

Factors Leading to a Lack of Leisure Time in High School Students in Croatia

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Summary. For a person's overall health, it is important to establish a proper connection between work and leisure. This paper shows the results of theoretical and empirical research on factors leading to a lack of leisure time in high school students. The main goal of this paper was to determine whether high school students have any leisure time and what activities take their leisure time away. To examine this, an empirical study was conducted among 468 students in three high schools in the city of Split (general-education high school, medical high school, and electrical engineering high school). Descriptive and inferential statistics were used in the analysis. The research has shown that parents-imposed duties are minimal and do not take away a lot of students' leisure time. On the other hand, class-related activities, i.e. homework and learning take away the greatest part of students' leisure time, students are not prone to participate in extracurricular and out-of-school activities. Moreover, if they do engage in such activities, their choices may be influenced by gender norms.

Keywords: extracurricular, out-of-school activities, leisure time, student, duties

Kroatijos vidurinių mokyklų moksleivių laisvalaikio stokos veiksniai

Santrauka. Siekiant užtikrinti bendrą žmogaus sveikatą, svarbu tinkamai susieti darbą ir laisvalaikį. Straipsnyje pateikiami teorinio ir empirinio tyrimo, kokie veiksniai lemia vidurinių mokyklų moksleivių laisvalaikio trūkumą, rezultatai. Pagrindinis straipsnio tikslas buvo nustatyti, ar vidurinių mokyklų mokiniai turi laisvalaikio ir kokios

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veiklos jį iš jų atima. Siekiant tai iširti, atliktas empirinis tyrimas, kuriame dalyvavo 468 mokiniai iš trijų Splito miesto vidurinių mokyklų (bendrojo ugdymo vidurinės mokyklos, medicinos vidurinės mokyklos ir elektrotechnikos vidurinės mokyklos). Analizei naudota aprašomoji ir indiferencinė statistika. Tyrimas atskleidė, kad tėvų nustatytos pareigos yra minimalios ir neatima daug mokinių laisvalaikio. Kita vertus, su mokykla susijusiai veiklai, t. y. namų darbams ir mokymuisi, tenka didžiausia mokinių laisvalaikio dalis, be to, mokiniai nėra linkę dalyvauti popamokinėje ir užklausinėje veikloje. Rezultatai rodo ir tai, kad jeigu mokiniai ir dalyvauja tokiose veiklose, įtakos jų pasirinkimams gali turėti lyčių normos.

Pagrindiniai žodžiai: užklausinė veikla, popamokinė veikla, laisvalaikis, mokinys, pareigos.

Introduction

Leisure time occurs with the emergence of civilization, from tribal communities to modern everyday life. In the context of modern society, the presence and increasing importance of leisure time in human life is observed. High school students are an important part of our society. The quality of their lives is essential from the aspect of investing in the future.

Leisure time is shaped according to one's own wishes, without any obligation. Freedom, voluntariness and non-obligation are some of the key features of leisure time. Leisure time may include physical activity, reading books, going to the cinema, learning foreign languages, playing games, etc. Leisure provides high school students with opportunities to develop and learn in a more flexible environment, it enables self-control exercise and various activities such as conversations, walks, travels, sightseeing, playing, reading, listening to the radio, watching TV, visiting a cinema or a museum, going to sports and theater events, social media activities, creative organized activities, household chores, and certain school obligations.

Research on high school students' quality of life is interdisciplinary. It has become a prominent subject of interest in social sciences and humanities, and in the field of medicine. The quality of life of high school students includes health status, quality of nutrition, quality of education, quality of housing, clothing, leisure and levels of social security and human freedom.

The current issues revolve around the surplus of leisure time, strategies for utilizing and filling this time productively, and preparing society as a whole for its effective utilization. It is necessary to actively participate in design and implementation of leisure time activities, as well as to prepare the young generation to gain experience in this field in order to develop a culture of leisure time. Adolescents often undergo changes in behavior and family dynamics, leading to variability in their leisure activities.

They spend time in families and educational institutions, but leisure time is also available to them. During this period, the influence of parents and teachers decreases, and social relationships intensify in a peer environment. Leisure activities can have a positive and negative impact on one's physical and mental health (Stebbins, 2021). There are several theories that describe the link between leisure and health. Social determinants of health and leisure overlap, and control is limited by socioeconomic circumstances and exclusive social structures (Peel et al., 2021). Leisure affects health by increasing or reducing the risk associated with health promotion or impairment practices (Mansfield, 2020). Health-related leisure activities are broad, and they include physical activity,

food work, creative and cultural activities, reading and time spent using the TV, cell phones, and laptops. It also increases sedentary behaviour, which is a public health problem (Owen Et al., 2019). There is an inconsistent association between the frequency of physical and sedentary behaviour classes (Silva et al., 2022; Roccliffe, 2023). This relationship was not clear when analyzing sedentary behaviour, including weekend days (Cheung, 2017). Only some studies were based on representative patterns of sedentary behaviour, such as screen time or school time (Martins et al., 2022).

Previous research on young people's leisure time and life quality show that leisure time is crucial for the development of a young person and that the young build their identities in the sphere of leisure time (Larsen et al., 2001) as well as their own lifestyles (Caldwell, 2017), sometimes extending beyond the boundaries of conventional societal norms. In addition to increasing their quality of life, participation in recreational activities in leisure time makes individuals' lives more meaningful (Kırtepe, 2018).

According to the research on leisure time (Badrić et al., 2015; Byrne et al., 2006; Huang, 2013; Hanžek et al., 2013; Leversen et al., 2012), the content-related dimension of young people's ways of spending their leisure time determines their recognizable lifestyle. Research (Ilišin, 2000) proves that active and meaningful leisure time is related to personality development. Leisure activities are essential, especially among adolescents, since they help to promote their mental development and wellness (Auhuber et al., 2019).

Mc Hale's study (2001) showed a link between leisure activities in childhood (hobbies, sports, toys and games, outdoor play, reading, watching television and socializing) and school grades, behaviour and symptoms of depression in early adolescence.

Plenković (2000) states that leisure is the source of an endless multitude of problems that are crucial for the positive or negative development of a person's life. Positive adolescent development is a topic of interest to both scientists and the community. There are many initiatives currently aimed at increasing positive behaviour such as commitment to school and achievements and reducing negative behaviours such as drug and alcohol use. The interest in the positive adolescent development has led to a focus on the discretionary use of adolescent time. A significant part of one's leisure time is dedicated to unstructured activities, and participation in extracurricular activities has proven to be a productive use of this time, providing diverse opportunities for development and growth (Larson, 2000). Participation of adolescents in structured extracurricular activities is associated with numerous developmental benefits, for example, greater attachment to school and a sense of belonging, better academic success, higher academic aspirations, and less risky behaviours such as alcohol and drug use or dropping out of school (Cooper, 1989; Darling et al., 2005; Eccles & Barber, 1999; Eccles et al., 2005 Fredricks & Eccles, 2005; Holland & Andre, 1987; Videon, 2002). Mahoney & Stattin (2000) divide extracurricular activities into structured and organized extracurricular activities and sports training, and non-structured activities, which include all other activities such as watching television and movies, hanging out with peers, telephone conversations and exchanging SMS messages, socializing with family, resting, playing computer games and using the Internet. Participation in structured

extracurricular activities provides important opportunities for social, emotional, and civic development during adolescence (Mahoney et al., 2005). When compared with unstructured leisure, structured activities have consistently been found to be more developmentally beneficial. For example, higher test scores and school grades are associated with less time spent watching television and more time in extracurricular activities (Cooper et al., 1999; Marsh & Kleitman, 2002). The time in structured activities is also related to better peer relationships and emotional adjustment at school, while unstructured leisure time is associated with poorer emotional adjustment and work habits (Posner & Vandell, 1994, 1999). Mahoney and Stattin (2000) reported that participation in unstructured activity settings, specifically youth recreation centres in Sweden, was associated with higher levels of antisocial behaviour compared to participation in structured activities. Most research in leisure activities (sports, hobbies, games, reading, socialization, resting, watching TV, and using the internet) compare youth in structured activities to those who do not participate in any and found a range of developmental benefits (Eccles & Templeton, 2002; Feldman & Matjasko, 2005). Most of the research was conducted in the United States, with scholars from a variety of different disciplines including sociology, education, leisure studies, sports psychology, and human development found developmentally positive outcomes associated with participation in structured extracurricular activities. Educational benefits have attracted a great deal of attention. There is a clear link between activity participation and levels of attachment, engagement, and satisfaction with school, with adolescents who participate in extracurricular activities reporting significantly higher levels of these indicators (Darling et al., 2005; Eccles & Barber, 1999; Gilman, 2001). Students love sports more than other meaningful leisure activities because sporting activities enhance their enjoyment and foster a sense of belonging within society (Kudlacek et al., 2020). Marsh (1992) found higher educational and occupational aspirations to be associated with participation in extracurricular activities, both during school and two years after completing school. According to recent research, there is a positive correlation between workload with a number of activities and educational outcomes, which is maintained throughout much of young adulthood, including eight years after high school (Gardner et al., 2008). Participation in structured activities is associated with peer group attributes. Adolescents who participate in extracurricular activities have more academic friends who do well in school and who plan to attend university than adolescents who do not participate in any activities (Eccles & Barber, 1999; Quane & Rankin, 2006). Caldwell (2017) notes that most of the literature on leisure has focused on the structure of the activity so that distinctions could be made between the importance of organized or structured activities and the negative outcomes of unstructured activities.

The negative factors of leisure time should also be considered. Obstacles to the development of quality leisure time also appear during schooling. One of the negative factors of a lack of leisure time is homework. A study (Ovčar, 1972) aimed to determine how much time students needed to do their homework, learn a subject, and prepare for school found that school preparation requires from 2.5 to 3 hours, that writing requires between 1 and 1.5 hours, and that students are unable to effectively learn for

more than three hours. At the age of 15, adolescents spend close to two hours every weekday on homework and just over an hour during the weekends. Studies show that students who have some difficulty in completing their homework assignments, and who spend more hours on both weekdays and weekends working on their homework, tend to achieve better grades in science. Additionally, research suggests that academic obstacles the student may have faced in the past, as well as the level of involvement from their parents in homework, can impact their performance in science (Crocker & Kleitsch, 2023). According to Hattie (2013), teachers believe that homework is essential for learning, while 116 studies around the world have proved that homework has almost no effect on learning in elementary school. Research done by Kjersti (2016) also showed that homework has a little influence on the development of good working ethics and that homework could be counterproductive, lead to physical and emotional fatigue and the loss of interest in school. According to Vinko (2016), classroom teachers in most cases believe that students do their homework only because they have to. According to educators, homework has several benefits, including improved learning, reinforcement of learned material, increased understanding, conceptual clarity, and self-motivation. The debate between those who support and those who oppose homework benefits occurs on different levels. While some teachers do not advocate for homework as part of their curriculum, there is also disagreement among education researchers regarding its effectiveness. Optimal homework assignments may dispel some of the claims made by opponents of homework. For example, detractors argue that lengthy homework leads to stress and takes up too much time. However, appropriate homework should focus on spending an average amount of time on assignments, with the quality of the work closely related to sample exam questions. Adequate homework can boost assignment scores, vastly improve learning outcomes, and reduce the time spent on assignments (Pllana, 2022).

Another issue regarding the lack of leisure time is academic helplessness. The correlation between academic helplessness and life satisfaction among adolescents is mediated by depression. It is crucial for clinical assessment and treatment to focus on lessening depressive symptoms in middle school students who experience academic helplessness. Additionally, taking part in leisure time physical activity is found to moderate depression's mediation effect between academic helplessness and life satisfaction. Therefore, motivating involvement in physical activities may be an essential instrument for adolescents dealing with academic helplessness (Kim, Shin & Park, 2023).

Contemporary parenting is also affecting leisure time, and it has undergone a significant transformation. The consumerist way of life is at the forefront of this change. The primary objective of life today is the acquisition of material possessions, a concept that was once regarded as superficial and unnecessary but is now highly esteemed. Evaluating oneself and others based on material possessions has become a standard for human worth. Success and wealth have become the yardsticks for assessing the worth of modern people. As a result of this preoccupation with success, family life is being relegated to the background, resulting in a weakening of relational bonds within the family (Dobrołowicz, 2018; Mendelova & Guzikova, 2023). The organization of family life is the primary impediment to children's engagement in physical activity during

their leisure time. The lack of balance between work and familial responsibilities leaves little room for spontaneous outdoor activities, particularly in urban areas where such opportunities are scarce. Despite being cognizant of the significance of physical activity, children have limited control over their leisure time as parents dictate the type of activities they participate in. Education is also prioritized over leisure, which further restricts children's free time. Additionally, scheduled activities, while occupying children, do not promote physical activity (Martínez-Andrés et al., 2020).

Research Goals

The main goals of this research are to determine the extent to which extracurricular and out-of-school activities affect students' leisure time and to check if there are differences between students from different school types (General-education high school, Electrical engineering high school, and Medical high school). Additional goals of this research are to identify the activity group on which students spent the most time and if that activity group is gender-related.

Hypotheses

Based on the research goals, the following hypotheses arise:

- H1** – There is a high dependency between school duties and leisure time.
- H2** – There is a high dependency between leisure time and the high school student attends.
- H3** – There is a statistically significant difference between male and female students in the amount of time spent on various activities.
- H4** – High school students do not have enough leisure time.

Methodology

Sample

Appropriate procedures (selection and definition of the sample, decision on the type of sample selection and the selection of the sample size) were applied when selecting the sample to ensure that the sample is of sufficient size, homogeneity, and representativeness. The sample of this research consists of high school students (15 to 18-year-old students). A total of 468 students participated in the study (248 (53%) male and 220 (47%) female high school students). A sociodemographic overview of the sample can be found in Table 1. The empirical research was conducted in May 2022. Based on their high school type, the participants were divided into three groups:

The first group are students from the General-education school oriented to prepare students for university; students get wide theoretical knowledge; there is less practical work; it is not gender-oriented (N=180, 62% female and 38% male students).

The second group are students from Electrical engineering high school oriented to prepare students for technical university (all subjects (Mathematics, Physics, the Croatian language, and the English language) final test (needed for university) are

included throughout all the 4 years) and for work as technicians; students get technically oriented theoretical knowledge and practical work knowledge; gender: male oriented (N=150, 100% male students).

The third group are students from Medical high school oriented to prepare students to become nurses (subjects (Mathematics, Physics, the Croatian language and the English language) needed for the final test (for university) are included only in the first 2 years); students get a lot of nurse work practice; gender: mainly female-oriented (N=138, 78% female and 22% male students).

Table 1. Student gender with respect to the high school and the grade

School	General-education school				Electrical engineering school				Medical high school				
	Grade	Total	2	3	4	Total	2	3	4	Total	2	3	4
Male	53%	67	24	21	22	150	52	50	48	31	14	8	9
Female	47%	113	36	39	38	0	0	0	0	107	28	40	39

Instruments

The research questionnaire was prepared by the authors. Students answered questions about their sociodemographic characteristics by choosing one of the offered answers (gender, school, grade, GPA in the previous year). Students also answered questions related to their subjective feeling about school workload and available leisure time. The last section included questions related to the time spent on extracurricular and out-of-school activities (time scale with 5 values, – values were proposed based on pilot research conducted prior to the mean research).

Procedure

The research on the factors and causes that lead to a lack of leisure time among high school students was conducted in accordance with the Code of Ethics for Research with Children and Youth of the State Institute for Family, Maternity and Youth Protection: The Children's Council of the Government of the Republic of Croatia. In accordance with the Convention on the Rights of the Child, Croatia is obliged to promote and protect the rights of the child (Ajduković & Kolesarić, 2020). The survey was conducted in May 2022. The questionnaire was printed, distributed in schools (with the approval of the school principals), and was conducted anonymously and transversely. The data were collected by the Self-Assessment Scale. The data were processed using SPSS Statistics for Windows.

Data analysis

In the research results analysis, appropriate procedures of descriptive and inferential statistics were applied (Paerson's Chi-square test, Kruskal-Wallis test, Cronbach's alpha, standard deviation, mode (value that appears most frequently), median (value of middle

data set)). Descriptive data are expressed in frequencies and percentages to present sociodemographic characteristics.

Results and Discussion

The subjective feeling of high school students (regardless of the school) is that they do not have enough leisure time (see Figure 1).

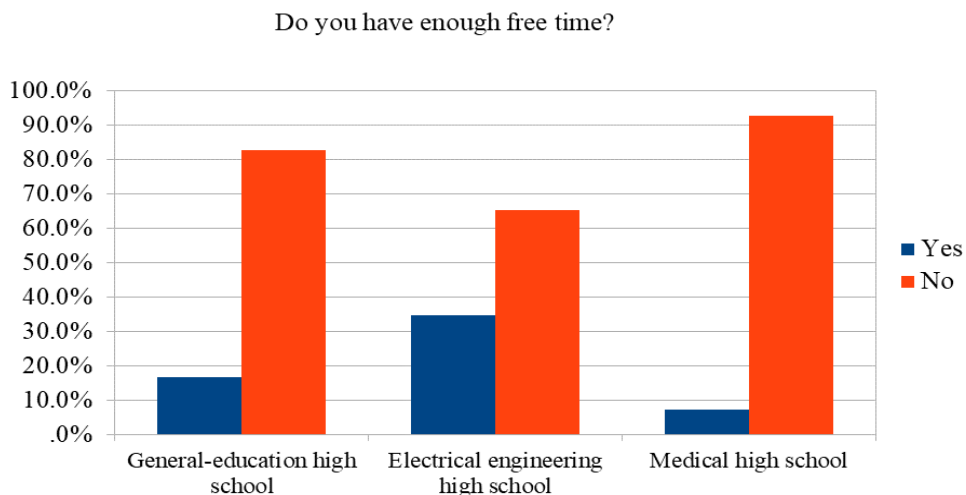


Figure 1. Students' opinion on whether they have enough leisure time

Since there are no major differences between schools, we checked the dependence between having enough leisure time and attending a particular grade. Statistically significant dependence was observed for all grades (**second grade**: the cut-off value of the Chi-square test with 2 degrees of freedom, at the significance level of 0.3%, is 11.3, and the obtained Chi-square test is 11.7; **third grade**: the cut-off value of the Chi-square test with 2 degrees of freedom, at the significance level of 1.8%, is 8.7, and the obtained Chi-square test is 8; **fourth grade**: the cut-off value of the Chi-square test with 2 degrees of freedom, $p < 0.001$, is 18.7, and the obtained Chi-square test is 18). All the results can be found in Table 2.

Table 2. Chi-square of the leisure time assessment test

Leisure time with respect to the school and the grade					
grade		N	χ^2 -test	df	p
2	Paerson's χ^2 -test	154	11.694	2	0.003
	Odds Ratio		11.258	2	0.004
3	Paerson's χ^2 -test	158	8.066	2	0.018
	Odds Ratio		8.675	2	0.013
4	Paerson's χ^2 -test	156	17.974	2	0.000
	Odds Ratio		18.674	2	0.000
total	Paerson's χ^2 -test	468	35.874	2	0.000
	Odds Ratio		36.346	2	0.000

For the students who indicated that they do not have enough leisure time, activities that reduce leisure time are checked. Most of them (70% from each school) identify school-imposed activities as a reason for the lack of leisure time.

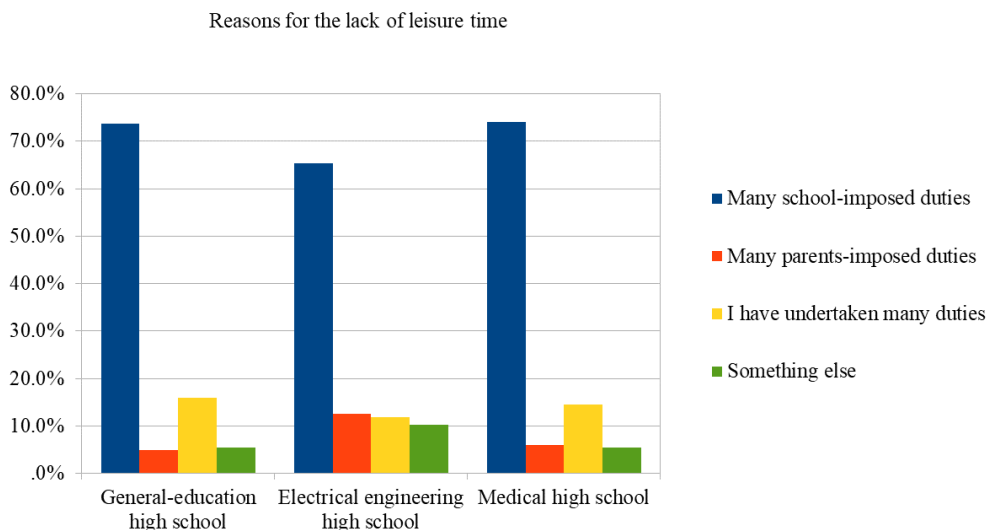


Figure 2. Graphical representation of the reasons of the lack of leisure time

Since again there are no major difference between schools, the Chi-square test is used to check the frequency of selecting individual reasons for the lack of leisure time with respect to the grade. Dependence in terms of having many school-imposed duties with respect to the grade was checked to find a statistically significant dependence for all grades (second grade: the cut-off value of the Chi-square test with 2 degrees of freedom, $p < 0.001$, is 18.4, and the obtained Chi-square test is 19; third grade: the cut-off value of the Chi-square test with 2 degrees of freedom, $p < 0.001$, is 19.1, and the obtained Chi-square test is 17.7; fourth grade: the cut-off value of the Chi-square test with 2 degrees of freedom, at the significance level of 0.1%, is 14.9, and the obtained Chi-square test is 13.5, more details could be found in Table 3). In the second grade, having many duties as a cause of lack of leisure time is the most common choice in general-education high school students (98%), while 76% of students in second grade of electrical engineering high school report the same. In the third grade, this was the choice of all medical high school students and 82% of electrical engineering high school students. In the fourth grade, all electrical engineering high school students reported having many duties as the cause of the lack of leisure time, just like 80% of general-education high school students. One cannot ignore the fact that some students have undertaken many duties themselves, including 17% of general-education high school students, 12% of electrical engineering high school students and 15% of medical high school students. The causes of the lack of leisure time such as 'I have to study for graduation' and 'I do not know how to use leisure

time in the right way' are stated by 7% of general-education high school students, 15% of electrical engineering high school students and 7% of medical high school students. The Chi-square test checked the dependence in terms of many parents-imposed duties with respect to the school and the grade. Statistically significant dependence was not observed. In the opinion of students in all the grades of all the three schools, many duties imposed by parents are rarely the cause of the lack of leisure time.

Table 3. *Causes of the lack of leisure time*

Many school-imposed duties with respect to the grade					
grade		N	χ^2 -test	df	p
2	Paerson's χ^2 -test	154	19.015	2	0.000
	Odds Ratio		18.401	2	0.000
3	Paerson's χ^2 -test	158	17.719	2	0.000
	Odds Ratio		19.090	2	0.000
4	Paerson's χ^2 -test	156	13.529	2	0.001
	Odds Ratio		14.918	2	0.001
Many parents-imposed duties with respect to the grade					
grade		N	χ^2 -test	df	p
2	Paerson's χ^2 -test	154	4.681	2	0.096
	Odds Ratio		4.241	2	0.120
3	Paerson's χ^2 -test	158	5.587	2	0.061
	Odds Ratio		6.201	2	0.045
4	Paerson's χ^2 -test	156	5.226	2	0.073
	Odds Ratio		4.933	2	0.085
Duties undertaken by students with respect to the grade					
grade		N	χ^2 -test	df	p
2	Paerson's χ^2 -test	154	4.144	2	0.126
	Odds Ratio		4.359	2	0.113
3	Paerson's χ^2 -test	158	2.540	2	0.281
	Odds Ratio		2.736	2	0.255
4	Paerson's χ^2 -test	156	7.110	2	0.029
	Odds Ratio		8.023	2	0.018

The results showed that students have few household responsibilities imposed by their parents. Time for household responsibilities is on average 1 hour for all schools (median is up to 1 hour) with a standard deviation of 25 minutes. No differences were found between the schools. The answers to this question confirm that the duties imposed by their parents are not one of the key reasons for students' lack of leisure time.

Table 4. Matrix with time used for obligations per school

Question	School	Answers						
			up to 30 min	up to 1 h	up to 1.5 h	up to 2 h	> 2 h	
Time for household responsibilities (week)	General	N	58	89	20	13	0	
		%	32.22%	49.44%	11.11%	7.22%	0.00%	
	Electrical	N	36	84	21	8	1	
		%	24.00%	56.00%	14.00%	5.33%	0.67%	
	Medical	N	60	54	17	6	1	
		%	43.48%	39.13%	12.32%	4.35%	0.72%	
	Together	N	154	227	58	27	2	
		%	32.91%	48.50%	12.39%	5.77%	0.43%	
	Homework time (week)	General		up to 2 h	up to 4 h	up to 6 h	up to 8 h	> 8 h
			N	18	74	46	26	16
%		10.00%	41.11%	25.56%	14.44%	8.89%		
Electrical		N	33	56	42	11	8	
		%	22.00%	37.33%	28.00%	7.33%	5.33%	
Medical		N	22	53	25	28	10	
		%	15.94%	38.41%	18.12%	20.29%	7.25%	
Together		N	73	183	113	65	34	
		%	15.60%	39.10%	24.15%	13.89%	7.26%	
Learning time (week)		General		up to 3 h	up to 6 h	up to 9 h	up to 12 h	> 12 h
	N		8	33	53	59	27	
	%	4.44%	18.33%	29.44%	32.78%	15.00%		
	Electrical	N	32	48	43	21	6	
		%	21.33%	32.00%	28.67%	14.00%	4.00%	
	Medical	N	26	32	41	33	6	
		%	18.84%	23.19%	29.71%	23.91%	4.35%	
	Together	N	66	113	137	113	39	
		%	14.10%	24.15%	29.27%	24.15%	8.33%	
	Occupancy with trainings (sports activities)	General		No activities	up to 2 h	up to 3 h	up to 4 h	> 4 h
N			103	33	20	14	10	
%		57.22%	18.33%	11.11%	7.78%	5.56%		
Electrical		N	50	15	18	45	22	
		%	33.33%	10.00%	12.00%	30.00%	14.67%	
Medical		N	90	30	12	6	0	
		%	65.22%	21.74%	8.70%	4.35%	0.00%	
Together		N	243	78	50	65	32	
		%	51.92%	16.67%	10.68%	13.89%	6.84%	
Occupancy with courses (e.g. language, music school, etc.)		General		No courses	up to 1 h	up to 2 h	up to 3 h	> 3 h
	N		56	27	74	18	5	
	%	31.11%	15.00%	41.11%	10.00%	2.78%		
	Electrical	N	75	32	37	6	0	
		%	50.00%	21.33%	24.67%	4.00%	0.00%	
	Medical	N	95	19	24	0	0	
		%	68.84%	13.77%	17.39%	0.00%	0.00%	
	Together	N	226	78	135	24	5	
		%	48.29%	16.67%	28.85%	5.13%	1.07%	

Table 5. Matrix with arithmetic means and standard deviations for obligations

	School	Average (hours/week)	SD	Mode	Median	Dispersion
Time for household responsibilities (week)	General	0.97	0.42	up to 1 h	up to 1 h	0,18
	Electrical	1.01	0.41	up to 1 h	up to 1 h	0,16
	Medical	0.90	0.44	up to 1 h	up to 1 h	0,19
	Together	0.96	0.42	up to 1 h	up to 1 h	0,17
Homework time (week)	General	5.42	2.22	up to 4 h	up to 4 h	4,93
	Electrical	4.73	2.14	up to 4 h	up to 4 h	4,58
	Medical	5.26	2.38	up to 4 h	up to 4 h	5,5
	Together	5.17	2.27	up to 4 h	up to 4 h	5,11
Learning time (week)	General	10.07	3.24	up to 12 h	up to 9 h	10,52
	Electrical	7.42	3.29	up to 6 h	up to 6 h	10,83
	Medical	8.15	3.46	up to 9 h	up to 9 h	11,95
	Together	8.65	3.51	up to 9 h	up to 9 h	12,26
Occupancy with trainings (week)	General	1.29	1.65	No trainings	No trainings	1,64
	Electrical	2.49	1.94	No trainings	up to 3 h	3,75
	Medical	0.87	1.27	No trainings	No trainings	1,61
	Together	1.55	1.78	No trainings	No trainings	3,16
Occupancy with courses (week)	General	1.38	1.11	up to 2 h	up to 2 h	1,24
	Electrical	0.83	0.94	No courses	up to 30 min	0,88
	Medical	0.49	0.78	No courses	No courses	0,60
	Together	0.94	1.04	up to 1 h	up to 1 h	1,07

School duties include the time for homework and learning. Homework (writing homework, projects, etc.) requires on average 5 hours and 10 min per week (median up to 4 hours), with a standard deviation of 2 hours and 15 min. Although there is a difference between the schools, it is not statistically significant ($p > 0.05$). Students need an average of 8 hours and 40 min per week (median up to 9 hours) for learning (preparations for exams), with a standard deviation of 3 hours and 30 min. There is a difference between the schools, which is statistically confirmed. The Kruskal-Wallis test showed a statistically significant difference between schools in the time spent for learning ($p < 0.01$). General-education high school students need the most time for learning as they spend an average of 10 hours learning (median up to 12 hours, 32% of students) with a standard deviation of 3 hours and 10 min. Electrical engineering high school students, who spend an average of 7 hours and 25 mins (median up to 6 hours, 32.78% of students) with a standard deviation of 3 hours and 10 min, need the least time for learning. On average, homework and learning require about 14 hours a week.

The duties freely chosen by students were also examined aiming to see how much time students spend on training and various courses. In training sessions, students spend an average of 1 hour and 30 min (most students do not train in any sports)

with a standard deviation of 1 hour and 45 min. There is a difference between the schools, which is statistically confirmed. The Kruskal-Wallis test showed a statistically significant difference between schools in terms of the time spent on training ($p < 0.01$). Electrical engineering high school students spend the most time as they train on average 2 hours and 30 min (median up to 3 hours, 30% of students) with a standard deviation of 2 hours. Medical high school students spend the least time on training, an average of 52 minutes (most students do not train in any sports) with a standard deviation of 1 hour and 15 min. The average time spent on taking courses is 1 hour (coincides with the median of one hour a week), with a standard deviation of 1 hour. The Kruskal-Wallis test showed a statistically significant difference between schools in time spent on taking courses ($p < 0.05$). General-education high school students spend most time on courses, an average of 1 hour and 15 min (median up to 2 hours, 41.11% of students) with a standard deviation of 1 hour and 5 min. Medical high school students spend the least time on courses, an average of 30 minutes (most students do not attend any course) with a standard deviation of 1 hour and 5 min. For the freely chosen activities, the Kruskal-Wallis test shows a statistically significant gender-conditioned difference ($p < 0.05$).

The analysis was also done per gender. For school-related activities there are no major changes between male and female high school students. Among students who engage in some kind of activity, males mostly choose sports activities, while females choose courses. The reason why a statistically significant difference was found between medical high school students and students in the other two schools in terms of engaging in sports activities and going to courses.

Table 6. Time spent on trainings and courses per gender

Question	Gender	Answers					
			No sport activities	up to 2 h	up to 3 h	up to 4 h	more than 4 h
Occupancy with trainings (sports activities)	Male	N	83	28	43	65	29
		%	33.47%	11.29%	17.34%	26.21%	11.69%
	Female	N	160	50	7	0	3
		%	72.73%	22.73%	3.18%	0.00%	1.36%
Occupancy with courses (e.g. language, music school, etc.)	Male	N	131	42	62	13	0
		%	52.82%	16.94%	25.00%	5.24%	0.00%
	Female	N	95	36	73	11	5
		%	43.18%	16.36%	33.18%	5.00%	2.27%

Conclusion

The research was conducted in three high school types: the first that prepares students to participate in the labour market immediately after graduation (Medical school); the second that is equally focused on preparing students for specific university and on participating in the labour market immediately after graduation (Electrical engineering high school), and the third that prepares students for any university (General-education high school)) in Croatia. Based on the research presented in this paper, a correlation between the lack of leisure time in high school students and school-related duties is found. Here, it is important to stress that school-related duties include the time for homework (writing homework, projects, etc.) and the time for learning (preparation for exams). The research showed that there is a difference in time spent on school-related activities between the schools (most time is spent in General-education high school). Generally, it is worrying that a high percentage of respondents use most of their leisure time for learning and doing their homework. Most of the surveyed students have no extracurricular and out-of-school activities, which means that learning and school duties are the main preoccupations of students in their leisure time. Among the various functions provided by extracurricular and out-of-school activities, gender-conditioned differences have been identified. Male students tend to choose sports activities, while female students primarily opt for courses, especially foreign languages.

Leisure time provides a rich and unique context for adolescents to develop into healthy adults through work, activities, and behaviours that contribute to their personal life, meaning, and the development of identity and autonomy. Therefore, this paper can be an incentive for further research in this area delving into how the lack of leisure time influences subjective well-being. It can also facilitate exploration into the correlation between leisure time deprivation and subjective well-being.

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