

Passive / Active Rest and Social Relationships in a Group of Teenagers from Suceava

Adriana Albu¹, Florin Dima², Lucian Laurentiu Indrei³

^{1,2,3}Hygiene, Grigore T. Popa University of Medicine and Pharmacy, Iasi, Romania
dralbuadriana@gmail.com¹, drdimaflorin@gmail.com², lucian_indrei@yahoo.com³

Article Info

Volume 83

Page Number: 8683 - 8694

Publication Issue:

March - April 2020

Abstract

fatigue is a physiological phenomenon that disappears through passive rest (sleep) and active rest (free time activities). Method: the study was carried out on a group of 271 adolescents from two high schools in Suceava, in the 9th, 10th and 11th grades from three different school profiles: Sports, Information Technology (I.T.), and Theoretical. The adolescents completed a questionnaire with questions regarding the time allocated to sleep, relaxation activities, and social relationships. The results were processed using the Pearson's chi-squared test. Results and discussions: in most cases the time allocated to nighttime sleep is 8-9 hours (58.67%) with significant differences among school profiles. Daytime sleep is rarely present in most students (50.55%) with significant differences among profiles and grades. In most cases (46.86%) young people do not spend time watching television (T.V.), with significant differences among profiles. There are 52.39% students who do not spend time at home on the computer, the differences calculated by profile and grade being statistically insignificant. The group of friends is present in 43.54% young people, who spend 2-3 days per week with friends outside of school (40.59%). Parents show little concern regarding the students' daily program. Conclusions: there are numerous problems related to passive and active rest which can have negative effects on the health of young people

Article History

Article Received: 24 July 2019

Revised: 12 September 2019

Accepted: 15 February 2020

Publication: 09 April 2020

Keywords: Computer, parents, sleep

I. INTRODUCTION

Fatigue is a physiological phenomenon that appears after a sustained physical or intellectual effort. The body reacts by reducing the work capacity associated with the necessity for rest. Rest can be passive through sleep or active through leisure activities.

Insufficient sleep during the night is compensated for during the day. According to The Sleep Foundation recommendations, children need 9-11 hours of sleep per day, and adolescents 8-10 hours [1]. In most cases, the students recognize an "inadequate sleep duration" that has negative effects on their health and school results.

Leisure activities can sometimes become a source of fatigue and even overload, which is why they need to be carefully monitored by parents. We are

referring mainly to television programs and computer use.

Television programs are becoming less and less interesting for young people, because in most cases they do not fit their interests. It is a situation that is also present in adults who are less and less interested in viewing these programs. In a study carried out on adults in Romania, aged 35-49 we see 40.85% "rarely / almost never" responses, 38.9% in adults aged 50-59 and 20.5% in those aged 60-74 [2]. If the parents do not watch TV shows, the young people will not be interested in this type of relaxation. In a study carried out on adolescents from three high schools in Iasi, 22.78% negative answers appear, so there is no interest in watching television programs [3].

There are, however, situations in which adolescents

obtain interesting information from these programs. Tennessee teens learn about nutrition from television. Such a response is present in 37.5% of high school students and 41.0% of middle school students [4]. In this context, it is necessary to adapt these programs to the characteristics of the age group and to the nutritional needs of young people.

The situation is even more complicated when we talk about computer use and especially the time spent by young people on the Internet. According to the studies, there is a positive association between Internet use and the appearance of social, emotional, and behavioral problems. Young people who spend a lot of time on the Internet have a higher frequency of emotional problems, anxiety, depression, and tendency for isolation compared to those who spend less time on the Internet [5]. There is even described a phenomenon of computer addiction, which is considered to be just as dangerous as drug addiction. Numerous cases of data related to nutrition for example, are obtained from the Web, as stated by 52.5% of high school students and 38.5% of middle school students in Tennessee [4].

Also important are social relationships represented by the group of friends and parents. The group of friends is essential for the adolescent. There are situations of acceptance and inclusion in a certain group, but also of exclusion which can have serious repercussions on the young person. It is important to study these issues because of the current tendency to give up real world friends in favor of online ones.

Parents are still a vital part of adolescent life, and they have an important role to play. Adolescents want to be independent, but in reality they cannot achieve this on their own.

The young person loves their family, thusly parents become the preferred persons with whom to discuss and solve school and health problems, while friends become essential in terms of emotional and sexual problems. High school students in Tennessee talk with parents about nutrition related issues in 82.5% of cases, and those in middle school in 93.2% of

cases [4].

In forming healthy lifestyle habits the parent-child relationship becomes essential. There are numerous studies in which the correlation between the body mass index (BMI) of the parent and the child is made - practically the correlation between the eating habits of the parent and the child [6]. Also, numerous studies evaluate the correlation between the active lifestyle of the parents and the child. If parents play sports, there is a good chance that the child will be involved in such activities [7], [8]. If the parent is interested in intellectual pursuits there are high chances that the child will also be interested in similar things. The level of interest also depends on the educational level of the parents. A parent without education or with only an elementary-level education will be less concerned about the level of school performance of the child [9]. In this context it is also important to know the educational level of the parents, especially of the mother, in order to be able to more accurately assess school results and what interventions are needed [10], [11].

Sometimes educational programs are needed for both students and parents, oriented towards achieving a balanced daily program related to sleep time, nutrition, physical activity, reducing or controlling the time allocated to computer games, the Internet, smartphone use, watching T.V. [12].

II. OBJECTIVES

Evaluate students' nighttime and daytime sleep and comparing them to the recommendations of the specialists; assessment of free time activities, especially of time spent watching television and using the computer; time spent in front of the T.V. and computer should be carefully monitored as it can generate fatigue; assessment of social relationships, especially those related to the group of friends; the existence of the group of friends implies a certain time spent by students together outside of school, so it is important to know the number of days spent in the company of friends; assessing the way parents supervise free time and school activities

(homework).

III. METHOD

The study was carried out on a group of 271 adolescents from two high schools in Suceava city. These are students from a sports program high school and an I.T. program high school. At the sports program high school there are young people who study in the sports profile and students who study in the theoretical profile, and at the I.T. program school there are students who study in the I.T. profile. The questionnaire was given to 91 young people from the theoretical profile, 95 from the sports profile and 85 from the I.T. profile. The students in the studied group are between 14 and 17 years old. They are in the 9th, 10th and 11th grades. A questionnaire was given to the adolescents with questions regarding passive / active rest and social relationships.

Passive rest through sleep is evaluated using two questions:

- How many hours do you sleep on average, per night: 1. 6-7 hours 2. 8-9 hours 3. over 9 hours;
- Do you sleep in the afternoon: 1. every day 2. often 3. rarely 4. never.

Active rest (free time activities) was assessed using two questions that allow us to evaluate the daily time spent in front of the TV and the computer:

- How many hours per day you spend watching T.V.: 1. none 2. 0.5-1h 3. 2-3h 4. 4-5h;
- How many hours per day you spend at the computer: 1. none 2. 0.5-1h 3. 2-3h 4. 4-5h.

Social relationships involve the presence of friends and the relationship with the parents. We evaluated these with the help of two questions:

- How many real friends (true friends) do you have? 1. none 2. one 3. two 4. three or more;
- In general, how many days per week do you go out with your friends after school? 1. none 2. 1 day 3. 2-3 days 4. 4-5 days 5. 6-7 days.

It is important for parents to show interest in school activity and leisure time. These issues were studied with the help of two questions:

- Do parents (at least one of them) have time to help with how you prepare your homework? 1. always 2. most of the time 3. rarely 4. Never;
- Do parents have time to organize your free time? 1. always 2. most of the time 3. rarely 4. never.

Here we also focused on maternal education level in order to be able to make the correlation between this and the level of interest in school activity and leisure time.

- Maternal studies: 1. middle school 2. high school 3. university 4. post high school 5. professional school.

We focused on the maternal educational level because it is the mother who most often deals with the family and with the problems that arise, including those regarding the care and education of the children.

The results were processed using Pearson's chi-squared test.

IV. RESULTS

The study is oriented in two main directions represented by passive / active rest and social relationships (relationships with friends and parents).

Passive rest refers to the time allotted for sleep and active rest refers to leisure activities. Adolescents need 8-9 hours of sleep per night, but this response occurs only in 58.67% cases. We must not overlook the 33.21% of students who chose the "6-7 hours" response, which can be associated with the occurrence of the phenomenon of chronic fatigue and even of school failure (Table I).

Table I - Hours of sleep per night

| | | | |
|--------------------|-----------|-----------|--------------|
| Hours of sleep per | 6-7 hours | 8-9 hours | Over 9 hours |
|--------------------|-----------|-----------|--------------|

| night | Distribution based on profile | | |
|-----------------------------|-------------------------------|-------|------|
| Theoretical | 39 | 51 | 1 |
| Sports | 16 | 63 | 16 |
| I.T. | 35 | 45 | 5 |
| Total | 90 | 159 | 22 |
| % | 33.21 | 58.67 | 8.11 |
| Distribution based on grade | | | |
| 9th | 28 | 63 | 8 |
| 10th | 30 | 47 | 9 |
| 11th | 32 | 49 | 5 |

The differences calculated based on school profile are statistically significant ($p < 0.0001$, $f = 4$, $\chi^2 = 32.713$) and draw attention to the students from the sports profile who show a greater number of hours of sleep per night. When looking at school years the calculated differences are statistically insignificant ($p > 0.05$, $f = 4$, $\chi^2 = 2.480$) and show the presence of similar school rigors for the questioned students, so the time allocated to night sleep is not different. The reduced number of nighttime sleep hours can be balanced out by daytime sleep. Unfortunately, such a balance does not appear because the dominant response is “rarely” (50.55%) and “never” (34.31%). There are only 3.32% of students who always sleep during the day and 11.80% who often sleep during the day. In 85% of students there is a risk of marked fatigue and overloading through insufficient hours of sleep at night and during the day (Table II).

The differences calculated based on profile are statistically significant ($p < 0.01$, $f = 6$, $\chi^2 = 19.492$) and they draw our attention to the students from the sports profile who predominantly chose the answers “rarely” or “never”. It is a somewhat expected result because these young people also recognize a greater number of hours of sleep during the night.

The differences among grades are also statistically significant ($p < 0.001$, $f = 6$, $\chi^2 = 23.402$) and show the existence of a higher percentage of students in the 11th grade who recognize the existence of daytime sleep. There are no statistically significant differences in nighttime sleep, but in the daytime we see students in the 11th grade who feel tired after

school and need to rest.

Table II - Daytime sleep

| Daytime sleep | Daily | Often | Rarely | Never |
|-----------------------------|-------------------------------|-------|--------|-------|
| | Distribution based on profile | | | |
| Theoretical | 3 | 13 | 53 | 22 |
| Sports | 2 | 5 | 56 | 32 |
| I.T. | 4 | 14 | 28 | 39 |
| Total | 9 | 32 | 137 | 93 |
| % | 3.3 | 11.80 | 50.55 | 34.31 |
| Distribution based on grade | | | | |
| 9th | 1 | 6 | 49 | 43 |
| 10th | 1 | 8 | 50 | 27 |
| 11th | 7 | 18 | 38 | 23 |

Leisure (active rest) was assessed through the daily time allotted to watching television programs and using the computer.

The result is interesting because most of the responses (46.86%) are negative, so young people are not interested in television programs. There are 32.47% answers of “30 minutes - 1 hour” a result which shows a modest interest for this type of recreational activity. The 4.05% of pupils who spend 4-5 hours in front of the TV screen are worrying. In this context they do not have time to prepare homework or time for other recreational activities (Table III).

The differences calculated among profiles are statistically significant ($p < 0.05$, $f = 6$, $\chi^2 = 14.017$) and they underline the situation of the students from the sports profile who spend more time in front of the TV screen, probably watching sports broadcasts. Differences among school years are statistically insignificant ($p > 0.05$, $f = 6$, $\chi^2 = 4.228$), which shows a modest interest of the students for this type of relaxation.

In many situations, television programs have been replaced with computer games and socializing on the Internet. In the studied group the situation is surprising because there are 52.39% negative answers (“none”) (Table IV). We should pay close attention to the 8.11% young people who stay in

front of the computer for 4-5 hours per day. It is a worrying result because it can be associated the phenomenon of computer addiction and with the appearance of the pathological fatigue.

The differences calculated based on profile are statistically insignificant ($p > 0.05$, $f = 6$, $\chi^2 = 6.001$) and draw attention to the young people from the computer profile who, at home, are no longer interested in using the computer. Among school years the calculated differences are also statistically insignificant ($p > 0.05$, $f = 6$, $\chi^2 = 8.240$) which is easy to understand if we consider that these young people are not yet concerned with exams (the baccalaureate).

The second aspect taken into consideration is the one related to social relationships represented by the group of friends and the relationship with the parents.

The group of friends (three or more) appears in 43.54% of cases. There is a worrying 8.11% of young people who show the absence of a true friend. It is a situation that should be in the attention of the school psychologist (Table V).

Table III - Daily hours spent watching T.V.

| Hours spent watching T.V. | None | 30 min - 1 h | 2-3 h | 4-5 h |
|---------------------------|-------------------------------|--------------|-------|-------|
| | Distribution based on profile | | | |
| Theoretical | 48 | 24 | 15 | 4 |
| Sports | 31 | 43 | 17 | 4 |
| I.T. | 48 | 21 | 13 | 3 |
| Total | 127 | 88 | 45 | 11 |
| % | 46.86 | 32.47 | 16.60 | 4.05 |
| | Distribution based on grade | | | |
| 9th | 46 | 34 | 15 | 4 |
| 10th | 45 | 21 | 16 | 4 |
| 11th | 36 | 33 | 14 | 3 |

Table IV - Daily hours spent on the computer

| Computer use | None | 30 min - 1 h | 2-3 h | 4-5 h |
|--------------|-------------------------------|--------------|-------|-------|
| | Distribution based on profile | | | |
| Theoretical | 52 | 19 | 14 | 6 |

| 1 | | | | |
|--------|-----------------------------|-------|-------|------|
| Sports | 52 | 19 | 19 | 5 |
| I.T. | 38 | 20 | 16 | 11 |
| Total | 142 | 58 | 49 | 22 |
| % | 52.39 | 21.40 | 18.08 | 8.11 |
| | Distribution based on grade | | | |
| 9th | 53 | 20 | 18 | 8 |
| 10th | 49 | 22 | 12 | 3 |
| 11th | 40 | 16 | 19 | 11 |

The differences calculated based on profile are statistically insignificant ($p > 0.05$, $f = 6$, $\chi^2 = 3.355$) even though sustained sports activity is conducive to the development of social relationships. The results based on school year are statistically significant ($p < 0.01$, $f = 6$, $\chi^2 = 19.002$), an understandable aspect, considering the decrease in level of interest for the group of friends as teens mature and the appearance of the pairs of close friends.

The presence of the group of friends implies the existence of time spent with them outside school. In most cases (40.59%) young people spend 2-3 days per week in the company of friends. Particular attention should be paid to the answers of 6-7 evenings (9.96%) and especially those of no evenings at all spent with friends (18.45%) (Table VI).

The differences calculated are statistically significant ($p < 0.001$, $f = 8$, $\chi^2 = 27.058$) and highlight the existence of a small number of negative responses for students from the sports profile, a somewhat expected result considering that sports favor the formation of social relationships. When looking at school years the differences are statistically insignificant ($p > 0.05$, $f = 8$, $\chi^2 = 7.113$) which is expected if we take into account the age of the students and the fact that they are not yet preoccupied with exams.

Table V - Number of true friends

| True friends | None | One | Two | Three |
|--------------|-------------------------------|-----|-----|-------|
| | Distribution based on profile | | | |
| Theoretical | 9 | 27 | 15 | 40 |

| | | | | |
|-----------------------------|----------|-----------|-----------|-------|
| Sports | 7 | 24 | 20 | 44 |
| I.T. | 6 | 22 | 23 | 34 |
| Total | 22 | 73 | 58 | 118 |
| % | 8.1 1 | 26.9 3 | 21.4 0 | 43.54 |
| Distribution based on grade | | | | |
| 9th | 6 | 17 | 26 | 50 |
| 10th | 11 | 25 | 10 | 40 |
| 11th | 5 | 31 | 22 | 28 |

Table VI - Days spent with friends outside of school

| Days spent with friends | Zero | 1 day | 2-3 days | 4-5 days | 6-7 days |
|-----------------------------|-------------------------------|-----------|----------|----------|----------|
| | Distribution based on profile | | | | |
| Theoretical | 24 | 21 | 27 | 6 | 13 |
| Sports | 7 | 15 | 50 | 11 | 12 |
| I.T. | 19 | 19 | 33 | 12 | 2 |
| Total | 50 | 55 | 110 | 29 | 27 |
| % | 18.4 5 | 20.2 9 | 40.59 | 10.70 | 9.96 |
| Distribution based on grade | | | | | |
| 9th | 13 | 16 | 47 | 11 | 12 |
| 10th | 20 | 18 | 32 | 11 | 5 |
| 11th | 17 | 21 | 31 | 7 | 10 |

The control exercised by the parents is still important, taking into account the age group, and young people's desire for independence, but also the impossibility of solving problems by themselves. Obviously, many tense situations arise from this desire for independence associated with the need to still be controlled and guided. Unfortunately, parents give in easily and give up their interest in school performance and how children spend their free time.

Constant interest for school activity and especially for homework is present in only 15.12% of parents. In most cases (37.63%) parents rarely care about this aspect. The "never" answers that are present in 18.08% young people are worrying (Table VII). The lack of control can be easily associated with

neglecting homework and with the occurrence of school failure.

We can observe parents of students from the sports profile who are quite interested in their children's school performance, so the calculated differences are statistically significant ($p < 0.01$, $f = 6$, $\chi^2 = 17.118$). It is a situation that is easy to understand considering the sports profile, the student's high level of interest for sports, for competitions, for sports performance, and less for doing homework.

Table VII - Parental interest in school activity (homework)

| Parental interest in school performance (homework) | Always | Most of the time | Rarely | Never |
|--|-------------------------------|------------------|--------|-------|
| | Distribution based on profile | | | |
| Theoretical | 13 | 20 | 41 | 17 |
| Sports | 17 | 38 | 32 | 8 |
| I.T. | 11 | 21 | 29 | 24 |
| Total | 41 | 79 | 102 | 49 |
| % | 15.12 | 29.15 | 37.63 | 18.08 |
| Distribution based on grade | | | | |
| 9th | 18 | 34 | 33 | 14 |
| 10th | 10 | 23 | 38 | 15 |
| 11th | 13 | 22 | 31 | 20 |

Table VIII - Maternal educational level correlation – interest in school performance

| Maternal education level | Middle school | High school | University | Post high school | Professional school |
|--------------------------|---------------|-------------|------------|------------------|---------------------|
| Always | 0 | 28 | 6 | 3 | 4 |
| Most of the time | 10 | 44 | 5 | 5 | 15 |
| Rarely | 12 | 57 | 13 | 5 | 15 |
| Never | 4 | 25 | 3 | 7 | 10 |

| | | | | | |
|-------------------------------|------|-------|------|------|-------|
| Total | 26 | 154 | 279 | 20 | 44 |
| % | 9.59 | 56.82 | 9.96 | 7.38 | 16.23 |
| Distribution based on profile | | | | | |
| Theoretical | 12 | 45 | 7 | 5 | 22 |
| Sports | 8 | 63 | 7 | 6 | 11 |
| I.T. | 6 | 46 | 13 | 9 | 11 |

When looking at school years the calculated differences are obviously statistically insignificant ($p > 0.05$, $f = 6$, $\chi^2 = 6.536$), the parents' concern regarding homework is not higher in the 9th grade compared to the 11th.

We made the correlation between maternal education level and the level of interest for school performance. Theoretically, mothers with a higher educational level (post high school education or university) know the importance of studying for the future of the child and act accordingly (Table VIII).

In the studied group, mothers with a high school education (56.82%) or vocational school (16.23%) are dominant. The differences calculated based on profile are statistically insignificant ($p > 0.05$, $f = 12$, $\chi^2 = 15.868$) and highlight a modest level of interest for the preparation of the child's homework, even in cases where the mother has a higher education. There are numerous situations in which the family considers homework and the management of this activity as the responsibility of the teachers and not the family. When looking at the school profile and maternal studies, the calculated differences are also statistically insignificant ($p > 0.05$, $f = 8$, $\chi^2 = 15.066$).

It is also important to spend free time wisely, an element which applies to the whole family. The dominant response is "often" (35.79%), but there are 15.82% negative answers (Table IX).

Table IX - Parental interest in student's free time activities

| | | | | |
|-------------------|--------|-------------|--------|-------|
| Parental interest | Always | Most of the | Rarely | Never |
|-------------------|--------|-------------|--------|-------|

| | | | | |
|-------------------------------|-------|-------|-------|-------|
| | | time | | |
| Distribution based on profile | | | | |
| Theoretical | 18 | 31 | 24 | 18 |
| Sports | 20 | 37 | 30 | 8 |
| I.T. | 13 | 29 | 18 | 25 |
| Total | 51 | 97 | 72 | 51 |
| % | 18.82 | 35.79 | 26.56 | 15.82 |
| Distribution based on grade | | | | |
| 9th | 20 | 43 | 21 | 15 |
| 10th | 14 | 27 | 30 | 15 |
| 11th | 17 | 27 | 21 | 21 |

In the sports profile, parents are more interested about how children spend their free time, the differences calculated being statistically significant ($p < 0.01$, $f = 6$, $\chi^2 = 14.031$). Based on school year the differences are statistically insignificant ($p > 0.05$, $f = 6$, $\chi^2 = 7.578$), so the parents of students in the 9th grade show the same level of interest about this aspect as those of the 11th grade. It is a situation difficult to understand, which can lead to inappropriate behaviors.

We calculated the difference that appears between the parents' concern for homework and for spending their free time. The differences obtained are statistically significant ($p < 0.05$, $f = 3$, $\chi^2 = 8.38$) and show an increasing level of involvement in parents for organizing their child's free time.

The correlation between maternal education level and the concern for how the child spends their free time highlights the existence of statistically insignificant differences ($p > 0.05$, $f = 12$, $\chi^2 = 13.212$). Mothers who have more information about the importance of adolescent leisure time are just as unconcerned about this as those with less information (Table X).

Table X - Correlation between maternal education level and student's leisure time

| | | | | | |
|--------------------|---------------|-------------|------------|------------------|---------------------|
| Maternal education | Middle school | High school | University | Post high school | Professional school |
|--------------------|---------------|-------------|------------|------------------|---------------------|

| | | | | | |
|------------------|------|-------|------|------|-------|
| on level | 1 | | | ol | |
| Always | 2 | 32 | 8 | 2 | 7 |
| Most of the time | 13 | 51 | 10 | 9 | 14 |
| Rarely | 5 | 7 | 5 | 3 | 12 |
| Never | 6 | 24 | 4 | 6 | 11 |
| Total | 26 | 154 | 27 | 20 | 44 |
| % | 9.59 | 56.82 | 9.96 | 7.38 | 16.23 |

V. DISCUSSION

Adolescence is the period of transition from childhood to adulthood. It is a stage of life characterized by intense processes of growth and development, associated with those of maturation especially cognitive functions. During this period, important intellectual acquisitions appear which are evident throughout the school years. It is very important to adapt school rigors to the specifics of each age group, in order to avoid overloading of the school programs and the appearance of inappropriate reactions from the students. The evaluation of these reactions is increasingly important in Romania, where we are witnessing a decrease in the number of young people completing their studies (passing the baccalaureate exam). In this context, it is necessary to evaluate the level of interest relating to rest and of course social relationships.

According to recommendations, a teenager needs 8-10 hours of sleep every day. In our group there are 33.21% of young people who chose the answer "6-7 hours" of nighttime sleep. In a study on adolescents from three high schools in Iasi, 75.94% such answers appear, which is an even more difficult situation [3].

A particular element observed in the questioned students is the one represented by the greater number of hours of sleep present in the students from the sports profile. It is easy to understand why this is so if we take into account the specifics of the

sports profile curriculum. Sustained sports activity contributes to the development of one's discipline, increasing competitiveness, cooperation, developing leadership skills and respect for authority [13].

Failure to comply with the recommended number of hours of sleep is a common feature in students, being associated with the same habit being present in parents. In a study carried out on adults in Italy, between 53.2% and 62.6% of people claim a sleep duration of more than 7 hours. The differences obtained are also influenced by adherence to the Mediterranean diet, so a new aspect is represented by the correlation between balanced nutrition and a better quality of sleep [14].

A similar situation was seen in an Egypt study on adolescents with and without anemia. In those with anemia, the average sleep time per night was 6.95 hours, while in those without anemia, 8.22 hours. Also the young people with anemia had sleep disorders in proportion of 82.5% while those without anemia in proportion of only 50.00% [15].

The small number of hours of sleep in the school period becomes a habit that sometimes persists throughout life. In Japan we see only 5.35% responses of 8 hours and more of sleep, especially those in the first year of study. Basically, a lifestyle is formed that later changes very little or does not change at all [16]. Specialists in the field of education and preventive medicine should pay attention to these aspects, as coherent educational programs are necessary.

The time given to sleep during the day is even less well represented because young people are involved in different leisure activities. In most cases they are either watching TV shows or using the computer.

Almost half of the students surveyed do not watch television programs. In the survey carried out on adolescents from Iasi, such answers appear only in 22.78% of cases [3]. There is a marked decrease in students' interest for recreation in front of the TV screen. In Austrian students the average time of

watching these programs is 2 hours, with a percentage of 48.5% students exceeding this time. Girls are less interested in this kind of relaxation compared to boys and also there is a decrease in interest for television programs as they get older. The high number of hours spent in front of the TV is associated with reduced sleep time and a lower quality sleep. Participation in sports activities is associated with a low interest in television programs [17].

In a study carried out on adolescents, adults, and elderly people in Belgium we observe an intense change in the type of sedentary activity carried out and the time allocated to it. In adolescents, sedentary activities are mainly represented by the time spent in school (42.95%), followed by T.V. programs (14.11%), and the use of the computer (9.72%). In adults, these activities are represented by the time spent at work (30.02%), in front of the television (28.38%), and consuming food (12.53%), and in the elderly, watching television (47.88%), eating food (22.86%), and reading (10.77%). Adolescents set aside little time for reading (0.80%), hobbies (0.61%), music (3.62%), and food consumption (7.45%) [18].

In general, using the computer is becoming more and more the favorite free time activity of young people. In the studied group more than half of the students chose "zero", a surprising result especially for those from the I.T. profile. In the group from Iasi, the negative answers appear only in 11.81% of situations, so we are witnessing a decrease in interest for this way of spending free time.

The computer is used daily by 72,662% of the students in Zagreb, especially for social activities (29,094%), games (25,146%) or internet searches (20.76%). Only in 14,327% of cases students use the computer for studying a result which is not encouraging [19]. Practically there is an intensive use of the computer for online relationships and games which leads to the decrease of the interest for the real friends. There may be a phenomenon of

computer dependence associated with the change of eating habits and the appearance of obesity. In students from the universities of Turkey there are situations in which the Internet is used daily over 4 hours. The differences are related to the universities' profile. We see that 48.1% of such answers appear in the polytechnic profile, in the educational one only 18.8% of cases, while in the social sciences 68.6% of students use the computer for over 4 hours for Internet related activities [20].

The intense activity on the computer can be associated with the reduction of social relationships overall and the ending of true friendships. There are 8.11% negative answers that appear in the studied group, while in the high school students from two counties of Moldavia 9.78% negative answers appear [21]. Unfortunately, social isolation can be associated with the appearance of suicidal ideas and the tendency of self-aggression [22]. In a study carried out in Tokyo, 33.4% of boys and 35.2% of 17-year-old girls show preference for loneliness and 24.1% of boys and 12.1% of 17-year-old girls are socially isolated [23]. There are important aspects that need to be carefully studied in order to identify the causes and to intervene. One of the causes of social isolation is the modification of bodily aspect. People considered to be "plump" are often rejected by others, and there are even situations where their employment is blocked in certain jobs [24]. In adolescents the situation is even more difficult because there is the phenomenon of identifying with the current beauty "ideal" and the risk of exclusion from the group of friends due to obesity or being overweight. Many young people receive nicknames like "fatty" which generates the tendency to give up on friendships and limit the time spent with them.

The social pressure from friends is sometimes high, so there is a risk of serious health problems. All activities are carried out in groups, including those relating to losing weight. People often obtain flawed information from the Internet, so there is a risk of serious nutritional imbalances [25], [26].

The problems that have arisen can be easily solved with the active involvement of parents in the lives of young people. Unfortunately, this involvement is less and less important; we see many “never” answers regarding help with the preparation of homework and supervision of leisure activities. In the studied group there are statistically significant differences between school profiles, the parents of the students from the sports profile being more involved in the activities of the young people. It is an answer that should be present in the coach-parent-child relationship. Coaches have the obligation to involve parents in the activities of the student. Parents can be involved in training activities and competitions; they can be educated about the role of physical activity in the development of the child [27, 28]. In the studied group there was such an involvement of the coaches that led to the increase of parents' interest in the activity of preparing homework and especially in organizing free time even though the maternal educational level is not different compared to the families of the students from the other profiles. Parents can watch TV shows together with their children and comment on the results of matches. Doing such things can lead towards a better parent-child relationship and a more intense involvement of parents in the student's daily program.

VI. CONCLUSION

There are many problems that should be in the attention of teachers, parents, and even medical personnel working in the field of preventive medicine. The time allocated to night and daytime sleep is insufficient for many young people, which exposes them to the onset of fatigue. Preferred leisure activities are not predominantly represented by television and computer programs, a somewhat unexpected result because in most cases these are preferred by young people. The group of friends is present especially in the 9th grade, after which its importance decreases. This leads to significant differences compared with the young people in the 11th grade. There are students who do not have

friends and do not spend time outside of school with them, which leads to the tendency of social isolation that must be detected and monitored. Parents are less concerned about the activities of their children even though they cannot handle everything by themselves and still need help and guidance.

It is necessary to develop coherent educational programs that allow young people to develop healthy lifestyles.

REFERENCES

- [1]. E. Villa-Gonzalez, F. Huertas-Delgado, P. Chillón, R. Ramirez-Vélez, & Y. Barranco-Ruiz, Association between active commuting to school, sleep duration, and breakfast consumption in Ecuadorian young people, *BMC Public Health*, 2019, 19(85).
- [2]. C. Rada, Impact of some demographic parameters on leisure time and body weight, *Anthropological Researches and Studies*, 2017, 7, 111-121.
- [3]. Albu, R. M. Hodorca, I. Onose, M. Negrea, & I. Cracana, The evaluation of the scholar fatigue phenomenon and some causative factors in a group of teenagers from Iasi, *Global Journal of Sociology: Current Issues*, 2016, 6(2), 44-49.
- [4]. S. Partida, A. Marshall, R. Henry, J. Townsend, & A. Toy, Attitude toward nutrition and dietary habits and effectiveness of nutrition education in active adolescents in a private school setting: a pilot study. *Nutrients*, 2018, 10, 1260.
- [5]. Buonomo, I. Cipriani, S. Piperno, I. Saggi, & C. Fiorilli, Internet and socialization: how internet use influences online and offline relationships, *Anthropological Researches and Studies*, 2015, 5, 3-10.
- [6]. C. Y. Lee, T. Ledoux, C. Johnson, G. Ayala, & D. O'Connor, Association of parental body mass index (BMI) with child's health behaviors and child's BMI depend on child's age, *BMC Obesity*, 2019, 6, 11.

- [7]. B. Bringolf-Isler, C. Schindler, B. Kayser, S. Suggus, & N. Probst-Hensch, Objectively measured physical activity in population-representative parent-child pairs: parental modelling matters and is context-specific, *BMC Public Health*, 2018, 18, 1024.
- [8]. C. Tanaka, M. Okuda, M. Tanaka, S. Inoue & S. Tanaka, Association of physical activity and sedentary time in primary school children with their parental behavior and supports, *International Journal of Environmental Research and Public Health*, 2018, 15, 1995.
- [9]. Zilanawala, A. Sacker & Y. Kelly, Longitudinal latent cognitive profiles and psychosocial well-being in early adolescence, *Journal of Adolescent Health*, 2017, 61, 493-500.
- [10]. P. C. Siah, A. B. K. Koe, M. W. Pang, S. M. Ng, & J. T. A. Tan, Parenting styles, food addiction and obesity: a case study of Malaysian Chinese adolescents, *Asia Pacific Journal of Multidisciplinary research*, 2018, 6(4).
- [11]. S. Gautam, & H. S. Jeong, Childhood obesity and its associated factors among school children in Udipi, Karnataka, India, *American Journal of Public Health Research*, 2018, 6(4), 182-188.
- [12]. Watanabe, M. Watanabe, K. Yamaoka, M. Adachi, A. Nemoto & T. Tango, School-based lifestyle education involving parents for reducing subjective psychosomatic symptoms in Japanese adolescents: study protocol for a cluster randomised controlled trial, *BMJ Open*, 2018, 8.
- [13]. Lisinkiene, & S. Šukys, Coach's role in encouraging parent-child educational interaction in sport, *Global Journal of Sociology: Current Issues*, 2016, 6(1), 001-008.
- [14]. Godos, R. Ferri, F. Caraci, F. I. I. Cosentino, S. Castellano, F. Galvano, & G. Grosso, Adherence to the Mediterranean Diet is associated with better sleep quality in Italian adults, *Nutrients*, 2019, 11, 976.
- [15]. H. Naglaa, & M. A. O. Marwa, Life style risk factors of iron deficiency anemia among adolescent's girl, *International Journal of Nursing Didactics*, 2018, 8(10).
- [16]. J. Nakanishi, Y. Suematsu, T. Arimura, T. Kuwano, Y. Shiga, K. Kitajima, N. Morito, T. Nii, K. Saku, & S. Miura, Recommendations of lifestyle modification according to a survey of first-year university students, *J. Clin. Med. Res*, ELMER PRESS, 2018, 10(10), 772-780.
- [17]. K. Greier, C. Drenowatz, G. Ruedi, & H. Riechelman, Association between daily TV time and physical fitness in 6-to 14-year-old Austrian youth, *Translational Pediatrics*, 2019.
- [18]. S. Compennolle, D. Van Dyck, K. De Cocker, J. Palarea-Albaladejo, I. De Bourdeaudhuij, G. Cardon, & S. Chartin, Differences in context-specific sedentary behaviors according to weight status in adolescents, adults and seniors: a compositional data analysis, *International Journal of Environmental Research and Public Health*, 2018, 15, 1916.
- [19]. J. L. Lazic, A. P. Pavlina, & T. Belovic, The interest of elementary school students in computer science, *New Trend and Issues Proceedings on Humanities and Social Sciences*, 2017, 4(1), 232-238.
- [20]. Gündüz, O. Gökçen, F. Eren, E. Erzincan, Ö. Timur, H. Turan, & A. Polat, The relationship between internet addiction and eating attitudes and obesity related problems among university students, *Turkish L. Clinical Psychiatry*, 2019, 22.
- [21]. Albu, F. Dima, S. Dorofte, & I. Abdulan. School fatigue and free time activities in a group of adolescents from two information technology high schools. *The Educational Review*, USA, 2017, 1(3), 47-53.
- [22]. R. Salam, J. Das, Z. Lassi, & Z. Bhutta, Adolescent health and well-being: background and methodology for review of potential intervention, *Journal of Adolescent Health*, 2016, 59, S4-S10.
- [23]. K. Endo, S. Ando, S. Shimodera, S. Yamasaki,

S. Usami, Y. Okazaki, T. Sasaki, M. Richards, S. Hatch, & A. Nishida, Preference for solitude, social isolation, suicidal ideation and self-harm in adolescents, *Journal of Adolescent Health*, 2017, 61, 187-191.

- [24]. C. Urzeala, Considerations regarding the risk of obesity and physical inactivity, *Anthropological Researches and Studies*, 2018, 8, 92-100.
- [25]. Al-sheyab, T. Gharaibeh, & K. Kheirallah, Relationship between peer pressure and risk of eating disorders among adolescent in Jordan, Hindawi, *Journal of Obesity*, 2018.
- [26]. S. Harris, M. Aalsma, E. Weitzman, D. Garcia-Huidobro, C. Wong, S. Hadland, J. Santelli, J. Park, & E. Ozer, Research on clinical preventive services for adolescents and young adults: where are we and where do we need to go?, *Journal of Adolescent Health*, 2017, 60, 249-260.
- [27]. L. Escardó, & Ch. Lester. Improving communication between parents and siblings. *Studies in Educational Management*, 2019 (3) 26-37
- [28]. Lisinkiene, & S. Šukys, The athlete triangle: coach, athlete and parents as an educational system. *Global Journal of Sociology*, 2014, 4(2), 46-51.

AUTHORS PROFILE



Adriana Albu, MD, PhD.

Born on the 8th of July 1958 in Iasi.

MD in 1983 of the Grigore T. Popa University of Medicine and Pharmacy.

Specialist in Hygiene in 1990.

PhD in Medicine – Hygiene in 1997 of the Grigore T. Popa University of Medicine and Pharmacy.

Associate Professor of Hygiene at the Grigore T. Popa University of Medicine and Pharmacy, Department of Preventive Medicine.

Author and co-author of 8 books.



Florin Dima, MD.

Born on April 5th 1988 in Iasi.

MD in 2014 of the Grigore T. Popa University of Medicine and

Pharmacy.

Specialist in Hygiene in 2018.

Public Health Supervisor at the Vaslui County Public Health Authority.



Lucian Laurentiu Indrei, MD, PhD.

Born on August 9th 1967 in Iasi.

MD in 1992 of the of the Grigore T. Popa University of Medicine and

Pharmacy.

Specialist in Hygiene in 1998.

PhD in Medicine – Hygiene in 2000 of the Grigore T. Popa University of Medicine and Pharmacy.

Associate Professor of Hygiene from 2008 at the Grigore T. Popa University of Medicine and Pharmacy, Department of Preventive Medicine.

Chief inspector of the Public Health Control Division from 2009 in the Iasi County Public Health Authority.

Author and co-author of 4 books.