

Psychometric evaluation of the *leisure satisfaction scale* on a sample of future pedagogues

Milena M. Letić Lungulov*

University of Novi Sad, Faculty of Philosophy

ABSTRACT

The aim of this study was to examine the factor structure and psychometric properties of the Leisure Satisfaction Scale in a sample of pedagogy students. Additionally, the paper provides a descriptive insight into patterns of leisure time satisfaction within this specific academic population. The study was conducted on a convenience sample of 249 pedagogy students from the Faculty of Philosophy in Novi Sad. The factor structure was examined using principal component analysis with Promax rotation, and reliability was assessed using McDonald's ω and Cronbach's α coefficients. Horn's parallel analysis and the Guttman-Kaiser criterion indicated a five-factor solution explaining 63.2% of the total variance. In contrast to the original six-factor structure of the instrument, comprising psychological, educational, social, relaxation, physical, and aesthetic dimensions, the first two dimensions were integrated into a single psychological-educational factor in the sample of pedagogy students. The remaining factors retained a structure consistent with the original factor solution, with no deviations in item distribution. The Scale demonstrated high internal consistency ($\omega = .77-.89$; $\alpha = .75-.89$). Descriptive data suggest that pedagogy students are most satisfied with the relaxation aspect of leisure time, while the lowest satisfaction is expressed in the physical dimension. The findings confirm that the instrument is valid and reliable for use in pedagogical settings.

Keywords: *leisure time satisfaction, pedagogy students, reliability, factor analysis.*

Introduction

Leisure satisfaction represents an important indicator of subjective well-being and the quality of individuals' everyday functioning (Kaushik et al., 2025). In the literature, it is defined as a positive perception or feeling that arises as a result of engagement in leisure activities (Beard & Ragheb, 1980). Examining leisure satisfaction enables the identification of individuals' specific needs and the types of activities that most effectively contribute to their subjective well-being and developmental functioning, thereby providing an empirical basis for planning and improving leisure programs (Kuykendall et al., 2015).

In research practice, leisure satisfaction is most often operationalized through the assessment of satisfaction with specific activities carried out within that time frame.

* milenaletic@ff.uns.ac.rs, <https://orcid.org/0000-0001-8666-5430>

This approach is based on the assumption that activities represent the immediate context in which the psychological, social, and developmental benefits of leisure are realized. As Robinson (2003) points out, satisfaction with leisure activities is one of the key factors influencing further participation, as well as the stability of interests and the level of individual engagement. Understanding this construct also has practical value. Mannell and Kleiber (1997) emphasize that insight into subjective evaluations of satisfaction allows for a more precise understanding of users' needs and the creation of activities aligned with their interests and expectations. In this sense, examining leisure satisfaction provides a foundation for developing strategies that support optimal psychological and social functioning of individuals.

Leisure time is not viewed merely as a context for relaxation, but as a space in which identity is actively explored and developed through various activities and interactions, a process that is particularly pronounced during the period of studying (Layland et al., 2018). This developmental context, in synergy with academic demands, contributes to a specific way in which students experience leisure. Furthermore, research on professional socialization (Pach et al., 2025) confirms that the structure and content of study programs, as well as expected professional roles, influence the shaping of students' identities and their engagement in non-academic life. Accordingly, it is reasonable to assume that pedagogy students display specific patterns of leisure participation that are reflected in their overall satisfaction. To accurately identify these patterns, it is necessary to employ an instrument that does not treat leisure as a single construct, but rather as a system of interconnected domains of satisfaction.

The Leisure Satisfaction Scale (Beard & Ragheb, 1980) offers precisely such an approach, operationalizing this construct through six relatively autonomous yet interconnected dimensions: psychological, educational, social, relaxation, physical, and aesthetic. Each of these dimensions reflects specific aspects of the leisure experience and the needs individuals expect to fulfill through activities. The psychological dimension of leisure satisfaction refers to subjective experiences such as enjoyment, feelings of freedom, challenge, and involvement, while the educational dimension encompasses processes of learning, self-development, and intellectual stimulation. The social dimension of satisfaction is associated with establishing and maintaining interpersonal relationships during leisure, whereas the relaxation dimension highlights the role of leisure in recovery, stress reduction, and emotional relief. The physical dimension of satisfaction pertains to bodily activity, health, and vitality, while the aesthetic dimension involves the perception of the environment and the quality of the space in which activities take place (Beard & Ragheb, 1980).

Over the past decades, the Leisure Satisfaction Scale has found wide application in various research contexts (Di Bona, 2000; Duyan & Gimej, 2020; Kaya, 2016; Köse et al., 2024; Muzindutsi & Masango, 2015; Nikolić Maksić, 2015; Yaman et al., 2016). Although previous studies have largely confirmed the utility of the instrument (Köse et al., 2024; Lysyk et al., 2002; Nikolić Maksić, 2015; Trottier et al., 2002), contemporary approaches to the analysis of psychometric properties highlight the need for further

examination of the stability of its six theoretically assumed dimensions (Kim & Cho, 2022). Namely, findings suggest that the factor structure may vary depending on the sociocultural environment or particular features of the sample, raising the question of the optimal number and composition of factors across different populations (Kim & Cho, 2022).

Building on these insights, the aim of this study is to examine the psychometric properties of the Leisure Satisfaction Scale in a sample of pedagogy students. The particular importance of this research stems from the fact that these are future professionals whose work will, among other things, be directed toward designing, organizing, and evaluating leisure activities for others. Testing the structural validity and reliability of the Leisure Satisfaction Scale in this population provides a basis for an objective assessment of the construct itself, while also contributing to a deeper understanding of how pedagogy students perceive and value their own leisure time – an understanding that may have significant implications for their future professional practice.

Review of Relevant Research

Previous empirical studies on leisure satisfaction point to a gradual development of scientific interest: from initial validation studies focused on examining the basic metric properties of the instrument (Beard & Ragheb, 1980; Lysyk et al., 2002; Trottier et al., 2002) to contemporary psychometric analyses that investigate the functioning of the Scale, its factor stability, and measurement invariance across different populations and cultural contexts (Kim & Cho, 2022; Köse et al., 2024). Following the establishment of the Leisure Satisfaction Scale in the works of Beard and Ragheb (1980), a series of studies were conducted with the aim of examining the applicability and structural adequacy of the six-dimensional model in various populations. The results of these studies largely provide empirical support for the assumed structure of the instrument (Köse et al., 2024; Lysyk et al., 2002; Nikolić Maksić, 2015; Trottier et al., 2002). The findings indicate that respondents' answers are to a significant extent organized around the psychological, educational, social, aesthetic, physical, and relaxation aspects of leisure satisfaction, thereby confirming the theoretical assumption about the complex nature of this construct.

Alongside studies that confirm the usability of the instrument, the literature also includes works that problematize the stability of its factor structure in different demographic and cultural contexts. Research focused on measurement invariance (Köse et al., 2024) shows that, although the basic model demonstrates satisfactory fit across various groups, certain dimensions and items may function differently depending on respondent characteristics such as gender, age, or marital status. These findings suggest that leisure satisfaction may be shaped by particular features of the life context, implying the need for cautious interpretation of results and for testing the metric properties of the instrument in each new population. Contemporary

psychometric approaches further deepen the understanding of the Scale's functioning. The application of the Rasch item response theory model (Kim & Cho, 2022) has shown that most items adequately contribute to measuring the latent construct, while some items may exhibit certain deviations in their metric properties, pointing to the possibility of further refinement of the instrument and optimization of its structure. Such findings do not call into question the theoretical foundation of the Scale but rather emphasize the importance of continuous empirical verification of its functionality in different research contexts.

When the focus of research is directed toward the student population, leisure satisfaction acquires an additional developmental dimension. The period of studying is characterized by an intensive process of identity formation, professional orientation, and social relationships, which makes leisure an important context for personal development. Empirical findings indicate that leisure satisfaction among students is associated with indicators of subjective well-being, happiness, and overall life satisfaction (Kaya, 2016; Özmaden, 2019; Yaşartürk et al., 2024). An analysis of specific aspects of this construct reveals characteristic patterns within the student population. Research shows that students achieve the highest levels of leisure satisfaction in the relaxation dimension, while the lowest average scores are recorded in the physical dimension (Kaya, 2016). Such findings suggest that, for students, the aspect of recovery from academic demands plays a primary role, whereas physical activity remains a less prominent source of satisfaction, which may indicate a specific way in which this population channels academic stress.

In the domestic research context, the Leisure Satisfaction Scale has been analyzed on a sample of adult respondents, with findings indicating satisfactory metric properties of the instrument. The study by Nikolić Maksić (2015) confirmed the factor structure of the Scale and pointed to a high degree of internal consistency of the overall instrument, thereby providing empirical support for its applicability in the context of adult education. However, given that leisure satisfaction is theoretically defined as a multidimensional construct, additional analyses of the reliability of individual dimensions may contribute to a more comprehensive understanding of the psychometric functioning of the Scale across different populations. Such an approach is particularly important in studies involving specific target groups in which the structure of latent dimensions may differ.

Summarizing the existing knowledge, it can be concluded that the Leisure Satisfaction Scale represents a widely applied and theoretically grounded instrument whose basic psychometric properties have been confirmed in numerous studies. Nevertheless, findings from contemporary research indicate that the structure and functioning of certain dimensions may vary depending on the particular features of the sample and the context of application, underscoring the need for further validation analyses. In this regard, examining the psychometric properties of the Scale in a sample of pedagogy students constitutes a significant research contribution.

Method

Aim of the Study

The aim of this study was directed toward the psychometric evaluation of the Leisure Satisfaction Scale in a sample of pedagogy students. Within this framework, the structural validity of the instrument, as well as its reliability, were examined. In addition, the study provides a descriptive insight into the patterns of expressing leisure satisfaction among pedagogy students. Such a research design enables the verification of the stability of the measurement characteristics of the instrument in a specific educational context, thereby contributing to its further application in studies within the field of leisure pedagogy.

Sample of the Study

The research, conducted using a convenience sampling method, included 249 pedagogy students from the Faculty of Philosophy, University of Novi Sad, with an average age of 21 ($SD = 1.96$). The sample was predominantly female (93.2%). Participants comprised both undergraduate and master's students, with the largest proportion represented by first-year students (26.1%), followed by third-year (21.3%), second-year (19.7%), and fourth-year undergraduate students (19.3%), while master's students accounted for 12.4% of the respondents.

Instruments

The research employed the short version of the Leisure Satisfaction Scale (LSS; Beard & Ragheb, 1980), consisting of 24 items. The instrument was designed to assess the extent to which individuals feel that their personal needs are met through participation in leisure activities. The original model comprises six dimensions of leisure satisfaction, each represented by four statements: psychological, educational, social, relaxation, physical, and aesthetic. Respondents answered each item using a five-point Likert scale (ranging from 1 – does not apply to me at all, to 5 – applies to me completely).

In international research contexts, the Leisure Satisfaction Scale has demonstrated sound psychometric properties. The authors of the Scale (Beard & Ragheb, 1980) reported high internal consistency ($\alpha = .85 - .92$), which was subsequently confirmed in later studies (Lysyk et al., 2002; Köse et al., 2024; Trottier et al., 2002). In the domestic context, Nikolić Maksić (2015) validated the six-factor structure on a sample of adult respondents, with a reliability coefficient of .91 for the overall instrument.

Although previous studies have indicated satisfactory psychometric properties of the Scale, this study conducts an additional examination of its factor structure on a specific sample of pedagogy students. This approach is based on the assumption that sample characteristics may influence the manifestation of the latent dimensions of the construct, which makes empirical validation of the instrument in each new research group methodologically justified.

Results

Factor Structure of the Leisure Satisfaction Scale

The factor structure of the Leisure Satisfaction Scale was examined using principal component analysis with Promax rotation, given the expected correlation among latent dimensions. The statistical significance of the correlation matrix was confirmed by Bartlett's test of sphericity ($\chi^2_{(276)} = 2930.92, p < .001$), while the adequacy of the sample for factor analysis was supported by the Kaiser-Meyer-Olkin measure of sampling adequacy ($KMO = .833$). The decision to retain five factors was based on Horn's parallel analysis, with the same number of factors also suggested by the Guttman-Kaiser criterion. As shown in Table 1, the five extracted factors had eigenvalues greater than the corresponding values obtained from randomly generated data, jointly explaining 63.2% of the total variance of the questionnaire. Communality values for all items were above the recommended threshold of .30.

Table 1

Results of the parallel analysis and percentage of variance explained by the factors

Factor	Eigenvalue	Proportion of Variance	Cumulative	Parallel Analysis Value	Decision
1	6.579	.274	.274	1.591	Accept
2	2.701	.113	.387	1.513	Accept
3	2.373	.099	.486	1.434	Accept
4	1.988	.083	.568	1.372	Accept
5	1.538	.064	.632	1.306	Accept
6	0.928			1.250	Reject

As shown in Table 2, the first factor integrates items that, in the original version of the Scale, were distributed across two separate factors – psychological and educational – and can therefore be interpreted as an integrated *psychological-educational* dimension of leisure satisfaction. This factor encompasses items related to acquiring new knowledge and skills, personal development, a sense of achievement, self-confidence, and the subjective experience of progress through leisure activities. The merging of psychological and educational components may be explained by the specific characteristics of pedagogy students, whose leisure activities often intertwine with processes of personal and professional development, reflection, and self-improvement. Consequently, learning and the psychological benefits of these activities are perceived as interconnected aspects of a unified experience. The remaining factors are fully consistent with the original factor solution of the instrument, with no observed deviations in item structure. Accordingly, the second factor refers to the *physical* dimension of leisure satisfaction and includes items related to movement, physical effort, fitness, and health maintenance. The third factor describes the *relaxation* dimension, encompassing psychological recovery, stress reduction, and emotional well-being associated with leisure activities. The fourth factor represents the *social* dimension of leisure satisfaction and includes items related to companionship, social

interactions, and relationships with others, while the fifth factor covers the *aesthetic* dimension, referring to the characteristics of the environment and settings in which leisure activities take place.

Table 2
Pattern Matrix

	RC1	RC2	RC3	RC4	RC5
[5] My leisure activities increase my knowledge about things around me.	.896				
[7] My leisure activities help me to learn about myself.	.767				
[8] My leisure activities help me to learn about other people.	.739				
[4] I use many different skills and abilities in my leisure activities.	.705				
[6] My leisure activities provide opportunities to try new things.	.698				
[2] My leisure activities give me self-confidence.	.685				
[3] My leisure activities give me a sense of accomplishment.	.668				
[1] My leisure activities are very interesting to me.	.595				
[18] I do leisure activities which develop my physical fitness.		.923			
[19] I do leisure activities which restore me physically.		.902			
[17] My leisure activities are physically challenging.		.834			
[20] My leisure activities help me to stay healthy.		.792			
[14] My leisure activities help relieve stress.			.936		
[13] My leisure activities help me to relax.			.849		
[15] My leisure activities contribute to my emotional well-being.			.758		
[16] I engage in leisure activities simply because I like doing them.			.520		
[12] I associated with people in my free time who enjoy doing leisure activities a great deal.				.885	
[10] My leisure activities have helped me to develop close relationship with others.				.829	
[9] I have social interaction with others through leisure activities.				.727	
[11] The people I meet in my leisure activities are friendly.				.556	
[24] The areas or places where I engage in my leisure activities are well designed.					.909

	RC1	RC2	RC3	RC4	RC5
[23] The areas or places where I engage in my leisure activities are beautiful.					.853
[22] The areas or places where I engage in my leisure activities are interesting.					.661
[21] The areas or places where I engage in my leisure activities are fresh and clean.					.556

The correlation values between the factors ranged from low to moderate. The strongest associations were observed between the relaxation and aesthetic dimensions of leisure satisfaction ($r = .43$), as well as between the psychological-educational and aesthetic dimensions ($r = .41$). A somewhat lower, yet still moderate correlation was recorded between the psychological-educational and relaxation dimensions ($r = .37$). The correlation between the psychological-educational and physical dimensions of leisure satisfaction was of lower intensity ($r = .31$), while correlations among the remaining factor pairs were low ($r = .17 - .20$). This correlation pattern indicates both the interconnectedness and the distinctiveness of the extracted dimensions of leisure satisfaction.

Psychometric Properties of the Leisure Satisfaction Scale

The internal consistency of the dimensions of the Leisure Satisfaction Scale was examined using McDonald's ω and Cronbach's α coefficients, in order to provide a more comprehensive assessment of the instrument's reliability. The obtained values indicate good reliability across all dimensions of the instrument. The ω coefficients ranged from .77 to .89, while the α coefficients were between .75 and .89. The psychological-educational dimension demonstrated high reliability ($\omega = .88$; $\alpha = .88$), whereas the physical dimension achieved the highest values for both coefficients ($\omega = .89$; $\alpha = .89$). The reliability of the relaxation dimension was somewhat lower, yet still satisfactory ($\omega = .79$; $\alpha = .77$). The social dimension showed stable reliability values ($\omega = .82$; $\alpha = .79$), while the aesthetic dimension had the lowest, but still acceptable reliability values ($\omega = .77$; $\alpha = .75$).

Perception of Leisure Satisfaction among Pedagogy Students

In the next step, descriptive indicators (means, standard deviations, ranges, skewness, and kurtosis) were calculated for the dimensions of leisure satisfaction, in order to gain insight into central tendencies, variability, and the shape of the distributions. Their results are presented in Table 3.

Table 3
Descriptive statistics: perception of leisure satisfaction

	Range	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
Psychological-educational dimension	1.63 – 5	3.93	0.74	-0.81	0.38
Social dimension	1.00 – 5	3.94	0.85	-0.94	0.80
Relaxation dimension	1.50 – 5	4.48	0.55	-1.46	3.45
Physical dimension	1.00 – 5	2.89	1.09	0.03	-0.81
Aesthetic dimension	1.25 – 5	3.73	0.74	-0.21	-0.28

The obtained results indicate that respondents, on average, achieve the highest level of satisfaction through the relaxation dimension ($M = 4.48$, $SD = 0.55$), while relatively high mean values were also recorded for the social dimension ($M = 3.94$, $SD = 0.85$) and the psychological-educational dimension of leisure satisfaction ($M = 3.93$, $SD = 0.74$). The aesthetic dimension likewise shows a moderately high mean value ($M = 3.73$, $SD = 0.74$). The lowest mean values were observed in the physical dimension of leisure satisfaction ($M = 2.89$, $SD = 1.09$), accompanied by the greatest variability in respondents' answers. The skewness and kurtosis values for most dimensions fall within the acceptable range according to the ± 2 criterion, whereas the relaxation dimension demonstrates a more pronounced kurtosis value, indicating a greater concentration of responses around the higher end of the Scale. These results suggest that pedagogy students place the greatest value on activities contributing to relaxation, while physical activity elicits the widest diversity in the perception of satisfaction.

Discussion

The results of the factor analysis indicated a five-dimensional structure of the Leisure Satisfaction Scale, whereby the psychological and educational dimensions from the original model were merged into a single psychological-educational dimension. This integration may be interpreted in light of the specific characteristics of the pedagogy student population, whose leisure activities are often directly linked to processes of personal and professional development, reflection, and the acquisition of competencies. In other words, pedagogy students perceive learning and the psychological benefits of leisure as interconnected components of a unified experience, which differs from the findings of previous studies in which these dimensions remained separate (Köse et al., 2024; Lysyk et al., 2002; Nikolić Maksić, 2015; Trottier et al., 2002).

The remaining dimensions – physical, relaxation, social, and aesthetic – fully retained the structure of the original solution, thereby confirming the conceptual stability of these dimensions in the sample of pedagogy students. Similar observations regarding the preservation of the structure of these dimensions have also been noted in recent studies of leisure satisfaction, where they consistently appear as independent aspects of the leisure experience (Köse et al., 2024).

The analysis of inter-factor correlations revealed low to moderate associations between the factors, with the relaxation and aesthetic dimensions, as well as the psychological-educational and aesthetic dimensions, showing stronger connections. This pattern suggests that, although the dimensions are related through shared subjective experiences of leisure, they nevertheless retain clear mutual distinctiveness, thereby confirming the multidimensional nature of leisure satisfaction (Beard & Ragheb, 1980).

The psychometric verification of the instrument demonstrated good internal consistency across all dimensions ($\omega = .77 - .89$; $\alpha = .75 - .89$), confirming that the Scale reliably measures different aspects of leisure satisfaction among pedagogy students. The highest coefficients were recorded for the physical and psychological-educational dimensions, which may reflect the stability and clarity of these dimensions in respondents' perceptions, while lower yet acceptable values for the aesthetic dimension point to the relative subjectivity of evaluating the environment in which activities take place. These results support the findings of previous studies emphasizing that the Leisure Satisfaction Scale is a methodologically reliable instrument applicable across diverse populations, with possible variations in factor structure depending on the specific characteristics of respondents (Beard & Ragheb, 1980; Kim & Cho, 2022; Köse et al., 2024; Lysyk et al., 2002; Nikolić Maksić, 2015; Trottier et al., 2002).

Taking into account the five factors identified in this study, it can be concluded that the population of pedagogy students perceives the psychological and educational aspects of leisure as an integrated dimension, while the physical, relaxation, social, and aesthetic dimensions remain conceptually distinct and methodologically stable. These findings provide empirical support for the further application of the Scale in educational contexts, while at the same time pointing to the need for additional research that would examine the factor structure on larger and more heterogeneous samples.

The results of the descriptive analysis indicate that pedagogy students experience the highest level of satisfaction through activities that promote relaxation, which is consistent with previous findings showing that recovery from academic demands plays a primary role for students (Kaya, 2016). Relatively high mean values recorded for the social and psychological-educational dimensions suggest that pedagogy students also value interaction with others, as well as activities that contribute to personal and professional development, which may be interpreted as a specific characteristic of this population. Namely, future pedagogues often perceive their leisure time as a space for self-improvement, learning, and reflection, so acquiring new knowledge, a sense of achievement, and personal growth are closely linked to psychological satisfaction. Lower mean values for the physical dimension of leisure satisfaction ($M = 2.89$), accompanied by the greatest variability in responses, point to a heterogeneous approach to physical activities. This can be explained by the fact that pedagogy students have diverse everyday habits and motivations related to movement and sports, and physical activity in leisure time does not hold the same importance as relaxation or social interaction. Such a pattern suggests that physical activity, though

part of pedagogy students' leisure, does not constitute a dominant source of leisure satisfaction among them, which is consistent with earlier studies that also reported the lowest mean values for students on this dimension (Kaya, 2016).

Such data suggest that, within the student population, the aspect of recovery from academic demands through relaxation plays a primary role, while physical activity remains a less prominent source of satisfaction. This may indicate a specific way in which this population channels academic stress, relying primarily on relaxation as a key mechanism for achieving well-being. Recognizing these specific patterns of satisfaction may serve as a starting point for designing student support programs aimed at preventing academic burnout and strengthening professional competencies through more effectively structured leisure time.

Conclusion

The conducted study provides empirical confirmation that the Leisure Satisfaction Scale possesses adequate psychometric properties for application in the population of pedagogy students. The results indicate high internal consistency of the instrument, thereby confirming its reliability in measuring different aspects of leisure satisfaction within a specific academic context. The key theoretical and methodological contribution of the study lies in the identification of a five-dimensional structure of the instrument, which deviates from the original six-dimensional model due to the integration of the psychological and educational dimensions. This solution suggests that pedagogy students perceive their personal development and the acquisition of professional competencies as a unified, complementary process within the context of leisure.

The descriptive findings highlight dominant patterns of leisure satisfaction among future pedagogues, emphasizing relaxation as the primary source and key resource for recovery from academic demands. The high valuation of social interaction further confirms the importance of interpersonal relationships in this population, while lower values and greater variability in responses within the physical dimension indicate that physical activity is not uniformly recognized as a dominant source of satisfaction. These patterns provide guidance for understanding the ways in which future pedagogues organize and experience their non-academic time.

Despite the significant insights, the study is characterized by certain limitations that require caution when generalizing the findings. The convenience sample, restricted to a single institution of higher education, as well as the pronounced gender asymmetry (93.2% female students), point to the need for verifying the results on larger and more heterogeneous groups. In addition, the use of self-report instruments carries the risk of socially desirable responses, which represents an inherent limitation of this type of research.

Overall, the results of the study confirm the value of the Leisure Satisfaction Scale as a reliable tool for future research and pedagogical practice. The practical implications of the study lie in the possibility of designing specific support programs that, by acknowledging students' need for relaxation and personal development, could contribute to the prevention of academic burnout. Future research should be directed toward examining the measurement invariance of the Scale across different educational profiles, which would further strengthen its diagnostic and prognostic value in the formative and educational context.

References

- Beard, J. G., & Ragheb, M. G. (1980). Measuring Leisure Satisfaction. *Journal of Leisure Research*, 12(1), 20–33. <https://doi.org/10.1080/00222216.1980.11969416>
- Di Bona, L. (2000). What are the Benefits of Leisure? An Exploration Using the Leisure Satisfaction Scale. *British Journal of Occupational Therapy*, 63(2), 50–58. <https://doi.org/10.1177/030802260006300202>
- Duyan, M., & Gimeı, İ. (2020). The Effect of Leisure Satisfaction on Job Satisfaction: A Research on Physical Education Teachers. *International Journal of Applied Exercise Physiology*, 9(12), 68–75.
- Kaushik, P., Sharma, H., & Pallai, P. (2025). Leisure Satisfaction, Happiness, and Psychological Wellbeing among University Students: A Gender and Educational Level Perspective. *Interdisciplinary Perspectives of Education*, 2(2), 92–109. <https://doi.org/10.65525/ipe.v2i2.27>
- Kaya, S. (2016). The Relationship between Leisure Satisfaction and Happiness among College Students. *Universal Journal of Educational Research*, 4(3), 622–631. <https://doi.org/10.13189/ujer.2016.040322>
- Kim, S. H., & Cho, D. (2022). Psychometric Properties of Leisure Satisfaction Scale (LSS) – Short Form: A Rasch Rating Model Calibration Approach. *BMC Psychology*, 10(1), 151. <https://doi.org/10.1186/s40359-022-00861-1>
- Köse, E., Gökçe, H., Toktaş, N., Yerlisu Lapa, T., & Tercan Kaas, E. (2024). Measurement Invariance of the Satisfaction with Leisure Satisfaction Scale by Gender, Marital Status, and Age. *Psicologia: Reflexão e Crítica*, 37(1), 1. <https://doi.org/10.1186/s41155-023-00282-y>
- Kuykendall, L., Tay, L., & Ng, V. (2015). Leisure Engagement and Subjective Well-being: A Meta-analysis. *Psychological Bulletin*, 141(2), 364–403. <https://doi.org/10.1037/a0038508>
- Layland, E. K., Hill, B. J., & Nelson, L. J. (2018). Freedom to Explore the Self: How Emerging Adults Use Leisure to Develop Identity. *The Journal of Positive Psychology*, 13(1), 78–91. <https://doi.org/10.1080/17439760.2017.1374440>
- Lysyk, M., Brown, G. T., Rodrigues, E., McNally, J., & Loo, K. (2002). Translation of the Leisure Satisfaction Scale into French: A Validation Study. *Occupational Therapy International*, 9(1), 76–89. <https://doi.org/10.1002/oti.157>
- Mannell, R. C., & Kleiber, D. A. (1997). *A Social Psychology of Leisure*. Venture Publishing Inc.
- Muzindutsi, P. F., & Masango, Z. (2015). Determinants of Leisure Satisfaction among Undergraduate Students at a South African University. *International Journal of Business and Management Studies*, 7(2), 1–15.
- Nikolić Maksić, T. (2015). *Obrazovanje kao činilac kvaliteta slobodnog vremena odraslih [Education as a factor in the quality of leisure of adults]*, [Neobjavljena doktorska disertacija, Filozofski fakultet, Univerzitet u Beogradu] NARDUS. <https://nardus.mpn.gov.rs/bitstream/handle/123456789/4950/Disertacija561.pdf?sequence=6&isAllowed=y>
- Özmaden, M. (2019). The Investigation of the Relationship between University Students' Leisure and Life Satisfaction Levels. *International Journal of Progressive Education*, 15(2), 91–103. <https://doi.org/10.29329/ijpe.2019.189.7>

- Pach, J., Stoffels, M., Schoonmade, L., van Ingen, E., & Kusurkar, R. A. (2025). The Impact of Educational Activities on Professional Identity Formation in Social Sciences and Humanities: A Scoping Review. *Educational Research Review*, 48, 100704. <https://doi.org/10.1016/j.edurev.2025.100704>
- Robinson, J. A. (2003). *Perceived Freedom and Leisure Satisfaction in Mothers with Preschool-Aged Children* [Unpublished Master's Thesis]. Ohio University.
- Trottier, A. N., Brown, G. T., Hobson, S. J., & Miller, W. (2002). Reliability and Validity of the Leisure Satisfaction Scale (LSS – short form) and the Adolescent Leisure Interest Profile (ALIP). *Occupational Therapy International*, 9(2), 131–144. <https://doi.org/10.1002/oti.161>
- Yaman, B., Akgül, B. M., Karaman, M., Ayyıldız, T., & Karaküçük, S. U. A. T. (2016). Examination of Leisure Satisfaction Levels of Individuals Participating in Youth Center Activities. *Niğde University Journal of Physical Education and Sport Sciences*, 10(3), 474–487.
- Yaşartürk, F., Elçi, G., Kural, S., & Keskin, Y. (2024). Analysis of the Relationship between Leisure Satisfaction and Life Satisfaction among Students Participating in Outdoor Recreational Activities. *Physical Education of Students*, 28(6), 371–381. <https://doi.org/10.15561/20755279.2024.0606>