differences between four groups

According to the ANOVA results based on participation purpose, significant differences were observed in both leisure time management and mental well-being ($p<.001$). The Bonferroni multiple comparison test revealed that individuals who participated for mental health purposes had higher leisure time management scores ($\bar{x}=4.04$; $SS=.59$) compared to those participating for socialization

($\bar{x}=3.80$; $SS=.43$) and physical health ($\bar{x}=3.80$; $SS=.63$) ($F=8.147$; $p<.001$). Similarly, in terms of mental well-being, participants engaging in physical health activities scored lower ($\bar{x}=3.69$; $SD=.80$) than those participating for socialization ($\bar{x}=3.90$; $SD=.61$) or mental health purposes ($\bar{x}=4.02$; $SD=.61$), with the differences reaching statistical significance ($F=7.260$; $p<.001$).

Table 6. Analysis of the Relationship Between Variables Using Pearson's Correlation Coefficient

Variables	Sig	Mental Well-Being
Leisure Time Management	r	.647**
	p	.001

** $p<.001$

Pearson correlation analysis revealed a strong, positive and statistically significant relationship between

leisure time management and mental well-being ($r=.647$; $p<.001$).

Table 7. Regression Analysis of the Effect of Leisure Time Management on Mental Well-Being

Model	B	Std. Hata	β	t	p
Fixed	.794	.186	--	4.264	.001
Leisure Time Management	.796	.048	.647	16.739	.001
R=.647 R ² adj=.417 F _(1,389) =280.200 p<.001					
Dependent variable=Mental Well-Being				Method=Enter	

* $p<.05$, B: Unstandardized coefficient, β : Standardized coefficient, Std. Hata: Standard error

Linear regression analysis was conducted to examine the effect of participants' leisure time management on their mental well-being. The results revealed that leisure time management predicted the

mental well-being variable by approximately 42% ($R^2_{adj}=.417$). In other words, leisure time management had a positive and statistically significant effect on mental well-being ($\beta=.647$, $p<.001$).

DISCUSSION

The findings of this study, which examined the effect of leisure time management on mental well-being among individuals participating in recreational sports, were interpreted in comparison with similar studies in the literature. The findings of the study indicate that leisure time management and mental well-being levels differ significantly by gender. Female participants were found to manage their leisure time more effectively and report higher levels of mental well-being than male participants. This difference may be attributed to women's tendency to use their leisure time in a more planned and purposeful manner, as well as to their generally higher emotional awareness compared to men. Similar findings have also been reported in the literature. Several studies indicate that women are more effective than men in managing their free time [43, 44, 45]. Misra and McKean [46] likewise found that women scored higher than men on time management measures. On the other hand, some studies report no significant gender difference in mental well-being [47, 48], while Tennant et al. [40] and Tekkurşun et al. [49] found that men have higher levels of mental well-being than women. This difference may be due to the fact that participants in previous studies were drawn from the general population and did not engage in regular physical activity, whereas the individuals in this study actively participated in recreational sports. These findings suggest that recreational sports may have a particularly positive impact on women's mental well-being.

The study found that marital status significantly influences individuals' leisure time

management and mental well-being. Married participants demonstrated higher leisure time management skills and greater mental well-being compared to single participants. This may be explained by married individuals' greater need to plan their time effectively, act with a sense of responsibility, and benefit from higher levels of social and emotional support. Similar findings have been found in the literature. For example, Gözel et al. [50], in a study of primary school teachers in grades I and II, found a statistically significant difference in time management skills based on marital status, with married teachers demonstrating superior skills. Similarly, an intervention study by Bagi et al. [51] involving emergency room assistants reported that married individuals had significantly lower social procrastination scores than their single individuals. These findings suggest that married individuals may possess more developed time management skills. Furthermore, various studies have shown that married individuals generally exhibit better mental health than single individuals [52, 53, 54]. For instance, Kim & McKenry [55] found a significant relationship difference between marital status and mental well-being, concluding that married individuals have higher levels of mental well-being compared to unmarried individuals. These findings are consistent with the results of the current study.

The findings reveal that higher educational levels are associated with significant increases in both leisure time management and mental well-being. In particular, participants with postgraduate education were found to manage their leisure time more efficiently and exhibit higher levels of mental well-being. These results show that as educational level

increases, individuals' time planning and self-regulation skills develop, which in turn positively affects both leisure time management and mental well-being. Similarly, the literature states that as individuals' educational level increases, their frequency of participation in leisure activities also rises, and their activity preferences, selection tendencies, and levels of active participation are influenced by their education [56]. Fidan [57] further notes that managers' sensitivity to time management increases with higher seniority and educational level. A study conducted in Australia observed that higher educational levels were associated with decreased psychological distress and increased positive emotions and life satisfaction [58]. Similarly, İçik [59] found that individuals with higher education exhibited higher levels of mental well-being. These findings suggest that education supports both time management and mental well-being by enhancing individual's ability to structure their lives, cope with stress, and engage in meaningful activities.

Another finding of the study shows that leisure time management and mental well-being levels vary depending on individuals' purposes for participating in leisure activities. Participants engaging in activities for mental health purposes had higher leisure time management score, whereas those participating for physical health purposes were found to have lower levels of mental well-being. Kelly [60] found that leisure activities have a positive impact on mental health, particularly when used for social interaction and mental relaxation, and that individuals who manage their leisure time effectively have higher levels of mental well-being. This finding shows that participating in activities for mental health purposes can enhance leisure time management skills. Similarly, Moinuddin & Chaudhari [61] stated that recreational sports not only improve physical fitness but also significantly reduce psychological factors such as anxiety and stress. They noted that engaging in sporting activities for physical health purposes also

contributes to mental well-being. These findings suggest that individuals' purposes for participating in leisure activities affect influence both their leisure time management and mental well-being in different ways. Specifically, those who participate for mental health purposes tend to manage their time more effectively, while those who participate for physical health purposes experience greater improvements in mental well-being.

A positive and significant relationship was found between leisure time management and mental well-being, indicating that individuals' planned and purposeful use of their leisure time supports their mental health. Supporting this finding, Hadad et al. [10] reported in a study of university students that effective management of leisure activities is meaningfully associated with mental well-being. Similarly, Alinezhad et al. [62] found a positive relationship between time management and mental well-being. In a study by Yasser's [63] involving handball coaches, a strong positive relationship between time management and mental well-being was also observed. These results suggest that the findings of the present study are consistent with previous research.

The findings of the study indicate that individuals' effective management of their leisure time has a significant and positive impact on their mental well-being. The analyses show that leisure time management explains 41.7% of the variance in mental well-being, highlighting the importance of planned and productive use of leisure time as a key factor in supporting mental health. Supporting this, a review by Ponde and Caroso [64] emphasizes that leisure time can enhance emotional well-being, protect against psychological symptoms, and contribute to psychiatric rehabilitation. Similarly, Hadad et al. [10] reported that university students who managed their free time efficiently had higher levels of mental health indicators. In a study by Perez et al. [65] involving

high school students, time management was found to be significantly related to a sense of belonging and overall mental well-being, with certain dimensions of time management identified as significant predictors. In a study by Hong-xia et al. [66] involving 226 university students, it was determined that time management tendencies and interpersonal problems together explained 36% of the variance in students' mental health levels.

CONCLUSION

In conclusion, this study found a positive and significant relationship between leisure time management and mental well-being, with leisure time management emerging as a significant predictor of mental well-being. Conducting similar studies across different age groups and socio-cultural characteristics could enhance the generalizability of these findings. Furthermore, developing educational programs that encourage individuals to use their leisure time more consciously and purposefully may play an important role in supporting mental health.

CONFLICT OF INTERESTS

No potential conflict of interest was reported by the authors.

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