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Leisure Time Activities in Adolescents as Factor in Well-Being at School and Academic Performance

Znaczenie czasu wolnego młodzieży dla dobrostanu szkolnego i wyników w nauce

Abstract: Leisure time after school is crucial for a proper development of young individuals. However, factoring the role of various leisure activities in explaining their well-being at school and school grades is not well understood. The conducted research aimed at addressing this gap by examining 182 adolescents, aged between 15 and 18. As a conclusion, it was found that both well-being at school and academic performance were positively influenced by time spent with parents but negatively affected by time spent playing video games. Excessive participation in organized leisure activities was negatively related to relationships with peers and teachers. Some passive activities that promoted school skills, such as painting, drawing, and reading, positively predicted academic performance of adolescents. These findings highlight the importance of free time after school for adolescents' well-being in an educational context, as they also have implications for the social policy.

Keywords: leisure activity, well-being at school, academic performance, leisure time, adolescence

Słowa kluczowe: aktywność w czasie wolnym, dobrostan szkolny, wyniki w nauce, czas wolny, adolescencja

INTRODUCTION

Leisure time plays a crucial role in the personal development of young people, including their interests, passions, and social skills (Auhuber et al., 2019; Hu & Mu, 2020; Shin & You, 2013). Existing research has established a significant relationship between various forms of leisure time activities and mental as well as physical health of adolescents (Hu & Mu, 2020; Shin &

You, 2013), revealing both positive and negative effects. However, much of this research primarily focused on two activities: sports/physical activities and media use (Auhuber et al., 2019). There is a notable gap in understanding the effects of other forms of activities – such as homework time, artistic pursuits, and family interactions – on mental health. Additionally, limited research examined the impact of adolescents' leisure time on well-being at school and

academic performance. Both school well-being and academic performance are crucial indicators of educational success, with the former being subjective, reflecting students' perceptions and experiences within the school environment; and the latter being more objective, representing the academic achievements of students. This study aimed at addressing this research gap by exploring the role of the after school activities in relation to adolescents' well-being at school and academic performance. The findings have the potential to enhance our understanding of the distinct factors influencing well-being at school versus academic performance, thereby contributing to a more comprehensive understanding of adolescent development and educational outcomes.

LEISURE ACTIVITY

Leisure time of adolescents involves activities voluntarily pursued after school (Bälter et al., 2023; Shin & You, 2013). During their free time, children and adolescents can satisfy their needs for recreation, entertainment, developing interests, and engaging in social activities (Bojarska, 2016). The allocation of free time among young people varies as it depends on individual needs and preferences; family dynamics; the leisure patterns of their loved ones; and contextual factors such as place of residence, family income, and the availability of various recreational opportunities (Caldwell & Faulk, 2013; Çecelek, 2016; Shin & You, 2013). For example, students from problematic families, due to the lack of supervision and support from adults, may be exposed to dangerous situations during their free time, such as contact with destructive peer groups or addictions (Çecelek, 2016).

Leisure activities play a significant role in adolescent development. Leisure time facilitates social development as it provides opportunities for expanding peer relationships, thereby fostering the internalization of various social norms (Hu & Mu, 2020; Shin & You, 2013). Additionally, teenagers' leisure pursuits contribute to the development of autonomy and self-efficacy (Shin & You, 2013). Time free

from duties is crucial for the development of a young person, as its proper use stimulates comprehensive growth, plays an important role in the regeneration of strength, and contributes to continuous improvement (Çecelek, 2016).

Among the array of leisure activities available to adolescents, the most prevalent include interactions with peers, listening to music, engaging in sports activities, screen time, and artistic pursuits (Auhuber et al., 2019; Hu & Mu, 2020; Shin & You, 2013). Currently, there is a growing trend towards increased screen time among young people during leisure hours, particularly time spent using mobile phones, computers, and laptops, with comparatively less time allocated to physical or outdoor activities (Auhuber et al., 2019; Brzyszczyk, 2016).

LEISURE ACTIVITY AND WELL BEING AT SCHOOL

Well-being is the experience of physical and mental health, happiness, and prosperity (Karaś & Ciecuch, 2017; World Health Organization, 1948:1). It can be conceptualized according to hedonistic and eudaimonic traditions. The hedonistic approach to well-being focuses on the experience of pleasure and life satisfaction, while the eudaimonic approach emphasizes the realization of human potential and the attainment of valuable life achievements (Karaś & Ciecuch, 2017). Well-being encompasses various domains of a person's life, one of which is well-being at school (Hascher, 2012).

Like a general well-being, school well-being can be conceptualized from both hedonistic and eudaimonic perspectives. From a hedonistic perspective, it is characterized by a prevalence of positive emotions and attitudes toward school among students (Hascher, 2012). In the eudaimonic approach, it includes various essential factors indicative of students' potential and effective functioning within the educational setting (Hossain et al., 2022). While not directly linked to academic objectives, school well-being serves as a potential indicator of students' academic achievements (York et al., 2015). It is influenced significantly by factors such as the perception

of safety within the school, relationships with teachers and peers, satisfaction with academic performance, and the overall school climate (Hossain et al., 2022; Nickel, 2024).

Previous research indicates that the way in which teenagers spend their free time contributes to their well-being (Shin & You, 2013). There are several different ways of categorizing teenagers' free time based on some common elements (Gordon & Caltabiano, 1996; Tsaur et al., 2021). One of them is the division of free time into passive and active activities, which distinguishes the degree of physical effort involved. For example, passive leisure activities may include watching television/videos, reading, painting, sitting around feeling bored, listening to music, shopping, writing correspondence, relaxing, thinking, doing nothing, and talking on the phone. Active leisure activities include physical activities and exercises, such as walking, running, volunteering, or traveling (Cho et al., 2017; Gordon & Caltabiano, 1996; Tsaur et al., 2021).

Kleiber et al. (1986) suggest that passive activities, such as watching television, provide short-term satisfaction, while active activities – like sport – are more conducive to personal development, fostering qualities such as freedom of choice and increased internal motivation. Moreover, Passmore (2003) claims that social activities, such as peer meetings, are important for the mental health of young people. Engaging in physical activity during leisure time significantly reduces the risk of depression among young individuals (Ma et al., 2020). Using free time in an effective way helps young people develop social, behavioural, physical, and academic competencies, consequently improving mental health (Passmore, 2003). Furthermore, time spent with family plays a crucial role in well-being. Warm emotional bonds within the family serve as a significant source of adolescents' well-being (Gomez-Baya et al., 2023; Moral-García et al., 2019).

Apart from positive effects of leisure time on the mental health of young people, it may also bring out the negative ones. For instance, adolescents' excessive use of electronic devices (such as computers, mobile phones, video game consoles, and television) may be associated with

poorer mental and physical health (Auhuber et al., 2019; Hu & Mu, 2020). Additionally, unstructured activities of adolescents without adult supervision may be linked to the risk of engaging in antisocial behaviour; including substance abuse, risky sexual activity, and poorer academic performance (Badura et al., 2018; Gomez-Baya et al., 2023).

LEISURE ACTIVITY AND ACADEMIC PERFORMANCE

Academic performance reflects students' progress in acquiring educational skills and knowledge across various school subjects, providing insight into whether the students have met educational objectives. It can be assessed through grades given out by teachers or results from standardized tests, including national assessments (Bolt, 2011; Vedel & Poropat, 2017). Positive academic outcomes foster students' favourable attitudes towards school, increase engagement in lessons, alleviate school-related stress, and mitigate school avoidance (Nickel et al., 2020). Academic performance serves as the primary metric for assessing academic success, as it is widely recognized and utilized (York et al., 2015).

A positive relationship has been observed between leisure time activities and academic performance. Firstly, research indicates that organizing structured activities after school – such as participation in sports, youth clubs, and art clubs – can positively impact academic outcomes (Aumètre & Poulin, 2018; Bälter et al., 2023). These organized activities are characterized by regularity, with specific days and hours scheduled, lasting for extended periods (several months or even years), and focusing on skill development and goal achievement. Such structured engagements promote the development of social skills, reduce behaviour issues, and correlate with higher academic achievements (Aaltonen et al., 2016; Belošević & Ferić, 2022). Conversely, unstructured activities, like shopping, or regularly spending time in public places, such as parks or playgrounds after 8 p.m., may have a detrimental effect on students' academic performance (Badura et al., 2018).

THE PRESENT STUDY

To summarize the aforementioned points, the current study was aimed at exploring the relationship between adolescents' leisure time activities and their well-being at school as well as academic performance. Drawing from the literature discussed, it was hypothesized that both well-being at school and academic grades would be positively related to the structured forms of free time activities (such as sport activities and skill development activities) and family time. Conversely, negative relationships were expected with unstructured forms of free time activities (e.g., spending time in shopping centres) and excessive use of electronic devices.

METHOD

Participants

The study was conducted among a group of 182 high school students in Wrocław, Poland. The gender distribution consisted of 94 girls (51.6%) and 73 boys (40.1%), while 15 participants (8.2%) selected another option. The respondents' ages ranged from 15 to 18 years, with a mean age of 16 ($SD = .76$). The students represented various types of secondary schools: high schools ($n = 50.27\%$), art schools ($n = 55.30\%$), technical secondary schools ($n = 41.23\%$), and Catholic schools ($n = 36.20\%$). The sample size allowed for determining correlations ($r > .21$) between variables and an anticipated effect size in multiple regression ($r > .12$) at a significance level of $\alpha = .05$ with a power of $1 - \beta = .2$. Moreover, the study sample ensured a minimum of 10 individuals per predictor in the regression analysis (Harrell, 2015).

Procedure

Before commencing the study, consent was obtained from the head teachers, parents of participating students, and the students themselves. The survey was administered using a Google form, and the participants did not receive any form of compensation for their involvement. The eligibility criterion for the purposive sample was the age of the children. The study was conducted in adherence to ethical standards for research in the social sciences, ensuring anonymity and confidentiality for all survey respondents. Furthermore, the planned study was registered on the ASPREDICTED website (https://aspredicted.org/355_32S).

MEASURES

Leisure Activities

Leisure time activities were assessed using 16 items developed on the basis of relevant literature (e.g., Belošević & Ferić, 2022; Hu & Mu, 2020; Matysiak-Błaszczuk, 2023; Moral-García et al., 2019). Students were asked about their leisure activities of various types, including playing video games, Internet usage, sports activities, music activities, other skill-developing activities (e.g., foreign languages, programming, art activities), preparing for lessons, meeting friends (face to face), meeting friends online, napping, listening to music, painting or drawing, cultural engagements (e.g., theatre, cinema, concerts, etc.), reading books, spending time with parents, shopping, and watching TV. Each item was rated on a 5-point scale as follows: 1 = *Never/Almost never*, 2 = *At least once a week*, 3 = *Every day or almost every day*, 4 = *Several times a day*, 5 = *Almost all the time*.

Well-Being at School

The adolescents completed the Student Well-Being at School Questionnaire, which assessed school well-being within four domains: school success, relationships with school teachers, relationships with school peers, and general attitude toward school (Nikel, 2023). The questionnaire items were formulated as to capture factors influencing student satisfaction with school, drawing upon constructs from previous studies on school well-being, student well-being, and school climate (e.g., Lodi et al., 2019; Renshaw et al., 2015; Tian et al., 2014; Tobia & Marzocchi, 2015). The questionnaire comprises 20 items, enabling the calculation of overall school well-being and specific well-being in each of the

for each factor). The total score ranged from 20 to 100 points, while scores for each subscale ranged from 5 to 25 points. Sample items included: for school success – *I am satisfied with my school grades*; for relationships with teachers – *I have teachers at school who I can rely on in difficult situations*; for peer relationships – *I have friends at my school whom I can rely on*; and for attitude towards school – *I feel safe at my school*. The respondents rated each item on a 5-point scale, ranging from 1 – *Never* to 5 – *Always*. The internal consistency of the scale in the study was as follows: overall school well-being $\alpha = .93$, school success $\alpha = .76$, relationships with teachers $\alpha = .90$, peer relation-

Academic Performance

Academic performance was operationalized as the grade point average across all school subjects at the end of the previous school term. The grade point average was collected for each

range from 1 (*unsatisfactory*) to 6 (*excellent*). The students were required to select one of the following options when indicating their grade average: 1–2; 2.1–2.5; 2.6–3; 3.1–3.5; 3.6–4;

Statistical Analyses

Firstly, the descriptive statistics were computed for school well-being and its constituent factors. Correlations were examined between types of leisure time activities, and gender-based differences in leisure time were explored. Ordinal variables were assessed using Spearman's ρ coefficient and the Mann–Whitney U test. Additionally, the percentage distribution of responses for each type of leisure activity was calculated. Subsequently, multiple linear regression (using forward stepwise selection) was performed to identify the strongest predictor of leisure time on school well-being (both overall score and across the four dimensions: school success, relationships with teachers, relationships with peers, and general attitude towards school) as well as school achievement. Variables were introduced into the analysis using a progressive selection method to iden-

tify the most significant predictors of the dependent variable. The threshold for statistical significance was set at $p < .05$.

RESULTS

Descriptive Statistics and Correlations Analysis

Descriptive statistics for school well-being and its dimensions are presented in Table 1. Table 2 shows the frequency of responses to items assessing leisure activities among young individuals, with differences analysed by gender. Among various types of leisure activities after school, young individuals most often use the Internet (38.5% almost all the time and 34.6% several times a day), and listen to music

(48.4% almost all the time and 18.1% several times a day) Nearly 50% of the students do not participate in other skill-developing activities. The majority of young individuals do not get involved in cultural activities (59.9%), they do not watch TV (60.4%) or participate in music activities (86.3%). Approximately 42.3% of the teenagers are physically inactive after school. Over half of the students regularly prepare for lessons (63.1% almost every day or more often) and spend time with their parents (54.9% almost every day or more). More than half of the students read books occasionally (58.8% once a week or less), and one in three teenagers needs a regular nap during the week (35.2% almost every day or more often). Less than half of the students meet peers face-to-face (41.2%), and 37.4% meet peers online almost every day or more often. The analysis of gender differences revealed significant differences in leisure activities between girls and boys in the areas of video gaming ($U = 1534; p < .001$), preparation for lessons ($U = 2521; p = .002$), online peer meetings ($U = 2445; p < .001$), napping ($U = 2640; p = .007$), painting and drawing ($U = 2294; p < .001$), participation in cultural activities ($U = 2502; p < .001$), reading ($U = 2565; p = .004$), and shopping ($U = 2817; p = .03$).

A correlation analysis was conducted between items assessing how young individuals spent their leisure time after school. Given the ordinal nature of the variables, Spearman's *rho* coefficient was employed for the correlation analysis. Due to the large number of test items, only significant associations were presented in Supplemental Materials 1.

Regression Analysis

Multiple linear regression with forward selection was used to determine which types of leisure activities best predicted academic performance, school well-being, and its constituent factors (school success, relationships with peers, relationships with teachers, and general attitude towards school). The regression analysis revealed that various types of adolescents' leisure time accounted for approximately 16% of the variance in academic performance ($F =$

$8.36, p < .001$), approximately 20% of the variance in school well-being ($F = 7.40, p < .001$), approximately 18% of the variance in school success ($F = 13.41, p < .001$), approximately 16% of the variance in peer relationships ($F = 6.54, p < .001$), approximately 22% of the variance in relationships with teachers ($F = 9.69, p < .001$), and approximately 10% of the variance in attitude towards school ($F = 6.46, p < .001$). Detailed results of the regression analysis for academic performance and school well-being are presented in Table 3, and for school well-being in Table 4.

DISCUSSION

The presented study examined the relationship between young individuals' leisure activities and their well-being at school, as well as their academic performance. The authors hypothesized that both school well-being and academic grades would be positively predicted by structured types of leisure time (such as sports activities and skills development activities) and family time, while being negatively related to unstructured forms of free time (such as spending time shopping) and excessive use of electronic devices. Our hypotheses were partially confirmed, as discussed further in the subsequent sections.

Both school grades and school well-being were positively predicted by spending leisure time painting and drawing. These findings align with previous research emphasizing the significant role of skill-building activities on academic performance and well-being (Aumètre & Poulin, 2018; Badura et al., 2018). Engaging in painting and drawing after school, for instance, can foster students' creativity, help them manage negative emotions, and enhance cognitive skills such as concentration, thereby potentially leading to improved academic performance and greater school well-being. These skills can be instrumental in assisting students in various school-related situations (Forkosh & Drake, 2017). Additionally, a notable portion of the respondents (approximately 30%) attended secondary art schools, which suggests

Table 1. Descriptive Statistics for Study

| Variables | Min | Max | M | SD | Skew | Kurtosis |
|----------------------------|-----|-----|-------|-------|------|----------|
| School Well-Being | 29 | 100 | 65.28 | 15.31 | -.29 | -.42 |
| School Success | 5 | 25 | 14.74 | 3.83 | -.23 | -.15 |
| School Peers Relationship | 5 | 25 | 17.73 | 4.81 | -.56 | -.27 |
| Relationship with Teachers | 5 | 25 | 14.51 | 5.03 | -.10 | -.92 |
| Attitude Toward School | 5 | 25 | 16.30 | 5.13 | -.43 | -.64 |

Source: own elaboration

Table 2. Percentage Distribution of Leisure Activities by Frequency and Gender Differences

| Leisure time | Never/ Almost never | At least once a week | Every day or almost every day | Several times a day | Almost all the time | Gender differences |
|--|---------------------------|----------------------------|-------------------------------------|------------------------|------------------------|-----------------------|
| Video games | 38.5 | 30.8 | 15.9 | 6 | 8.8 | M > F |
| Using the Internet | 1.1 | 4.4 | 21.4 | 34.6 | 38.5 | |
| Sport | 42.3 | 29.1 | 20.3 | 3.3 | 4.9 | |
| Music activities | 86.3 | 9.9 | 2.7 | .5 | .5 | |
| Other activities (e.g. foreign languages, art, etc.) | 48.9 | 34.1 | 12.1 | 3.8 | 1.1 | |
| Preparing for lessons | 11.5 | 25.3 | 33.5 | 12.6 | 17 | F > M |
| Meeting peers online | 40.1 | 22.5 | 17.6 | 12.1 | 7.7 | M > F |
| Meeting peers face-to- face | 16.5 | 41.2 | 18.1 | 12.1 | 12.1 | |
| Napping | 37.9 | 26.9 | 23.1 | 6.6 | 5.5 | F > M |
| Listening to music | 7.1 | 4.9 | 21.4 | 18.1 | 48.4 | |
| Painting or drawing | 46.2 | 19.2 | 18.7 | 9.9 | 6 | F > M |
| Participating in culture | 59.9 | 29.1 | 7.1 | 2.7 | 1.1 | F > M |
| Book reading | 32.4 | 26.4 | 28 | 7.1 | 6 | F > M |
| Time with parents | 16.5 | 28.6 | 31.3 | 16.5 | 7.1 | |
| Shopping | 49.5 | 34.1 | 8.2 | 5.5 | 2.7 | F > M |
| TV | 60.4 | 21.4 | 12.6 | 1.6 | 3.8 | |

Note. F = Female; M = Male.

Source: own elaboration

Table 3. Regression Analysis Predicting Academic Performance and School Well-Being Based on Leisure Activities

| Model | Academic Performance | | | School Well-Being | | |
|---------------------|----------------------|-----|---------|-------------------|------|---------|
| | B | SE | β | B | SE | β |
| Video games | -.30 | .08 | -.26*** | -1.87 | .83 | -.15* |
| Painting or drawing | .24 | .08 | .21** | 2.87 | .83 | .24** |
| Listening to music | -.22 | .08 | -.19** | | | |
| Time with parents | .21 | .09 | .17* | 2.67 | .91 | .20** |
| Napping | | | | -2.42 | .90 | -.18** |
| Shopping | | | | -2.35 | 1.06 | -.15* |
| Other activities | | | | -2.80 | 1.17 | -.16* |

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Source: own elaboration

Table 4. Regression Analysis Predicting School Well-Being Domains Based on Leisure Activities

| Predictors | Model | | | | | | School Well-Being Domains | | | | | |
|-----------------------------|----------------|-----|---------|---------------------------|-----|---------|----------------------------|-----|---------|------------------------|-----|-------|
| | School Success | | | School Peers Relationship | | | Relationship with Teachers | | | Attitude Toward School | | |
| | B | SE | β | B | SE | β | B | SE | β | B | SE | B |
| Time with parents | 1.02 | .23 | .30*** | | | | | | | .96 | .32 | .22** |
| Painting or drawing | .67 | .21 | .22** | .67 | .27 | .18* | .87 | .27 | .22** | | | |
| Napping | -.65 | .22 | -.20** | -1.06 | .29 | -.26*** | | | | | | |
| Meeting with peers (direct) | | | | 1.04 | .29 | .27*** | | | | | | |
| Shopping | | | | -.88 | .35 | -.18* | | | | -.92 | .37 | -.18* |
| Other activities | | | | -.85 | .38 | -.16* | -1.17 | .40 | -.21** | | | |
| Computer games | | | | | | | -.84 | .28 | -.21** | -.60 | .29 | -.15* |
| Book reading | | | | | | | .77 | .30 | .18* | | | |
| Sports | | | | | | | -.82 | .33 | -.18* | | | |

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Source: own elaboration

that in relation to those students, the development of artistic skills during the leisure time may contribute to better academic outcomes and enhanced school well-being.

As anticipated, both school grades and school well-being were positively related to time spent with parents, as can be seen in the study. Family time provides a valuable opportunity for developing problem-solving skills, fostering social competencies such as the ability to compromise, and nurturing supportive bonds that can serve as a source of assistance during challenging school situations (Gomez-Baya et al., 2023; Moral-García et al., 2019). Furthermore, the results of the correlation analysis in this study also indicated a positive relationship between preparing for lessons and family time, which supports the notion that strong family bonds play a significant role in supporting the child's school functioning.

Passive leisure activities such as excessive video gaming and prolonged listening to music negatively predicted school grades, with the former also detrimentally impacting overall school well-being. Excessive engagement in passive activities among young individuals may divert their focus from academic tasks (as evidenced by the study's findings indicating a negative correlation between video gaming and preparation for lessons) and restrict opportunities for developing essential skills necessary for navigating school situations (Ahuber et al., 2019).

The results also revealed that excessive napping, excessive shopping, and an overabundance of skill-developing activities may negatively impact school well-being, though not school grades (the unexpected negative correlation between school well-being and other skill-developing activities contradicted our initial expectations). Excessive sleepiness after school among adolescents may indicate fatigue and potentially reflect an overload of daily responsibilities in some students, thereby detrimentally impacting overall well-being and school functioning (Belošević & Ferić, 2022; Mednick & Liu, 2019). Moreover, an excessive number of skill-developing activities may impede adolescents' overall functioning, despite existing studies that often highlight the positive effects of structured

activities on adolescent functioning (Aumètre & Poulin, 2018; Shin & You, 2013). While adolescents can enhance their skills through such activities, an excessive workload may become burdensome, causing stress and hindering adherence to school requirements (Bälter et al., 2023; Belošević & Ferić, 2022). Additionally, unstructured activities like excessive shopping may be associated with risky behaviour among young individuals, such as substance use, and may also divert their focus from academic responsibilities (Badura et al., 2018; Belošević & Ferić, 2022).

Different types of leisure activities predicted various domains of school well-being in different ways. Spending time with parents positively predicted academic success and overall attitudes toward school. Adequate family support can help students develop their academic skills, cope with school-related challenges, and foster positive attitudes toward school (Gomez-Baya et al., 2023; Moral-García et al., 2019). Engaging in painting and drawing positively predicted academic success, relationships with peers, and relationships with teachers. As far as students attending art schools are concerned, these activities can develop skills relevant to their academic success and foster peer interactions based on shared interests (Forkosh & Drake, 2017). Excessive need for after-school naps was negatively related to academic success and peer relationships. Such fatigue may hinder cognitive abilities, impede skill acquisition, and limit interaction with peers (Mednick & Liu, 2019). Face-to-face meetings with peers were positively correlated with peer relationships at school, facilitating social competence development and positive peer interactions (Belošević & Ferić, 2022). Spending leisure time shopping after school negatively affected relationships with school peers and attitudes toward school, similarly to excessive participation in organized activities, both of which may distract teenagers from academic responsibilities (Bälter et al., 2023; Badura et al., 2018; Belošević & Ferić, 2022). Excessive video game playing negatively predicted relationships with teachers and attitudes toward school, potentially limiting students' engagement in academic tasks and skill

development (Auhuber et al., 2019). Reading books positively predicted relationships with teachers, reflecting intellectual engagement and regular preparation for lessons, fostering engagement and positive teacher-student relationships (Kreutz et al., 2023; Watson, 2015; Hu & Mu, 2020). Participation in sports activities negatively impacted relationships with teachers, potentially due to reduced time for academic preparation and emphasis on sport to the detriment of other activities (Hu & Mu, 2020). Excessive sports activity may lead to strain and fatigue (Mutz et al., 2020), reducing classroom engagement, although not necessarily affecting students' overall sense of success, peer relationships at school, or attitudes toward school.

LIMITATIONS AND FUTURE RESEARCH DIRECTION

The study has several limitations that require consideration. Firstly, its cross-sectional design means that the results cannot establish causation – only correlations – thus limiting our ability to infer causal relationships between leisure activities and school outcomes. Future studies employing longitudinal designs could better elucidate causal pathways. Additionally, as children's behaviour evolves over time, future research could explore different developmental stages – such as early school years – to capture a broader understanding of the topic. Furthermore, the study's sample size and selection method may limit the generalizability of findings to other student populations. The purposive sampling technique used may introduce biases, and the sample may not be fully representative of the broader student population. Conducting studies with larger, more diverse samples could enhance the generalizability of results. Another limitation is the narrow focus on school achievements, primarily measured by grade point average. Future research could consider incorporating additional measures of academic performance, such as standardized test scores or teacher evaluations, to provide a more comprehensive assessment of student success. Lastly, the study explores a relatively novel area

of school well-being, which requires cautious interpretation of results. As such, these findings should be considered more so as the preliminary insights, offering directions for further investigation rather than definitive conclusions. Future research could go deeper into various facets of school well-being and explore potential moderators or mediators of the relationship between leisure activities and well-being.

CONCLUSIONS AND IMPLICATIONS

Despite its limitations, this study represents one of the first efforts to investigate various leisure activities of young individuals, and their implications for school well-being and academic performance. In summary, the findings underscore the importance of parental support for both school well-being and academic achievement. Moreover, excessive use of mobile technologies – particularly engaging in video gaming – negatively affects school grades, well-being at school, and, notably, preparation for lessons, thereby hindering developing positive relationships with teachers, or meeting academic requirements; and promoting development of negative attitudes toward school. While prior research suggests that organized activities are conducive to mental and physical health (Auhuber et al., 2019; Badura et al., 2018; Shin & You, 2013), this study indicates that such activities may not necessarily translate into improved school well-being. Instead, striking a balance between leisure time and academic responsibilities may be crucial (Bälter et al., 2023). The study also highlights the potential adverse effects of excessive engagement in other skill-developing activities on fulfilling academic duties and maintaining the student-teacher relationship. Additionally, passive leisure activities may negatively impact teenagers' well-being (Kleiber et al., 1986), as evidenced by our findings. However, the study also reveals that certain passive leisure activities, such as painting, drawing, and reading – which foster skill development – can yield benefits for school functioning.

The study offers valuable insights for parents, teachers, psychologists, and school coun-

sellors regarding the influence of adolescents' leisure activities on their academic performance. This information can be instrumental in providing support to students experiencing academic challenges. Recommendations include planning after-school activities carefully, enhancing

students' understanding of the impact of their free time on their academic performance, and conducting informational campaigns to raise awareness about the detrimental effects of excessive computer gaming on students' mental well-being.

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Supplemental Materials 1

Table 1. Correlation Analysis Between Items Assessing How Young Individuals Spent Their Leisure Time After School

| Leisure time | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|--------------------------------------|---|-------|---|---|--------|---------|--------|-------|-------|--------|----|--------|--------|--------|----|-------|
| 1. Video games | 1 | .23** | | | | -.31*** | .51*** | | | | | | -.24** | | | |
| 2. Using the Internet | | 1 | | | | | .16* | | | .27*** | | .18* | -.18* | | | |
| 3. Sports activities | | | 1 | | .29*** | | | .20** | | | | .18* | | | | |
| 4. Music activities | | | | 1 | .16* | | | | | | | | | | | |
| 5. Other skill-developing activities | | | | | 1 | .18* | | .20** | | | | | | .18* | | |
| 6. Preparing for lessons | | | | | | 1 | | -.16* | | | | | .38*** | .24** | | |
| 7. Meetings with peers online | | | | | | | 1 | | | | | .16* | -.21** | | | |
| 8. Meetings with peers directly | | | | | | | | 1 | .21** | .15* | | .32*** | | .17** | | |
| 9. Napping | | | | | | | | | 1 | .16* | | | | | | |
| 10. Listening to music | | | | | | | | | | 1 | | | | .16* | | |
| 11. Painting and drawing | | | | | | | | | | | 1 | | | .23** | | |
| 12. Shopping | | | | | | | | | | | | 1 | | .35*** | | .23** |
| 13. Reading | | | | | | | | | | | | | 1 | .23** | | |
| 14. Time devoted to culture | | | | | | | | | | | | | | 1 | | |
| 15. Time with parents | | | | | | | | | | | | | | | 1 | |
| 16. Watching TV | | | | | | | | | | | | | | | | 1 |

Note. * $p < .05$. ** $p < .01$. *** $p < .001$.

Source: own elaboration