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Universitatea "Lucian Blaga" din Sibiu

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*Facultatea de Științe*  
*Departamentul Științe ale Mediului, Fizică, Educație Fizică și Sport*  
*Domeniul: Educație Fizică și Sport*

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# **FAIR-PLAY**

## **REVISTĂ ȘTIINȚIFICĂ ȘI PEDAGOGICĂ**

**VOL. X, Nr. 14, OCTOMBRIE 2023**

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## **The role of motor activities in rising student motivation for sport**

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### **Abstract**

*In the present research, we tried to discover the motivations considered by the students as decisive for the active participation in the motor activities proposed during the sports lessons. The study had as a main method of research the opinion questionnaire and the sample of the research included a number of 100 students from the "Lucian Blaga" University of Sibiu. The conclusions of the research showed that the main motivations of the students for practicing in the motor activities were: maintaining an optimal state of health, the need for relaxation or relief of psychological stress, ensuring a physical condition, psychological, emotional and social balance, the attractiveness of the motor activities, from the sphere of socialization, the discovery of new friends, communication, socialization.*

*Gender differences have shown that opinions are shared, male students consider physical and social motivations to be the most important, while female students consider important in the motor activities the psychological and sanogenic effects.*

**Keywords:** *the motivation for sports, socializing, motor activities.*

### **1. Introduction**

During the period of university studies, physical education and sports activities aim to continue training and self-training of future specialists. Therefore, in the physical education and sports lessons, through the practical activities of different sport disciplines, students can take advantage of their talents and skills, as well as provide a framework for enhancing their mobility skills, develop motor skills at a higher level, improving the body's great functions, developing moral values such as respect for self and adversary, fair play, helping in need, perseverance, attention, memory (Tufan, 2015).

In the literature, the notion of sport has a general meaning, representing "all forms of physical exercises and dynamic games of a more or less spontaneous and competitive nature, originating in the traditional games and the founding myths of modern civilization, and its diversification is related to the fact that it carries values that come from contemporary ways of life" (Dragnea & Mate-Teodorescu, 2002).

Motor activities are a component of active life, an "important link to lifestyle, which involves making moves, according to your own choices, a few times a week, a pleasure movement, to consume energy and to produce satisfaction (Grigore, 2007).

Physical education can also improve the cohesion of groups, with a good cohesion of the group is considered important and can lead to better performance of the group. The relationship between cohesion and performance has been studied by many researchers, and most have come to the conclusion that "the connection between performance and cohesion is reciprocal (Sopa & Pomohaci, 2014, b). Also, successful groups are built around strong leaders and the importance of this role is increasing in today's sports in all categories (Sopa & Pomohaci, 2015 a).

A lot of skills are taught by young people through team sports, one of which is competition. Today we meet the competition every day and in every field. As adults we meet the competition when looking for a job or trying to find better jobs, children meet the competition at school for the best grades (Sopa & Pomohaci, 2015 b).

The benefits of practicing motor activity on the body have been highlighted in many specialized works, we want to present some of the formative valences of practicing the motor activities that aim at the sanogenic, attitude and behavioral plan (Uță, 2012):

Table 1. The formative valency of motor activities

Formative valency		
<i>Sanogenic plan</i>	<i>Atitudinal plan</i>	<i>Social plan</i>
<ul style="list-style-type: none"> <li>- stress removal;</li> <li>- restoration;</li> <li>- relaxation;</li> <li>- strain relief;</li> <li>- disease prevention;</li> <li>- increasing work capacity;</li> <li>- good physical condition;</li> <li>- maintaining a pleasant physical appearance for as long as possible</li> </ul>	<ul style="list-style-type: none"> <li>- self-respect;</li> <li>- emotion management;</li> <li>- tolerance for failure and frustration;</li> <li>- conflict management and violence control;</li> <li>- risk management;</li> <li>- positive mental attitude (eliminating the loser complex, better self-knowledge).</li> </ul>	<ul style="list-style-type: none"> <li>- respect for the community;</li> <li>- fair play and team spirit;</li> <li>- the ability to integrate through sports into different groups;</li> <li>- the ability to know and recognize the stable values of society;</li> <li>- developing the communication capacity (knowing that physical activities are a stimulant for communication);</li> <li>- the ability to work in a team;</li> <li>- cooperation, collaboration skills, etc.</li> </ul>

One of the main motivations for sport, analyzed and discovered by specialists, is the formation of a healthy lifestyle by practicing physical exercise. In the opinion of specialists, healthy lifestyles are an active process that takes place during ontogenesis, especially during maturation, as well as the genetic heritage and norms and values of the environment in which individuals live.

Sports activities also develop communication, intergroup relationships, and group cohesion. We can demonstrate that motor activities can develop group cohesion, develop positive intergroup relationships, discover the group leader and most importantly integrate and reintegrate children into the social group. The cohesion of the school group is very important in the evolution of performance as a group, so in collectives where we have positive relationships like sympathies, friendships, and cooperation, the efficiency of work is high (Sopa & Pomohaci, 2014).

Other important contributions to motor activities are their socializing role, demonstrated by many scholars in different fields, most of whom state that these activities represent the perfect framework for the social development of young people (Sopa & Pomohaci, 2014 e).

Table 2 – Factors that influence the formation of a healthy lifestyle (after Grigore, V., 2007):

Factors that influence the formation of a healthy lifestyle		
Factors relating to the individual himself	Group belonging to other people	Institutions, organizations, associations of other structures
Regulatory factors	Cultural level	Socio-political factors



Socialization through sport is a process of social integration through communication, understanding, and cooperation, with an interactive role for conflict resolution. Therefore, it is structured on cognitive, emotional and motivational constructions, as well as the performances, behaviors, and performances of sports groups (Sopa & Pomohaci 2014 c). Also, the important situational factors for group cohesion are living close to each other, sharing the same hobbies and activities, the same uniforms or clothing, group rituals, etc. (Sopa & Szabo, 2014).

Seen as a social institution, the sport has its own basis in society, it has a regulation, specific laws, sanctioning ways, links, friendship (both social and cultural) and communication systems, principles and ideologies (Sopa & Pomohaci, 2014).

Besides family, the first and most important socializing group, other groups contribute to the socialization of individuals: school colleagues, friends and later professional groups. One of the ways in which socialization within the group of friends or colleagues is achieved is the practice of sport. Individuals learn through sport to work together, to assume certain roles within the group and to define themselves within the group (Sopa, 2014).

Socializing through sport is a complex process through which individuals learn skills, attitudes, values, and modes of behavior that enable them to function in a particular culture. These modes of behavior are taught in institutions such as school or family (Sopa & Pomohaci, 2014 d).

## **2. The aim of the research**

Through this research, we intend to know the opinions of the students in the higher education of the "Lucian Blaga" University of Sibiu regarding the motivational factors that lead the students to participate in the motor activities proposed by the university. The objective of the research among the objectives of the research we can list: identifying the opinions of the students about the motivational factors that lead them to participate in the motor activities.

## **3. The research hypothesis**

The knowledge of the students' motivation regarding the active participation in the proposed motor activities can give us, as leaders of the didactic act, indicative data for the formation of the practical-methodical and didactical approaches within the student sports disciplines.

## **4. The research methods**

In the research, we used the following research methods: the method of investigation and data collection (theoretical documentation), statistical methods of processing and interpretation of the obtained data, the survey method - the questionnaire.

## **5. Results**

The sample of the questionnaire included 100 students from different specializations from the we've used them to have a clearer picture of the group of subjects, both in age and gender. Subsequently, gender analysis will show whether there are differences between female and male gender views. Age - most of the interviewed students are aged between 19 and 20 years (67.4%), "Lucian Blaga" University of Sibiu. Demographics - according to Fig. 1 and Table no. 3.

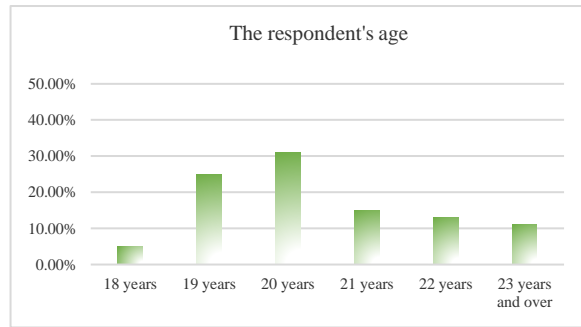


Figure 1. Graphic representation of the questionnaire respondents' age

Table 3. Age of respondents statistical calculation

Age of respondents	Cases	% N = 100
18 years	5	5%
19 years	25	25%
20 years	31	31%
21 years	15	15%
22 years	13	13%
23 years and over	11	11%
<b>Total</b>	<b>100</b>	<b>100%</b>
<i>The average</i>	20.91	
<i>The mediana</i>	20	
<i>Standard deviation</i>	2.92	
<i>Skewness</i>	2.72	
<i>Kurtosis</i>	8.20	

The gender distribution of respondents to the questionnaire was as follows:

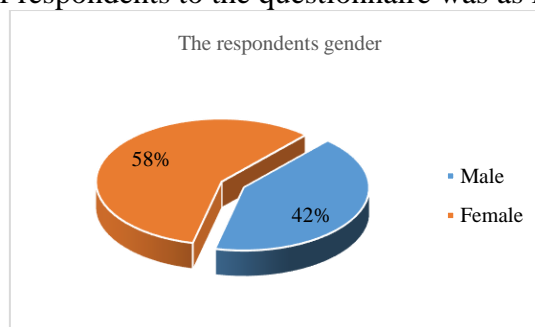


Figure 02. Gender distribution of the questionnaire respondents

Appreciate how the following motivational factors influence you in participating in physical education curricula. Evaluate each motivational factor.

Table 04. Students' answers to the questionnaire

Motivational factors, students' opinions	5	4	3	2	1
1. Maintaining the optimum body condition	60	23	10	2	5
2. Improving the functions and body systems	52	15	18	5	10
3. Keeping high indexes of some certain activities ability	58	21	11	4	6
4. The knowledge of acts and motor activities	55	25	10	5	5
5. Developing social values (communication, collaboration, socializing, relationships)	44	20	10	16	10

6. The development of cognitive capacities (thinking speed, memory, attention, boldness, ambition)	50	14	16	10	10
7. Developing creativity (imagination, rapid adaptation to new systems, initiative)	53	8	14	18	7
8. Promoting moral values (fair play, mutual aid, honesty, modesty, dignity)	62	20	11	4	3
9. Networking with peers involved in activities	58	12	10	11	9
10. Staying healthy	30	15	5	10	40
11. Developing group cohesion	52	28	4	6	10
12. Reducing the level of violence	33	10	12	5	40
13. Forming a positive self-image	55	15	12	8	10
14. Training constant habit of practicing motor activities during your leisure time	61	18	5	14	2

Table 05. Calculation of statistical indices in the items of the questionnaire

Questionnaire item	Arithmetic mean	Median	Standard deviation	Skewness	Kurtosis	T-test on gender
Item 1	4.31	5	1.07	-1.76	2.64	2.332
Item 2	3.94	5	1.35	-1.03	-0.17	1.150
Item 3	4.21	5	1.17	-1.51	1.43	2.120
Item 4	4.20	5	1.13	-1.48	1.44	1.740
Item 5	3.72	4	1.42	-0.69	-0.97	-0.322
Item 6	3.84	4.5	1.40	-0.84	-0.67	2.136
Item 7	3.82	5	1.42	-0.67	-1.10	0.220
Item 8	4.34	5	1.03	-1.64	2.12	1.180
Item 9	3.99	5	1.40	-1.05	-0.38	2.454
Item 10	2.85	2.5	1.75	0.12	-1.78	2.224
Item 11	4.06	5	1.31	-1.38	0.67	1.202
Item 12	2.91	3	1.76	0.06	-1.77	-0.200
Item 13	3.97	5	1.38	-1.07	-0.23	-0.420
Item 14	4.22	5	1.17	-1.29	0.30	2.450

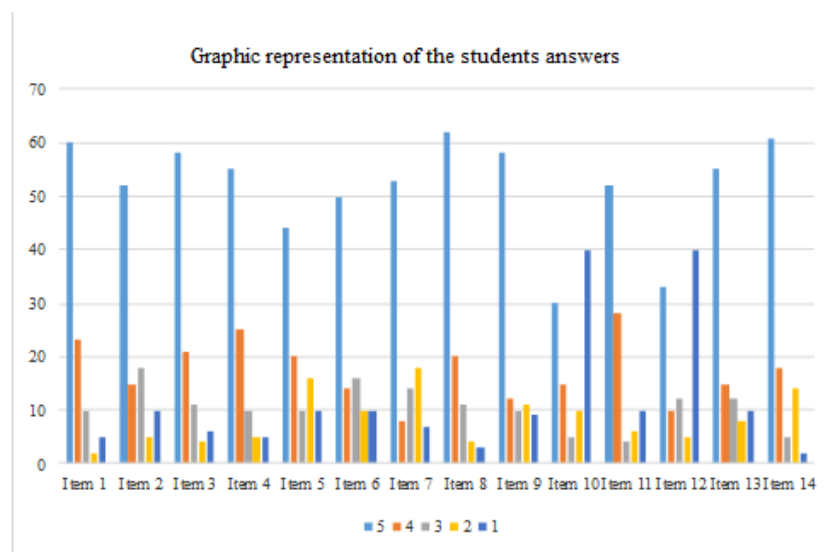


Figure 03. Graphic representation of the students answers

## 6. Conclusions

Analyzing Figure 1 we can see that many students are aged between 19 and 20 years (56% of total). And regarding gender composition we can see that most of the students (58% of total) are female and 42% of respondents were male.

Asked to answer which of the following values of effects they consider essential for developing a positive attitude for practicing motor activities, the students answered:

- at the answer variant "maintaining the optimum body condition", students majority response was 5 (60% of total respondents), the average mean was 4.41 and the differences by gender, calculated with the significance t-test (0.522), being insignificant.

- in the case, of the answer "improving the functions and body systems," the most common response was 5 (49% of total) average 4.18 and a significant gender difference (2.050).

- at the item "keeping high indexes of some certain activities ability", the most frequent response was 5 (45% of total), the average was 4.01, a significant difference in terms of gender (0.340).

- at the answer variant "the knowledge of acts and motor activities" the students replied in 33% with alternative 5, averaging 3.53 and significant gender difference (2.542).

- at the item 5 "developing social values", 62% of students responded with 5, the average grade is 4.38 and gender difference is significant (2.392).

- at the item 6 "the development of the cognitive capacities", 41% of students chose the 5 grade, the average grade was 3.55, gender difference was not significant (0.102).

- regarding item 7 "developing creativity", about 45% of students rated 5, the average grade was 3.74, and gender difference was significant (2.380).

- at the item 8 concerning "promoting moral values", about 55% of students chose the 5 grade, the average grade was 4.12, and gender difference was significant (3.060).

- at the item 9 "networking with peers involved in activities", 58% of respondents chose the grade 5, the average grade was 4.24, and gender difference was significant (2.600).

- regarding the item 10, "staying healthy", most students (57% of the total) rated 5, the average grade was 4.17, and gender difference was insignificant (1.424).

- at the item 11 "developing group cohesion", 50% of students have chosen the 5 grade, the average grade was 3.95, and gender difference was significant (1.232).

- in the case of the item 12 "reducing the level of violence", 40% of students chose the 5 grade, the average grade was 3.96, gender difference was not significant (-0.843).

- at the item 13 "forming a positive self-image", 38% of students have ticked note 5, the average grade was 3.71, gender difference was not significant (1.453).

- regarding item 14 "training constant habit of practicing motor activities during your leisure time", 45% of respondents chose the 5 grade, the average grade was 3.86, gender difference was significant (2.380).

- at the item 15 "positively influencing psychological characteristics", 48% of the total number of students have chosen the 5 grade, the average grade was 4.12, gender difference was not significant (-0.876).

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## Using the questionnaire for analyzing the personality of Students practicing motor activities

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### **Abstract**

*Motor activities must be part of the overall education of each student, through such activities the student succeeds in maintaining muscle tone and optimal health, improving communication and social relations, and positively modifying their personality.*

*This paper aims to highlight the beneficial effects of the motoric activities on the students' personality level. So we started from the hypothesis that motor activities have effects on the personality sphere on the five scales: sociability and social integration, anxiety, sensation, aggression, and level of activity. We formed two samples of students (N = 25), the experimental group, 12 girls and 13 boys, and the control group, 11 girls and 14 boys, both groups with children aged 9 to 10 years. We followed the school curriculum in the control group and in the case of the experiment group we used a training program that included playful and agonistic action systems with dynamic games and sports competitions.*

*Following the application of the differentiated programs on the two groups, we found using the Zuckerman-Kuhlman personality questionnaire that the experimental group students have a better level of sociability and social integration, a low level of anxiety, are not so attracted to new sensations, have low aggressiveness and increased activity level compared to the control group.*

**Keywords:** motor activities, personality, socialization, social integration.

### **1. Introduction**

Sport and physical education and sport activities can be considered very important social tools, and therefore any state has a great responsibility to promote and develop it (Tufan, 2016).

Another important contribution of motor activities is their socializing role, demonstrated by many researchers in different areas, most of them claiming that these activities represent the perfect framework for the social development of young people. Socialization through sport is a process of social integration through communication, understanding and cooperation, with an interactive role for conflict resolution. Therefore, it is structured on cognitive, affective and motivational constructions, as well as the performances, behaviors and performances of sports groups (Sopa & Pomohaci, 2014 e). Sports activities also develop communication, intergroup relationships and group cohesion. Motor activities can develop group cohesion, develop positive intergroup relationships, discover the group leader and most importantly integrate and reintegrate children into the social group. The cohesion of the school group is very important in the evolution of performance as a group, so in groups where we have positive sympathetic relationships, the efficiency of work is high (Sopa & Pomohaci, 2014).

The motor activity is a component of active life, an "important lifestyle link, which involves making moves, according to your own choices, several times a week, moving to enjoy, to consume energy and to produce satisfaction" (Grigore, 2007).

Regarding the physical education and its effects on the cohesion of the groups the specialists assert the following: "Physical education can also improve the cohesion of the groups, having a good cohesion of the group is considered important and can lead to better performance of the group. The relationship between cohesion and performance has been studied

by many specialists, most have come to the conclusion that "the connection between performance and cohesion is reciprocal" (Sopa & Pomohaci, 2014 b). Also, successful groups or teams are built around strong leaders and the importance of this role is increasing in today's sport in all categories (Sopa & Pomohaci, 2015 a). Situational factors that are important for group cohesion are also living together, sharing the same hobbies and activities, the same uniforms or clothing, group rituals, etc. (Sopa & Szabo, 2014).

A lot of skills are taught by young people through team sports, one of which is competition. Today we meet the competition every day and every field. As adults meet the competition when looking for a job or trying to find better jobs, children meet the competition at school for notes (Sopa & Pomohaci, 2015 b).

Seen as a social institution, sport has its own basis in society, it has a regulation, specific laws, sanctioning ways, links friendships (both social and cultural) and communication systems, principles and ideologies (Sopa & Pomohaci, 2014 f).

Besides family, the first and most important socializing group, other groups contribute to the socialization of individuals: school colleagues, friends and later professional groups. One of the ways in which socialization within the group of friends or colleagues is achieved is the practice of sport. Individuals learn through sport to work together, to assume certain roles within the group and to define themselves within it (Sopa, 2014 a).

## **2. Aim of the research**

The primary purpose of the research was to analyze the effects of motor activities on the five spheres analyzed using the Zuckerman-Kuhlman personality questionnaire: sociability and social integration, anxiety, sensation, aggression, and level of activity. The objective of the research

The objective of this research was to apply the Zuckerman-Kuhlman personality questionnaire to the two pupils and analyze their results and progress.

## **3. Research hypothesis**

The use of Zuckerman-Kuhlman's personality questionnaire as a research tool can give us the opportunity to investigate the personality traits of pupils present in the two experimental and control groups as regards sociability and social integration, anxiety, seek of sensation, level of the aggressiveness and level of activity.

## **4. Research methods**

In the experimental research we have chosen to use a questionnaire used in the literature in psycho-social and personality research, called the Zuckerman-Kuhlman Personality Questionnaire.

The Zuckerman-Kuhlman questionnaire (Zuckerman et al., 1993) aims at analyzing five dimensions of personality: socialization and social integration of the individual (SY), neuroticism-anxiety (N-Anx), impulsive sensation of impatience (Agg-Host) and activity level (Act).

The Zuckerman-Kuhlman questionnaire is a model of multivariate analysis of personality, a model by which to analyze the personality traits and its basal factors. In previous models, psychologists have attempted to propose different models of baseline personality analysis, some of which have three factors (Eysenck, 1985), others with five factors (Costa & McCrae, 1985). Of all these, the most used model is the five-factor model, which also includes the Zuckerman-Kuhlman questionnaire.

Other research methods were the following: the bibliographic method, the statistical-mathematical method.

### 5. Results

Following the psychological questionnaire Zuckerman-Kuhlman we managed to establish the psychological profile of each student in the two groups, experiment and control. The statistical interpretation of the data obtained was achieved using the SPSS 22 program, performed on each scale.

#### Social affiliation and social integration of the individual

In the case of sociability scale items, analyzing the responses of the two groups, experiment and control, we came to the conclusion that 72% of the experimental group students and 68% of the control group pupils obtained a t on the T-test within the population average.

Applying the significance T-test we observed that the value of p calculated was 0.00001, lower than the value of T (-10.907800), which indicates a significant difference between the two groups of students.

Analyzing the results of the Zuckerman-Kuhlman test on the sociability scale, we could see that 8% of experimental group students prefer individual activity, and their results are considered better when working alone. In the case of the control group, we noticed a higher number for students who prefer individual activities, ie 20% of the total number of pupils in the control group.

We obtained high scores of about 20% of the experimental group's students, 12% of those in the control group, at the top of the scale, which may indicate the presence of many friendships.

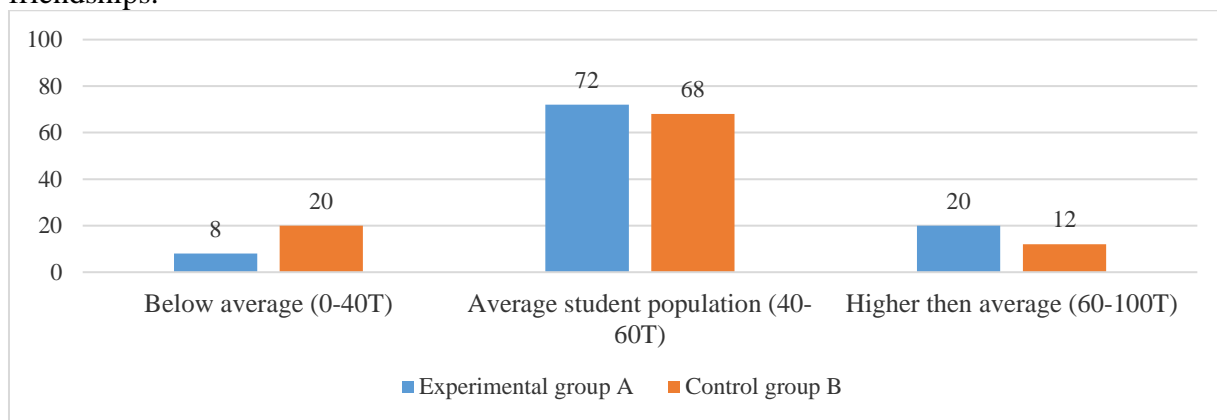


Figure 1. The scale of sociability and social integration

Table 1. Statistical indicators of the sociability and social integration scale

Experimental group A			Control group B		
The scale of sociability and social integration	Cases	%, N = 25	The scale of sociability and social integration	Cases	%, N = 25
Below average (0-40T)	2	8%	Below average (0-40T)	5	20%
Average population (40-60T)	18	72%	Average population (40-60T)	17	68%
Over average (60-100T)	5	20%	Over average (60-100T)	3	12%
<b>Total</b>	<b>25</b>	<b>100%</b>	<b>Total</b>	<b>25</b>	<b>100%</b>
Mann-Whitney U Test	Z-score = 2.4933	U-value = 183.5	p-value = 0.01278	p ≤ 0.05	
Test-T	p-value = 0.00001	T-value = -10.907800	p ≤ 0.05		
One-Way ANOVA	f-ratio = 7.89464	p-value = 0.007153	p ≤ 0.05		



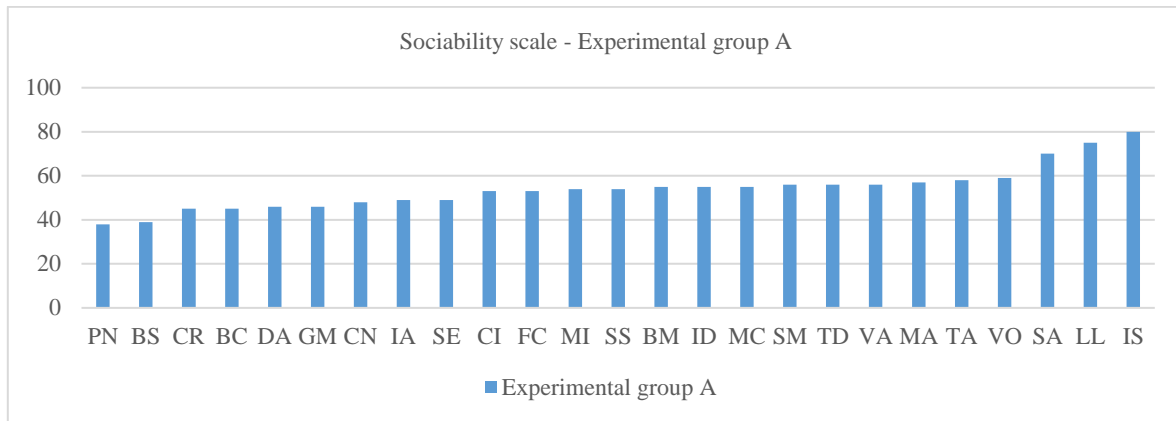


Figure 2. Sociability scale – Experimental group A

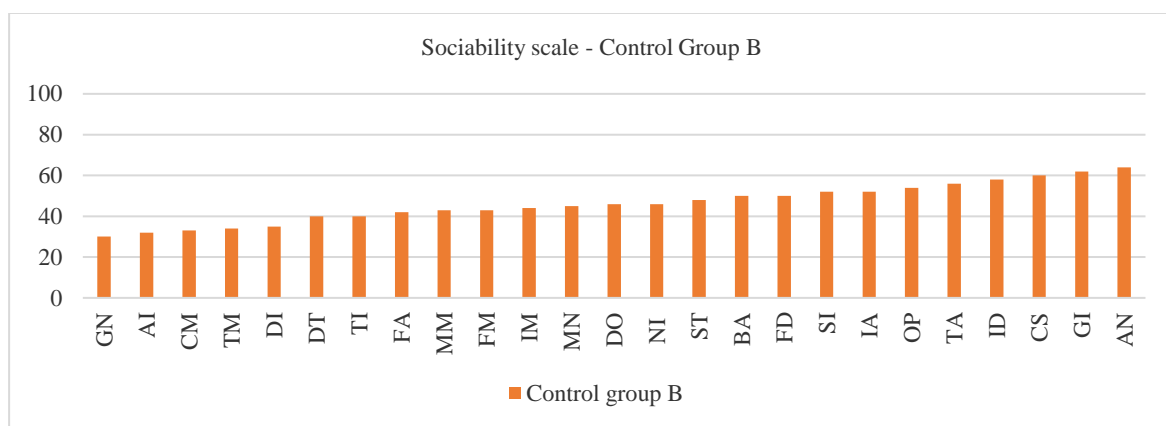


Figure 3. Sociability scale – Control group

### Neuroticism-Anxiety

In the case of items that focused on neuroticism-anxiety scale, we watched emotions, worries, anxiety level and distrust of the students in the two groups. Significant scores show the sensitivity of the subject, distrust in their own forces, and the level of anxiety. So analyzing the responses of the two groups, the experimental group, and the control group, we concluded that 48% of students in the experimental group and 46% of control group students are in the average population.

Applying the significance test T-test, we noticed that the value of t was 4.471485, higher than the p value of 0.000159, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

Analyzing the results of the Zuckerman-Kuhlman test application, on the neuroticism-anxiety scale, we have seen that 40% of students in the experimental group have no fears, worries or other anxieties.

In the control group, we noticed a larger number of pupils who are fearful, worried or have high levels of anxiety, at 24% of all students from the control group.

Regarding the upper part of the chart representing students with a high level of anxiety, we have scores of 12% of the students from the experimental group, compared with 28% of those from the control group, which may indicate a high level of resistance to stress, and a lower level of fear and anxiety in experimental group compared to the control group.

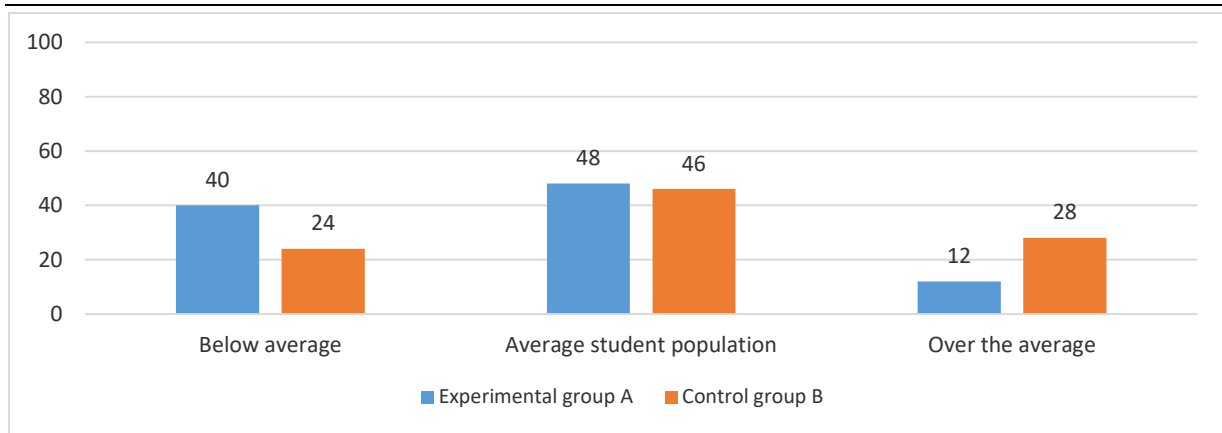


Figure 4. Neuroticism-anxiety scale

Table 2. Statistic indicators of neuroticism-anxiety scale

Experimental group			Control group		
Neuroticism-anxiety	Cases	%, N = 25	Neuroticism-anxiety	Cases	%, N = 25
Below average (0-40T)	10	40%	Below average (0-40T)	6	24%
Average population (40-60T)	12	48%	Average population (40-60T)	11	46%
Over average (60-100T)	3	12%	Over average (60-100T)	8	28%
<b>Total</b>	<b>25</b>	<b>100%</b>	<b>Total</b>	<b>25</b>	<b>100%</b>
Mann-Whitney U Test	Z-score = -1.0478	U-value = 258	p-value = 0.29372	p ≤ 0.05	
Test-T	p-value = 0.000159	T-value = 4.471485	p ≤ 0.05		
One-Way ANOVA	f-ratio = 2.2064	p-value = 0.143978	p ≤ 0.05		

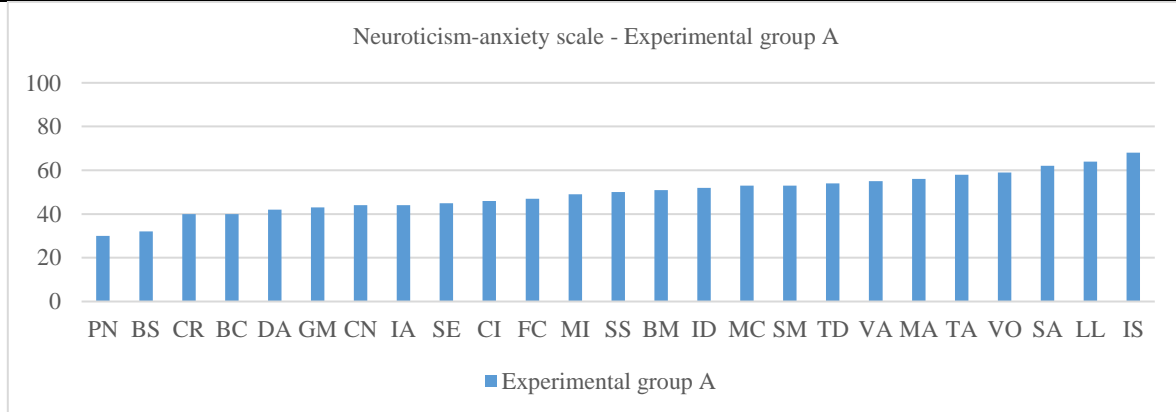


Figure 5. Neuroticism-anxiety scale – Experimental group A

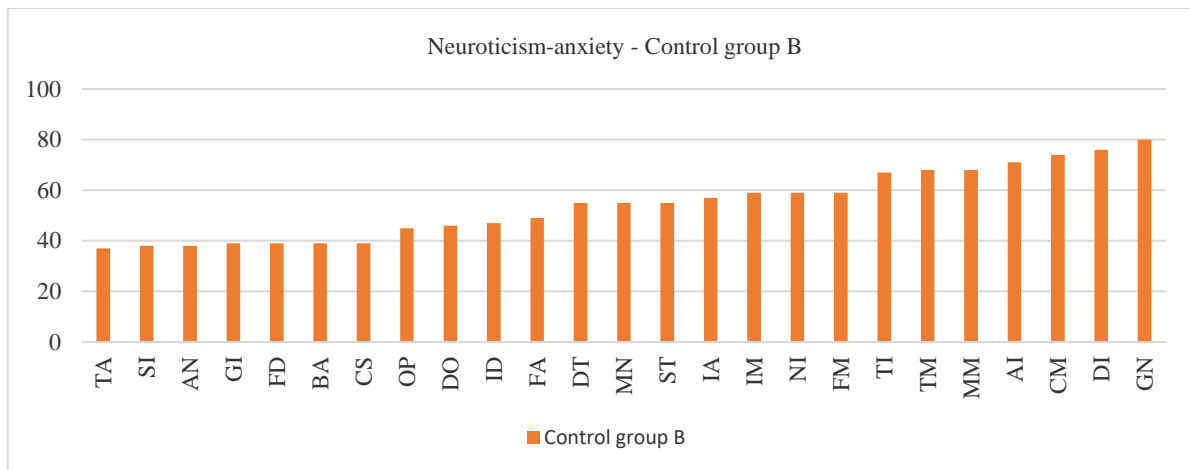


Figure 6. Neuroticism-anxiety scale – Control group B

### Impulsive search of sensations

In the case of items that focused on impulsive scale search of sensations, we followed the subject need of new, characteristic of those to impatience, rapid response and impulsive without prior reflection, unexpected, spontaneous, unpredictable.

Therefore analyzing the responses of the two groups, the control group, and the experimental group, we concluded that 60% of students in the experimental group and 58% students of the control group have obtained a quota T below the average population.

Applying the significance test we noticed that the value of  $t$  was 11.037062, higher than the  $p$  value of 0.00001, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

Analyzing the results of applying the Zuckerman-Kuhlman test on the scale of the impulsive search of sensations, we have seen that 20% of students in the experimental group tend to not seek thrills or to hasty decisions, they are not anxious, thinking clear, imperceptibly need for contingency. In the control group, we observed a higher rate number of students with impulsivity and sensation seeking, up to 16% from the total of the students.

We obtained lower scores in the case of the experimental group, approximately 20% of students, compared with 24% of those from the control group regarding students who need sensational, unexpected, being impulsive and uncontrollable. Therefore we can say that motor activities have influenced the students from the experimental group to be more patience, being more calculated, more attentive, more disciplined, compared with those from the control group.

Impulsive search of sensations, we have seen that 20% of students in the experimental group tend to not seek thrills or to hasty decisions, they are not anxious, thinking clear, imperceptibly need for contingency. In the control group, we observed a higher rate number of students with impulsivity and sensation seeking, up to 16% from the total of the students.

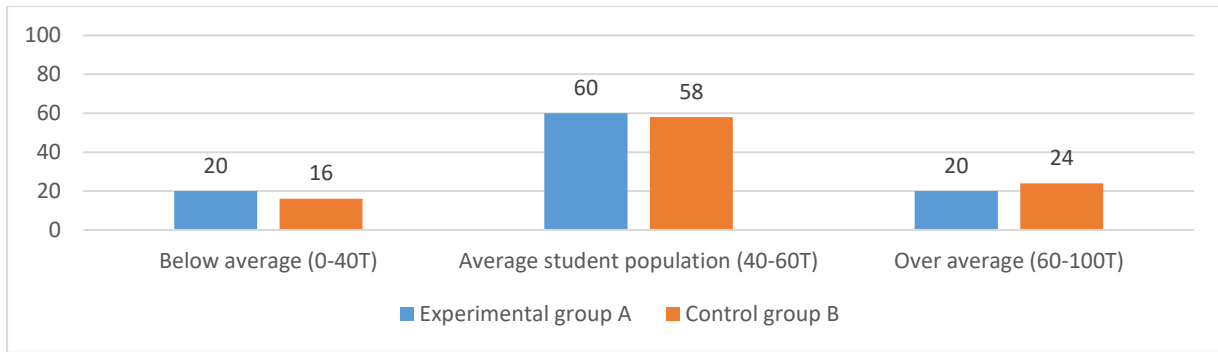


Figure 7. Impulsive search for sensations

Table 3. Statistic indicators of impulsive search for sensations scale

Experimental group			Control group		
Impulsive search for sensations scale	Cases	%, N = 25	Impulsive search for sensations scale	Cases	%, N = 25
Below average (0-40T)	5	20%	Below average (0-40T)	4	16%
Average population (40-60T)	15	60%	Average population (40-60T)	14	58%
Over average (60-100T)	5	20%	Over average (60-100T)	7	24%
<b>Total</b>	<b>25</b>	<b>100%</b>	<b>Total</b>	<b>25</b>	<b>100%</b>
Mann-Whitney U Test	Z-score = -2.1246		U-value = 202.5	p-value = 0.034	$p \leq 0.05$
Test-T	p-value = 0.00001		T-value = 11.037062		$p \leq 0.05$
One-Way ANOVA	f-ratio = 5.09013		p-value = 0.028655		$p \leq 0.05$

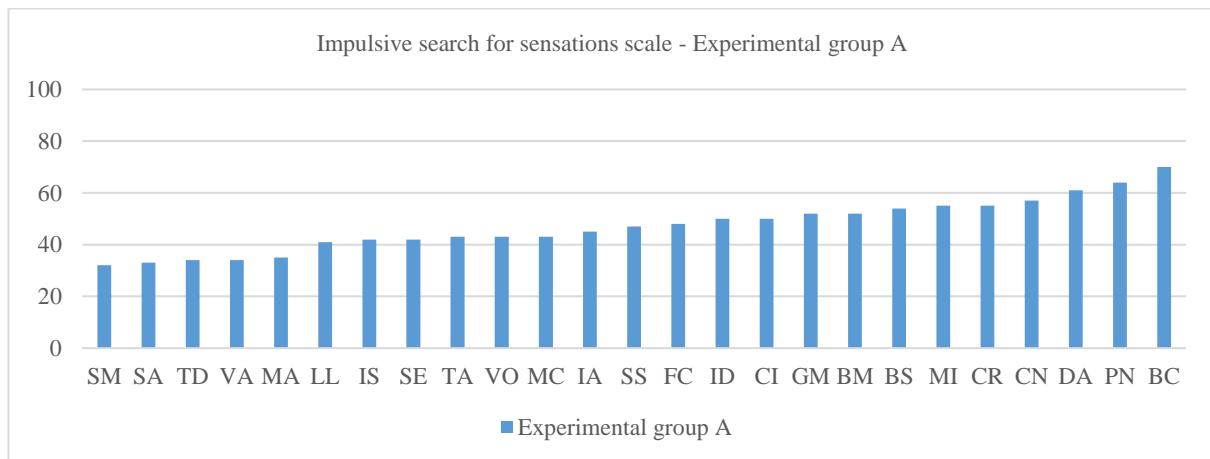


Figure 8. Impulsive search for sensations scale – Experimental group A

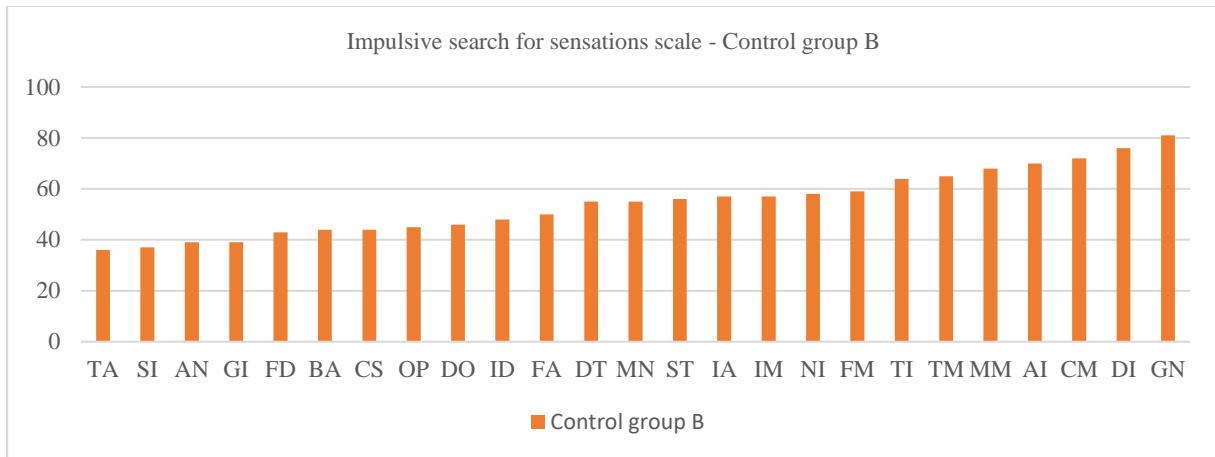


Figure 9. Impulsive search of sensations scale – Control group B

**Aggressive-hostility:**

In the case of items that focused on aggressive, hostility scale, we watched subjects' inclination towards an increased level of aggression, both physically but mostly verbal. Subjects exhibit impulsive behavior, they don't have patience in interpersonal relationships, and they have a choleric temperament. Therefore analyzing the responses of the two groups, the control group, and the experimental group, we concluded that 56% of students in the experimental group and 48% of control group students have obtained a quota T below in the average population.

Applying the significance test T-test we noticed that the value of t was 12.545046, and the p value was 0.00001, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

Analyzing the results of Zuckerman-Kuhlman test application on the aggression and hostility scale, we have seen that 32% of students from the experimental group have low hostility or aggression level. In the control group, we noticed a lower number of pupils who do not show aggression or hostility, over 24% from the total of students from the control group.

In the case of the experimental group 12% of all pupils achieved above-average results regarding hostility and aggression compared to a larger number of students, 28% of all students from the control group who exhibit these traits of aggression and hostility.

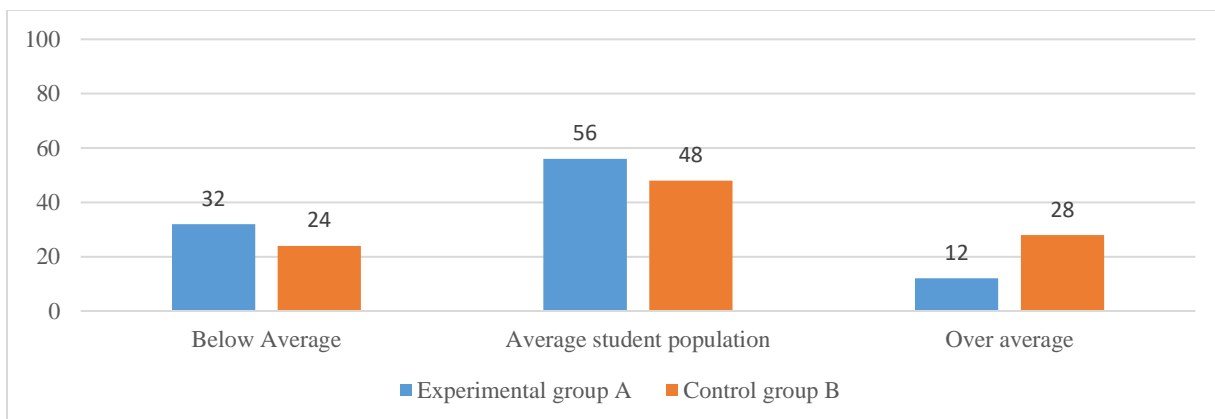


Figure 10. Aggressive-hostility scale

Table No. 4 – Statistic indicators of Aggressive-hostility scale

Experimental group A			Control group B		
Aggressive-hostility scale	Cases	%, N = 25	Aggressive-hostility scale	Cases	%, N = 25
Below average (0-40T)	8	32%	Below average (0-40T)	6	24%
Average population (40-60T)	14	56%	Average population (40-60T)	12	48%
Over average (60-100T)	3	12%	Over average (60-100T)	7	28%
<b>Total</b>	<b>25</b>	<b>100%</b>	<b>Total</b>	<b>25</b>	<b>100%</b>
Mann-Whitney U Test	Z-score = -2.3186	U-value = 192.5	p-value = 0.02034	p ≤ 0.05	
Test-T	p-value = 0.00001	T-value = 12.545046	p ≤ 0.05		
One-Way ANOVA	f-ratio = 6.5087	p-value = 0.013977	p ≤ 0.05		

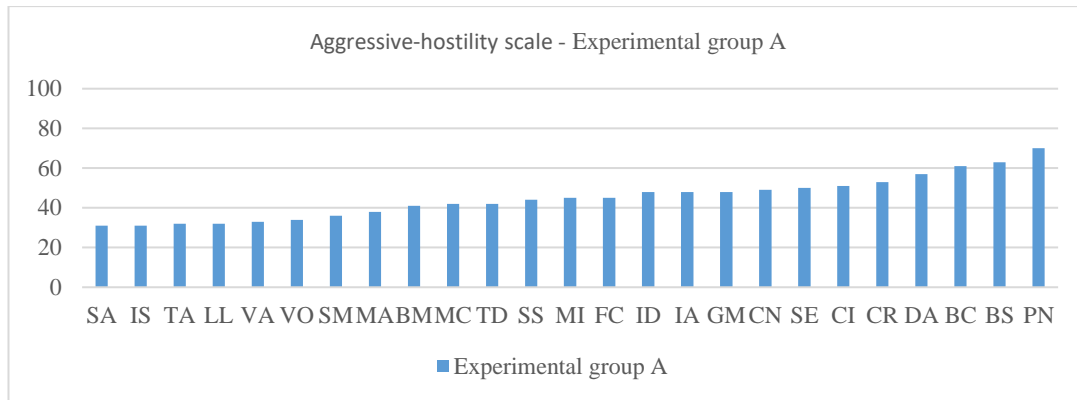


Figure 11. Aggressive-hostility scale – Experimental group A

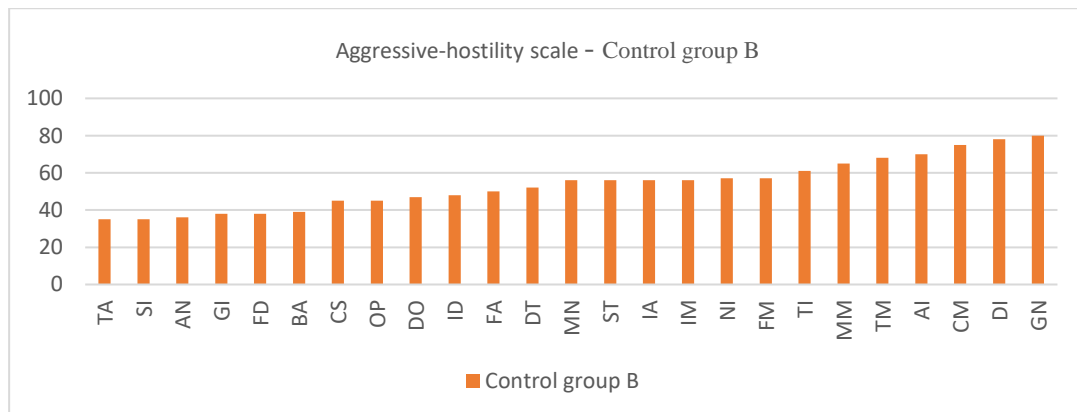


Figure No. 12 – Aggressive-hostility scale – Control group B

**Activity**

In the case of items that focused on the scale of activity, we watched the subject need to be active at all times, of working hard, subjects who prefer demanding activities with high energy consumption, the items showing also the subject level of anxiety, impatience when they are inactive. Therefore analyzing the responses of the two groups, the control group, and the experimental group, we concluded that 48% of students in the experimental group and 56% of control group students have obtained a value of T below the average population.

Applying the significance test T-test we noticed that the value of t was -0.303393 and p value was 0.764205, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

Analyzing the results of Zuckerman-Kuhlman test application on activity scale, we have seen that 8% of the experimental group students are not very active. In the control group, we noticed a larger number of pupils who prefer not to work, 16% of the total number of students from the control group.

In the case of students who prefer sports activities, we have achieved high scores about 44% of the experimental group compared with 28% of those from the control group, which may indicate an increased desire for activity in the experiment group.

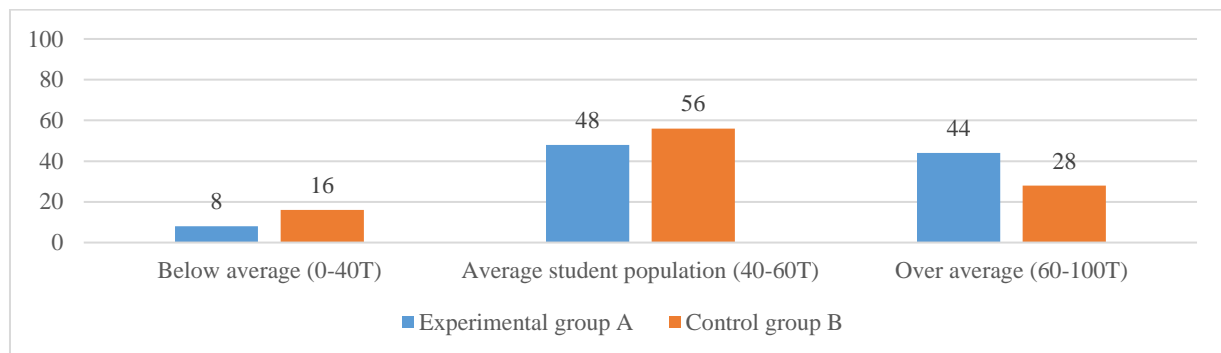


Figure 13. Activity scale at Experimental group A and Control group B

Table 05. Statistic indicators of activity scale

Experimental group			Control group		
Level of activity scale	Cases	%, N = 25	Level of activity scale	Cases	%, N = 25
Below average (0-40T)	2	8%	Below average (0-40T)	4	16%
Average population (40-60T)	12	48%	Average population (40-60T)	14	56%
Over average (60-100T)	11	44%	Over average (60-100T)	7	28%
<b>Total</b>	<b>25</b>	<b>100%</b>	<b>Total</b>	<b>25</b>	<b>100%</b>
Mann-Whitney U Test	Z-score = 0.1358	U-value = 305	p-value = 0.88866	$p \leq 0.05$	
Test-T	p-value = 0.764205	T-value = 0.303393	$p \leq 0.05$		
One-Way ANOVA	f-ratio = 0.0848	p-value = 0.927006	$p \leq 0.05$		

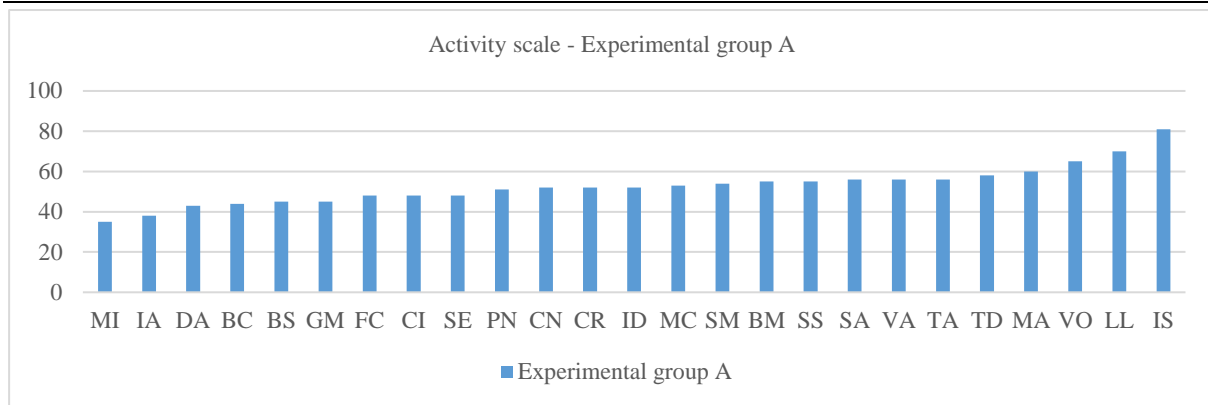


Figure 14. Activity scale – Experimental group A

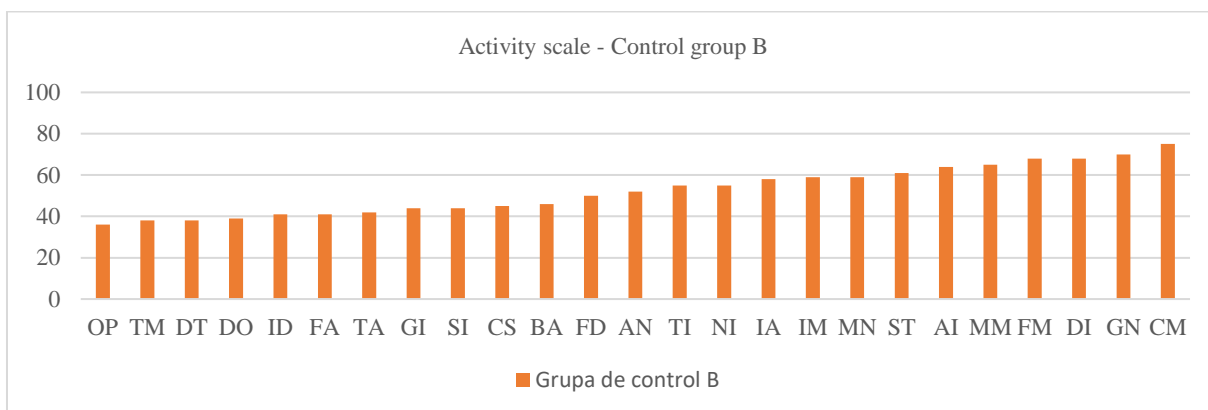


Figure 15. Activity scale – Control group B

## 6. Conclusion

After the applying of differentiated programs on the two groups, we found using the Zuckerman-Kuhlman personality questionnaire, that students from the experimental group had a better level of sociability and social integration, lower levels of anxiety, are not so attracted to newer experiences, have a low level of aggressiveness and increased activity levels compared to the control group. So we can say that the research hypothesis, according to which "used as a research tool the Zuckerman-Kuhlman personality questionnaire can give us the opportunity to investigate the personality traits of students present in both the experimental and control group in terms of sociability and social integration, anxiety, look for sensations, the level of aggression and activity level", was validated, we can say that students in the experimental group who completed the training program with motor activities, playful and agonistic games, are as the questionnaire say, more sociable, applying the significance T-test we noticed that the p-value calculated was 0.00001 and the value of T was -10.907800, indicating a significant difference between the two groups,  $p \leq 0.05$ .

Also on the scale of neuroticism-anxiety we found that students in the experimental group had a lower level of anxiety and nervousness than students from the control group, applying the significance t-test, we noticed that the value of T was 4.471485, and the value p was 0.000159, indicating a significant difference between the two groups of students,  $p \leq 0.05$ . Therefore we can say that the motor activities carried out with the experimental group had positive effects, students in the experimental group increased levels of resistance to stress, mastering the situation, they did not quickly lose their temper, and have a lower level of anxiety.

Regarding the scale of "impulsive search for sensation", we noticed that the experimental group has a lower level regarding impulsivity in search of sensations, students are more calculated, more patient, and more careful, with a higher level of discipline compared



with the control group. Therefore applying significance T-test we noticed that the value of T was 11.037062 and p-value was 0.00001, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

On the scale of "aggression-hostility" we can observe that students from the experimental group had a lower level of aggressivity and hostility compared to students from the control group, therefore applying the significance t-test we noticed that the value of T was 12.545046, and the value of p was 0.00001, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

Looking at scale of "activity" we can see that both groups of students met an increased willingness for activity, children are willing to make as many sports activities, therefore applying significance T-test we noticed that the value of T was -0.303393 and p-value was 0.764205, indicating a significant difference between the two groups of students,  $p \leq 0.05$ .

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## **Research regarding the influence of motor activities in the integration of students**

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### **Abstract**

*Motor activities, whether organized sports and physical education, sport training, leisure activities or competition, have at this age level, primary education, a strong playful time, pursuing both development and motor skills, physical fitness and especially the psychosocial. Through play and sports competition, the child can gain confidence and try new forms of communications so that he can express his potential and qualities.*

*Theory of social learning has shown that socialization is made best in the sports. According to specialists, practicing physical activities or sports influences youth personality and creates positive effects on body and mind.*

*Using sociological questionnaire method we tried to analyze the importance of motor activities in the process of socialization and social integration of students, the relationships established within the group and the influence of sport in group evolution.*

**Keywords:** *adaptation and social integration, motor activities, socialization, group dynamics.*

### **1. Introduction**

Motor activities are the perfect framework in forming young generations, being a social factor with increasing importance in contemporary society. The phase of transition from pre-school to school is a test for small scholar, his whole social environment, rules and rigors are changing, and it can disrupt his behavior thereby occurring problems of adaptation and integration in the social group. Motor activities at this age level are mostly playful which gives to the young scholar the perfect framework for socializing, relaxing him and taking off his prejudices.

Magineanu G.N. (2013 ) states "although he take part of the same group class, in physical education and sports student no longer retains the usual place in the classroom, no longer relate mainly to fellow bank, but stands in the lineup in height order, bordering colleagues, practice in pairs and groups, becoming a member of teams that are competing and whose composition changes from one lesson to another, is encouraged by fellow team members, encourage their teammates, enjoy in collective the victory, feels the sadness of failure among his colleagues, etc. All these aspects, extend child relationship system, it get used to the framework and activate in different groups, attenuates individualist spirit. Exercising rotating roles (in charge of the group, team captain, supervisor of compliance with the rules set), gets the student used to leadership and subordinate relationships, binding of compliance with the rules established by proper manifestation in any circumstance.

Socialization process helps shape the mental traits and personality; those traits are formatted as a continuous process as summing and exercising new social roles and acquiring new experiences. This period of forming and primary socialization is fundamental to the future development of the child.

Defining socialization through sport Epuran M. (1998) states: "Socialization through sport means the extent to which attitudes, values, skills, characteristics learned in sport are transferred and manifested in other social activities and institutions."

Constantinescu A., (2009) summarizes the importance of communication in the socialization process through motor activities saying "socialization is a progressively and accumulating process in which children, over the period of growth, assimilates the behaviors, values, codes, roles, habits conventions and ways of thinking characteristic to the socio-cultural environment. Good socialization is achieved using communication." Also here the author underscores the idea that "the process of socialization facilitates, in the same time, the normal existence of social life, providing stability and proper functioning of social structures, cohesion and inter-group socialization." Individuals assimilate a whole system of knowledge, attitudes, skills and moral rules required entering social life community, developing imagination and creative capacity in the same time with the affection necessary to moral and psychological balance."

## **2. Objectives**

The objectives of this study seek to demonstrate the importance of motor activities in personality development of scholar, socialization, communication and integration into social groups, sports and being an ideal framework facilitating the achievement of these objectives.

## **3. Materials and Methods**

The research methods used were: bibliographic study, observation method, interview, questionnaire method for groups.

## **4. The research hypothesis**

Primary period is the stage of forming and cognitive and moral development of individuals, thereby if students will participate in activities that have a strong socializing character then they will learn moral values like honesty, modesty, courage, and not least teamwork. If we will give attention within motor activities at primary level to social activities then we will have children that will be sociable, will integrate smoothly into an unknown environment without panic, they will behave freely, will connect fast and make friends and will know the limits to be imposed in certain relationships.

## **5. Research sample**

The experiment was conducted with class II A with an effective of 20 students (11 girls, 9 boys), control class and experimental class II B with an effective of 20 students (10 girls, 10 boys). In researching these two school groups we had as main objective to analyze and demonstrate the socializing role of motor activities at primary level.

## **6. The experiment content**

In this study we used the observation method which is one of the methods most commonly used for psychosocial research, applied and organized relatively easily, can be quickly adapted and used in various situations in analyzing the evolution of groups and can be used in varied forms depending not only on the objective of the investigation, as well as the nature of the group. By this method we can follow and record behavioral manifestations in various social situations individually or psychosocial inter action, as the psychological analysis of the whole group or a particular individual.

One of the objectives of the research was to analyze inter-group social relations, so we were concerned about capturing some aspects and phenomena that characterize social groups and the mark of motor activities on students in different stages of socialization activity: physical education class, sports, extracurricular activities, sports training, competition activities so on.

Observation combined with various discussions with these groups of students helped us getting information on existing relations in the class, affective communication between students, group decision making, resolving various disputes regarding the group, the degree of socialization, communication and integration of group members.

The main objective of the experiment was to discover the different aspects of socialization and the degree of social integration of students through motor activities.

The first sample group (the experimental) was involved in a sports project initiation and selection which involved training students for basketball, so the young scholars had extra-curricular 2-3 trainings per week, also participated in numerous competitions and during physical education classes we focused on team games, relay races, competitions in which students have been required to exercise the capacity of cooperation, communication and socialization. The second sample of students (the control sample) had normal physical education classes focused on individual sports such as gymnastics, athletics, chess, badminton where the process of socialization, communication and relationship is not strongly developed.

Besides the observation method, we used the research method of group questionnaire, so we developed a 15 item questionnaire that examines issues within the group socialization, communication, members relationships, members acceptance ability.

## 7. Results

Following the responses of our students, we had achieved the following graphs:

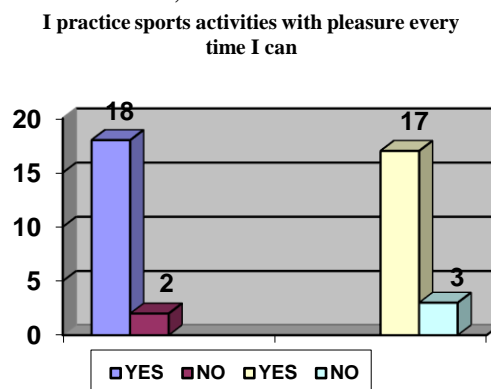


Figure 01. Item 1 – I practice sports activities with pleasure every time I can

Analyzing student responses we can see that the desire and availability for physical activity is very high, whether it is physical education classes and sports competitions or training sessions children from both samples have a high desire and about the same participation desire for such activities.

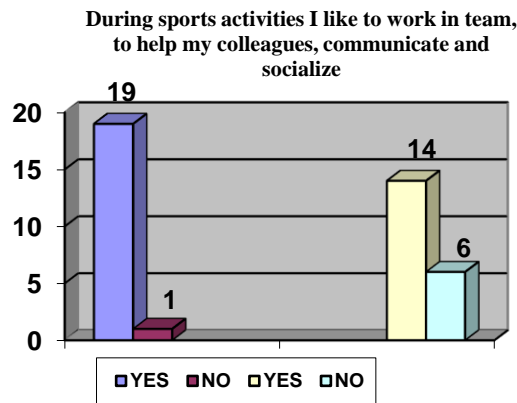


Figure 02. Item 2 – During sports activities I like to work in team, to help my colleagues, communicate and socialize

Looking at the chart above, the students belonging to the experimental sample recorded 19 positive responses, with an affirmative response rate of 95%, and only one negative response that represents 5%, and the control sample recorded 14 positive responses 70% from total, and 6 negative responses that represents 30% from total, so we can conclude that students in the experimental group who practice team sports, relay races, competitions between teams, like to work in team and likes to team up, communicate and socialize more easily.

For me, this group is an important social group in which I can find a lot of my best friends

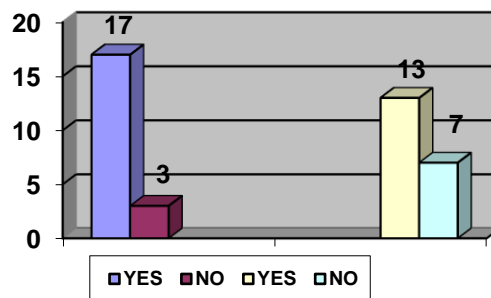


Figure 03. Item 3 – For me, this group is an important social group in which I can find a lot of my best friends

Regarding the item "For me, this class is an important social group which includes many friends of mine", 17 students from the experimental sample representing 85% said yes, while the control group were recorded answers percentage of only 65%, indicating that the groups that practiced team sports, children succeed to communicate and socialize effectively making lasting friendships, while in the control group witch practice individual sports and with a reduced frequency prefer to find friends in other activities other than sports.

My results are better when I practice sport alone then when I practice sport in a team

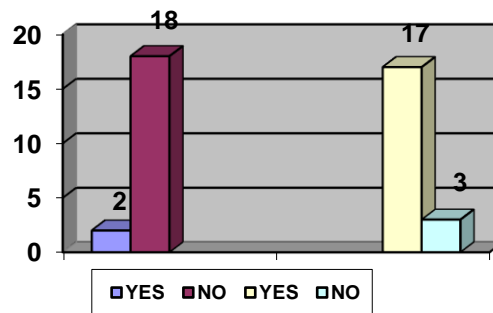


Figure 03. Item 3 – My results are better when I practice sport alone then when I practice sport in a team

At the question "My results are better when I do sports alone than when I practice sport in a team", 18 students of the experimental sample, representing 90% of the respondents, answered negative, two of them, representing 10%, responded positively. Regarding control group situation is opposite, 17 students, representing 85%, responded positively and only three students, representing 15% of the total, responded negatively, which indicates that the experimental group obtained higher performance and satisfaction through teamwork, as opposed to the control group who loves to play and perform alone.

I will miss my colleagues when the school year ends

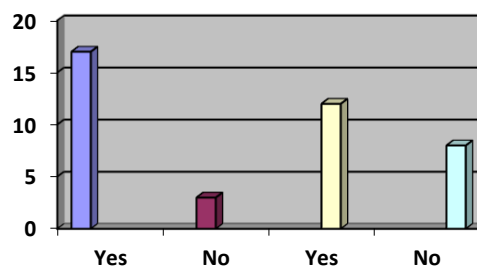


Figure 04. Item 4 – I will miss my colleagues when the school year ends

When asked if "I will miss my colleagues when the school year ends," 17 students, representing 85% of total, answered positive and only 3 of them, representing 15% of the total, answered negative, in the situation in the sample group the answers were 12 negative responses, representing 60% and 8 positive responses, representing 40%. Analyzing the results obtained in this item we can conclude that the experimental group teamwork has made its mark on group cohesion, socialization and communication developing lasting friendships and relationships. In the control group bonds between group members are not as welded and not immediate needs, students establishing just relations of friendship not exceeding the stage of pals.

Our class spends a lot of time socializing before starting of classes and also after finishing them

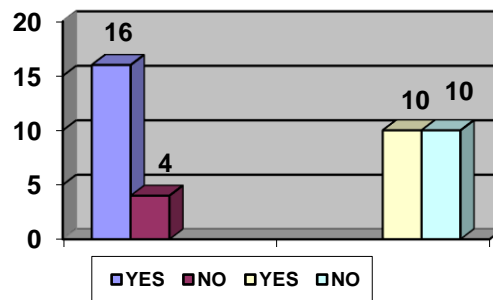


Figure 05. Item 5 – Our class spends a lot of time socializing before starting of classes and also after finishing them

At the question "Our class spends a lot of time socializing before starting classes and also after finishing them" 16 students from experimental group said yes, representing 80% of the total, and only 4 gave negative response, accounting for 20% of all students, and in the control group positive responses were equal to the number of negative responses 10, accounting 50% - 50%, which reinforces our belief that the experimental group practicing team sports communicate, socialize and have interest to organize itself even before and after the end of sport activities, while the control group only one side is interested to communicate with colleagues outside working hours.

If one of the class members would have trouble in one exercise everyone would like to help

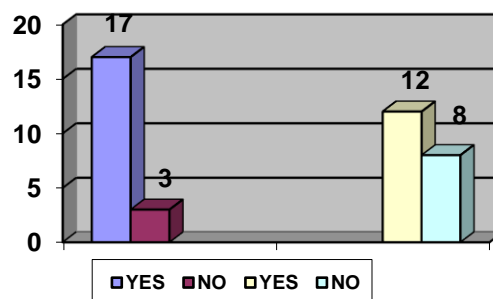


Figure 06. Item 6 – If one of the class members would have trouble in one exercise everyone would like to help

At the statement "if one of the class members would have trouble in one exercise everyone would like to help", experimental sample answered: 17 students yes, representing 85% of total, 3 students answered negative, representing 15 % of pupils, and the control group, 12 students answered yes, summing 60% from the total and 8 students responded negatively, representing 40% from the total, so we can conclude that in case of a problem the group with better cohesion, effective communication and socialization answer better, these communication and socialization processes develop social skills, spirit of self-help, cooperation, team spirit, spiritedness, while in the control group some members would prefer not to interfere in colleagues matters and let them fend for themselves.

### Conclusions

The conclusions of this study highlights the results of the experimental sample in witch we acted to develop socialization, communication, group cohesion through sports, team sports,



contests , relay races, competitive activity, students developing team spirit, mutual aid, cooperation, social integration.

So we can say that "sport and physical activity contribute to the socialization of men and especially young people. Sports and physical education promotes respect for moral values in both the Olympic spirit and the core values of life in the community, favoring the integration of the group and communication skills." Turcu DM (2010).

Cârstea G. (1981) said about socializing character of sport "relationships created in by participants in various competitions circles are unusually durable and exercise an important role in social microstructure formation" or "sport is a good opportunity of self revealing in open contact with others, it approaches the participants in these games, generates links between persons, attitudes and modes of behavior."

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## Developing students socialization through sport activities

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### Abstract

*Starting from the assumption that motor activities are the perfect framework for socializing, communicating and socially integrating young people, the present study aims to analyze the effectiveness of these activities in improving intergroup relationships at the level of university education. In the research, the samples were composed of two groups, experiment group A (n = 25) with students from Physical Education and control group B (n = 25) composed of students from the Faculty of Sciences. The sociological questionnaire applied to the two samples aimed at analyzing the level of socialization, communication and social integration of students. Conclusions have shown that Experiment Group A is much more united, having a higher level of socialization and communication, compared to control group B, proving once again the socializing effects of motor activities.*

**Keywords:** socialization, motor activities, communication, integration.

### 1. Introduction

Sport is a psycho-social excellence, including multiple relationships between individuals, experiences, feelings, attitudes, ultimately the behavior in the specific environment (partners, adversaries, supporters, etc.) and the non-specific, related to the current life. The game reflects social existence, acquiring knowledge through the motor and mental action, they reproduce social relations through written and unwritten rules, between cooperation and non-cooperation, oriented to solving problems and overcoming them through action. Sports play has psychosocial connotations, with individual behaviors such as motivations, conceptions, attitudes, beliefs, opinions, behaviors, mentalities, traditions, states of mind and feelings, as well as those collectively structured, such as conscious organization, intragroup tasks, common reality and objectives, leadership structures.

Regarding physical education and its effects on group cohesion, the specialists assert the following: physical education can also improve the cohesion of groups, having a good cohesion of the group is considered important and can lead to better performance of the group. The relationship between cohesion and performance has been studied by many researchers, and most have come to the conclusion that "the connection between performance and cohesion is reciprocal" (Sopa & Pomohaci, 2014b). Also, successful groups or teams are built around powerful leaders and the importance of this role is increasing in today's sport in all categories (Sopa & Pomohaci, 2015a).

Socialization through motor activities addresses a wide range of consequences of physical exercise: from motor skills and social competence to social values. (Sopa & Pomohaci, 2014).

Physical education and sport can be considered as factors of socialization and social integration, due to their characteristics (Stănescu, 2000):

- is predominantly in the group, facilitating the interaction between individuals (the basic condition of socialization). The model in which the interaction between individuals is organized in physical education and sport determines different levels of manifestation.

- through the content and forms of organization, a psycho-social environment is created which allows the emergence and manifestation of all types of interaction, from cooperative to adversity. By the specifics of organizing physical exercise, sports, individuals simultaneously fulfill cooperative roles - with members of their own team, but also with adversity - with members of the other team.

- physical education and sport put the individual in the position of evaluating others and evaluating oneself, which contributes to the formation of self-image. Socialization is favored as a result of the fact that physical education, but especially sport, involves competition between individuals and groups of individuals. By comparing the self and others, the values are hierarchized.

- The motric behavior of physical education and sport is socializing because it fosters the phenomena of social facilitation, communication, cooperation involved in social interaction. From the point of view of socialization, the schemes and forms of personal interaction are more important than the branches of sport practiced. Some factors are determinant: the degree of cooperation between individuals, the quality of leadership, the spirit of competition, the importance given to victory, the share of individual activity and the freedom of decision-making.

Sports activities also develop communication, intergroup relationships, and group cohesion. We can demonstrate that motor activities can develop group cohesion, develop positive intergroup relationships, discover the group leader and most importantly integrate and reintegrate children into the social group. The cohesion of the school group is very important in the evolution of performance as a group, so in collectives in which we have positive relationships like sympathy, friends, and cooperation the efficiency of work is high (Sopa & Pomohaci, 2014).

Another important contribution of motor activities is their socializing role, demonstrated by many scholars in different fields, most of them claiming that these activities represent the perfect framework for the social development of young people (Sopa & Pomohaci, 2014e).

A lot of skills are taught by young people through team sports, one of which is competition. Today we meet the competition every day and in every field. As adults meet the competition when looking for a job or trying to find better jobs, children meet the competition at school for the best grades (Sopa & Pomohaci, 2015b). Socialization through sport means the extent to which attitudes, values, skills, traits, rules learned in sport are transferred and manifest in other social activities and institutions (Epuran, 1998).

Socialization through sport is a process of social integration through communication, understanding, and cooperation, with an interactive role for conflict resolution. So, it is structured on cognitive, emotional and motivational constructions, as well as the performances, behaviors, and performance of sports groups (Sopa & Pomohaci, 2014c). Also, the important situational factors for group cohesion are living close to each other, sharing the same hobbies and activities, the same uniforms or clothing, group rituals, etc. (Sopa & Szabo, 2014).

The extracurricular activities of physical education are precisely those that highlight new aspects of the behavior, the motor act in its direct relation with the social activity, the value of these activities is of great importance, being also prophylaxis, compensation, and therapy, sports activities stimulate the collective integration of the individual, educating attitudes of cooperation, honesty and fairness (Florea, 1998).

Seen as a social institution, the sport has its own basis in society, it has a regulation, specific laws, sanctioning ways, links friendship (both social and cultural) and communication systems, principles and ideologies (Sopa & Pomohaci, 2014f).

Individuals learn through sport to work together, to assume certain roles within the group and to define themselves within the group (Sopa, 2014).

Socializing through sport is a complex process through which individuals learn skills, attitudes, values, and modes of behavior that enable them to function in a particular culture. These modes of behavior are taught in institutions such as school or family (Sopa & Pomohaci, 2014d).

The socialization of sports performance is a complex psychosocial process conditioned by many economic and non-economic factors; in the socialization, the transmission and assimilation of values and behavioral patterns of the individual and the sports group is realized; the goal is to adapt, form and integrate the individual (Ungureanu et al., 1998).

## **2. The purpose of the research**

The purpose of this research was to discover the effects of motor activities on the level of socialization, communication and social integration of students. The objective of the research

The main objective of the research was to apply a sociological questionnaire to analyze the effects of motor activities on the level of socialization, communication and social integration of students.

## **3. Research hypothesis**

Using a sociological questionnaire can provide the opportunity to analyze the level of socialization, communication and social integration of students in the group they are part of.

## **4. Sample of research**

The sample of the study was composed of two groups of students: A - experiment group and B - control group. Group A, the experiment group, was composed of 25 students, 15 male, and 10 female, with an average age of 20 years, all of whom graduated in the second year at Physical Education and Sports specialization. Group B, the control group, was composed of 25 students, 13 male, and 12 female, with an average age of 20, all students in the second year at the Faculty of Sciences. In the experiment group, group A, we conducted many team motor activities, excursions, competitions, cups. Group B, the control group took normal courses according to the specific curriculum.

## **5. Methods of research**

The research methods used in the present study were: the method of investigation and data collection (theoretical documentation), statistical methods of processing and interpretation of the data obtained, the survey method - the sociological questionnaire. The sociological questionnaire applied to pupils' samples was aimed at finding the motivational factors regarding group membership, socialization, and cohesion of groups, relations within the group, etc. The questionnaire was structured on 12 items, each aiming to discover part of the socialization and group cohesion puzzle.

The content of the sociological questionnaire applied to students

The bibliographic sources used in the sociological questionnaire were the following: Eys, M. A., Carron, A. V., Bray, S. R., Beawley, L. R. (2007), Dragnea, A., et al. (2006), Cârstea, G., (2000).

We used the following types of scales in the cost of the sociological questionnaire:

- Proportional scale with 5 predefined responses - we used this scale with 5 responses for quantitative variables, allowing most types of operations and detailed statistical processing.

## 6. Results

The sociological questionnaire addressed to the students in the two samples was provided with 12 questions, each with a 5-level response scale, aiming to analyze the group's degree of cohesion, group communication, the level of acceptability of individuals, the degree of cooperation, helping, socializing and social integration of students.

In Table 1 we can see the 12 items of the sociological questionnaire in the first column, and in the following columns, we have the answers of the students from the experimental group (A) and the control group (B) depending on which note they chose from 1 to 5.

Table 01. Answers to the sociological questionnaire

Items of the sociological questionnaire	5		4		3		2		1	
	A	B	A	B	A	B	A	B	A	B
1. I like to communicate and collaborate with colleagues during group activities	10	8	6	5	4	4	1	3	3	5
2. I will miss my group colleagues when the semester is over	12	9	6	7	3	2	1	3	3	4
3. Some of my best friends are part of this group of colleagues	14	11	3	4	3	3	1	3	4	4
4. I like to practice with classmates during different activities	12	8	7	5	1	3	2	3	3	6
5. Colleagues would prefer to do more together than each other	14	8	4	2	2	3	1	4	4	8
6. All colleagues want everyone to participate in all group activities	10	7	2	3	3	3	4	3	6	9
7. Our group's colleagues meet and practice activities outside the courses	12	8	2	4	5	3	2	4	4	6
8. Our group spends a lot of time socializing before and after courses	11	11	5	4	1	2	3	3	5	5
9. Group activities require mutual collaboration and assistance to fulfill the tasks we have received	14	10	4	4	1	3	1	3	5	5
10. If one of the group members had problems at one of the exercises everyone would want to help him	12	9	5	4	2	2	2	4	4	6
11. I can fulfill the tasks received alone without the help of the other colleagues	8	10	2	5	4	2	2	3	9	5
12. Our group's colleagues communicate and express themselves freely during classes	12	10	3	2	2	3	2	5	6	5

Table 02. Statistical Interpretation of Answers

Questionnaire Items	Average arithmetic mean		Median		Standard deviation		Skewness		Kurtosis		T-test on gender	
	A	B	A	B	A	B	A	B	A	B	T	p
Item 1	3.62	3.38	4	4	1.46	1.56	-0.86	-0.46	-0.55	-1.28	0.845	0.201
Item 2	3.92	3.58	4	4	1.38	1.53	-1.18	-0.73	0.26	-1.03	0.881	0.191
Item 3	3.88	3.67	5	4	1.54	1.55	-1.06	-0.76	-0.42	-0.97	0.262	0.262
Item 4	3.92	3.25	4	4	1.41	1.65	-1.20	-0.31	0.12	-1.62	1.585	0.597
Item 5	3.92	2.92	5	3	1.53	1.74	-1.16	0.14	-0.20	-1.82	2.185	0.017
Item 6	3.24	2.88	3	3	1.69	1.73	-0.18	0.10	-1.73	-1.79	0.834	0.204
Item 7	3.64	3.26	4	4	1.55	1.63	-0.65	-0.25	-1.10	-1.64	1.068	0.145
Item 8	3.56	3.58	4	4	1.64	1.64	-0.64	-0.68	-1.32	-1.25	0.121	0.501
Item 9	3.84	3.46	5	4	1.62	1.64	-1.05	-0.50	-0.63	-1.47	0.875	0.193
Item 10	3.76	3.35	4	4	1.54	1.67	-0.91	-0.35	-0.71	-1.66	1.148	0.128
Item 11	2.92	3.50	3	4	1.73	1.64	0.08	-0.58	-1.77	-1.40	-1.185	0.121
Item 12	3.52	3.29	4	3	1.71	1.68	-0.58	-0.20	-1.47	-1.75	0.505	0.308

In Table 2 we carried out the statistical calculations on each item of the questionnaire, so in the first column we find the items of the questionnaire from 1 to 12, in the second column we find calculated the arithmetic mean for each group, in the third column we find the calculated median, then the standard deviation, the Skewness coefficient, the Kurtosis coefficient, and in the last column we calculated the difference in the meaning of the groups.

## **7. Conclusions**

In the first item "I like to communicate and collaborate with my colleagues during the activities", the average of the grades in the experimental group A was 3.62, compared to the control group B where the average of the answers was 3.38 and the difference between the two groups was significant (0.845).

At item 2 "I will miss my group colleagues when the semester is over", the experimental group students responded on average by 3.92, compared with those of control group B where the average of answers was 3.58 and the difference between two groups was insignificant (0.881).

Regarding item 3, "some of my best friends are part of this group of colleagues," the average score in the experimental group A was 3.88, compared to control group B, where the average of answers was 3.67, the difference of the two groups being significant (0.262).

At item 4 "I like to practice with classmates during different activities", the average of the scores of the group A respondents' scores was 3.92, compared to the control group B that had an average of 3.25, the difference between the two groups being insignificant (1.585).

At item 5, "colleagues would prefer to do more together than each other alone", the average of responses in experiment group A was 3.92, compared with control group B, where the average response was 2.92, the difference between the two groups being significant (2.185).

At item 6, "all colleagues want everyone to participate in all group activities", the average score in the experimental group A was 3.24, compared to the control group B where we recorded an average of 2.88, the difference between the groups being insignificant 0.834).

Regarding item 7, "our group colleagues meet and practice different activities outside the courses", the average of the answers to the experimental group A was 3.64, compared to the control group where the average was 3.26, the differences being significant (1.068).

Item 8 "Our group spends a lot of time in socializing before and after the completion of courses", we have an average score of 3.56 in the experiment group A, compared with the control group where the average was 3.58, the differences being insignificant (0.121).

Regarding item 9 "group activities require mutual collaboration and assistance to perform the tasks received", the average of the answers to the experimental group A was 3.84, compared to the control group where the average was 3.46, the differences being insignificant (0.875).

At item 10, "if one of the group members had problems at one of the exercises, everyone would like to help him," the average score in the experiment group A was 3.76, compared to the control group B where we recorded an average of 3.35, the difference between the groups is significant (1.148).

Concerning item 11 "I can fulfill the tasks received alone, without the help of the other colleagues", the average of the grades in the experimental group A was 2.92, compared to the control group B where the average of the answers was 3.50, the difference between the two groups being insignificant (-1,185).

At item 12, "our group colleagues communicate and express themselves freely during classes", the average of answers within the experiment group A was 3.52, compared with the control group B, where the average response was 3.29, the difference between the two groups being insignificant (0.505).

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## **Audiovisual media in Physical Education and Sports lessons in primary classes**

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### **Abstract**

*In the past few years, various educational means, including audiovisual ones, have been increasingly used in the pre-university education system.*

*It is assumed that the use of audiovisual means in the physical education and sports lessons has a major influence on the optimization of the instructive-educational process of physical education through the implementation of new ways of approaching the contents specific to the primary classes, which will contribute to:*

- *increasing the level of physical and functional training;*
- *improving the level of learning motor skills and abilities;*
- *increasing interest in the subject of "physical education".*

*The audiovisual means used rationally in some moments of the lesson ensure a significant evolution of the physical and motric parameters, as well as an increase in the attractiveness of the lesson, the interest and the motivation of the students in the practice of physical education.*

*The application of the audiovisual means in the physical education lesson at the level of the primary classes must be done in accordance with the psychomotor and motivational particularities of the pupils, the level of the equipment in the schools, and the achievement of a higher level of psychomotor training, thus ensuring maximum efficiency of their use.*

**Keywords :** *physical education and sports, visual audio, primary classes.*

### **1. Introduction**

Like any other discipline, physical education is marked by the new transformations of the instructive-educational process, the fact supported by the new methodical guidelines that have been implemented in the didactic approach:

- Operationalization is an analytical approach that involves expressing learning outcomes in the form of observable and measurable manifestations. Operating a pedagogical objective is to translate in the operations and actions the expected results from the training (Stoica, 1995), ie the correct specification of what students need to know at the end of an instructive - educational stage.

- Scheduled training is a specific planning method in which the content is ordered in a model report, and consists in fragmenting the content into short items (methodical steps, sequences) that are accessible, placing the learning difficulties in a rational order according to the possibilities assimilation of students (Alexe, 1980).

- The rationalization validates the selection and the means of physical education according to the students' biometric particularities, the achievement of the objectives and the social-utilitarian tasks that belong to the educational approach.

- Standardization is the typology of the lessons used in the system as a result of the knowledge of their biological, technical and methodological values and their stable effects in the structure of the motor systems (Benga, 1982)

- Objectivization - the systematized action of collecting information from the educational instructive process and transforming them into units of measure (digital) that allow their quantity, quality, and efficiency to be determined at a given moment.

- Algorithmization is part of the methods recently adopted by general didactics to rationalize the training process to increase its efficiency.



Between speech and communication, there is a difference also explained by the notion of non-grasp, erroneous conception. There is an unprecedented development of communication technologies, but the rhetoric has its established rules from 2000 years ago (Amstrong, 2000)

- knowledge of the subject;
- adapting the speech to the public;
- coherent presentation;
- credibility.

The implementation of modern technologies in education and training in pre-university education at international standards is possible by developing the informatization of the didactic process; the provision of pre-university education with audiovisual equipment and their promotion.

Visual information in sport has a well-determined role in the fact that the performer analyzes two types of visual information as he or she is interested in understanding the situation or executing the action. That is why we distinguish:

- psycho-sanitary information - meant to inform the performer of the significance of the situation in which he participates;
- psycho-sensory-motor information - designed to provide motor-sharing functions between the individual and the physical environment.

In classroom activity, hearing aids can play an important role while respecting some elementary rules that will optimize teaching (Siclovan, 1970).

At first glance, the introduction of auditory specimens, music, in particular, seems to provide a positive result both for the teacher's work and for the effects on the pupils. Practice, however, demonstrates that it is much more complicated - an incorrect use of music can be absurd and even dangerous for the proper conduct of the lesson.

Music should be used with care at the right place and time, with rules that do not transform lessons into concerts, hamper communication between teacher and student, create tense situations and lower discipline but also work capacity (Badiu, 1982) :

- The end result will be influenced by the teacher's ability to learn about how functional music influences the human body, the student, the mental state and the ability to work;
- episodic use is more productive than systematic;
- musically stimulated lessons should be alternated with lessons in ordinary circumstances, precluding musical stimulation dependence;
- hearing aids will be used according to the typology of the lesson;
- music has an important functional effect if it is used when repeating simple exercises or those already studied, which do not require intellectual concentration and responsibility;
- oral explanations will be avoided during the use of functional music;
- the music used must like most of the students;
- musical pieces will not be used indefinitely.

Taking into account the above, the best known audiovisual techniques are (Alexe, 1975):

1. presentations - may be held in front of small, heterogeneous or homogeneous groups or in front of a very large group;

2. photography, film, television and art - photographs are used to accompany media texts as ancillary materials in oral communication; they are not much used to presentations but are used more for small groups enough to be placed around a table. The film has the advantage of combining the impact of image, sound, and movement into a meaningful action that gently sinks into the student's memory; they present ideas that involve movement, which can not be rendered otherwise; keep the student's attention for the duration of the presentation; can

simulate an event; may present invisible processes to the human eye; may show enlarged or dimmed objects; allow tricks.

- Motor systems are also selected according to the stage of training and material endowment, influencing the level of achievement of the instructive - educational tasks. (Scarlat, 1981).

- Regarding how the audiovisual means can be implemented in different types of physical education lesson, the following can be made:

- In the training lesson, in the preparatory or introductory part, at the time of learning the main front and xgroup positions used in the physical education lesson, photographs and/or slides will be used, this approach accounting for approximately 20% of the time allocated. At the time of preparation of the body for effort, in addition to classical approaches, visual means will be used. The selective influence of the locomotor system will also bring pictures of work bands, exercise complexes and represents approximately 20-30% of the time allocated to the exercise. In the end, only audio and musical backgrounds with high-intensity concerts are used.

- In the learning lesson - photos and films will be used, the use of visual aids will be 30-40% in the first 2 hours, 20-30% in the other hours, the percentage decreasing with the advancement in learning. After 3-4 weeks when the use of video will no longer be necessary, a more rhythmic musical background will be used at the time of the execution of the harmonious physical development complexes and more discreetly resting.

- In repetitive lecture - improvement, sports game, the visual means will be used from the first lesson of the lesson cycle; so slides and photos (20-30%), match films (50%) with commentary on landing, attack and defense phases, individual techniques, individual and collective tactics will be used; their share falls towards the end of the lesson cycle.

- In the rehearsal lesson or acrobatic gymnastics, it will be used slides and photos, video images accompanied by comments that will highlight the incorrect executions and mistakes; the lessons can also be accompanied by a discreet, slightly rhythmic musical background.

- In the rehearsal lesson or athletics, it will be used images from the Olympic Games and the World Championships and especially the sprint races, 400 m, 800 m, length.

Considering all this, we can say that the application of the audiovisual means in the instructive-educational process is a method that can contribute to solving the tasks of the physical education lesson, leading to an conducive atmosphere to the work, while at the same time influencing the didactic framework which applies, in the sense of appreciation by the non-standard means, obliging him at the same time to improve continuously (Dragan, 1998).

In conclusion, we can say that the use of audiovisual media as elements of content in physical education lessons at the level of primary classes leads to a better achievement of the objectives of the physical education lesson. For organizing and successfully conducting audiovisual lessons, it is necessary to take into account the following organizational moments (Cârstea, 1995):

- The selection of the audiovisual means is done by the physical education teacher in order to shape the content of the activity of the instructive-educational process;

- The teacher needs to know how to implement these means, the time at which they can intervene, as well as their dosing so that the goals are achieved in a short time and with maximum efficiency;

- The music used will be effective at all stages of the lesson when combined with sports activities;

- Musical stimulation will only be used when it comes to repeating exercises that have already been studied and which do not require maximum concentration on the part of pupils;

- It is recommended to use the recorded pictures with frequent mistakes, but no more than 10% of the time allocated to the process;

- The proportion of use of visual aids will be 30-40% in the early hours and will gradually decrease with advancement in material failure.

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## **Socialization through motor activities at the primary school level**

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### **Abstract**

*Motor activities are an important framework in youth development being more and more important in modern society. This period of development and primary socialization is fundamental in further development of our children. Transition from pre-school to school can be a shock or a barrier in the process of integration of children in school groups and society, a problem in communication could develop a certain level of anxiety.*

*This study examines the importance of motor activities in the process of socialization and integration of school youth, in the following we will try to demonstrate the importance of motor activities at primary level, which is a source of socialization through which the child makes a fundamental integration and social adaptation, reduce anxiety, assimilates a set of attitudes and moral values.*

*Research methods included literature review, methods of observation; the results demonstrate the importance of motor activities in socializing students at this age level.*

**Keywords:** *motor activities, socialization, social integration.*

### **Introduction**

Motor activities are an important source of socialization, communication and social integration being an ideal setting in forming young people and their further development.

Social learning theory has shown that socialization is done best in sport activities. According to specialists, practicing physical activities or sports influences youth personality and creates positive effects on the body and the mind. So to understand the importance of motor activities, or sports in general, in the process of socialization between students, we believe that we should start from the definition of socialization in sports. Epuran M. (1998) defines socialization in sport as "socialization has two meanings, which we can call them individual and group. The first is defined as (quoting Vlăsceanu L.) "the psychosocial process of transmission - acquiring the attitudes, values, perceptions and patterns of behavior specific to a group or a community so that it could form the adaptation and social integration of a person" . The second meaning concerns (quoting Vlăsceanu L.) "expanding the number of individual agents controlling or directly participate in the development of a system, subsystem or sector." "The athlete, as human being is characterized as being bio-psycho- social being unable to achieve its full manifest outside his socio-cultural determinants, determinants that can be optimized in a well-balanced society." "In its turn performance is also determined by socio-cultural factors which helps the individual components skills and attitudes manifest maximized in terms of scientific training."

Referring to the starting point of socialization in sport Epuran M. (1998) states: "Humanistic sciences, particularly psychology, sociology and pedagogy has agreed a long time ago the main aspects of the socialization of individual, his training for social life (family, group of friends, school, work and sports). In the language of this sciences the highest frequency it has next terms: social learning, interactive communication, personal preferences, group membership, membership affiliation, group structure, leadership, control, imitation, role, status, integration, compliance, ritual, conformism, social values as nonconformist, aggression, isolation, etc.. "

The role of socialization in sport is special, the period of formation and primary socialization is a fundamental one in the further development of the child, Epuran M. (1998) structures this phenomenon in two ways: "keeping us in the first part of socialization, named individual, appear still two areas: socialization in sports and socializing through sports." Regarding socialization in sport he states that "is basically athlete's integration problem in system of attitudes, skills, needs and social structures of the sports group, group membership obliges knowing its rules."

In conclusion he states "sport must structure its socio-educational system in accordance with its specific and resist to dissocializing influences of the current era." "Sport is a system like other social systems, and they have, their own regulation of functioning and integration of its members.

### **Motor activities sources of socialization**

Socialization through motor activities aims a wide range of consequences in practicing physical education: starting from the development of motor skills and social competence, to the acquisition of values and social norms. In other words "refers to what is learned in sports without necessarily seek out sport utility." (Patriksoon G. 1996). When we refer to socialization through motor activities we focus our attention on the effects of participation in these sports activities to other spheres of life. In fact these two aspects are intertwined; socialization is an ongoing dynamic process.

After the author Serban M., (1998) socialization represents "a process of social integration through communication, understanding, cooperation, with interaction role for active and conscious conflict resolution. It is structured on cognitive constructions, affective and motivational individual, as well as representations, behaviors and performance of sports groups".

We can structure socialization as Serban M. (1998) said: individual socialization who "is based on integration through active acceptability according to specific conditions and requirements, with readjustment in terms of the group or team, in fact, a dissocializing / re-socialization on another plane of collective socialization" and anticipative socialization "updating values and guidelines for success in a new relationship, by resizing the roles in sports group, actually an adaptive social learning, conscious, cognitive, creative, emotional and motivated case."

The area of sport socialization can be extended and analyzed also in relational fields like psychology of the behavior (personal conduct, emotional, intellectual), group sports, sociometry and sociotherapy (sociodram proposed by Moreno), leading role or group membership, identity and social status, the theory of social comparison etc.

Bogdan Mita , Letitia Miculescu Camelia Dumitru (2002 ) in the study "Sport, socialization and practice in contemporary Romanian society" examines the role and importance of sports, teachers and parents in the social integration of children through motor activity. The research was conducted in 2002, in Bucharest on a sample of 550 students, 416 parents and 158 teachers, and emphasized the importance of sport classes, but especially the influence of parents and teachers in educating the taste for sport. Thus we can say besides family, the first and most important social group, other groups contribute to the socialization of individuals: classmates, group of friends, school group and later professional staff. One of the ways that socialization within the group of friends or colleagues is achieved is through sports. Individuals learn through sport to work together, to take on specific roles within the group and to define themselves within the group.

C. Gavrilă, Gavrilă N. (2005) emphasizes the role of parents and the importance of socialization of children through sport activities, stating that "physical inactivity and its

consequences, parental implication, fashion and cultural usages leads many parents in finding solutions for spending leisure time and socialization through sport. Offers range is very extensive, from optional physical education classes from kindergartens and schools to special sport centers for children. And in the case of performance sports we talk about secondary socialization, institutional type. Norms, rules and organizational values influence the manner of socialization and the identity of each one."

Jean-Charles Basson, Andy Smith (1998), in the study "Socialization through sport. Social representations through sport" analyzed socialization through leisure sport activities, referring here to the practice of sports games such as volleyball, jogging, basketball, skateboard, rollerblading, cycling etc. which are opposed, as according to the authors, institutional socialization, that achieved in sports clubs and seen as a "social self" that does not cover the real needs of young people.

Turcu D.M., Todor R., (2010) - Study regarding "Socialization through sport. Effects of physical education and sport" analyzes the complexity of sport and physical activity and the influence on man and society because "this activities produce beneficial effects on health maintenance, tonus and personality development." Also the authors concluded that "time has validated the positive effects of physical activity and sport on self-concept, self-esteem, anxiety, depression, pressure and stress, self confidence, energy, mood, efficiency and wellbeing. Sport and physical activity contribute to the socialization of men and especially young people, in circumstances where there is a good control. It is said that socialization in sport can be promoted only when there are highlighted moral qualities, attitudes, skills and rules assimilated in physical activities can be transferred to any other social sphere and can be adapted to the specifics of any other social institution. Sports and physical education promotes respect for moral values in both the Olympic spirit and the core values of life in the community, fostering integration in the group and society and communication skills."

Epuran M. (1998), quoting I. Vlăsceanu presents two ways of socialization one achieved by practicing physical exercises individual and one in group. The first is defined as "the psychosocial process of transmission - assimilation of attitudes, values, perceptions and patterns of behavior specific to a group or a community to form, adaptation and social integration of a person". The second meaning refers to "expanding the number of individual agents controlling or directly participate in the development of a system, subsystem or sector of activity."

Rusu, A (2000) states that "viewed as a social institution, sport has its own sociological base in society, in that it has regulations, specific laws, sanctioning ways, it establishes relationships (social and cultural) and communication systems, identification of role-sets and status-sets, their ideology and principles" or "for nowadays societies (modern) sport acquires other connotations as: it becomes increasingly important in the sense that it is practiced by an increasing number of individuals within the school or leisure, it is followed with great interest (either directly or indirectly as a spectator or media), for most it has become a profession.

A summary of the most important opinions of specialists concerned with issues of socialization and social integration through sport is conducted by Stanescu M., (2000) "Physical education and sport - factors for socializing process":

"Motor activities of great complexity, through structure and functionality, physical education and sports are constantly revealed new meanings with implications for human development and society in general. Among the constant concerns of specialists in the field are those related to physical education and sport and the contribution of this to the process of socialization and social integration of the individual.

Starting from the definition of socialization, according to which it represents "a fundamental social process through which any society is projecting, reproducing and performing the proper conduct of its members, normative and cultural model", physical

education and sport can be considered factor of socialization and social integration , due to their characteristics:

1. Takes place mainly in groups, thus facilitating interaction between individuals (basic condition of socialization). Model in which it is organized the interaction of individuals in physical education and sport, determines different levels of manifestation. In some cases, like sport games, the need for cooperation is huge (basketball, volleyball, football, rugby, handball), in others the need for cooperation is reduced (competitions for individual sports teams).

2. By its content and organizational form it is created an psycho-social environment that allows apparition and manifestation of all types of interaction, from the cooperative to the adversity. By the specific of organizing physical education, sport branches, individuals simultaneously fulfill cooperative roles - members of their teams, but also adversity - with other team members.

3. Physical education and sport puts the individual in a position to assess and evaluate others and himself, which contributes to the formation of self-image. Socialization is favored due to the fact that physical education, but especially sports involve competition between individuals and groups of individuals. Through competition it is realized the comparison with itself and others, it ranks values.

Motor behavior in physical education and sport is socializing because it favors the emergence of the phenomenon of social facilitation, communication, cooperation, social interaction involved. In terms of socialization, schedules and forms of personal interaction are more important than the branches of sport. Some of those determining factors are: the degree of cooperation between individuals, quality of the management, competitive spirit, the importance given to the victory, the share of individual activity and freedom of taking decision.

Physical education and sport can be considered factor of socialization and social integration, due to their characteristics Stanescu M. (2000):

- takes place mostly in a group, thus facilitating interaction between individuals (prerequisite socialization). The model in which it is organized the interaction between individuals in physical education and sport, determines different levels of manifestation

- through its content and forms of organization it is created an psycho-social environment that allows emergence and manifestation of all types of interaction, from the cooperative ones to the adversity. Through the specific of organizing physical education, sports branches, cooperative roles simultaneously meet individuals - members of their teams, and adversity - with other team members.

- physical education and sport bring the individual into a position to assess and evaluate others and himself, which contributes to the formation of self-image. The socialization is favored due to the fact that physical education, but especially sports involves competition between individuals and groups of individuals. Through competition it is realized the comparison with itself and with others, it ranks values.

- motor behavior in physical education and sport is socializing because it favors the emergence of the phenomenon of social facilitation, communication, cooperation, social interaction involved. In terms of socialization, schedules and forms of personal interaction are more important than the branches of sport. Some of those determining factors are: the degree of cooperation between individuals, quality of the management, competitive spirit, the importance given to the victory, the share of individual activity and freedom of taking decision.

The purpose of socialization is to socially form a competent person, to recognize the society values, norms and patterns of behavior. Socialization process thus involves the acquisition of social competence and interpersonal skills training.

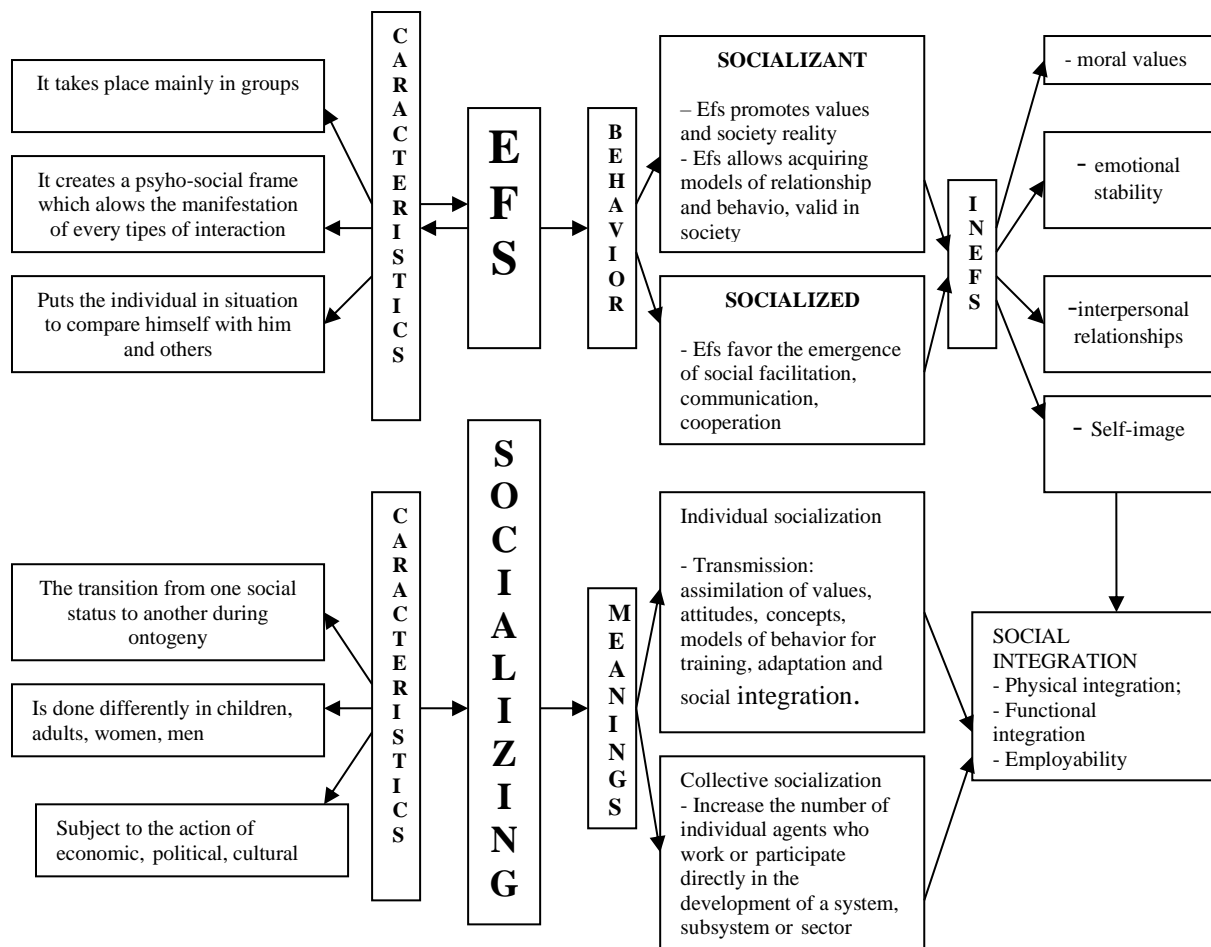


Figure 01. Physical education and sport - Factors of socialization process Stanescu M. (2000)

Florea A., (1998 ), notes the importance of extracurricular activities in the development and socialization of students: “physical education activities and extracurricular activities are just those that reveal new sides of the behavior, the motor act in his direct relationship to social work” or “a big importance it has the value of these activities, being equally prevention, compensation and therapy, sports activities stimulate collective integration of the individual, educating cooperative attitude, honesty and fairness.”

Serban M., (1998 ) analyzes the influence of socialization into sports games, stating that “sport is essentially psycho-social, which includes multiple relationships between individuals, with feelings, emotions, attitudes, ultimately their behavior in specific environments (partners, opponents, fans etc.) and the nonspecific, bound to daily life” or “game reflects social existence, of acquiring knowledge by motor and mental action, they reproduce social relations by rules written and unwritten, between cooperation and non-cooperation, aimed at solving problems and overcome them through action.” “sports game has psychosocial connotations, with individual behaviors, such as: motivations, perceptions, attitudes, beliefs, opinions, behaviors, attitudes, traditions, moods and feelings, as with the structured collectively as: conscious organization, relationships and tasks intra-group, reality and common objectives, management structures, etc.”

Antonios A. Ionescu I. (1998 ) – “The dependence of pro social behaviors and progressive costs and level of involvement in work practice exercise” examines pro social



behavior through the socialization through sport saying that "in the process of socialization is found that people shall assist each other proverbs as "a friend in need is a friend indeed" or "together for better or worse", reflecting the life situations in which pro social behavior is nuanced differently depending on many factors (social responsibility norm, the norm of reciprocity, state affective system attributes socio-cultural history, etc.)."

Constantinescu A., (2009) study "Characteristics of human communication in the process of socialization through sport", summarizes the importance of communication in the process of socializing through sport by saying that "socialization is a progressively process and accumulating in which the children, over the period of growth, assimilates the behaviors, values, codes, roles, habits, conventions and ways of thinking, characteristic for the socio-cultural environment. Good socialization is achieved using communication." Here the author underlines the idea that "socializing process facilitates, in the same time, the existence of normal social life, providing stability and proper functioning of social structures, cohesion and inter-group socialization." "individuals assimilate a whole system of knowledge, attitudes, skills and moral rules necessary for social life intra-community developing imagination and creative capacity, in the same time with the affection between balance of moral and psychological."

Ungureanu O., Antohi N., Luchian M., Clapon, G., Lupu, A., Paveliuc, P., (1998) - "Study regarding socializing phenomenon in juvenile performance sport", based on assumption that it is possible to know and intervene on social elements (formative and integration) can increase performance capacity of young groups, they had conducted a study on the elements which determine the performance of juvenile socialization (student athlete, family, school and operating unit performance) with a representative sample of four football and basketball teams, based on social survey research method and mixed questionnaires. There was a downward slope on motivation for sport and highlights the idea that we must intervene in the direction of social stimulation and support of the student and inform through socialization policy makers (family, parents) for the support of students with bio-motor potential stating that "socialization of sport performance represents a complex psychosocial process conditioned by many economic and non-economic factors" or "during socialization it is realized the transmission and assimilation of values and behavioral patterns of individual and group sports, the purpose is to adapt, develop social integration of the individual."

The game, the competition and the motor activities has very specific and important roles in the overall process of socialization. The image on itself is not natural born, but is developed through socialization during childhood as a result of going through different experiences and roles.

As stated by the authors Gavriluță C. and Gavriluță N. (2005) "sport develops teamwork and increases self-confidence. Without a doubt, the biggest gain of socialization in sport is that it develops in us the idea of social belonging and team spirit".

The desire for belonging and recognition is causing the child to always model the communicational system and method of relationship. Here is what Cârstea G. (1981) said about socializing character of sport "relationships created in circles of participants in various competitions are unusually durable and perform an important role in social microstructure" or "sport is a good way of revealing your own personality in free contact with others, sport appropriates the participants in these games, generates collegial links, attitudes and modes of behavior". Through games and sports competition, the child can gain confidence and can try new forms of networking so as he can highlight his potential and qualities.

Children learn the difference between themselves and the role they play. As they grow, children pass from noncompetitive gaming to competitions and ball games. At the stage of the game (more accurate at the stage of competitive games), children face more stringent rules and regulations. They develop a reflexive conception of self and their position in relation to others,

and in addition self-image analyzing and image that others have of them. They become self-conscious social actors.

After Canadian sociologist G. Rocher, quoted by E. Peacock (1982) socialization is "the process in which the human person acquires and internalizes throughout life, socio-cultural elements of the environment integrate them into his personality structure under the influence of experience and significant social agents and thereby adapt to the social environment in which you live."

Socialization is the process of integration and adaptation of the individual to society through learning in the frame of the family, school, institution, profession, cultural products that enable coexistence in society: language and other means of communication, cultural patterns of that society, ways of thinking rules and moral values, legal, scientific, political, social roles.

Subject ability for socialization is one of the essential characteristics of his human nature. Human socialization is required for: the existence of human impulses and not of invariable instincts as animals; the need for human interaction in childhood, long dependence on adult, learning capacity characteristic for human species, the biological availability of learning to speech and symbolic language.

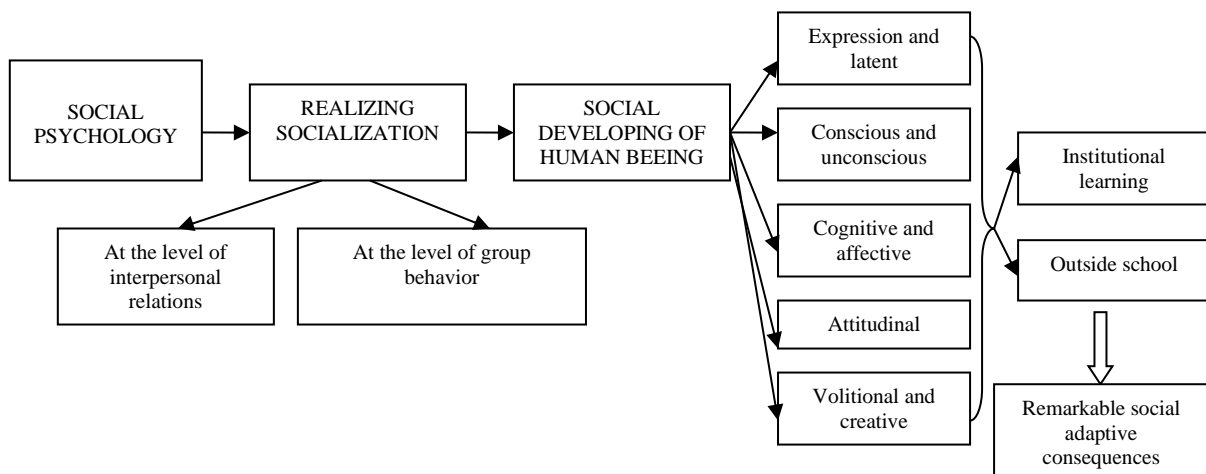


Figure 02. Social Psychology and Social Integration

### Conclusions

Socialization aims child's social integration, in the definitions of socialization there are still many differences that concern either scope or mechanisms or means of achieving either determinant factors. Socialization supposes the integration of future adults in society to shape socially bounded by adults. It is therefore a process of gradual assimilation of the social and converting its specific personality characteristics.

Thereby motor activities represent the perfect framework in developing young people, the period of forming and primary socialization period is one fundamental to the further development of the child. So sport can provide a framework of support and encouragement for children, developing relationships, communication and social integration.

Besides family, the first and most important social group, other groups contribute to the socialization of individuals: classmates, friends group, school group and later professional staff. One of the ways that socialization within the group of friends or colleagues is achieved is through sports. Individuals learn through sport to work together, to take on specific roles within the group and to define themselves within the group.

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## **Study regarding socializing impact of motor activities of students**

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### **Abstract**

*In the present study, we tried to discover the values or the effects considered essential for the development of positive attitudes in practicing motor activities by students. The study had as main research method the survey and the research sample included a total of 100 students from the "Lucian Blaga" University of Sibiu. Research findings showed that students are aware of the beneficial effects of motor activities both on the biological, psychological and socio-cultural level. Gender differences show that opinions are divided, male students consider the physical and social effects as most important assets developed by the motor activities, while feminine students consider exponential for the motor activities effects, the mental and sanogenic effects.*

**Keywords:** *socializing, motor activity, health*

### **1. Introduction**

During student activities life, motor activities have as the primary objective the continuous training and development of the youth. Within students' motor activities through practical activities of various sports, students can develop and harness the skills and their talent, ensuring also an ideal setting to strengthen the motor skills, the development of motor capacity, improving the major functions of the body, developing moral values as respect for self and opponent, fair play, help needed, perseverance, attention, memory (Tufan, 2015).

Specialists define the notion of sport as a generic meaning, this representing "all forms of physical exercises and dynamic games character more or less spontaneously and competitive, with origins in traditional games and major founding myths of modern civilization and its diversification of link that conveys values that come from contemporary lifestyles" (Dragan & Teodorescu, 2002).

We focused our interest towards such a theme because we met a growing interest of young people for such activities, or because we analyzed the consequences of lack of physical activity with adverse effects on human life (obesity, body mass index increased, deformation of the spine, heart problems etc.) also practicing motor activities can improve socialization, communication and intergroup relationships.

As regarding the establishment of the overall objectives of physical education in higher education, experts highlighted the following objectives: the formation of a healthy lifestyle by practicing outdoor physical exercise, the revival of tourism activities, preservation of health and the capacity to adapt to various ambient conditions; develop team spirit and competitive spirit, having as primary scope to integrate the young students into society; independent and continuing practice of the physical exercise or sport branches; the integration of specific knowledge and techniques of optimization in physical education, and the development of motor capacity. (Stoica, 2004).

From the pedagogical perspective we emphasize the tasks of physical education, systematized by the specialist as: establishing a harmony between body and soul; developing and strengthening the body, building the physiological capacity of the body; correcting and improving physical disability; getting used with the sanitary rules (Ionescu, 2010).

Also, sports activities develop communication, intergroup relationships, and group cohesion. We can demonstrate that motor activities can develop group cohesion positive intergroup relationships development, the discovery of group leader and most importantly integrate and reintegrate children into the social group. Group cohesion is very important in the evolution of school performance as a group, therefore in groups where we can find positive relationships as sympathy, friendships and cooperation the work efficiency is greater. (Sopa & Pomohaci, 2014 a).

Related to physical education and its effects on cohesion, of the groups, experts say the following: physical education can also improve the cohesion of groups having a good cohesion of the group is considered important and may lead to better performance of the group. The relationship between cohesion and performance has been studied by many researchers, the majority concluded that "the connection between performance and cohesion is mutual" (Sopa & Pomohaci, 2014 b). Also, successful groups and teams are built around strong leaders and the importance of this role is growing in nowadays sport in all categories (Sopa & Pomohaci, 2015 a).

Physical education specialists and, also from the field of psychology, sociology, pedagogy and medicine have established objectives of this domain, each in terms of their scope. Among these approaches, we cannot find major differences. So the physical education and sports must satisfy the following set of objectives: maintaining an optimal health and increase working capacity and life of those who practice physical education and sports activities; the development of the basic motor capacity and those specific to other fields of sports; training and conscious habit of practicing correct physical exercise, in an organized and independent way, especially in leisure sport activities; forming a large system of motion and motor skills, but also valuing it in sporting activities; the effective contribution to the development of intellectual traits and qualities, civic, moral, etc. (Cârstea, 2000).

Another important contribution of the motor activities is their socializing role, demonstrated by many researchers from different fields saying that these activities represent the perfect framework in the social development of young people. (Sopa & Pomohaci, 2014 e).

The specialists appreciate that another form of physical activity, considered as "a bridge between sedentary and active life", which through the way of action connects the static and dynamic attitude of the human body, is stretching. Practiced regularly, before and after physical effort, independently, as a form of movement, but also "associated with other motor activities", stretching helps in improving the flexibility of muscles and causes a good and relaxing feeling, improving quality of life (Macovei, 2012).

Many skills are learned by young people with the help of team sports, one of these is even the competition. Nowadays we meet competition every day and in every area. As adults we meet competition when looking for a job or trying to find better jobs, students meet competition for better grades (Sopa & Pomohaci, 2015 b).

The systematically and regularly practice of sports activities contributes to eliminating or reducing some deficiencies related to the somatic profile at the functional level of the body, supporting motivation for moving, controlling emotions, stress reduction, planning and organizing the work and leisure time activities, development of relationships, intra-group communication, and socialization improvement. Socialization through sport is a process of social integration through communication, understanding, and cooperation, an interactive role for conflict resolution. Therefore, is structured on cognitive constructions, affective, and motivational, as well as representation, behaviors and performance of sports groups (Sopa & Pomohaci, 2014 c).

Also, situational factors are important for the cohesion of the group like living close to each another, sharing the same hobbies and activities, the same uniforms or clothing, group rituals etc. (Sopa & Szabo, 2014).

Some of the most important aspects of a healthy lifestyle values are expressed in synthetic frame by experts, a summary of the characteristics or components of a lifestyle promoting the following aspects: constant and active participation in physical education; the pro physical movement; concern for improving and maintaining optimal health status; recognition of risk factors for health; concern for knowledge of the human body; knowledge of hygiene rules (Uță, 2012).

Seen as a social institution, sport has its own base in society, it has rules, laws specific ways of sanctioning, binding friendships (both social and cultural) and communication systems, principles and ideologies (Sopa & Pomohaci, 2014 f).

Besides family, the first and most important social group, other groups contribute to the socialization of individuals: schoolmates, friends group and later professional staff. One of the ways that socialization within the group of friends or colleagues is performed is sports. Individuals learn through sport to work together, to assume certain roles within the group and to define themselves within the group (Sopa, 2014 a).

Socialization through sport is a complex process in which individuals learn skills, attitudes, values and ways of behavior that allows functioning in a particular culture. These modes of behavior are learned in institutions like school or family (Sopa & Pomohaci, 2014 d)

## **2. Aim of the research**

Through this research, we wanted to know the opinions of students in higher education at the University "Lucian Blaga" concerning: sports activities preferred by students, the impact of motor activities on the human body, socialization, and communication, cohesion of the groups, education through sports of a healthy lifestyle.

The research objectives

Among the research objectives we can include: identifying the student opinions about the concept of a healthy lifestyle through practicing sport, effects of motor activities on the human body, socialization, and communication, group cohesion, knowing the student options for practicing certain motor activities.

## **3. Research hypothesis**

Knowing the student preferences regarding the motor activities and their relation with the development of a healthy lifestyle through sport can offer, as managers of teaching act, the guideline data for practical and methodological approaches from student sports disciplines.

## **4. Materials and methods**

In this research, we used the following research methods: the method of investigation and data collection (theoretic documentation) statistical methods of processing and interpretation of data, the survey method - questionnaire of opinions.

## **5. Results**

The sample of the questionnaire included 100 students from various specializations within the "Lucian Blaga" University from Sibiu. We used the demographic data to have a clear picture of the group of subjects, such as age and gender. Later we will use the gender analysis to show whether there are differences between feminine and masculine opinions. Age - most students

interviewed had the age between 19 and 20 years (67.4%), according to Figure 1 and Table Nr. 1, with a mean of 20 years.

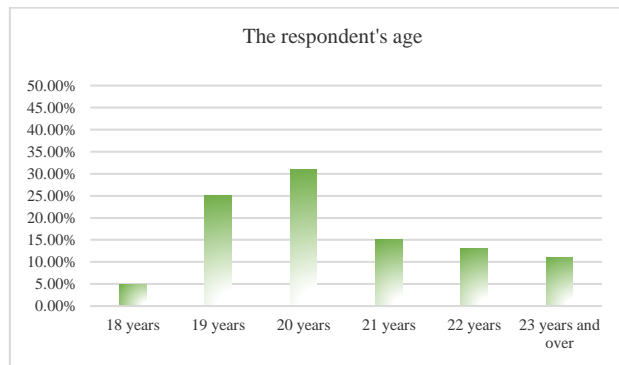


Figure 01. The respondent’s age

Table 01. Statistics regarding the age of the questionnaire respondents’

The age of the respondents	Cases	% N = 100
18 years	5	5%
19 years	25	25%
20 years	31	31%
21 years	15	15%
22 years	13	13%
23 years and over	11	11%
<b>Total</b>	<b>100</b>	<b>100%</b>
<i>Arithmetic mean</i>	20.91	
<i>Median</i>	20	
<i>Standard deviation</i>	2.92	
<i>Skewness</i>	2.72	
<i>Kurtosis</i>	8.20	

Gender distribution of the questionnaire respondents

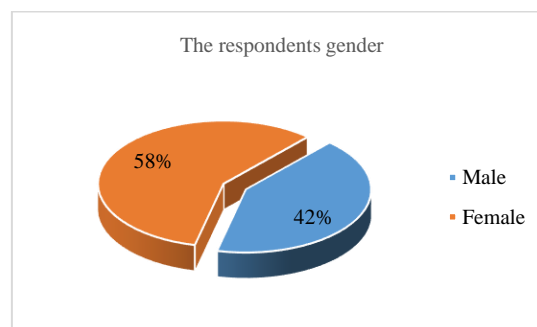


Figure 02. Gender distribution of the questionnaire respondents

The students were asked to appreciate which of the following values of effects they consider essential for developing a positive attitude for practicing motor activities.

Table 02. Students' answers regarding the questionnaire items

Values or effects of motor activities	5	4	3	2	1
1. Maintaining the optimum body condition	60	26	11	1	2
2. Improving the functions and body systems	49	25	22	3	1
3. Keeping high indexes of some certain activities ability	45	30	14	3	8
4. The knowledge of acts and motor activities	33	20	24	13	10
5. Developing social values (communication, collaboration, socializing, relationships)	62	21	13	1	3
6. The development of cognitive capacities (thinking speed, memory, attention, boldness, ambition)	41	14	17	15	13
7. Developing creativity (imagination, rapid adaptation to new systems, initiative)	45	15	18	13	9
8. Promoting moral values (fair play, mutual aid, honesty, modesty, dignity)	55	21	10	9	5
9. Networking with peers involved in activities	58	22	10	6	4
10. Staying healthy	57	19	11	10	3
11. Developing group cohesion	50	17	17	10	6
12. Reducing the level of violence	40	30	21	4	5
13. Forming a positive self-image	38	21	23	10	8
14. Training constant habit of practicing motor activities during your leisure time	45	20	19	8	8
15. Positively influencing physical characteristics	48	22	25	4	1

Table 03. Statistics regarding the answers of the questionnaire items

Questionnaire item	Arithmetic mean	Medias	Standard deviation	Skewness	Kurtosis	T-test on gender
Item 1	4.41	5	0.88	-1.73	3.35	0.522
Item 2	4.18	4	0.95	-0.88	0.04	2.050
Item 3	4.01	4	1.20	-1.27	0.83	0.340
Item 4	3.53	4	1.34	-0.45	-0.95	2.542
Item 5	4.38	5	0.96	-1.74	2.93	2.392
Item 6	3.55	4	1.47	-0.48	-1.22	0.102
Item 7	3.74	4	1.38	-0.67	-0.90	2.380
Item 8	4.12	5	1.21	-1.25	0.45	3.060
Item 9	4.24	5	1.11	-1.48	1.38	2.600
Item 10	4.17	5	1.16	-1.22	0.36	1.424
Item 11	3.95	4.5	1.27	-0.92	-0.35	1.232
Item 12	3.96	4	1.11	-1.01	0.50	-0.843
Item 13	3.71	4	1.29	-0.65	-0.65	1.453
Item 14	3.86	4	1.30	-0.87	-0.36	2.380
Item 15	4.12	4	0.99	-0.76	-0.34	-0.876



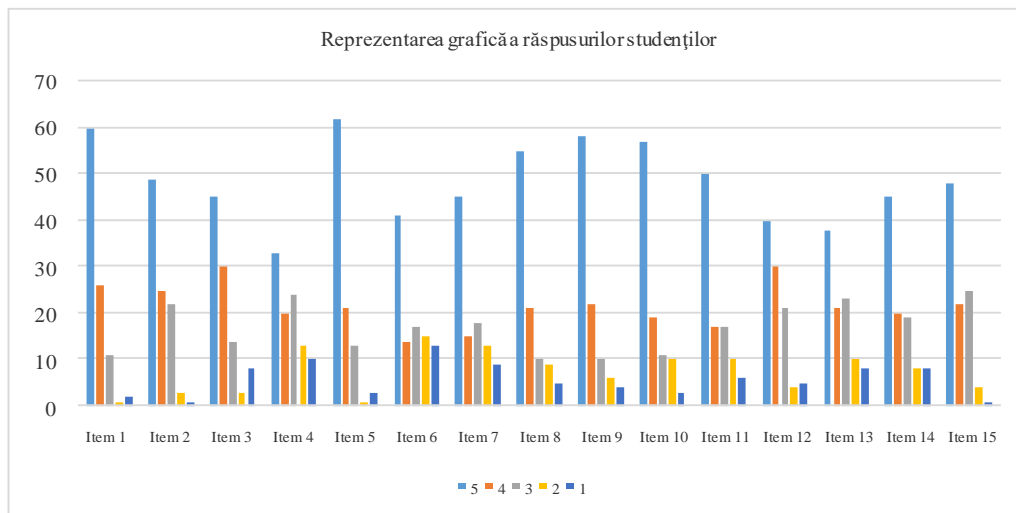


Figura 03. Reprezentarea grafică a răspusurilor studenților la chestionar

## 6. Conclusions

Analyzing Figure 1 we can see that many students are aged between 19 and 20 years (56% of total). And regarding gender composition we can see that most of the students (58% of total) are female and 42% of respondents were male.

Asked to answer which of the following values of effects they consider essential for developing a positive attitude for practicing motor activities, the students answered:

- at the answer variant "maintaining the optimum body condition", students majority response was 5 (60% of total respondents), the average mean was 4.41 and the differences by gender, calculated with the significance t-test (0.522), being insignificant.

- in the case, of the answer "improving the functions and body systems," the most common response was 5 (49% of total) average 4.18 and a significant gender difference (2.050).

- at the item "keeping high indexes of some certain activities ability", the most frequent response was 5 (45% of total), the average was 4.01, a significant difference in terms of gender (0.340).

- at the answer variant "the knowledge of acts and motor activities" the students replied in 33% with alternative 5, averaging 3.53 and significant gender difference (2.542).

- at the item 5 "developing social values", 62% of students responded with 5, the average grade is 4.38 and gender difference is significant (2.392).

- at the item 6 "the development of the cognitive capacities", 41% of students chose the 5 grade, the average grade was 3.55, gender difference was not significant (0.102).

- regarding item 7 "developing creativity", about 45% of students rated 5, the average grade was 3.74, and gender difference was significant (2.380).

- at the item 8 concerning "promoting moral values", about 55% of students chose the 5 grade, the average grade was 4.12, and gender difference was significant (3.060).

- at the item 9 "networking with peers involved in activities", 58% of respondents chose the grade 5, the average grade was 4.24, and gender difference was significant (2.600).

- regarding the item 10, "staying healthy", most students (57% of the total) rated 5, the average grade was 4.17, and gender difference was insignificant (1.424).

- at the item 11 "developing group cohesion", 50% of students have chosen the 5 grade, the average grade was 3.95, and gender difference was significant (1.232).

- in the case of the item 12 "reducing the level of violence", 40% of students chose the 5 grade, the average grade was 3.96, gender difference was not significant (-0.843).

- at the item 13 "forming a positive self-image", 38% of students have ticked note 5, the average grade was 3.71, gender difference was not significant (1.453).

- regarding item 14 "training constant habit of practicing motor activities during your leisure time", 45% of respondents chose the 5 grade, the average grade was 3.86, gender difference was significant (2.380).

- at the item 15 "positively influencing psychological characteristics", 48% of the total number of students have chosen the 5 grade, the average grade was 4.12, gender difference was not significant (-0.876).

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## **The use of CrossFit and High Intensity Interval Training in the physical training of athletes**

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### **Abstract**

*Physical training aims to improve the effort capacity. This paper presents the importance of using elements of CrossFit or High Intensity Interval Training in the physical training of athletes from various sports disciplines. The factors that can contribute to improving the sports training process and the results obtained are also presented.*

**Key words:** *physical training, CrossFit, HIIT*

### **Introduction**

Sports training is conditioned by a multitude of aspects, such as: physical, technical, tactical, psychological and biological preparation for competition. In this context, the use of advanced technology to optimize training is increasingly common and is carried out in parallel with the permanent monitoring of the athletes' health, with long-term impact. The technology can be used to analyze how the healthy human body functions during exercise and how sport and physical activity promote health and performance. Current research highlights that athletes, coaches and the interdisciplinary team around the athlete have different views regarding the integration of technology in sports training.

The aim of the paper is to show the importance of using elements of CrossFit and High Intensity Interval Training in the physical training of athletes.

#### **1. General physical training**

Regardless of the specifics of the sport practiced, the basic task of physical training is to improve the effort capacity. This workload allows the body to adapt to the continuous increase in physical and psychological training requirements.

General exercise does not bear a direct resemblance to sports practice, such as running for a cyclist or rower. It doesn't affect performance much; however, they play an important role in physical training, to compensate for deficiencies.

Based on their orientation and effects, physical development exercises are divided into two groups

(Physical et al., 2022):

- exercises without equipment or with objects other than those used in competitions (sticks, spears, ropes, medicine balls) and,
- exercises derived from related sports.

#### **2. The use of CrossFit or High Interval Intensity Training in the physical training of athletes**

##### **2.1. CrossFit training**

CrossFit® is a training program characterized by high-intensity stimuli with constantly varied and multifunctional movements that induce a significant range of physiological, hemodynamic and biochemical responses.

CrossFit dates back over three decades, its popularity due to its short and intense workouts. The WOD (workout of the day) is usually task or time sensitive: "Do this workout as fast as you can" or "as much as you can do in this amount of time." Both methods require high intensity, but rest is kept to a minimum due to the purpose of each workout.

Crossfit involves working with 10 general physical skills: strength, power, endurance, flexibility, speed, accuracy, balance, coordination, agility and cardiovascular endurance, which must be trained (Celebration crossfit, 2018).

Heart rate variability (HRV) can be used to measure how individuals respond to physiological stress and fatigue. Thus, the acute responses of HRV and blood pressure during and after Crossfit® sessions can be checked (Barreto et al., 2023). Some authors show that CrossFit practitioners subjected to periods of competition have changes in their mood profile and stress levels compared to non-competitive individuals subjected to the same training routines (D'Alpino et al., 2022).

## 2.2. HIIT training (High Intensity Interval Training)

**HIIT training** is a cardio training technique in which high-intensity physical exercises are alternated with low-intensity ones. In general, a training session lasts less than 30 minutes, and each exercise involves between 20-90 seconds. For example, an exercise might involve 30 seconds of intense activity followed by 10 seconds of recovery.

Application of HIIT training to combat sports athletes resulted in improved muscle function, fatigue resistance (Seo et al., 2022) and positively influenced maximal oxygen consumption and anaerobic power (Franchini et al., 2016), with a minor impact on body composition (Vasconcelos et al., 2020).

Training periodization is a planned manipulation of different training stimuli with the aim of optimizing training adaptation and performance. The specific training periodization strategy in which the training plan is divided into several blocks, each providing focused training and a specific stimulus for developing only one or a few specific aspects of performance, is better known as block periodization (Dolci et al., 2020).

High-intensity interval training (HIIT) is a powerful tool in developing an athlete's cardiorespiratory and metabolic function (aerobic and anaerobic capacity) (Franchini et al., 2019), which translates into better physical performance (Chua, 2022).

Interval training has become an essential component of endurance training programs because it can facilitate a substantial improvement in endurance sports performance. The two forms of interval training that are commonly used to improve endurance sports performance are:

- high-intensity interval training (HIIT) and
- sprint interval training (SIT).

Despite extensive research, there is no consensus on the optimal method of manipulating interval training programming variables to maximize endurance performance for different individuals. Some authors show that listening to favorite music during a HIIT session can increase exercise performance (English et al., 2019) and elicit more positive affective responses in athletes (Filho et al., 2022).

### **HIIT training benefits:**

There are numerous studies on the health, endurance and metabolic benefits of HIIT training. Below are the main benefits of HIIT workouts (World Class Romania, 2022):

- Helps regulate blood sugar;
- Stimulates metabolism, thus burning more fat - studies show that HIIT workouts burn up to 30% more calories than regular ones;
- Improve cardiovascular capacity - according to studies, regular practice of HIIT helps increase VO<sub>2</sub> max volume by 46% in 24 weeks and boosts the

amount of blood pumped through the circulatory system by 10% in just eight weeks;

- Support memory and concentration and help regulate mood;
- Helps to reduce appetite after just one workout - the secret is that intense exercises are done after lunch and not in the morning;
- They slow down premature aging of the body. (Hervis, 2019)

### **3. The factors that can contribute to the improvement of the sports training process and the results obtained**

Williamson et al. show that primarily process goals appear to be the most effective type of goal for improving performance and improving certain psychological outcomes (eg, self-efficacy). Second, self-referential goals (e.g., process, performance, and mastery) often lead to positive outcomes, whereas goals based on normative comparisons do not improve performance and result in some maladaptive psychological outcomes. Third, non-specific goals appear to be as effective as specific goals for improving sports performance (Williamson et al., 2022).

Another study highlighted the self-regulation process, which is linked to athletes' emotions and facilitates the optimization of their sports performance. The social environment could be considered a significant facilitator of self-regulation and sports performance. Specifically, athletes can focus on their social environment (opponents) when they have to set goals and choose appropriate strategies to achieve them (anticipatory thinking phase), monitor and manage their actions and emotions ( performance phase) and make self-judgments and choose self-reactions (self-reflection). Coaches, who represent the social environment, can observe, intervene and facilitate these complicated processes (Sakalidis et al., 2022).

A paper that examined the impact of effective team communication skills on the development of athletes' motivation when it comes to their professional development, as well as the impact of motivation on the development of sports skills demonstrates the effectiveness of effective communication skills in physical activity for the motivation of athletes(Wang, 2022).

A meta-analysis of 17 specialist articles carried out with the aim of identifying the perception of student athletes regarding involvement in sport, highlighted a number of benefits and a positive relationship between sport and study. Also, playing sports has a positive influence on the academic performance of student-athletes. Young people perceive the dual relationship sport - academic performance as favorable to their development, making it essential to their human formation (Fernanda Porto Maciel et al., 2023).

The motivational climate oriented towards self-mastery is related to the orientation of the goal towards the task and respectively the motivational climate towards performance is related to the orientation of the goal towards the own ego (Mitsova, 2019).

Tusak M. et al. conducted a study aimed at identifying the motivation of Slovenian athletes of different ages practicing nine different sports disciplines (basketball, football, handball, water polo, ice hockey, ski jumping, alpine skiing, sport climbing and judo). The authors of the study used different motivation concepts, such as achievement motivation, incentive motivation, participation motivation, goal orientation, satisfaction and enjoyment in sport, self-efficacy, effort and ability attributions. The most popular motivational framework in sport has been the social-cognitive perspective. The result was the realization of a dynamic interactive model of sports motivation that explains the possible behaviors and motivation in sports situations. The findings of the study show important differences between these groups and suggest that the specific sport discipline also has a specific imprint within motivation (Tušak et al., 2022).

## Conclusions

To increase the athlete's ability to achieve peak performance, CrossFit and high-intensity, high-volume workouts must be part of the training program.

One of the most used conceptual frameworks for studying motivation in sports is the goal orientation theory. Motivation has a great impact on sports activities.

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## **Motivation in sport**

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### ***Abstract:***

The paper defines the concept of motivation and its structure with addressability in sports. Ways to measure athlete motivation and examples of good motivational practices to improve performance in different sports disciplines are presented. Motivation is intrinsic to the athlete and must be maintained at a high level, both during tournaments and in the daily habits that are part of the lifestyle. Coaches play an essential role in motivating athletes.

**Key word:** *motivation, sport, performance*

### **Introduction**

In performance sports, motivation has a decisive role because it is the basis of the continuity of sports training and its performance at parameters as close as possible to the optimal ones. Motivation in performance sports must be seen both from the point of view of the athlete, of the professional environment (coaches, doctor, psychologist, manager, etc.), and of the social environment (family, friends, etc.).

#### **1. The notion of motivation**

Motivation is a concept explained in different ways. The origin of the word is the Latin "movere", meaning what sets in motion, what pushes to action. In specialized literature, the approach to this notion is centered either on the individual, or on the individual in relation to his environment.

The approach from the perspective of the individual claims that the motivational force is internal to the individual and depends on personal characteristics such as needs, drives, instincts, personality traits. In the situational perspective (individual + his environment) (Nae, 2010), behavior also depends on factors external to the individual, namely his work environment, the nature of work, the management style of superiors, etc. Thus, authors who fall into the first category (Maslow, Alderfer, McClelland, Freud, etc.), under the influence of psychology or psychoanalysis, define motivation as:

- the force that allows the body to move from the state of rest to the state of action;
- what pushes the individual to act according to his needs;
- state of tension that sets the body in motion until the tension is reduced.
- From this perspective, to motivate means:
  - for psychoanalysts: the solicitation of fundamental drives;
  - for classical psychologists: to appeal to fundamental needs;
  - for clinical psychologists: to appeal to affective certainties with which the child was impregnated in the family, school and social environment;
  - for behavioral psychologists: biological level stimuli that trigger instinctive and reflexive behaviors.

It is observed that the motivations as well as the motivation - the creation of the conditions that push to action, are thought outside the group and the context in which the individual acts, that the motivations have only individual causes.

If motivations represent "what pushes to action", and behavior reflects the actions undertaken in order to achieve some goals, we can say that motivations determine the individual's behaviors.

A recent study of over 600 athletes highlighted a positive association between autonomy-supportive behaviors, competence and relationships with need satisfaction and autonomous motivation (Alexe et al., 2022).

## **2. The Structure of motivation**

The reason is the internal factor that triggers, supports and guides an activity and fulfills two functions: activation, energy mobilization and behavior direction.

Motivation (internal factor) is conditioned by its object; the external factor has a triggering effect only in relation to certain needs, desires, aspirations.

The range of motivations of human behavior can be described by the following notions: need, impulse, desire, intention, goal, tendency, valence, expectation, aspiration, ideal.

- The need designates certain internal states and often signifies a certain lack or deficiency. Duties can be primary and secondary. The primary ones are biological, innate and related to the maintenance of the body: the need for food, rest, sex, hygiene, or psychological: the need for security, affection, affiliation. Secondary needs are acquired under the influence of socio-cultural factors: the need for communication, success and performance, self-realization, social approval, etc.
- The impulse consists in the appearance of heightened excitability of the corresponding nerve centers (from a physiological point of view) and a state of tension (from a psychological point of view). The impulse is the dynamic, procedural aspect of the need. For example, a certain level of sex hormones in the blood leads to the sexual drive.
- Desire is a conscious need, it is an emotional activation oriented towards its object. For example, the desire to win a contest.
- The intention marks the transition from motives to goals, projects and indicates the directional aspect of the motive.
- The goal is the mental foreshadowing of the result, of the desired effect. If the proposed goal has not been achieved, the mental tension is maintained in the form of an impulse to continue.
- The tendency is the motivational factor that orients the activity in a certain direction.
- Valence is the property of an object, event or person to respond to a need, to satisfy a requirement. Valences are at the intersection between subject and object.
- They can be positive (acting towards the goals) or negative (intervening as barriers to achieving the goals).
- Expectation defines the result that the individual estimates to obtain, starting from a realistic assessment. It is based on a calculation of chances.
- Aspiration is the result that the individual expects, a hope of self-realization; the standard that a person expects and hopes to achieve in a performance.
- The ideal has its origin in the value system of the person or group; it presupposes a valuable perspective option that finds expression in the individual's life program.

The diversity of reasons why young people practice sports has been systematized as follows: motor needs, the desire for affirmation, the search for compensation, social tendencies, interest in competition, the desire to win and become a champion, the taste for risk, the love of nature and the spirit of adventure.

The reasons for practicing different sports are complex and placed on several levels, being closely related to the individual's personality. Practicing performance sports is due to a multitude of reasons and motivational structures, classified as follows:

- Intrinsic motivation – the pleasure produced by the respective activity, the need for affirmation, compensation, etc.
- Extrinsic motivation – recognition, rewards, satisfaction of another nature, curiosity, etc.).

### **3. Ways of measuring athletes' motivation**

To measure the motivation of combat sports athletes, researchers have suggested that computerized psychological assessment can be used (Pulido-Pedrero Silvia et al., 2020). "Objective Achievement Motivation Test" is a computerized test that measures objective performance for different sets of instructions, that is, in situations with different incentives for achievement (doing your best, setting individual goals, competing against another fictitious person). Test performance is interpreted as an indicator of a person's general tendency to exert effort and thus of their achievement motivation (Brandstätter, 2005).

### **4. Motivation and its role for athletes in different sports disciplines**

In judo it is shown that motivation is certainly one of the most important elements in the structure of personality and is therefore considered an important factor that explains social behavior. A certain risk may be that some athletes have high demands on their coach (Gorner et al., 2019). Coaches should meet the basic psychological needs of judokas to trigger an increase in more self-determined forms of motivation, which could lead to improved self-confidence and reduced levels of anxiety states (Pulido et al., 2017).

Outstanding performance in individual sports is based on intrinsic motivation. In recent years, motivation has been assessed through a self-reported measurement tool that emphasizes knowing an athlete down to the finest details.

In the sports environment, many techniques and methods of mental training adapted to the competition have been imposed. Among these, Neuro-Linguistic Programming (NLP) should be mentioned. His different methodology and technique mainly focuses on setting goals and improving the management of the athlete's mental states. An experiment shows that there is a significant improvement in mental abilities in athletes trained through this technique. Specifically, emotional, attentional and cognitive control, motivation and self-confidence are improved. The training technique is effective in both training and competition situations (Boughattas et al., 2017).

The authorities of National Judo Federations must focus their attention on motivational strategies to enhance performance and develop their country's human resources in this sport (Mohammadali Noudehi et al., 2017).

How individuals demonstrate their competence can influence their motivation to enact a behavior in training or performance (Felix Zurita Ortega et al., 2016). Self-determined motivation promotes athletes' self-determined situational motivation before a competition, which in turn predicts their sports performance. Autonomy of coaches facilitates self-determined motivation and sports performance (Gillet et al., 2010).

The planning and application of the judo training process is the result of the coach's thinking. Subjective measures of training tasks are useful tools that should be used with confidence by coaches. Olivia J. et al. shows that the type of training that judokas do is perceived differently by athletes. Thus, an experiment tested the athletes' perception after two weeks of training of two types: traditional training (TT) and functional unit training (FUT). Indicators such as: motivation, pleasure, fatigue, understanding, competitive specifics, physical condition, tactical-technical training, variability of scores, creativity, problem solving were analyzed. and general development. An interview conducted with the athletes at the end of the two weeks shows that the participants felt that FUT was more effective in the following categories: motivation; pleasure; understanding; competitive specificity; technical-tactical training, randomness variability; creativity; problem solving and general development. TT was perceived as superior in the other two analyzed categories: fatigue and physical condition. According to the results, the study participants found FUT to be the most effective judo training model (Olivio Junior et al., 2018).

A recent study aimed to verify whether athletes' mental fatigue influences the performance and physiological and perceptual responses of judokas subjected to a high-intensity intermittent test specifically designed and validated for this sport. Thus, mentally fatigued athletes are shown to exhibit impaired aerobic performance, strength endurance, and manual dexterity, despite no changes in anaerobic performance and maximal muscle strength and power. Physical performance measured during a judoka-specific test is not affected by a prior 30-minute cognitive task that causes mental fatigue. Furthermore, this cognitive task did not influence the physiological changes induced by the specific physical test (Campos et al., 2022).

Some authors show that judo is a multifactorial sport in which many variables or key performance indicators (CPIs) such as force-speed profile, bioenergetic capacity, technical and tactical skills, and cognitive and emotional competence play a role and influence the final result. Motivation is usually intrinsic to the athlete and must be maintained at a high level, not only during tournaments, but also during daily training and lifestyle activities (Uriarte Marcos et al., 2021). Thus, the psychologist's role is to benefit the athletes they work with by targeting approaches to the judo athletes' physical self-concept.

Also in judo, another study had as its main objective to identify the possible differences in the level of motivation, self-confidence and anxiety depending on the gender and the competitive level of two groups of judoka (the High Performance Group and the Specialization Group). The results revealed differences in the level of somatic anxiety (intensity), higher values being observed in women than in men. Significant differences were also found for the self-confidence variable (intensity), showing that the judokas of the national team present higher values than those of the specialization group. No differences were found in the variables of motivation and self-confidence according to gender, nor in the variables of motivation and anxiety in the comparison between both groups (Pulido et al., 2021).

A study conducted among members of the Turkish national judo team analyzed the value of the mental toughness of the athletes. The concept of mental toughness, which is one of the psychological characteristics, is an important factor in the success of elite athletes. Mental toughness contains four critical traits, which are motivation, pressure management, focus and confidence. In elite high-performance sports, there are few factors as important as mental toughness in achieving competitive advantage and success (Yasar & Turgut, 2020). Another study that highlighted mental toughness in judoka shows that some characteristics of perfectionism may be trainable (Ernesto Suarez Cadenas et al., 2016).

Authors such as Wolska et al. highlighted that Brazilian Judo and Jiu-Jitsu training provides practitioners with a sense of health, fitness and independence (Wolska et al., 2022).

**In bodybuilding**, Mihăiță E. et al. conducted a study among bodybuilders participating in competitions with the aim of identifying personality and autonomy factors that can contribute to the improvement of the sports training process. The obtained results show that competitive bodybuilders perceive the factors of personality and autonomy differently in relation to the particularities of age and sports experience, and knowledge of these changes can contribute to the improvement of the sports training process. Thus, the changes that occur with the growing age of athletes are: extraversion, agreeableness, conscientiousness, emotional stability, autonomy, impulsive sensation seeking, value autonomy, behavioral autonomy, and cognitive autonomy. The personality and autonomy factors that do not depend directly proportionally on the age of the athletes are sociability, activity, aggression-hostility, neuroticism-anxiety and emotional autonomy (Mihăiță et al., 2023).

**In basketball**, mental fatigue has been shown to negatively impact shooting performance in elite basketball players. The study authors suggest that practitioners and coaches encourage athletes to refrain from cognitively demanding tasks before basketball competition (Daub et al., 2022).

**In rugby**, an analysis of rugby matches played in the English Premiership during 2020-2021 found that the results of the matches can be explained by the ability of the teams and the motivation of the players, reflected by the effort they put in. Thus, the number of trials was assumed to be an important component of any effort measure (Fioravanti et al., 2022).

### Conclusions

Evidence from the specialized literature shows that motivation is the most important factor for the development of human resources. To improve the performance of athletes, it is recommended that they receive professional psychological support during daily training sessions, and coaches should encourage sports internships.

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