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## Differences in Gender of Adolescents' Leisure Time Satisfaction in Slovakia: Do adolescent boys participate in more physical activity than girls?

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### Abstract

#### Background and purpose

Adolescents' leisure time satisfaction plays an important role in development (their), influencing academic success, self-esteem, and/or well-being. Structured leisure is associated with higher satisfaction, while unstructured is associated with health problems (mental). Study aims to examine adolescents' leisure time satisfaction in Slovakia; in particular, differences in gender.

#### Material and methods

20-item survey was carried out 10 weeks (January 1 – March 10, 2024), targeting 2764 Slovak adolescents (41.98% boys, and 58.02% girls) aged 17.4–17.6 years. 20-item survey, adapted for study, examined the Slovak adolescents' leisure time satisfaction across 5 sections; in particular, active leisure, passive leisure, education leisure, leisure caring, and social leisure, and by means of Assumption of Homogeneity of Variance and Independent Samples, 2-Sample T-Test, and Anova, of which the significance level (p) was 0.01 and 0.05 (Ibm Spss Modeler).

#### Results

Adolescent boys and girls reported moderate satisfaction in leisure time (boys: 3.44, girls: 3.48); however, significant (p) differences in gender were in specific sections of leisure. Adolescent boys reported higher satisfaction in active leisure (2.80 vs. 2.36; p < 0.01), while girls reported higher satisfaction in passive leisure (3.66 vs. 3.30; p < 0.01), leisure education (2.66 vs. 2.46; p < 0.01), leisure caring (2.56 vs. 2.36; p < 0.01), and social leisure (2.30 vs. 2.14, p < 0.01). Results (our) indicate that adolescent girls derive (more) satisfaction from leisure that involve learning, nurturing, and social interaction.

#### Conclusions

It (study) highlights significant (p) differences in gender in adolescents' leisure time satisfaction, as is shaped by social norms and preferences of adolescents. Adolescent boys seek autonomy and competence in active pursuits, while girls prioritize emotional connection and engagement in social leisure and leisure caring. Results (our) emphasize needs of gender-inclusive leisure programs that encourage diverse participation and/or address cultural (social) barriers.

**Key words:** Adolescence, differences in gender, leisure time, satisfaction, quality of life.

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## Анотація

Адамчак С., Ізакова А., Марко М., Бартік П., Гулка К. Гендерні відмінності у задоволеності дозвіллям підлітків у Словаччині: Чи беруть хлопці-підлітки більшу участь у фізичній активності, ніж дівчата?

### Обґрунтування і мета

Задоволеність дозвілля підлітків відіграє важливу роль у (їхньому) розвитку, впливаючи на академічну успішність, самооцінку та/або благополуччя. Структуроване дозвілля пов'язане з вищим задоволенням, а неструктуроване – з проблемами здоров'я (психічного). Дослідження має на меті вивчити задоволеність дозвіллям підлітків у Словаччині; зокрема, гендерні відмінності.

### Матеріал і методи

Опитування з 20 пунктів проводилося протягом 10 тижнів (1 січня – 10 березня 2024 р.) і охопило 2764 словацьких підлітків (41,98% хлопчиків і 58,02% дівчаток) віком 17,4–17,6 років. Опитування з 20 пунктів, адаптоване для дослідження, вивчало задоволеність дозвіллям словацьких підлітків у 5 розділах; зокрема, активне дозвілля, пасивне дозвілля, освітнє дозвілля, догляд, соціальне дозвілля, а також за допомогою припущення про однорідність дисперсії та незалежних вибірок, 2-вибіркового Т-тесту та Anova, для яких рівень значущості (p) становив 0,01 та 0,05 (Ibm Spss Modeler).

### Результати

Юнаки та дівчата повідомили про помірну задоволеність дозвіллям (хлопці: 3,44, дівчата: 3,48); однак значні (p) відмінності за статтю спостерігалися в окремих розділах дозвілля. Хлопчики-підлітки повідомили про більшу задоволеність активним дозвіллям (2,80 проти 2,36; p < 0,01), тоді як дівчата повідомили про більшу задоволеність пасивним дозвіллям (3,66 проти 3,30; p < 0,01), освітою у дозвіллі (2,66 проти 2,46; p < 0,01), доглядом за дозвіллям (2,56 проти 2,36; p < 0,01), а також соціальне дозвілля (2,30 проти 2,14, p < 0,01). Результати (наші) показують, що дівчата-підлітки отримують (більше) задоволення від дозвілля, яке передбачає навчання, виховання та соціальну взаємодію.

### Висновки

Дослідження підкреслює значні (p) відмінності за статтю у задоволеності дозвіллям підлітків, що формується соціальними нормами та уподобаннями підлітків. Хлопчики-підлітки прагнуть самостійності та компетентності в активних заняттях, тоді як дівчата надають перевагу емоційному зв'язку та участі в соціальному дозвіллі та догляді за дозвіллям. Результати (наші) підкреслюють потреби в програмах дозвілля з урахуванням гендерних аспектів, які заохочують різноманітну участь та/або усувають культурні (соціальні) бар'єри.

**Ключові слова:** підлітковий вік, гендерні відмінності, вільний час, задоволеність, якість життя.

## Аннотация

Адамчак С., Изакова А., Марко М., Бартик П., Халка К. Гендерные различия в удовлетворенности досугом подростков в Словакии: Участвуют ли мальчики-подростки в большей физической активности, чем девочки?

### Обоснование и цель

Удовлетворенность досугом подростков играет важную роль в развитии (их), влияя на успеваемость, самооценку и/или благополучие. Структурированный досуг связан с более высокой удовлетворенностью, в то время как неструктурированный связан с проблемами со здоровьем (психическими). Целью исследования является изучение удовлетворенности досугом подростков в Словакии; в частности, различий по полу.

### Материал и методы

Опрос из 20 пунктов проводился в течение 10 недель (1 января — 10 марта 2024 г.) с охватом 2764 словацких подростков (41,98% мальчиков и 58,02% девочек) в возрасте 17,4–17,6 лет. Опрос из 20 пунктов, адаптированный для исследования, изучал удовлетворенность досугом словацких подростков по 5 разделам; в частности, активный досуг, пассивный досуг, образовательный досуг, досуг с заботой и социальный досуг, а также с помощью предположения об однородности дисперсии и независимых выборок, 2-выборочного t-теста и дисперсионного анализа, уровень значимости (p) которых составил 0,01 и 0,05 (Ibm Spss Modeler).

### Результаты

Подростки-мальчики и девочки сообщили об умеренном удовлетворении досугом (мальчики: 3,44, девочки: 3,48); однако значимые (p) различия по полу наблюдались в определенных разделах досуга. Мальчики-подростки сообщили о более высоком удовлетворении активным досугом (2,80 против 2,36; p < 0,01), в то время как девочки сообщили о более высоком удовлетворении пассивным досугом (3,66 против 3,30; p < 0,01), досуговым образованием (2,66 против 2,46; p < 0,01), досуговым уходом (2,56 против 2,36; p < 0,01) и социальным досугом (2,30 против 2,14, p < 0,01). Результаты (наши) показывают, что девочки-подростки получают (больше) удовлетворения от досуга, который включает в себя обучение, воспитание и социальное взаимодействие.

### Выводы

Исследование подчеркивает существенные (p) различия между полами в удовлетворенности досугом подростков, поскольку оно формируется социальными нормами и предпочтениями подростков. Мальчики-подростки стремятся к автономии и компетентности в активных занятиях, в то время как девочки отдают приоритет эмоциональной связи и вовлеченности в социальный досуг и досуговой уход. Результаты (наши) подчеркивают необходимость гендерно-инклюзивных программ досуга, которые поощряют разнообразное участие и/или устраняют культурные (социальные) барьеры.

**Ключевые слова:** Подростковый возраст, гендерные различия, свободное время, удовлетворенность, качество жизни. физическое воспитание, дети



## Introductions

Leisure time (positive) plays an important role in development of adolescents; in particular, (their) identity and autonomy, academic achievements, competence and initiative [1-2]. Adolescents' leisure time differs, ranging from structured (sports, language course) to unstructured (going out, watching television) leisure [3]. Quality of experiences influences adolescents' leisure time satisfaction and development [1-3]. Adolescents' leisure time satisfaction is associated with self-esteem (better), academic success, and social adjustment, while dissatisfaction contributes (may) to issues; in particular, delinquency, stress, and mental health problems [4]. Research (available) indicates that participating in meaningful leisure promotes self-identity, emotional resilience, and well-being [5]. Adolescents who participate in structured leisure report higher levels of life satisfaction [6]. Participating in leisure (structured) fosters problem-solving skills and self-determination, all of which contribute to personal growth and fulfillment [7]. Unstructured leisure; in particular, excessive social media and television watching, is associated with lower levels of satisfaction – life and negative mental health problems [8].

Adolescents' leisure time satisfaction is shaped by personal interests, peer influences, and socio-economic status. Experiences in leisure that align with personal interests and provide intrinsic motivation tend to enhance satisfaction [9]. Relationships (peer) play an important (critical) role in shaping experiences in leisure. Adolescents participate in social leisure if it is rewarding and provides senses of belonging [10]. Interaction in social leisure enhances emotional support, reduces stress, and fosters self-concept [11]. Socio-economic status influences (both) participation in leisure and its satisfaction. Adolescents of lower-income (background) face (may) barriers; in particular, financial constraints, lack of resources, and limited parental supervision [12].

Leisure time satisfaction is linked to problems (possible) of mental health in adolescence. Engaging in leisure that is fulfilling, reduces stress, anxiety, and depression, while enhancing emotional regulation, and coping skills [11]. Experiences in leisure that are positive, contribute to senses of self-worth, happiness, and accomplishment [13]. Lack of participation in meaningful leisure is associated

with increased rates of loneliness, boredom, and psychological distress [14]. Adolescents who experience dissatisfaction in leisure time are at risks of developing maladaptive behaviors; in particular, substance abuse, aggression, and social withdrawal [15].

Technology (digital) is transforming how adolescents spend leisure time (their). Online content; in particular, social media is becoming integral aspects of modern leisure, offering new forms of entertainment [16]. While it provides (may) relaxation and social interaction, excessive screen time is linked to negative outcomes; in particular, decreased physical activity, poor sleep quality, and lower overall satisfaction [17].

Research (available) indicates that differences in gender exist in leisure preferences, participation rates, and levels of satisfaction. Adolescent boys participate (more) in active leisure; in particular, outdoor recreation and sports, while girls participate (more) in artistic and social leisure [18]. Differences in gender influence satisfaction in leisure, as participation in activity (favorite) enhances enjoyment [18-19]. Societal expectations and cultural norms shape gendered leisure experiences. Adolescent girls face (often) greater restrictions of choices in leisure because of parental concerns about social (safe) norms, leading to lower satisfaction levels in some contexts [20]. Understanding the factors influencing adolescents' leisure time has important implications for educators (teachers), and parents. Schools play (may) an important role in promoting diverse and available leisure that caters adolescents' interests and developmental needs [8, 21]. Because of that and/or gaps in research that remain in the literature, in terms of adolescents' leisure time satisfaction in Slovakia (the best of authors' knowledge), the study aims to examine (analyze, compare) the adolescents' leisure time satisfaction in Slovakia; in particular, differences in gender.

Study aims to examine adolescents' leisure time satisfaction in Slovakia; in particular, differences in gender.

## Material and methods

### Participants

Regarding the study aim, 20-item survey (adolescents' leisure time satisfaction) was carried



out 10 weeks (January 1 – March 10, 2024), aiming at 2762 (100%) Slovak adolescent boys (1160, 41.98%) ( $17.60 \pm 0.30$  years) and girls (1602, 58.02%) ( $17.40 \pm 0.20$  years) (Table 1). Adolescent boys and girls (i.e. survey group) consisted of convenience sample [21], recruited by Edupage [22] and teachers of Physical Education (PE) and principals of secondary schools [23-24]. Recruitment of survey group (2762, 100%) was carried out 10 weeks (January 1 – March 10, 2024), in intervals of 1x/ week by Edupage (school system) and 2x/ week by teachers of PE (during PE classes), aimed at selective sampling (age). By focusing on demographic (this), the study aims to address gaps in gender-specific and age-target research. Recruiting for surveys, in our case questionnaires, in schools in an effective way, in terms of involving adolescents to participate in research [25]. Adequate sample size of survey group was determined by means of conventional standards: (i) adolescent boys and girls in Slovakia; (ii) estimation error of  $\pm 4\%$ ; (iii) variance of 50%; (iiii) reliability of 99 % ( $1 - \alpha$ ) [21].

Examining the adolescents' leisure time satisfaction of survey group 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 [26], after obtaining the decisions (positive) of **Ethics Committee** of Artistic/ Pedagogical Council of Faculty of Performing Arts, Academy of Arts in Banská Bystrica (**No. 001March12 /25**). Adolescent boys and girls (some in representation of parents) provided the written informed consent.

**Table 1**

Demographic data of survey group (2762, 100%)

Age (2)	
Boys (years)	$17.60 \pm 0.30$
Girls (years)	$17.40 \pm 0.20$
Gender (2)	
Boys (n, %)	1160, 41.98%
Girls (n, %)	1602, 58.02%

n – Number, % – Percentage.

### Procedure

20-item survey (instrument of survey) was

carried out 10-weeks (January 1 – March 10, 2024), as means of examining (i.e. analyze, compare) adolescents' leisure time satisfaction in Slovakia; in particular, differences in gender. Quantitative cross-sectional 20-item survey (design) was employed, allowing broader evaluations at single point in time. Adapting the 20-item survey [21, 23] made it easier to examine the data, consisting of 2 sections: (i) demographic data (Table 1); (ii) adolescents' leisure time satisfaction – 20-item survey, consisting of 2 5-point Likert scales (mutual saturation, evaluating attitudes):

#### Satisfaction (in general)

1. Very dissatisfied – “I am dissatisfied with the experience; it did not meet my expectations at all.”
2. Dissatisfied – “I am somewhat dissatisfied, as several aspects did not meet my expectations”.
3. Neutral – “I feel indifferent, as the experience was either satisfactory not unsatisfactory”.
4. Satisfied – “I am generally satisfied with the experience, however, there is some room for improvement”.
5. Very satisfied – “I am satisfied with the experience; it exceeded my expectations”.

#### Frequency of participation (in leisure)

1. Never – “The situation and/or behavior has not occurred at all.”
2. Rarely – “The situation and/or behavior occurs infrequently, almost never”.
3. Sometimes – “The situation and/or behavior occurs occasionally, but not regularly”.
4. Often – “The situation and/or behavior occurs frequently, more times than not”.
5. Always – “The situation and/or behavior occur consistently every time”.

20-item survey was designed to gather data of adolescent boys and girls in period of 10 weeks (see *Participants*) and implemented using Microsoft Forms (Office 365, Microsoft Corp.), chosen for its cost-effectiveness, time-saving ability, and easy accessibility [21, 23]. Adolescents' anonymity was maintained; there was no personal identifiable information collected. Incentives were not given for participation; it was voluntary; however, adolescent boys and girls received the report of individual data (results) afterwards.

Because of Kaiser-Meyer-Olkin Test of Sampling Adequacy, Bartlett's Test of Sphericity,



Factor Analysis Exploratory; Varimax Rotation), 20-item survey confirmed the presence of 5 sections:

1. Active leisure (walking, cycling)
2. Passive leisure (watching television, reading books)
3. Leisure education (knowledge of leisure, self-awareness)
4. Leisure caring (volunteering, caring of others)
5. Social leisure (going out, board games)

### Statistical analysis

Available data of adolescent boys and girls was tabulated in database design (see *Table 1-3*) [21]. 20-item survey (Adolescents' leisure time satisfaction) was examined by means of Independent Samples (T-Test), 2-Sample T-Test (Equal and Unequal Variance Assumption) and Assumption of Homogeneity of Variance, of which the significance level (p) was 0.01 and 0.05 evaluating the dependency and relationships between the items (20) of survey (effect size,  $r^2 = 0.10$  – small effect,  $0.30$  – medium effect,  $0.50$  – large effect) [27-28]. Descriptive statistics (percentage – %, arithmetic mean –  $\bar{x}$ ) described the basic features of adolescent boys and girls [29].

### Results

Adolescents' leisure time satisfaction is shown in *Table 2*. Satisfaction of leisure time (total) was similar (relatively), with adolescent boys reporting an average score ( $\bar{x}$ ) of satisfaction of 3.44 and girls of 3.48. Average score of satisfaction in both genders was 3.45, 2-Sample T-Test showed no differences (p; significant) between them ( $p = 0.22$ ). Differences in gender (p) emerged when examining specific types of leisure (5 sections). Adolescent boys

reported higher satisfaction in active leisure, scoring an average score of 2.80, compared to 2.36 of girls ( $p = 4.96E-34$ ). Adolescent girls reported higher satisfaction in passive leisure, scoring an average score of 3.66, compared to 3.30 of boys ( $p = 2.64E-28$ , *Table 2*). It suggests that adolescent boys find (more) enjoyment in active leisure. Adolescent girls reported higher satisfaction in 3 sections of leisure; in particular, leisure education, scoring an average score of 2.66, compared to 2.46 of boys ( $p = 2.22E-10$ ), leisure caring, scoring an average score of 2.56, compared to 2.36 of boys ( $p = 7.62E-10$ ), and social leisure, scoring an average score of 2.30, compared to 2.14 of boys ( $p = 2.08E-10$ ). Findings (our) indicate that adolescent girls derive (more) satisfaction from leisure that involves learning, nurturing, and social interaction.

Analysis of variance (Anova; p) of adolescents' leisure time satisfaction is shown in *Table 3*. It highlights the influence of leisure time on adolescents' leisure time satisfaction, with effect size ( $r^2$ ) and p-values (p), providing deeper insights. Within the adolescent boys, active leisure had the strongest effect on satisfaction (total) ( $r^2 = 0.16$ ,  $p = 1.28E-10$ ), followed by passive leisure ( $r^2 = 0.14$ ,  $p = 3.68E-10$ ). Leisure education was significant ( $r^2 = 0.16$ ,  $p = 1.28E-10$ ), compared to leisure caring ( $r^2 = 0.06$ ,  $p = 0.18$ ). Small effect ( $r^2 = 0.08$ ) was in social leisure, with "p" value of 0.04. Within the adolescent girls, results indicated that active leisure influenced satisfaction (their) ( $r^2 = 0.14$ ,  $p = 4.98E-08$ ), as did passive leisure ( $r^2 = 0.10$ ,  $p = 0.0005$ ). Leisure education and leisure caring showed (also) effects, with (both) having "r<sup>2</sup>" values of 0.08 ( $p = 0.0005$  and  $p = 0.0002$ ). Social leisure was significant ( $p = 2.64E-05$ ,  $r^2 = 0.10$ ), emphasizing the importance of social connection and interaction in adolescent girls.

**Table 2**

Adolescents' leisure time satisfaction

Indicators	Adolescent boys	Adolescent girls	Boys + Girls	2-Sample T-Test (p)
Satisfaction ( $\bar{x}$ )	3.44	3.48	3.46	0.22
Active leisure ( $\bar{x}$ )	2.80	2.36	2.58	4.96E-34**
Passive leisure ( $\bar{x}$ )	3.30	3.66	3.48	2.64E-28**
Leisure education ( $\bar{x}$ )	2.46	2.66	2.56	2.22E-10**
Leisure caring ( $\bar{x}$ )	2.36	2.56	2.46	7.62E-10**
Social leisure ( $\bar{x}$ )	2.14	2.30	2.22	2.08E-10**

( $\bar{x}$ ) – Arithmetic mean, \*\* – Significance (p) = 0.01



**Table 3**  
Analysis of variance of adolescents' leisure time satisfaction

Indicators	Effect size ( $r^2$ )	Anova (p)
Adolescent boys		
Active leisure ( $\bar{x}$ )	0.16	1.28E-10**
Passive leisure ( $\bar{x}$ )	0.14	3.68E-10**
Leisure education ( $\bar{x}$ )	0.10	0.001**
Leisure caring ( $\bar{x}$ )	0.06	0.18
Social leisure ( $\bar{x}$ )	0.08	0.04*
Adolescent girls		
Active leisure ( $\bar{x}$ )	0.14	4.98E-08**
Passive leisure ( $\bar{x}$ )	0.10	0.0005**
Leisure education ( $\bar{x}$ )	0.08	0.0005**
Leisure caring ( $\bar{x}$ )	0.08	0.0002**
Social leisure ( $\bar{x}$ )	0.10	2.64E-05**

( $\bar{x}$ ) – Arithmetic mean,  $r^2$  – Coefficient of determination (0.10 – small effect, 0.30 – medium effect, 0.50 – large effect), \*\* – Significance (p) = 0.01, \* – Significance (p) = 0.05

## Discussion

Findings of study provide substantial insights into differences in gender of adolescents' leisure time satisfactions. Results (our) align with research that suggests that adolescent boys and girls experience and participate in leisure differently, leading to different levels of satisfaction [21, 23]. Differences in gender, documented in satisfaction of all 5 sections (see *Results*) highlight the important patterns (developmental, social) that are shaped by individual and societal influences [33].

Among the most important (p) findings of study (our) was that adolescent boys documented higher levels of satisfaction; in particular, active leisure, while girls expressed satisfaction in passive, education, caring, and social leisure. It aligns with research, which found that adolescent boys favored active pursuits; in particular sports and outdoor recreation, while girls inclined to (more) passive and social leisure [18, 31].

Differences in gender are influenced by combinations of factors (biological, sociocultural) that shape leisure preferences from an early age.

Adolescent boys are prone to have higher levels of energy expenditure, making active leisure more appealing to them [32]. Adolescent boys participate (more) in structured (sports, volunteering) leisure [33]. Higher levels of satisfaction, documented in adolescent boys, in active leisure in

study ( $\bar{x} = 2.80$ ) reflect their greater engagement in physical activity. Adolescent girls reported lower satisfaction in this section ( $\bar{x} = 2.36$ ), supporting the findings of different authors [21, 34] who found that adolescent girls participate less in sports because of factors, such as body image concerns, lack of confidence, and societal expectations. Adolescent girls reported significantly (p) higher satisfaction with passive leisure ( $\bar{x} = 3.66$  for girls vs.  $\bar{x} = 3.30$  for boys), supporting previous research, indicating that adolescent girls tend to enjoy leisure that is less physically demanding, such as reading, watching television, and engaging in arts and crafts [35-36]. Preferences can be explained by using the theory of gender role socialization, which suggests that from an early age, adolescent girls are encouraged to participate (more) in sedentary and social driven activity, while boys are pushed towards physical and competitive pursuits [37-38].

Differences in gender are evident in leisure education, with adolescent girls reporting higher levels of satisfaction ( $\bar{x} = 2.66$ ) compared to boys ( $\bar{x} = 2.46$ ;  $p = 2.22E-10$ ). Findings (our) align with research that adolescent girls tend to participate (more) in leisure that involves learning and self-improvement [39-40]. Preferences can be attributed to the way adolescent girls are socialized to value academic success, personal development, while boys are encouraged to participate in more hands-on or



competitive activities. Higher levels of satisfaction documented in adolescent girls in social leisure in study (our) ( $\bar{x} = 2.30$  girls vs.  $\bar{x} = 2.14$  boys) suggest that girls find more enjoyment in leisure that involves social interaction; in particular, spending time with friends (peer), attending gatherings, and participating in groups. It is consistent with research [1] that adolescent girls derive greater well-being from social interactions than boys. Social leisure plays an important role in development, as it indicates that strong social connections contribute to better mental outcomes; in particular adolescent girls [3]. Findings (our) align with self-determination theory [41], which posits that adolescent boys and girls find leisure that satisfy their intrinsic psychological needs for autonomy, competence, and relatedness. In adolescent girls, higher levels of satisfaction in social leisure suggest that it fulfills needs for relatedness and emotional connection, as boys' higher levels of satisfaction in active leisure indicates pursuits of competence and autonomy [40, 42].

Difference in gender (significant,  $p$ ) was in leisure caring, with adolescent girls reporting higher levels of satisfaction ( $\bar{x} = 2.56$ ), compared to boys ( $\bar{x} = 2.36$ ;  $7.62E-10$ ). It aligns with research [43] that adolescent girls are prone to participate in caregiving and nurturing. It is supported by research [7, 44] on socialization in gender, which suggests that adolescent girls are raised with values that emphasize empathy, compassion, and care for others, while boys are encouraged to focus on independence and achievements.

Non-significant effect of leisure caring in adolescent boys' satisfaction ( $r^2 = 0.06$ ,  $p = 0.18$ ) suggests that caring-related activity may not be as integral to leisure experiences (their). It aligns with research [45] that adolescent boys are not prone to participate in caregiving roles; in particular, leisure contexts; however, in fostering more inclusive leisure that is encouraging adolescent boys and girls to participate in community-oriented and/or altruistic activities could help bridge this gap.

Findings of study (our) have important implications for leisure program development and policy-making. Given the significant ( $p$ ) differences in gender documented that it is important to design leisure programs that cater to adolescent boys' and girls' unique needs and preferences. Adolescent boys benefit (may) from programs that emphasize physical activity and adventure recreation, while

girls may respond better to programs that incorporate social, education, and passive leisure [31, 46]. It is needed to challenge traditional gender norms that limit leisure opportunity. Encouraging adolescent girls to participate in active leisure, whereas providing boys with opportunity to participate in education and leisure caring help (may) to create inclusive leisure environment [38]. Schools should take an active role in promoting diverse leisure that appeals to adolescents, regardless of gender. Another key consideration is the impact of socioeconomic factors on leisure satisfaction. Access to leisure is influenced by economic status, family background, and geographic location [12].

### Conclusions

Study (our) highlights the significant differences in gender in adolescents' leisure time satisfaction. Adolescent boys experienced higher satisfaction in active leisure, while girls found greater enjoyment in passive, education and social leisure and leisure caring. Differences reflect to societal norms and gender socialization, shaping leisure preferences from an early age. Findings align with self-determination theory, suggesting adolescent boys seek autonomy and competence through active pursuits, whereas girls prioritize emotional connection and relatedness in social leisure and leisure caring. Social interactions are particularly important for adolescent girls' well-being.

Study underscores the need for gender-inclusive leisure programs. Encouraging adolescent girls to engage (participate) in active pursuits and providing boys with changes in education leisure and leisure caring create (may) inclusive leisure environment. Future research should explore how different factors like these intersect with gender to provide comprehensive understandings of leisure experiences in adolescent boys and girls from different socio-economic backgrounds.

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### Conflict of interest

Authors have no conflict of interest to declare.



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