## **ORIGINAL ARTICLE**

TRENDS in Sport Sciences

2023; 30(**3**): 93-99 ISSN 2299-9590 DOI: 10.23829/TSS.2023.30.3-2

# Satisfaction rate of leisure time in adolescents of Slovakia

ŠTEFAN ADAMČÁK<sup>1</sup>, MICHAL MARKO<sup>2</sup>, LÍVIA NEMCOVÁ<sup>3</sup>, RASTISLAV KOLLÁR<sup>1</sup>, STANISLAV AZOR<sup>4</sup>

#### Abstract

Introduction. Leisure time is an important part of adolescents' lives, impacting the quality of lives. Engaging in leisure activity promotes health, well-being, social development, individual growth, and life satisfaction. Aim of Study. The aim of study was to examine the satisfaction rate (life) of leisure time in adolescents (n = 1204) of Slovakia. Material and Methods. Survey instrument (satisfaction rate of leisure time) was carried out 6 weeks (May 1 – June 10, 2023) as a way of examining (e.g., analyze, compare) satisfaction rate of leisure time in adolescent boys (n = 542, 45.02%) and girls (n = 662, 54.98%) of Slovakia. Examining the satisfaction rate of leisure time was by means of Assumption of Homogeneity of Variance and Independent Samples, 2-Sample T-Test, and Anova, of which the significance level was 0.01 and 0.05 (Ibm Spss Modeler). Results. Statistical difference (0.01, 0.05) between adolescent boys and girls was in: (i) active leisure ( $\pm 0.32$ ); (ii) passive leisure ( $\pm 0.25$ ); (iii) leisure education ( $\pm 0.20$ ); (iv) leisure caring ( $\pm 0.10$ ); (v) social leisure  $(\pm 0.12)$ . No difference (0.01, 0.05), between adolescent boys and girls was in satisfaction rate ( $\pm 0.08$ ). Within the adolescent boys, 0.01 and 0.05 difference of variance (Anova) was in: (i) active leisure (8.88E-06); (ii) passive leisure (4.24E-08); (iii) leisure caring (0.030); (iv) social leisure (0.008). Within the adolescent girls, 0.05 difference of variance was in: (i) leisure caring (0.020). Conclusions. Engaging in leisure activity provides adolescents with chances for individual growth, stress reduction, and social connection; therefore, it is important to encourage them to make most of their leisure time, which contributes to holistic development, happiness, and life satisfaction.

KEYWORDS: adolescents, leisure time, satisfaction rate, secondary schools, quality of life.

Received: 10 July 2023 Accepted: 4 August 2023 Corresponding author: michal.marko@aku.sk

- <sup>1</sup> Matej Bel University in Banská Bystrica, Faculty of Arts, Banská Bystrica, Slovak Republic
- <sup>2</sup> Academy of Arts in Banská Bystrica, Faculty of Performing Arts, Banská Bystrica, Slovak Republic
- <sup>3</sup> Matej Bel University in Banská Bystrica, Faculty of Education, Banská Bystrica, Slovak Republic
- <sup>4</sup> Technical University in Zvolen, Institute of Physical Education and Sports, Zvolen, Slovak Republic

#### Introduction

Adolescence is an important stage (transformative period) in an individual's life, characterized by numerous changes (e.g., physical cognitive, social). When navigating the demands (challenges) of this developmental stage, leisure time is an important aspect of adolescents' lives [11]. Adolescents experience a new sense of autonomy and independence, translating into increased leisure time. Participating in leisure activity provides adolescents with chances (opportunities) for individual growth, stress reduction, and social connection. Leisure time provides adolescents with breaks from the demands of academic life, enabling them to relax, revitalize, and explore individual interests and passions [4].

Physical activity (i.e., active leisure) is an important choice in adolescents during their leisure time, because sports and games contribute to health and wellbeing, while also fostering discipline, teamwork, and perseverance. Participating in active leisure enhances

self-esteem, improves body image, and reduces stress, as a consequence promoting well-being [9]. Passive leisure maintains an important place in leisure time of adolescents, offering chances for individual enrichment (e.g., relaxation, entertainment). Passive leisure (e.g., watching television, playing video games, reading books) provides adolescents with breaks from the demands of life, allowing mental escapes and a sense of calm. Entertainment allows adolescents to enjoy and indulge in moments of pure enjoyment and leisure. Watching television, playing video games, and reading books provides temporary escapes from reality; however, it is important to note that while passive leisure has its merits, a balanced approach to leisure is important. Adolescents should attempt a mix of both leisure types (active and passive), ensuring participation in physical activity, social interaction, and individual growth alongside experiences of passive leisure [3, 6, 10, 22].

Leisure education in adolescents refers to intentional (structured) attempts aimed at promoting the development of knowledge (skills) and attitudes necessary for meaningful leisure experiences. It seeks to enhance adolescents' understanding of leisure value, assists in making choices concerning leisure activity, and cultivates the ability to engage in leisure pursuits, contributing to individual growth and well-being [25]. Leisure education empowers adolescents to make informed choices, engage in a meaningful leisure activity, and cultivate habits, enhancing the quality of life [5, 12, 16].

At present adolescents are spending more time using screen time and social media [4] (e.g., Meta-Facebook, Instagram), with the number of hours spent online having risen during the Covid-19 pandemic. Excessive screen time causes problems; however, responsible use of technology offers chances for learning, individual growth, and social connections; therefore, adolescents should attempt to reach a mix of both online and offline activities, ensuring both education and recreation by means of technology [4]. Relationships between social leisure and screen time in adolescents are important, because screen time provides chances for social interaction and leisure activity; however, it is important to monitor (manage) screen time to avoid its excessive use and negative impacts. This can be done by maintaining a balance between screen time and social interaction (offline), promoting a mindful screen use, and setting limits all contribute to a positive social leisure experience. Social leisure provides adolescents with chances to socialize with their peers, fostering the development of important social skills, in particular empathy, cooperation, and conflict resolution [19]. In the case of organized groups, when hanging out with peers (friends) and participating in clubs (organizations), adolescents learn to navigate social dynamics, build relationships, and cultivate the sense of belonging [7]. Social leisure and leisure caring are similar concepts sharing common elements and they sometimes overlap in practice; however, leisure caring emphasizes acts of kindness (caring for others), while social leisure involves a diverse range of social interactions [1, 22].

## Aim of Study

Because many research gaps remain in literature in terms of satisfaction rate of leisure time and Slovak scale (the best of authors' knowledge), the aim of study was to examine the satisfaction rate of leisure time in adolescents (n = 1204) of Slovakia.

#### **Material and Methods**

Procedure sample and participant selection

In terms of the study aim, the survey group (n = 1204) (i.e., target population) consisted of 1204 adolescent boys (45.02%, n = 542) (18.88  $\pm$  0.38 years) and girls (54.98%, n = 662) (18.92  $\pm$  0.32 years) from Slovakia, attending grammar (40.04, n = 482) and vocational (59.96%, n = 722) secondary schools, and living in Žilina (46.68%, n = 562) and Banská Bystrica (53.32%, n = 642) (Table 1). Adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) (i.e., the survey group)

**Table 1.** Demographic data of the survey group (n = 1204)

Age (2)				
Boys	542; 45.02%			
Girls		662; 54.98%		
	Gender (2)			
Boys		$18.88 \pm 0.38$		
Girls		$18.92 \pm 0.32$		
	Region (2)			
Žilina		562; 46.68%		
Banská Bystrica		642; 53.32%		
	School (2)			
Grammar		482; 40.04%		
Vocational		722; 59.96%		

consisted of a convenience sample, recruited through the EduPage (complete school system) and teachers of physical education [13]. Recruitment (i.e., the selection process) of the survey group (n = 1 204) was carried out for 6 weeks (May 1 – June 10, 2023), in intervals of  $2 \times (Mon, Thu)$ / week, aiming for intentional (selective) sampling; in particular, age, gender, region, and school. Undertaking recruitment for surveys in schools (e.g., secondary schools, in our case) is an effective way in terms of recruiting adolescents to participate in surveys. Examining the satisfaction rate of leisure time in adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) from Slovakia was carried out in accordance with the ethical standards as laid down in the 1964 Declaration of Helsinki and its later amendments and/or comparable ethical standards. All subjects (i.e., the survey group) provided their written informed consent [14].

## Assessments, measures and procedures

The survey instrument (the satisfaction rate of leisure time) was carried out for 6 weeks (May 1 - June 10, 2023) as a way of examining (e.g., analyzing, comparing) the satisfaction rate of leisure time in adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) from Slovakia. Adopting the survey instrument (satisfaction rate of leisure time) [16] made it easier to examine the available data, consisting of two sections: (i) demographic data; (ii) satisfaction rate of leisure time (4 survey items) with a 5-point Likert scale (mutual saturation; assessing the attitudes): (ii-i) very unsatisfied (1); (ii-ii) unsatisfied (2); (ii-iii) neutral (3); (ii-iv) satisfied (4); (ii-v) very satisfied (5) (Figure 1). Determining the satisfaction rate (e.g., frequency) of leisure time in the survey group (n = 1204) was by means of 20 survey items with a 5-point Liker scale: (i) never (1); (ii) rarely (2); (iii) sometimes (3); (iv) often (4); and (v) always (5). Because of the varimax rotation, Kaiser-Meyer-Olkin Test of Sampling Adequacy, Bartlett's Test of Sphericity, and exploratory factor analysis, a 20-item survey confirmed the presence of five sections: (i) active leisure (e.g., walking, cycling, swimming); (ii) passive leisure (e.g., watching television, playing video games, reading books); (iii) leisure education (e.g., knowledge of leisure, self-awareness); (iv) leisure caring (e.g., volunteering, caring of others); and (v) social leisure (e.g., going out, board games) [16].

A 6-week period (May 1 – June 10, 2023) of the survey instrument (unlimited time) did not indicate any problems; in particular, the comparative design (technical) and language (e.g., grammar, vocabulary). Forms (debriefing) of the survey instrument did not

detect individual data (except for demographic data, Table 1) of the survey group (n = 1204). Incentives were not given for participation (it was voluntary); however, the survey group (n = 1204) received the report of their individual data (results) afterwards. The survey instrument (online version) was selected because of its cost effectiveness, time saving, and easy accessibility (Microsoft Forms, Office 365, Microsoft Corp., Redmond, WA, USA) [3].











**Figure 1.** An example of the 5-point Likert scale of satisfaction rate of leisure time

## Data processing

The satisfaction rate of leisure time in adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) from Slovakia was examined by means of Assumption of Homogeneity of Variance and Independent Samples (T-Test) and 2-Sample T-Test (Equal and Unequal Variance Assumption), of which the significance level (α) was 0.01 and 0.05. Anova (Correlation/ Regression Analysis), of which the significance level ( $\alpha$ ) was 0.01 and 0.05, evaluated the dependency and relationship between the items of the survey instrument (effect size.  $r^2 = 0.10 - \text{small effect}, 0.30 - \text{medium effect}, 0.50 - \text{large}$ effect) (Ibm Spss Modeler) [23, 26]. Available data of the survey group (n = 1204) was tabulated in a database design, precisely for a single measure comparative (descriptive) study [24]. Descriptive statistics (e.g., arithmetic mean, percentage frequency) described the basic features of the survey group (n = 1204).

#### Results

In terms of the study aim, Table 2 shows the satisfaction rate of leisure time in the survey group (n = 1204), which was 3.36 ('neutral') out of the 5-point scale (p > 0.05; p = 0.184), with 0.08 difference ( $\bar{x}$ ) in favor of adolescent girls (3.40; 54.98%, n = 662) compared to boys (3.32; 45.02%, n = 542). In terms of presence of five sections and satisfaction rate (overall), statistical differences (0.01, 0.05) were found in: (i) active leisure ( $\pm 0.32$ ; p = 1.92E-09); (ii) passive leisure ( $\pm 0.25$ ; p = 4.02E-08); (iii) leisure education ( $\pm 0.20$ ; p = 2.62E-06); (iiii) leisure caring ( $\pm 0.10$ ; p = 0.006), and (iiiii) social leisure ( $\pm 0.12$ ; p = 0.001) (Table 2).

The analysis of variance for the satisfaction rate of leisure time in the survey group (n = 1204) is shown in Table 3. Within the group of adolescent boys (45.02%,

**Table 2.** Satisfaction rate of leisure time in the survey group (n = 1204)

	Boys	Girls	Boys + girls	2-Sample T-Test
Satisfaction rate	3.32	3.40	3.36	0.184
Active leisure	2.64	2.32	2.48	1.92E-09*
Passive leisure	3.25	3.50	3.38	4.02E-08*
Leisure education	2.50	2.70	2.60	2.62E-06*
Leisure caring	2.40	2.50	2.45	0.006*
Social leisure	2.12	2.24	2.18	0.001*

<sup>\* 0.01</sup> 

n = 542), 0.01 and 0.05 differences of variance (Anova) in the five sections were found in: (i) active leisure (p = 8.88E-06,  $r^2=0.18$ ); (ii) passive leisure (p = 4.24E-08,  $r^2=0.22$ ); (iii) leisure caring (p = 0.030,  $r^2=0.10$ ); and (iv) social leisure (p = 0.008,  $r^2=0.12$ ) (Table 3). No difference (0.01, 0.05) in the population of adolescent boys (45.02%, n = 542) was observed in (i) leisure education (p = 0.080,  $r^2=0.08$ ). Within the cohort of adolescent girls (54.98%, n = 662) a 0.05 difference of variance in the five sections was recorded in (i) leisure caring (p = 0.020,  $r^2=0.08$ ). No differences (0.01, 0.05) in the group of adolescent girls (54.98%, n = 662) were found in: (i) active leisure (p = 0.286,  $r^2=0.04$ );

**Table 3.** Analysis of variance for satisfaction rate of leisure time in the survey group (n = 1 204)

	Effect size (r2)	Anova (p)		
Adolescent boys (n = 542)				
Active leisure	0.18	8.88E-06**		
Passive leisure	0.22	4.24E-08**		
Leisure education	0.08	0.080		
Leisure caring	0.10	0.030*		
Social leisure	0.12	0.008**		
Adolescent girls (n = 662)				
Active leisure	0.04	0.286		
Passive leisure	0.02	0.642		
Leisure education	0.04	0.256		
Leisure caring	0.08	0.020*		
Social leisure	0.04	0.342		

<sup>\* 0.05; \*\* 0.01</sup> 

(ii) passive leisure (p = 0.642,  $r^2$  = 0.02); (iii) leisure education (p = 0.256,  $r^2$  = 0.04); and (iv) social leisure (p = 0.342,  $r^2$  = 0.04).

### **Discussion**

Examining the satisfaction rate of leisure time in adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) from Slovakia may be demanding because of its subjective nature. The authors employed instruments (a self-report) to measure the satisfaction rate of leisure time in adolescents, including interviews, observations, and questionnaires (survey) [2, 4, 16, 25, 28]. Instruments aim to capture adolescents' subjective experiences (e.g., attitudes, feelings) related to leisure activity; therefore, it is important to select instruments, which are sensitive in nature, age-appropriate, and align with aims of study. By employing these instruments, the authors gathered comprehensive understanding of the satisfaction rate of leisure time in adolescents and gained insights into factors contributing to well-being (satisfaction) in leisure activity.

Understanding the satisfaction rate of leisure time in adolescents (n = 1204) from Slovakia is important because of identifying the factors, which contribute to leisure experiences, enabling peers, parents, and educators to create supportive environments, which support adolescents' leisure needs. The satisfaction rate of leisure time in adolescents may have positive outcomes for other areas of adolescents' lives (e.g., academic, social). Understanding the satisfaction rate of leisure time in adolescents makes it easier to develop interventions (programs), which maximize positive outcomes associated with leisure activity. The satisfaction rate of leisure time in adolescents may differ depending on diverse factors (e.g., preferences, opportunities). Adolescents worldwide report life satisfaction; however, the authors observed significant

drops of the satisfaction rate of leisure time in adolescents and consider this decrease as an upward trend [27]. The satisfaction rate of leisure time in the survey group (n = 1204) was 3.36 ('neutral') out of the 5-point scale (p > 0.05; p = 0.184), with a 0.08 difference  $(\bar{x})$  in favor of adolescent girls (3.40; 54.98%, n = 662) compared to boys (3.32; 45.02%, n = 542). The satisfaction rate ('Happiness Scale') of 1464 adolescents in Turkey was  $3.25 \pm 0.60$ ; however, no difference (0.01, 0.05) between adolescent boys (21.80 ± 2.24; 45.40%, n = 664) and girls (21.10 ± 1.90; 54.60%, n = 800) from Turkey was observed in the satisfaction rate (t = 1.092, p > 0.05). According to Anova, relationships between all the dimensions of the happiness scale and leisure satisfaction were significant (positive) (0.01, 0.05) [15]. When determining the frequency of dimensions for the satisfaction rate of leisure time the lowest score (average) was recorded in the 'physical' aspect (3.20). Active leisure (5-point scale) of adolescents (n = 1204) from Slovakia was 2.48 ( $\bar{x}$ ) (p < 0.01), with a 0.32 difference in favor of adolescent boys (2.64; 45.02%, n = 542)compared to girls (2.32; 54.98%, n = 662); however, it was less than in 1464 adolescents from Turkey (3.20) [15]. The leisure satisfaction scale of 360 adolescents in Turkey was 132 ( $\bar{x}$ ); however, no difference (0.01, 0.05) between adolescent boys (71.40%, n = 257) and girls (28.60%, n = 103) from Turkey was found in the leisure satisfaction scale (t = 0.716, p > 0.05) [2]. No difference (0.01, 0.05) between adolescent boys (21  $\pm$  2; 25.4%, n = 63) and girls (21 ± 2; 74.6%, n = 186) of Nigeria [20], university students (n = 423) of China [18], and residents (n = 398) of Antalya [17] was reported in the satisfaction rate; however, differences of 0.01 and 0.05 were found in leisure satisfaction in terms of gender (Macao, China; Konya, Turkey) [28, 29]. Within the population of adolescent boys (45.02%, n = 542), differences of variance (Anova) (0.01, 0.05) in 5 sections were recorded in: (i) active leisure  $(p = 8.88E-06, r^2 = 0.18)$ ; (ii) passive leisure (p = 4.24E--08,  $r^2 = 0.22$ ); (iii) leisure caring (p = 0.030,  $r^2 = 0.10$ ); and (iv) social leisure (p = 0.008,  $r^2 = 0.12$ ) when compared to girls: (i) leisure caring (p = 0.020,  $r^2 = 0.08$ ) A comparison of leisure satisfaction in adolescent boys (50.90%, n = 960) and girls (9.10%, n = 928) from Spain was similar in terms of the results, with higher scores of leisure education and lower scores of active leisure [8]. Leisure satisfaction of adolescent boys is dominant when compared to girls because of adolescent girls' need for leisure; in particular, social interaction is greater [21]. According to 1594 (50%) male students  $(13.78 \pm 0.40)$ , active leisure (only) had positive effects on leisure satisfaction, while by contrast, 1594 (50%) female students had negative effects on leisure satisfaction by means of passive leisure and social leisure [25].

Results of any cross-sectional study require extra formulation in light of existing limitations; therefore, we consider them to be the carrying limit (number) of surveyed adolescent boys and girls (n = 1204, 100%) from Slovakia and choosing two regions (Žilina, Banská Bystrica) out of eight. Another limiting element was collecting data from a population (target) at a single point in time (6 weeks; May 1 – June 10, 2023) [30]. Another limitation was the lack of motivation to fill the forms (debriefing), as participation in the study was voluntary and without incentives. Since our cross-sectional study has limitations, it provides significant data concerning the prevalence, distribution, and associations between selected variables at a specific time point. Recognizing the limitations helps the authors interpret the findings and indicates the need for a longitudinal study to strengthen the causal inference and investigate temporal dynamics.

### **Conclusions**

Examining the satisfaction rate of leisure time in adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) from Slovakia is an important study aim, because many research gaps remain in literature (in terms of the Slovak scale); therefore, the available study provides insights into leisure preferences, engagement patterns, and satisfaction rate in adolescents (n = 1204) from Slovakia, contributing in the development of target interventions (policy) aimed at impacting (improving) the quality of life. Filling the existing gaps in literature, this study offers comprehensive understanding of the specific context of satisfaction rate for leisure time in adolescent boys (45.02%, n = 542) and girls (54.98%, n = 662) from Slovakia.

Encouraging adolescents to make the most of leisure time is important in terms of development (holistic), happiness, and life satisfaction; however, it is important to create a supportive environment (e.g., school, home), which promotes participation in leisure.

## Acknowledgement

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

## **Conflict of Interest**

The authors declare no conflict of interest.

#### References

- Adams K, Leibbrandt S, Moon H. Critical review of literature on social and leisure activity and well-being in later life. Ageing Soc. 2011;41(4):683-712. https://doi. org/10.1017/S0144686X100 01091
- 2. Akdeniz H, Simsek S, Kavi O, Uzuner E, Sekban G. Levels of satisfaction with leisure time in foreign students. J Educ Train Stud. 2018;6(3):88-972. https://doi.org/10.11114/jets.v6i3a.3162
- 3. Andrade C. The limitations of online surveys. Indian J Psychol Med. 2020;42(6):575-576. https://doi.org/10.1177/0253717620957496
- Bartík P, Adamčák Š, Marko M. Leisure time analysis and comparison of secondary school male students in terms of selected regions of Slovakia: cross-sectional study. Trends Sport Sci. 2022;29(4):161-169. https://doi. org/10.23829/TSS.2022.29.4-3
- Caldwell L, Baldwin C, Walls T, Smith A. Preliminary effects of leisure education program to promote healthy use of free time among middle school adolescents. 2004;36(3):310-335. https://doi.org/10.1080/00222216. 2004.11950026
- Cho D, Kim S. Adolescents' self-esteem associated with solitary, passive, and active leisure activities. Sustain. 2022;14(9):4873. https://doi.org/10.3390/su14094873
- Fredricks A, Simpkins S. Organized out-of-school activities and peer relationships: theoretical perspectives and previous research. New Dir Child Adolesc Dev. 2013;140(1):1-17. https://doi.org/10.1002/cad. 20034
- Fraguela-Vale R, Varela-Crespo L, Varela-Garrote L, Carretero-Garciá M. The influence of gender and family educational background on leisure satisfaction among Spanish adolescents. 2021;26(1):391-404. https://doi.org/ 10.1080/02673843.2021.1970595
- Fröberg A, Lindroos A, Ekblom Ö, Nyberg G. Organized physical activity during leisure time is associated with more objectively measured physical activity among Swedish adolescents. Acta Paediatr. 2020;109(9):1815--1824. https://doi.org/10.1111/apa.15187
- Granic I, Lobel A, Engels R. Benefits of playing video games. Am Psychol. 2013;69(1):66-78. https://doi. org/10.1037/a0034857
- 11. Jaworska N, MacQueen G. Adolescence as a unique developmental period. J Psychiatry Neurosci. 2015;40(5): 291-293. https://doi.org/10.1503/jpn.150268
- Haddock A, Ward N, Yu R, O'Dea N. Positive effects of digital technology use by adolescents: a scoping review of the literature. Int J Environ Res Public Health. 2022;19(21):14009. https://doi.org/10.3390/ ijerph192114009

- Harriss D, Jones C, MacSwee A. Ethical standards in sport and exercise science research: 2022 update. Int J Sports Med. 2022;43(13):1065-1070. https://doi.org/ 10.1055/a-1957-2356
- 14. Hayes S, Chapple S, Ramirez C. Strong, smart, and bold strategies for improving attendance and retention in after-school intervention. J Adolesc Health. 2014;54(3):64-69. https://doi.org/10.101/6/j.jadohealth.2013.12.030
- 15. Kaya S. Relationship between leisure satisfaction and happiness among college students. Univers J Educ Res. 2016;4(3):622-631. https://doi.org/10.13189/ujer. 2016.040322
- Kozaňáková A, Adamčák Š, Marko M. Satisfaction rate with leisure time in a sample of Academy of Police Force students. Slovak J Sport Sci. 2022;8(2):39-49. https:// doi.org/10.24040/sjss.2 022.8.2.39-49
- Lapa T. Life satisfaction, leisure satisfaction and perceived freedom of park recreation participants. Procedia Soc Behav Sci. 2013;93(21):1985-1993. https://doi.org/10.1016/j.sbspro.2013.10.153
- Lu L, Hu C. Personality, leisure experiments, and happiness. J Happiness Stud. 2005;6(3):235-342. https:// doi.org/10.1007/s10902-005-8628-3
- Miklikowska M, Tilton-Weaver L, Burk J. With a little help from my empathic friends: the role of peers in the development of empathy in adolescence. Dev Psychol. 2022;58(6):1156-1162. https://doi.org/10.1037/ dev0001347
- 20. Misra R, McKean M. College students' academic stress and its relation to their anxiety, time management, and leisure satisfaction. Am J Health Stud. 2000;16(1):41-51.
- 21. Mota J, Santos M, Ribeiro J. Differences in leisure-time activities according to level of physical activity in adolescents. J Phys Act Health. 2008;5(2):286-293. https://doi.org/10.1123/jpah.5. 2.286
- Nemcová L, Dulovics Sámelová S. Voľnočasové activity stredoškolskej mládeže (Leisure activities of high school students). Banská Bystrica: Vydavateľstvo Univerzity Mateja Bela; 2021.
- 23. Norman G. Likert scales, levels of measurement, and "laws" of statistics. Adv Health Sci Educ. 2010;15(5):625-632. https://doi.org/10.1007/s10459-010-9222-y
- Setia S. Methodology series module 3: cross-sectional study. Indian J Dermatol. 2016;61(3):260-264. https:// doi.org/10.4103/0019-5154.182410
- 25. Shin K, You S. Leisure type, leisure satisfaction and adolescents' psychological wellbeing. J Pac Rim Psychol. 2013;7(2):53-62. https://doi.org/10.1017/prp.2013.6
- 26. Sullivan M, Feinn R. Using effect size or why the p value is not enough. J Grad Med Educ. 2012;4(3):279-282. https://doi.org/10.4300/JGME-D-12-00156.1

## SATISFACTION RATE OF LEISURE TIME IN ADOLESCENTS OF SLOVAKIA

- 27. Szcześniak M, Bajkowska I, Czaprowska A, Sileńska A. Adolescents' self-esteem and life satisfaction: communication with peers as a mediator. Int J Environ Res Public Health. 2022;19(7):3777. https://doi.org/10.3390/ijerph19073777
- 28. Tükel Y, Temel S. Examining the level of freedom, life satisfaction, and happiness perceived by college students in leisure time. Int J Res Educ Sci. 2020;6(4):668-678. https://doi.org/10.46328/Ij res.v6i4.1451
- 29. Vong T. Leisure satisfaction and quality of life in Macao, China. Leis Stud. 2005;24(2):195-207. https://doi.org/10. 1080/02614360412331313502
- 30. Wang X, Cheng Z. Cross-sectional studies: strengths, weaknesses, and recommendations. Chest. 2020;158(1): 65-71. https://doi.org/10.1016/j.chest.2020.03.012