

# Correlation between Teachers' Leisure Time Activities and their Teaching Styles

Ines Blažević

Department of Pedagogy, Faculty of Humanities and Social Sciences Split, University of Split, Croatia

Bruno Matijašević\*

Catholic University of Croatia, Zagreb  
[bruno.matijasevic6@gmail.com](mailto:bruno.matijasevic6@gmail.com)

**Abstract.** The aim of this paper is to explore the ways teachers spend their free time in relation to their place of residence, differences in teaching styles based on career advancement, class type, and school type, and the interrelation between teachers' free-time activities and their teaching styles. This topic was examined by using a two-part questionnaire containing the *Leisure Time Activity Questionnaire* (LTAQ) and the *Staffordshire Evaluation of Teaching Styles* questionnaire (SETS). A total of 1492 class and subject teachers voluntarily participated in the research. The results of the empirical part of the research indicate that teachers usually spend their leisure time in organized activities with friends and family, but statistically significant differences were found in teachers' leisure time activities with regard to their place of residence (city/village/island). Furthermore, the results of teachers' self-assessments show that they most often take on the role of a lecturer, but also a student-oriented teacher. Statistically significant differences have been identified depending on the type of class unit they teach (regular/combined), the type of school (central/branch) they work in, and qualification status they have achieved (mentor/advisor/excellent advisor). A mutual correlation in teachers' ways of spending leisure time and their teaching styles has also been established.

**Keywords:** leisure, organized leisure time, teacher, student-orientation/curriculum-orientation.

## Mokytojų laisvalaikio veiklų ir mokymo stilių sąsajos

**Santrauka.** Straipsnio tikslas – ištirti, kaip mokytojai leidžia laisvalaikį pagal gyvenamąją vietą, taip pat mokymo stilių skirtumus pagal pažangą karjere, pamokų ir mokyklos tipą, bei mokytojų laisvalaikio veiklų ir mokymo stilių ryšį. Tyrimė naudota dviejų dalių apklausa – Laisvalaikio veiklų klausimynas (angl. *The Leisure Time Activity Questionnaire* (LTAQ) ir Stafordšyro mokymo stilių vertinimo klausimynas (angl. *The Staffordshire Evaluation of Teaching Styles Questionnaire* (SETS)). Tyrimė savanoriškai dalyvavo 1 492 mokytojai. Empirinės tyrimo dalies rezultatai atskleidė, kad mokytojai laisvalaikį paprastai leidžia organizuotoje veikloje su draugais ir šeima, tačiau buvo nustatyta statistiškai reikšmingų skirtumų tarp mokytojų laisvalaikio veiklų pagal jų gyvenamąją vietą (miestas / kaimas / sala). Be to, mokytojų savistabos rezultatai rodo, kad jie dažniausiai atlieka lektoriaus, taip pat į mokinius orientuoto mokytojo vaidmenį. Nustatyta statistiškai reikšmingų skirtumų pagal mokomų klasių tipą (įprastos / jungtinės), mokyklos tipą (centrinė / filialas) ir pasiektą kvalifikaciją (mentorius / patarėjas / vyr. patarėjas). Taip pat nustatytos koreliacijos tarp mokytojų laisvalaikio praleidimo būdų ir jų taikomų mokymo stilių.

**Raktažodžiai:** laisvalaikis, organizuotas laisvalaikis, mokytojas, orientacija į mokinį / orientacija į mokymo programą

\* Corresponding author.

Received: 17/10/2024. Accepted: 27/02/2025

Copyright © Ines Blažević, Bruno Matijašević, 2025. Published by Vilnius University Press. This is an Open Access article distributed under the terms of the [Creative Commons Attribution Licence](https://creativecommons.org/licenses/by/4.0/) (CC BY), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

## Introduction

Leisure is an omnipresent concept that is not and cannot be unambiguously defined (Dux, 2017). In this paper, the term ‘leisure’ covers all activities, both structured and unstructured, freely chosen by the consumer of the activity (Gkiotsalitis and Stathopoulos, 2016). Adults spend their leisure time in different ways. It is well known that different forms of leisure time activities can contribute to a person’s mental health (Hou et al., 2018; Blažević et al., 2021), physical health (Labbe and Miller, 2019), and family relationships (Zhang et al., 2017). Leisure time can have different benefits, which makes it important in the context of the impact on a person’s professional life and work. In a world of rapid changes and stressful professional circumstances, leisure is considered a space for recovery (Kleiber, 2000). Benefits of leisure for individuals are observed with regard to the level of structuring and, more recently, according to the concept of situational leisure as developed by Stebbins (1997). In addition to the level of structuring, this theory also takes into account the opinion and feelings that the individual has towards their leisure time. The fundamental division within the theory is into serious and casual leisure. Serious leisure is more frequent, and it requires having knowledge and skills, while casual leisure includes infrequent and non-binding activities which do not require specific knowledge and skills (Stebbins, 1997). Recognizing leisure as an important factor in the life of employees is a key aspect for the benefit and better quality of life manifested in stress management, annulment of negative feelings, but also in the experience of positive feelings (Liang, 2018; Petelcycz et al., 2018). The importance of spending leisure time was in focus during the COVID-19 pandemic, especially in view of the increased presence of digital media (Blažević and Klein, 2022). In line with the importance of leisure and its various benefits, the question arises as to *how leisure affects the teacher as an adult employed in an educational institution*. The preference of teachers for certain leisure activities can be perceived from the different offers of extracurricular activities that teachers organize in schools (Blažević and Matijašević, 2021). Each and every teacher has their own values which can directly or indirectly influence their classroom management (Mlinarević and Brust Nemet, 2012), which ultimately makes a hidden curriculum of teachers. This is important because it has a great influence on the educational process (Riley, 2003). Swadźba et al. (2024) state that the organization of leisure activities is connected to the values important to people, and that they concretize them through their free time. This highlights the significance of leisure time in the context of the hidden curriculum, as it is linked to the values held by teachers. Therefore, the connection between leisure time, values, and the hidden curriculum is evident. A concrete example can be seen in the study by Matijašević (2024), which indicates that, based on their ways of spending free time, teachers shape how they teach about leisure time in general. This is directly related to the organization of extracurricular activities as an integral part of the educational system. A part of the hidden curriculum certainly belongs to different teaching styles as tools for managing the class environment and teaching methods. The term ‘teaching style’ connects the teacher and

the student (Mosston, 1978) and thus becomes a vital factor of the educational aspect of the school. Grasha (1996) distinguishes five different teaching styles: *Expert*, *Formal Authority*, *Personal Model*, *Facilitator*, and *Delegator*. The Expert possesses all the information the student needs for acquiring the learning content. Meanwhile, the Formal Authority is focused on achieving the goals, and this style of teaching is characterized by inflexibility in educational work with the preference of methodical perfectionism. Whereas, the Personal Model follows the principle of a teacher as a model who teaches from their own examples and directs students towards learning through observation. In comparison, the Facilitator focuses on the student and the quality of student-teacher interaction and is generally flexible in educational work. The final style, according to Grasha (1996), is the Delegator. Teachers applying this teaching style view the student as an independent person ready for independence in the learning process. In addition to Grasha's classification, there is another grouping provided by Woods (1995), who divides teachers and their work into three categories: *Discipline-Centered*, *Teacher-Centered* and *Student-Centered*. In the Discipline-Centered teaching style, the focus is on the clear structure of delivering the teaching content. Meanwhile, the Teacher-Centered model is a known model of the traditional forms of teaching in which the teacher is at the center as the main source of knowledge. Typical of the contemporary school is the Student-Centered style, in which the teacher adapts to the student and their needs, whereby the student is not an object but rather a subject of the educational process in which they actively participate. Teaching methods that are structured within different teaching styles and which include different visions and teaching preferences, direct and indirect educational goals and different ways of communication make a part of a hidden curriculum that is conditioned by different factors. Due the different influences of the way of spending leisure time on a person's professional life, the question arises related to the correlation between the way of spending leisure time and different teaching styles. This highlights the research problem regarding the impact of leisure activities on teaching methods and practices within the educational system.

## Methodology

*Research objective and hypotheses.* This research explores how teachers spend their free time in their residence, differences in teaching styles based on the career advancement, the class type, and the school type, and the interrelation between teachers' free time activities and their teaching styles. With regard to the objective, the following hypotheses were formulated:

- H1 – There is no statistically significant difference in teachers' leisure time activities with regard to their place of residence.
- H2 – There is no statistically significant difference in teaching styles with regard to the teachers' qualification status.
- H3 – There is no statistically significant difference in teaching styles with regard to the type of the class unit (regular/combined).

H4 – There is no statistically significant difference in teaching styles with regard to the type of school (central/branch).

H5 – There is no mutual correlation between teachers' leisure time activities and their teaching styles.

*Sample.* Empirical research was conducted in 2021 by using an anonymous survey questionnaire via *Google Forms*. A total of 1492 class and subject teachers participated in the research. All participants were familiar with the objective of the research and could withdraw at any time.

*Instrument.* For the purposes of the research, a three-part survey questionnaire was applied. The first part examined the socio-demographic characteristics: the professional profile, the place of residence, the qualification status, the type of class unit, and the type of school. The second part of the questionnaire included the *Leisure Time Activity Questionnaire* (LTAQ) (Przepiorka and Blachnio, 2017), whereas the third part was the *Staffordshire Evaluation of Teaching Styles* questionnaire (SETS) (Mohana et al., 2007) which examines the teaching style. The first scale contained 50 items, and the second scale contained 24 items. Both are 1–5-point Likert-type scales, on which, the respondents assessed the extent to which individual items relate to them, with '1' meaning "I completely disagree" and '5' standing for "I completely agree".

*Data processing methods.* For data analysis, descriptive analysis was used which included percentages, frequencies, mean values, and standard deviation. The hypotheses were tested by inferential statistics containing confirmatory factor analysis, Mann-Whitney U test, Kruskal-Wallis and Wilcoxon W test. The reliability test of the Cronbach's Alpha was used, the Kaiser-Meyer-Olkin value of the sampling adequacy measure was calculated, and Barlett's test was used to test the significance. Spearman's correlation coefficient was also used. The results are presented in tables and are further clarified in the text.

## Results and discussion

Table 1 shows the results on the *Leisure Time Scale*. The results of the Kaiser-Meyer-Olkin sampling adequacy measure are 0.956, which represents a very high test reliability. It should also be noted that Barlett's test is statistically significant ( $p < 0.05$ ).

By confirmatory factor analysis, 4 factors were eliminated, explaining 31.115% of the total variance after applying Varimax rotation with Kaiser normalization. The following factors are used: F1 – *Use of media*, F2 – *Socialization*, F3 – *Casual leisure*, and F4 – *Active leisure*. These factors show very high values of Cronbach's Alpha, which indicates the reliability of the questionnaire. The analysis also found a high consistency of the items within the observed factor and the possibility to form a total score for these variables.

**Table 1. Leisure Time Scale**

	$\bar{x}$	Sd	Cronbach's Alpha
<b>F1 – Use of media</b>	<b>2.89</b>	<b>.66</b>	<b>.805</b>
I love surfing the Internet	4.36	.79	
I watch TV	3.19	1.16	
I search different websites	3.84	.99	
I visit Internet portals	3.09	1.20	
I like to communicate through social media	3.25	1.22	
I read the portals and comments of the portal users	3.09	1.20	
I watch entertainment shows on TV	2.79	1.29	
I use social media to find friends or search other people's profiles	1.87	1.04	
I watch reality shows	1.72	1.08	
I like to read tabloids	1.72	1.00	
<b>F2 – Socialization</b>	<b>3.33</b>	<b>.60</b>	<b>.752</b>
When I can, I spend time with friends	3.58	1.11	
I do something relaxing	4.02	1.01	
I play sports	2.60	1.30	
I go for a walk	3.50	1.17	
I spend time with my family	4.39	.85	
I go to the movies	2.19	1.12	
I watch a good movie	3.69	1.10	
I travel	2.99	1.28	
I like to plan my excursions	3.38	1.25	
I like to go to cafes or pubs with my friends	3.14	1.29	
I'm very good at managing my free time	3.26	.99	
I'm happy with the way I plan my day	3.31	.98	
<b>F3 – Casual leisure</b>	<b>2.17</b>	<b>.63</b>	<b>.692</b>
I write my blog or read someone else's	1.82	1.06	
I learn a foreign language	1.90	1.90	1.19
I participate in different workshops	2.62	1.23	
I'm an active volunteer	1.76	1.12	
I read newspapers	2.28	1.26	
I do repairs around the house	2.74	1.19	
I do some gardening	2.43	1.41	
I write my diary	1.26	.71	
I'm socially active in associations	2.26	1.36	
I redecorate my apartment	2.65	1.31	
<b>F4 – Active Leisure</b>	<b>3.40</b>	<b>.072</b>	<b>.704</b>
I don't like to waste my free time doing nothing	3.60	1.31	
I like to have an organized day	3.92	1.10	
I always organize my time	3.21	1.14	
I like to get up early to have a longer day	3.04	1.45	
I like to do nothing (R)	3.16	1.35	
I clean up	3.56	1.04	
Sleeping during the day is a waste of time	2.81	1.44	
I sleep in the daytime (R)	3.93	1.20	

Analysis of teachers' answers shows mainly different forms of leisure. They spend most of their free time in organized leisure activities ( $\bar{x} = 3.40$ ;  $Sd = .072$ ) and socializing activities ( $\bar{x} = 3.33$ ;  $Sd = .60$ ), i.e., activities involving family and friends. Less free time is spent using the media ( $\bar{x} = 2.89$ ;  $Sd = .066$ ), and the least in casual leisure activities ( $\bar{x} = 2.17$ ;  $Sd = .063$ ) or in activities related to spending leisure time on their own. The results indicate that teachers attribute significant importance to the organization of time, including leisure. Organizational skills make a significant component of teachers' job, and this is reflected in their private life as well. The participants' answers show that they especially enjoy dedicating their leisure time to socializing activities involving family and friends. It is also interesting that they spend more time in these activities than in those involving the media. Nowadays, media-related activities have become an increasingly common form of spending free time for all generations, especially young people, although the media has been attracting people since they showed the first need for communication (Jurčić, 2017). In addition, the media are of interest because of offering some entertaining and manipulative content, especially the content denoted by characteristics of sensation (Labaš and Marinčić, 2018). The popularity of the Internet is sufficiently evidenced by the fact that there are more than four billion users in the world, according to data from June 30, 2020 (Internet World Stats, 2020). Understanding adults' leisure activities, in this case, the activities of teachers, is important because leisure time has the potential to shape a person's identity through the activities they engage in during their free time (Layland et al., 2017), which may also potentially influence their work in the educational field.

Table 2 shows the differences in teachers' leisure time activities with regard to their place of residence.

**Table 2.** Differences in leisure time activities with regard to the place of residence

	Place of residence	N	Arith. mean of ranks	Kruskal-Wallis H	df	Asymp. Sig. (2-tailed)
Use of media	city	1108	735.05	5.518	2	.063
	village	360	770.64			
	island	24	913.21			
Socialization	city	1108	764.43	10.127	2	<b>.006</b>
	village	360	685.52			
	island	24	<b>833.44</b>			
Casual leisure	city	1108	727.26	14.478	2	<b>.001</b>
	village	360	788.27			
	island	24	<b>1008.13</b>			
Active Leisure time	city	1108	747.73	1.892	2	.388
	village	360	735.24			
	island	24	858.83			

The results of the research show that teachers living on an island spend statistically significantly more time in socializing activities ( $p < 0.05$ ) and casual leisure ( $p < 0.05$ ). The data obtained are not surprising because islands are smaller environments where people are more directed towards each other. However, the results also suggest that teachers living on an island are more likely to spend leisure time in the company of their family and friends. The obtained data indicate previously known scientific findings (Martin et al., 2024; Matijašević, 2024a) which explain that the place of residence is an important sociodemographic factor that can determine engagement in specific leisure activities, depending on the availability of activities, natural surroundings, and the advantages and disadvantages of a particular living area. Based on the obtained data that indicate statistically significant differences in individual forms of leisure activities, it is possible to partially accept Hypothesis *H1*, according to which, *there is no statistically significant difference in teachers' leisure time activities with regard to their place of residence*.

Table 3 shows the results on the *Teacher Style Scale*. The results of the Kaiser-Meyer-Olkin sampling adequacy measure are 0.956, which represents a very high test reliability. It should also be noted that Barlett's test is statistically significant ( $p < 0.05$ ).

**Table 3.** *Teacher Styles Scale*

	$\bar{x}$	Sd	Cronbach's Alpha
<b>F1 – Student-centered teacher</b>	<b>3.98</b>	<b>.67</b>	<b>.715</b>
I like to use games in teaching to ensure the transfer of learning	3.76	1.03	
I like to have additional goals to determine the direction of learning	3.88	.92	
I like to give students the opportunity to explore how to learn	4.37	.73	
Expressing feelings through play or drama is a valuable aspect of teaching	3.92	.97	
<b>F2 – Curriculum-centered teacher</b>	<b>3.35</b>	<b>.64</b>	<b>.666</b>
I base my teaching preparation on myself and my role	3.29	1.16	
The best way to teach is to clearly convey the facts	3.45	1.13	
I avoid any distraction that would disrupt my planned way of conducting classes	3.07	1.06	
I am happy with teaching basic skills	3.75	1.00	
I am consistent in teaching about a topic regardless of the audience	3.37	1.02	
I find it important that my teaching is evaluated by an official body (e.g., advisor, headmaster, pedagogue)	2.90	1.30	
I am on my own when I organize teaching that fits into the curriculum	3.67	1.02	
<b>F3 – Flexible teacher</b>	<b>3.81</b>	<b>.59</b>	<b>.515</b>
I have less confidence when I only use presentations than when I use games and various exercises in teaching (R)	3.63	1.14	
I feel comfortable teaching a large number of people / a large audience	3.07	1.20	
I have developed my own teaching style	4.17	.89	
I am relaxed enough to use humor in class	4.48	.74	
I don't feel comfortable having different class units to teach (R)	3.73	1.09	
<b>F4 – Teacher lecturer</b>	<b>4.03</b>	<b>.89</b>	<b>.670</b>
I usually stand while I teach	4.31	.87	
I rarely sit down when I am with students	3.75	1.17	

By confirmatory factor analysis, 4 factors were extracted, explaining 31.115% of the total variance after applying Varimax rotation with Kaiser normalization. The following Factors are used: F1 – *Student-centered teacher*, F2 – *Curriculum-centered teacher*, F3 – *Flexible teacher*, and F4 – *Teacher lecturer*; the factors show very high values of Cronbach's Alpha, which indicates the reliability of the questionnaire. The analysis has also established a high consistency of the items within the observed factor and the possibility to form a total score for these variables.

The teachers' answers demonstrate that they mostly describe their teaching style as taking on the role of a lecturer ( $\bar{x} = 4.03$ ;  $Sd = .089$ ), student-centered ( $\bar{x} = 3.98$ ;  $Sd = .67$ ), a flexible teacher ( $\bar{x} = 3.81$ ;  $Sd = .59$ ), while a curriculum-centered teacher was least used to describe one's teaching style ( $x = 3.35$ ;  $Sd = .064$ ). The role of a teacher lecturer is typical of the traditional teaching. However, by analyzing the items covering the above outlined factor, it is evident that the assessment is related to the position of the teacher and that all the other most assessed items are related to the student-centered teacher. In the contemporary school, such a teacher gets the role of a moderator, researcher and evaluator of their own work (Jensen, 2003). Therefore, the data, according to which there are a large number of student-centered teachers, are one of the main determinants of the contemporary school (Kaffemanienė et al., 2017). A certain share of the sample identified themselves as flexible teachers who also possess the qualities of contemporary school teachers. Such a teacher has mastered different teaching techniques, uses presentations and different games in teaching. It is considered that the school of the future needs teachers who know how to use various digital tools and enrich the delivery of the teaching content by applying the gamification aspect (Zichermann and Cunningham, 2011). The smallest fraction of the teachers identify themselves with a teacher lecturer and a curriculum-centered teacher. Although knowledge of the learning content is important, including the curricular requirements, the contemporary school requires a focus on the student, which excludes the curriculum from being at the center of the educational process (Jensen, 2003).

Table 4 shows the differences in the Teacher Style Scale regarding the qualification status. In the current educational system of the Republic of Croatia, teachers can be assigned the following ranks: mentor, advisor, and excellent advisor (Pravilnik o napredovanju učitelja, nastavnika, stručnih suradnika i ravnatelja u osnovnim i srednjim školama i učeničkim domovima, 2019 [Ordinance on Promotion of Class Teachers, Subject Teachers, Expert Associates and Headmasters in Primary and Secondary Schools and Student Dormitories, 2019]).

The results of the research provide interesting data, according to which, all teachers who have been promoted in status assess themselves statistically significantly higher ( $p < 0.05$ ) in all teaching styles. Whereas, previous research has shown different results. According to Ridwan et al. (2019), teaching styles in the vast majority of cases do not correspond to the real needs of students, but Joyce and Hodges (1966) point out that different teaching styles enrich the educational process, and their combination is necessary

in order for the teaching process to be optimally managed. A potential reason for the general lack of career advancement and the reduced expression of competencies related to a teaching style can be linked to the qualitative research by Mallillin and Mallillin (2021), in which a fraction of the teachers in the sample reported a perception of not receiving sufficient recognition in the teaching profession. The responses indicate demotivation, which could manifest as a lack of career progression among some teachers, leading to reduced engagement and professional development in specializing in a particular teaching style. The above-outlined point may be a possible explanation of the results obtained. Namely, it is possible that those teachers who have been promoted in the qualification status are more aware of the importance of focusing on the student, but, on the other hand, also of the obligation to realize the given curriculum, and they assessed the offered items higher. It is certainly commendable that teachers identify themselves with different teaching styles and their application in practice, which can potentially indicate adaptation to their class. This is an indication of student-centered teaching. On the other hand, potential demotivation and reduced expressiveness of a particular teaching style can also be explained by the general demotivation related to the teaching job. It is considered one of the riskier jobs regarding burnout development (Jin et al., 2021), which can potentially explain the lower level of teacher-style profiling. Based on the obtained data, it is possible to reject *Hypothesis H2*, according to which, *there is no statistically significant difference in teaching styles with regard to the teachers' qualification status*.

**Table 4.** Differences in teaching styles regarding qualification status

	Qualification status	N	Arith. mean of the ranks	Sum of the ranks	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Student-centered teacher	yes	348	<b>791.61</b>	275479.00	183359.000	838299.000	-2.245	<b>.025</b>
	no	1144	732.78	838299.00				
Curriculum-centered teacher	yes	348	<b>804.67</b>	280025.99	178813.000	833753.000	-2.883	<b>.004</b>
	no	1144	728.81	833753.00				
Flexible teacher	yes	348	<b>839.66</b>	292202.50	166635.500	821575.500	-4.629	<b>.000</b>
	no	1144	718.16	821575.50				
Teacher lecturer	yes	348	<b>798.16</b>	277759.50	181078.500	836018.500	-2.611	<b>.009</b>
	no	1144	730.79	836018.50				

Currently, in the Croatian educational system, there are regular and combined class units (Pravilnik o broju učenika u redovitom i kombiniranom razrednom odjelu i odgojno-obrazovnoj skupini u osnovnoj školi, 2009 [Ordinance on the Number of Students in Regular and Combined Class Units and Educational Groups in Primary Schools, 2009]). Table 5 shows the differences in the Teacher Style Scale with regard to the type of class units (regular/combined).

**Table 5.** Differences in teaching styles according to the type of class units (regular/combined)

	Class unit	N	Arith. mean of the ranks	Kruskal-Wallis H	df	Asymp. Sig. (2-tailed)
Student-centered teacher	combined	109	825.50	5.115	2	.077
	regular	1209	735.68			
	both	174	772.20			
Curriculum-centered teacher	combined	109	<b>832.68</b>	7.241	2	<b>.027</b>
	regular	1209	746.66			
	both	174	691.40			
Flexible teacher	combined	109	702.74	1.859	2	.395
	regular	1209	753.43			
	both	174	725.75			
Teacher lecturer	combined	109	742.71	.081	2	.960
	regular	1209	745.65			
	both	174	754.77			

Working in a combined class unit is complex, as the teacher needs to adapt to the needs of students of different ages. This requires quality preparation and organization (Sušac, 2015) due to curricular requirements. Mulryan-Kyne (2004) states that the main problem of teaching in a combined unit is the overloaded content and insufficient time for content planning. The results of the research indicate that teachers working in combined units statistically significantly higher ( $p < 0.05$ ) assess the items that are combined in the curriculum-oriented teaching style factor. Due to the above-mentioned more complex organizational requirements when following several curricula of different grades, such results are not surprising. Toyoma and Yamazaki (2019) state that, for optimal teaching, it is crucial to align with the pupils' learning style, which is potentially influenced by the teacher's style. In this context, adapting to the learning style in combined teaching is possible with proper teacher preparation, with the primary foundation for this being the curriculum for each grade level in each specific subject. Teachers working in combined units certainly need to devote more time to the curriculum compared to those working in regular classes. Based on the obtained data, it is possible to partially accept *Hypothesis H3*, according to which, *there is no statistically significant difference in teaching styles with regard to the type of the class unit (regular/combined)* because differences were found only in the curriculum-oriented teaching style.

Table 6 shows the differences in the Teacher Style Scale according to the type of school. In the educational system in the Republic of Croatia, there are currently central and branch schools (Državni pedagoški standard osnovnoškolskog sustava odgoja i obrazovanja, 2008 [State Pedagogical Standard of the Primary Education System, 2008]).

Working in a central school in relation to a branch school is similar to working in a regular class unit in relation to working in a combined unit. Units in branch schools are mostly combined. According to the results obtained, teachers working in branch schools had statistically significantly higher self-assessments ( $p < 0.05$ ) as student-centered

teachers. The obtained data are, in a way, expected if it is taken into account that, in principle, branch schools have a smaller number of students, which makes the teacher's work easier because they can devote more attention to their students. In smaller classes, it is easier to focus on the work of a smaller number of pupils, thus making it easier to match the teaching style to the pupils' learning style, which is considered crucial for the pupils' progress (Toyoma and Yamazaki, 2019; Atma et al., 2021). Yet, as we have seen from previous researches, teachers who work in combined class units nevertheless feel that they are more focused on the curriculum, probably for the above-outlined reasons. Based on the obtained data, it is possible to partially accept *Hypothesis H4*, according to which, *there is no statistically significant difference in teaching styles with regard to the type of school (central/branch)*, because teachers differ statistically significantly only in the student-centered teaching style.

**Table 6.** Differences in teaching styles according to the type of school (central/branch)

	Type of school	N	Arith. mean of the ranks	Kruskal-Wallis H	df	Asymp. Sig. (2-tailed)
Student-centered teacher	central	1229	735.78	6.257	2	<b>.044</b>
	branch	139	<b>830.78</b>			
	both	124	758.28			
Curriculum-centered teacher	central	1229	746.43	2.089	2	.352
	branch	139	782.99			
	both	124	706.25			
Flexible teacher	central	1229	750.99	.860	2	.650
	branch	139	733.28			
	both	124	716.84			
Teacher lecturer	central	1229	742.69	2.596	2	.273
	branch	139	799.24			
	both	124	725.11			

Table 7 shows the results of the correlation between teachers' leisure time activities and their teaching styles. The correlation of variables was examined by using Spearman's correlation coefficient.

Table 7 shows a positive and a negative correlation between the observed variables. The greatest correlations were observed between the *Socialization* factor and the *Casual Leisure* factor ( $r = 0.403$ ;  $p < 0.01$ ) and between the *Casual Leisure* factor and the *Student-centered teacher* factor ( $r = 0.308$ ;  $p < 0.01$ ). Casual leisure and socialization are correlated because socialization is part of casual leisure. It is manifested in non-binding gatherings, which are not strictly and formally organized. Lack of strict structure and the frequency of certain leisure activities are one of the main features of casual leisure (Stebbins, 1997, 2021). The connection between the student-centered teaching style and casual leisure can potentially be explained by using the teacher's leisure time activity pattern. Those teachers who mostly spend time in casual leisure activities do not strive

**Table 7.** Correlation between leisure time activities and teaching styles

		1	2	3	4	5	6	7	8
1. Use of media	r	1.000	.217**	.173**	-.090**	.035	.155**	.019	-.033
	p	.	.000	.000	.001	.176	.000	.460	.208
	N	1492	1492	1492	1492	1492	1492	1492	1492
2. Socialization	r	.217**	1.000	<b>.403**</b>	.244**	.268**	.208**	.137**	.092**
	p	.000	.	.000	.000	.000	.000	.000	.000
	N	1492	1492	1492	1492	1492	1492	1492	1492
3. Casual leisure	r	.173**	.403**	1.000	.274**	<b>.308**</b>	.211**	.122**	.129**
	p	.000	.000	.	.000	.000	.000	.000	.000
	N	1492	1492	1492	1492	1492	1492	1492	1492
4. Active Leisure	r	-.090**	.244**	.274**	1.000	.223**	.239**	.062*	.169**
	p	.001	.000	.000	.	.000	.000	.017	.000
	N	1492	1492	1492	1492	1492	1492	1492	1492
5. Student-centered teacher	r	.035	.268**	.308**	.223**	1.000	.253**	.196**	.212**
	p	.176	.000	.000	.000	.	.000	.000	.000
	N	1492	1492	1492	1492	1492	1492	1492	1492
6. Curriculum-centered teacher	r	.155**	.208**	.211**	.239**	.253**	1.000	.120**	.215**
	p	.000	.000	.000	.000	.000	.	.000	.000
	N	1492	1492	1492	1492	1492	1492	1492	1492
7. Flexible teacher	r	.019	.137**	.122**	.062*	.196**	.120**	1.000	.126**
	p	.460	.000	.000	.017	.000	.000	.	.000
	N	1492	1492	1492	1492	1492	1492	1492	1492
8. Teacher lecturer	r	-.033	.092**	.129**	.169**	.212**	.215**	.126**	1.000
	p	.208	.000	.000	.000	.000	.000	.000	.
	N	1492	1492	1492	1492	1492	1492	1492	1492

\*\* Correlation is significant at 0.01 level (2-tailed)

\* Correlation is significant at 0.05 level (2-tailed)

for a strict structure of leisure activities. They spend their leisure time in activities that interest them at the moment, but are not binding, which also meets Stebbins' description of casual leisure (1997). Without striving for a strict structure, the teacher potentially transfers this attitude to work with students, thus putting the student in center and excluding the orientation towards the achievement of curricular requirements. Unlike self-focused teachers who rely on direct instruction, a student-centered teacher possesses more excellent pedagogical knowledge (Woods and Coper-Gencturk, 2024). In connection with how free time is spent in a more informal setting and this particular teaching style, it can be said that a teacher's informal free time shapes them into a person who is not solely focused on strictness and structure but rather someone who adapts to situations without merely adhering to rules. Ultimately, this results in meeting high pedagogical standards. Given that socialization is part of casual leisure, the aspect of communication

and leisure is one of the main aspects typical of the student-centered teacher. This is manifested in joint decision-making in the classroom and constant agreements between teachers and students. A student-centered teacher likes to constantly interact with their students, respecting their opinions and not dominating the educational process (Willower et al., 1967; Karasova and Nehyba, 2023).

## **Conclusion**

In addition to their knowledge and skills, teachers also bring their attitudes and values in the classroom. Attitudes and values can be influenced by forms of leisure time activities. Leisure is an important aspect of human life, and, depending on the way it is spent, it can have different impacts on the individual. This paper aims to link teachers' leisure time with their teaching styles. It has been shown that teachers, especially those who live on an island, usually organize their leisure time with family and friends. Moreover, it has been found that teachers use the media slightly less in their leisure time, and that they practice casual leisure.

Teachers prefer a student-centered teaching style to a curriculum-centered style as well as a flexible style. Teacher-centered style preferences are particularly typical of teachers who work in branch schools, while those who work in combined class units apply more a curriculum-oriented style than others. All teachers who have been promoted in their qualification status assess all the offered styles higher.

It has been found that there is a correlation between the student-centered teaching style and casual leisure. The relaxing and non-binding leisure time activity pattern within casual leisure is associated with a teaching style in which the teacher does not dominate the educational process, but rather makes decisions and leads the teaching process in interaction with the students. The correlation has been found between casual leisure and socialization, which is actually part of casual leisure. The connection between teachers' free time, which potentially influences their work at school through the hidden curriculum, is of great importance. This connection is particularly significant because the teaching approach, along with the hidden curriculum, can aid in identifying the optimal learning style for students. Aligning the teacher's teaching style with the student's learning style is considered crucial for the overall academic success (Toyoma and Yamazaki, 2019). This research has shown that, in the Croatian educational system, there are different teaching styles, most of which belong to the contemporary school paradigm. The topic of teachers' leisure time is an unexplored concept, and this paper enriches the literature of school pedagogy by respecting teachers as environmental factors who can influence the educational process. Despite the large sample of teachers from the Republic of Croatia, this study's sample is a convenience sample, which prevents the generalization of the obtained data and represents a limitation of this research. Another limitation is the reduced comparability of the findings with the recent scientific literature. Although this study marks a significant step forward in connecting the teachers' holistic lifestyles with their work in the classroom, the inability to compare the results prevents

a broader perspective on this phenomenon. Future research directions should include qualitative or mixed-methods approaches to analyze free time from another perspective, specifically, as an integral part of the potential hidden curriculum, teaching norms, and the teaching style.

## References

- Atma, B. A., Azahra, F. F., Mustadi, A., & Adina, C. A. (2021). Teaching style, learning motivation, and learning achievement: Do they have significant and positive relationships?. *Jurnal Prima Edukasia*, 9(1), 23-31.
- Blažević, I., & Klein, N. (2022). Digital Media and Internet Safety Among Primary School Students During the Covid-19 Pandemic. *Journal of Elementary Education*, 15(2), 127-124. <https://doi.org/10.18690/rei.15.2.127-144.2022>
- Blažević, I., & Matijašević, B. (2021a). Umjetničke aktivnosti u školi kao oblik provođenja slobodnog vremena osnovnoškolaca. *Acta Iadertina*, 18(2), 207-224. <https://doi.org/10.15291/ai.3604>
- Blažević, I., Matijašević, B., Matijašević, P. (2021). The Relationship between Physical Activity and Subjective Well-being in University Students. *Sport Science*, 14(2), 111-117.
- Dux, G. (2017). *Die Zeit in der Geschichte: Ihre Entwicklungslogik vom Mythos zur Weltzeit*. Wiesbaden, Springer-Verlag.
- Gkiotsalitis, K., & Stathopoulos, A. (2016). Demand-responsive public transportation re-scheduling for adjusting to the joint leisure activity demand. *Int J Transport Sci Technol*, 5, 68–82. doi: 10.1016/j.ijtst.2016.09.004
- Grasha, A. F. (1996). *Teaching with Style: A Practical Guide to Enhancing Learning by Understanding Teaching and Learning Styles*. Pittsburgh, PA: Alliance Publishers.
- Hou, CQ., Liu, WQ., Zhi, L., Han, WC., & Lan, T. U. (2018). GT-mediated metabolism plays a dominant role in the pharmacokinetic behavior and the disposition of morusin in vivo and in vitro. *J. Pharm. Biomed. Anal.*, 154, 339–53. doi: 10.1016/j.jpba.2018.02.062.
- Hrvatski sabor (2009). Državni pedagoški standard osnovnoškolskog sustava odgoja i obrazovanja. Available at: [https://narodne-novine.nn.hr/clanci/sluzbeni/full/2008\\_06\\_63\\_2129.html](https://narodne-novine.nn.hr/clanci/sluzbeni/full/2008_06_63_2129.html)
- Internet World Stats (2020). Retrieved from <https://www.internetworldstats.com/stats.htm>. Jensen, E. (2003.). *Super-nastava: nastavne strategije za kvalitetnu školu i uspješno učenje*. Zagreb: Educa.
- Jin, J., Mercer, S., Babic, S., & Mairitsch, A. (2021). ‘You just appreciate every little kindness’: Chinese language teachers’ wellbeing in the UK. *System*, 96, 102400.
- Joyce, B. R. and Hodges, R. E. (1966). Instructional flexibility training. *Journal of Teacher Education*, 17, 409–416.
- Jurčić, D. (2017). Teorijske postavke o medijima – definicije, funkcije i utjecaj. *Mostariensia*, 21(1), 127-136.
- Kaffemanienė, I., Masiliauskienė, E., Melienė, R., & Miltenienė, L. (2017). Educational Environment of the Modern School in the Aspects of Learning Factors, School Climate and Education Paradigms. *Pedagogika*, 126(2), 62–82. <https://doi.org/10.15823/p.2017.20>.
- Karasova, J., & Nehyba, J. (2023). Student-centered teacher responses to student behavior in the classroom: A systematic review. *Frontiers in Education*, 8, p. 1156530. Frontiers Media SA.
- Kleiber, D. A. (2000). The neglect of relaxation. *Journal of Leisure Research*, 32(1), 82-86.
- Labaš, D., & Marinčić, P. (2018). Mediji kao sredstvo zabave u očima djece. *MediAnali*, 12(15), 1-32.
- Labbé, D., & Miller WC, Ng R. (2019). Participating more, participating better: health benefits of adaptive leisure for people with disabilities. *Disabil Health J.*, 12, 287–95. doi: 10.1016/j.dhjo.2018.11.007.
- Layland, E. K., Hill, B. J., & Nelson, L. J. (2017). Freedom to explore the self: How emerging adults use leisure to develop identity. *The Journal of Positive Psychology*, 13(1), 78–91. <https://doi.org/10.1080/17439760.2017.1374440>

- Liang, Y. W. (2018). Conceptualization and measurement of work-leisure facilitation. *Journal of Leisure Research*, 49(2), 109–132 <https://doi.org/10.1080/00222216.2018.1489194>.
- Mallillin, L. L. D., & Lito & Mallillin, D. (2021). Job Satisfaction and Favorable Outcome on Teachers' Work Performance: The Noblest Profession. *Asian Journal of Education and Social Studies*, 21(1), 17–28.
- Martin, L., White, M. P., Elliott, L. R., Grellier, J., Astell-Burt, T., Bratman, G. N., ... & Fleming, L. E. (2024). Mechanisms underlying the associations between different types of nature exposure and sleep duration: An 18-country analysis. *Environmental Research*, 250, 118522.
- Matijašević, B. (2024a). *Povezanost situacijske dokolice adolescenata i rizičnih stilova ponašanja* (Doctoral dissertation). Filozofski fakultet u Osijeku, Osijek.
- Matijašević, B. (2024). Teacher self-assessment of competencies for leisure education and preferred leisure education models. In M. Sablić, K. Horvat, & B. Matijašević (Eds.). *Global competencies for the 21st century* (pp. 201–211). Filozofski fakultet Osijek.
- Mlinarević, V., & Brust Nemet, M. (2012). *Izvanastavne aktivnosti u školskom kurikulumu*. Osijek: Sveučilište Josipa Jurja Strossmayera u Osijeku, Učiteljski studij.
- Mohanna, K. Chambers, R., & Wall, D. (2007). Developing your teaching style: increasing effectiveness in healthcare teaching. *Postgraduate medical journal*, 83(977), 145–7. doi: 10.1136/pgmj.2006.054106
- Mosston, M. (1978). *Enseñanza de la educación física. Del comando al descubrimiento*. Barcelona, España: Paidós.
- Mulryan-Kyne, C. (2004). Teaching and Learning in Multigrade Classrooms: What Teachers Say. *The Irish Journal of Education*, 35(1), 5–19.
- MZO (2009). Pravilnik o broju učenika u redovitom i kombiniranom razrednom odjelu i odgojno-obrazovnoj skupini u osnovnoj školi, (2009). [https://narodne-novine.nn.hr/clanci/sluzbeni/2009\\_10\\_124\\_3065.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2009_10_124_3065.html)
- MZO (2019). Pravilnik o napredovanju učitelja, nastavnika, stručnih suradnika i ravnatelja u osnovnim i srednjim školama i učeničkim domovima, (2019). Dostupno na: [https://narodne-novine.nn.hr/clanci/sluzbeni/2019\\_07\\_68\\_1372.html](https://narodne-novine.nn.hr/clanci/sluzbeni/2019_07_68_1372.html)
- Petelczyc, C. A., Capezio, A., Wang, L., Restubog, S. L. D., & Aquino, K. (2018). Play at work: An integrative review and agenda for future research. *Journal of Management*, 44(1), 161–190. <https://doi.org/10.1177/0149206317731519>
- Przepiorka, M. A., & Blachnio, P. A. (2017). The relationships between personality traits and leisure time activities: development of the Leisure Time Activity Questionnaire (LTAQ). *Neuropsychiatry (London)*, 7(6), 1035–1046.
- Riley, C. (2003). *Learning in the Early years – a Guide for Teachers of Children 3-7*. London: Paul Chapman Publishing
- Stebbins, R. A. (1997). Casual leisure: A conceptual statement. *Leisure Studies*, 16(1), 17–25
- Stebbins, R. A. (2021). Casual Leisure Lifestyles. In *Leisure Lifestyles: Organizing Everyday Life for Fun and Fulfillment* (pp. 41–51). Emerald Publishing Limited.
- Sušac, T. (2015). Analiza uspješnosti učenika koji pohađaju nastavu u kombiniranim odjelima. *Život i škola*, LXI (1), 153–162. Preuzeto s <https://hrcak.srce.hr/152324>
- Swadźba, U., Horáková, N., & Trembacowski, Ł. (2024). Between Obligations and Leisure: an Examination of Non-Work Activities Among the Generation 55+ in Poland and Czechia. *Economics & Sociology*, 17(3), 11–29.
- Toyama, M., & Yamazaki, Y. (2019). Are there effects of a match between learning style and teaching style in an EFL classroom?. *Innovation in Language Learning and Teaching*, 14(3), 243–258.
- Willower, D. J., Eidell, T. L., & Hoy, W. K. (1967). *The school and pupil control ideology*. Penn State Studies Monographs No. 24. University Park: Pennsylvania State University.
- Woods, D. R. (1995). Teaching and learning: what can research tell us? *Journal of College of Science Teaching*, 25, 229–232.

- Woods, P. J., & Copur-Gencturk, Y. (2024). Examining the role of student-centered versus teacher-centered pedagogical approaches to self-directed learning through teaching. *Teaching and Teacher Education*, 138, 104415.
- Zhang, W., Feng, Q. S., Lacanienta, J., & Zhen, Z. H. (2017). Leisure participation and subjective well-being: exploring gender differences among elderly in Shanghai, China. *Arch Gerontol Geriatr*, 69, 45–54. doi: 10.1016/j.archger.2016.11.010
- Zichermann, G., & Cunningham, C. (2011). *Gamification by design: implementing game mechanics in web and mobile apps*. O'Reilly Media.