



## PRELIMINARY EVALUATION FOR CHILDREN TENNIS PLAYERS-AGE 11-14 YEARS OLD

Gheorghe MARINESCU  
Mihaela BUZĂRNESCU<sup>1</sup>  
Mihai BUZĂRNESCU  
Victor DULCEAȚĂ

---

### Abstract

*The tennis game, as sports, has contributed to the complex and multilateral development of the frail body of the child, with influences in the biological, psychological, social and communication areas of the young performer. The dynamic and diverse effort based on the basic and special driving skills requires practical exercise for the purpose of forming a general and at the same time special, driving background.*

*The particularity of the tennis game, using the ball and racket in the technical-tactics actions, widened and diversified the driving potential of the child. The doctoral dissertation aims to outline the existing correlation between the physical, technical-tactics preparation, and the driving and motional capacities, as well as the practical ways to improve these parts of the game at the level of children, aged 11-14 years old.*

**Keywords:** tennis player; psychomotor; preliminary study; driving skills

**JEL classification:** I100

---

### Introduction

In order to scientifically argue the necessity of the preliminary research, as compared to the final one, we resorted to presenting the data in the specialty literature, with references in this sense. The preliminary research targets the possibility to verify the working techniques and of recording the answers to the used questionnaires and the parameters of this research.

In starting the preliminary research, there were data necessary that can be capitalized, and their unfolding circumstances were natural. The purpose of the endeavour was to grant a large part to the psychomotor training of the children-tennis players aged 11-12, that comprises specific means of the drive ability (to find the best means for achieving the goals) and applying some batteries of tests to check the driving and psychomotor qualities.

---

<sup>1</sup> C.S. Dinamo Bucharest, mbuzarnescu@yahoo.com



### *1.1. The requisites of experimental research*

The doctoral thesis aims to outline the existing correlation between the physical, technical-tactics preparation and the driving and psychomotor capacities, as well as the practical ways for improvements of these parts of the game at the level of children, aged 13-14.

- Starting from the requisite that the psychometrics has a significant influence in forming the children's personality;
- The tennis game contributes to the multilateral development of the child's body, having important influences in the biological, psychological, social scopes and their communication;
- The particularity of the tennis game, where the ball and racket are used, in unfolding the technical-tactics actions, increases and diversifies the psychomotor potential of the child;
- The temporary participation in sports contests specific to the age induces feelings of self-improvement, trust, by which the degree of socialization is strengthened;
- Widening the children's interests and of their supporters for practising tennis, strengthens their participation in the sports training, by the respective game;
- Practising a sporting psychomotor activity constitutes an effective mean to fortify and maintain the children's health.

### *1.2. The objectives of the experimental research*

- improving the tennis game, at children aged 13-14, by developing the driving and psychomotor capacities;
- maintaining the best health condition of the children, tennis players;
- improving the specific physical training that is necessary ever since the first years of tennis;
- forming and developing some driving skills and manners specific for the tennis game;

### *1.3. The purpose of the experimental research*

The purpose of the achieved research was that of granting a large space to the part of driving and psychomotor preparation of tennis players – children aged 13-14, and of finding effective means, by which to attain the objectives of the research.



#### *1.4. The tasks of the experimental research*

- The collection and systematization of the theoretical information corresponding to the research topic, offered by the specialty literature, via indigenous and foreign authors;
- setting instructional objectives;
- scheduling the experimental stages;
- dividing the participants of the research according to value groups (experiment group and control group);
- identifying the evaluation system of the participants in the research;
- the initial evaluation of the level of biological general psychomotor and specific development, for children aged 13-14, who practise the tennis game;
- the selection, placing in order and setting the target of the means specific for psychometrics, in view of using them in the experimental attempt;
- planning and scheduling the experiment at the level of the training curriculum;
- final evaluation of the level of biological, driving and specific development for children aged 13-14 years, who practise the tennis game;
- summarization, tabling, analysis and interpretation of the obtained results;
- to verify the effectiveness of the intervention means for the purpose of improving the driving qualities of the children who practise the tennis game, included in the experimental research;
- drawing-up conclusions and proposals, that resulted from the processing and interpretation of the data.

#### *1.5. The hypotheses of the experimental research*

Through the general training program specific for tennis, we aimed to argue practically and methodically the following hypotheses:

1. The use of the means of general physical training specific for tennis, for the improvement/development of the children's psychometrics aged 13-14, had as results the improvement of their sporting performance. The results in tennis contests
2. The use of the means specific for athletics in training will contribute to the improvement of the driving and psychomotor capacities.

## **2. Materials and methods**

In our paper, we made use of the following methods:

- Conversation method
- Observation method



- Survey method- on the basis of questionnaire: review for coaches
- Preliminary experiment method
- Tests method
- Statistical-mathematical method
- Graphic method

We evaluated 25 tennis players, girls and boys. We used tennis rackets, stop-watch, tape measure, tennis balls, factual data questionnaire and psychomotor tests.

Your methods section provides a detailed overview of how you conducted your research. The methods section includes the following sub-sections: participants, apparatus and materials, procedure.

### 3. Results

In tables 1 and 2, we chose to show the results of the driving skills tests for boys and girls. In tables 3 and 4, we gave an example of the 550m-Running test. Figures 1 and 2 show the superior results from the boys.

**Table 1. Evaluation of the driving skills in girls**

Rank	Name and surname	Date of birth	Club	Softness amplitude sample	Test of dynamic suppleness	Sample race commute	Abdomina sampl	Sample long jump without Moose	Jump rope sample	Test of balance	Fixed bar pull-ups test	550 (m) running test
1	T. R. M	12.02.2002	T.C. 2000 BUCURESTI-ACADEMIA SEVER DRON	63	10/9	22,05	12	172	5	20/20	2	2,08
2	S. A. R	27.11.2002	CS AS CLUB POLITEHNICA	44	12/12	21,50	15	182	5	20/7	1	2,09
3	T. M. G	22.04.2002	CS DINAMO BUCURESTI	20	12/14	21,04	16	174	5	20/20	1	2,14
4	N. S. M	09.07.2002	CS TEN CLUB TENIS BUZAU	13	12/13	21,07	17	168	5	20/20	1	2,14
5	L. S	11.02.2002	CS GIGLIO IASI	26	12/11	20,31	16	169	5	20/20	1	2,10
6	D. I. I	15.06.2002	AS TENIS CLUB BUCURESTI	31	11/11	20,62	15	164	5	20/16	1	2,09
7	I. T	28.06.2002	AS TENIS CLUB BUCURESTI	60	12/10	23,14	15	145	5	20/8	1	2,11
8	M. T	11.10.2002	ASOCIATIA TC SUN	38	11/10	21,17	16	171	4	20/18	1	2,09
9	I. A. C	13.01.2002	CS AS CLUB POLITEHNICA	25	12/11	21,52	14	158	4	20/20	1	2,10
10	C. A. D	23.10.2002	AS CS TENIS MASTERS	32	11/10	21,39	15	155	5	20/17	2	2,09
11	I. M. A	13.01.2002	C.S PRO AS SIBIU	41	11/11	20,80	15	163	4	20/19	1	2,11
12	O. S	05.10.2002	AS CS TENIS MASTERS	50	14/14	21,72	12	179	5	20/13	2	2,08
13	D. M. A	18.08.2002	CS TARGOVISTE	52	11/10	22,14	14	172	5	20/17	1	2,10
14	D. A. M. M	12.08.2002	S&F TENNIS SYSTEM CLUB SPORTIV DE TENIS	60	10/9	22,30	13	187	5	20/20	1	2,14
15	M. V	14.06.2002	CSS PETROSANI	41	11/10	21,73	14	169	5	20/18	1	2,12
16	A. I. D	30.07.2002	CS ATLETIC ROMAN	16	14/14	20,41	14	185	5	20/16	2	2,11
17	D. L. M	22.03.2002	CSM DUNAREA GALATI	29	13/11	22,01	15	176	5	20/20	1	2,14
18	I. A. M	19.06.2003	CSS SLOBOZIA	42	14/15	21,75	16	185	5	20/20	2	2,12
19	Z. A. M	21.02.2002	C.S ATLAS GALATI	43	13/13	22,08	14	174	4	19/17	1	2,12
20	D. B. M	20.03.2002	CS DIANMO-Centrul Sportiv Braşov	50	14/15	21,90	14	170	4	20/20	1	2,13
21	D. I. M	07.04.2002	CSS SIGHETU MARMATIEL	34	12/12	22,15	13	169	5	20/17	1	2,09
22	K. F. I. A	13.07.2003	CS DINAMO BUCURESTI	26	13/12	23,08	13	160	5	20/14	2	2,11
23	C. C	06.08.2002	CS TENIS CLUB RM. VALCEA	46	13/11	22,43	13	168	4	20/19	1	2,14
24	C. A	12.11.2002	CLUB SPORTIV DACIA GALATI	26	10/10	23,15	11	162	5	20/16	1	2,11
25	C. S. M	15.08.2003	CSS MIRCEA ELIADE	33	15/13	21,40	13	155	5	20/20	3	2,14



Table. 2 Evaluation of the driving skills

Rank	Name and surname	Date of birth	Club	Softness amplitude sample	Test of dynamic suppleness	Sample race commute	Abdominal sample	Sample long jump without Moose	Jump rope sample	Test of balance	Fixed bar pull-ups test	550 (m) running test
1	G. S.	17.05.2002	PS-CSS CONSTANIA	60	14/13	20,01	17	175	5	20/18	2	1.55
2	P. R. M.	28.08.2002	CS TARGOVISTE	53	14/13	19,50	14	178	5	20/20	2	1.58
3	A. Ș.	09.11.2002	CLUB SPORTIV DACIA GALATI	49	14/12	20,25	21	168	5	20/20	1	1.58
4	I. N. D.	12.10.2002	AL BODY	43	13/12	21,03	18	201	5	20/9	3	1.57
5	O. R. M.	04.11.2002	SP. CLUB MUNICIPAL BACAU	52	11/12	21,10	20	152	4	20/15	1	1.56
6	M. B. A.	01.06.2002	SP. CLUB MUNICIPAL BACAU	54	12/11	20,54	19	160	4	18/17	1	1.57
7	L. K. L.	08.06.2002	CSM PETROSANI	39	11/10	18,72	20	178	4	20/19	1	1.55
8	A. A.	23.07.2002	CSS 2 BUCURESTI	24	15/18	19,37	28	180	5	20/20	2	1.57
9	R. R. B.	21.05.2002	CSS PETROSANI	34	14/14	22,14	21	175	5	20/20	1	1.58
10	P. A. C.	30.08.2002	C.S DINAMO BUCURESTI	38	12/12	19,11	17	168	4	18/14	2	1.55
11	M. A. I.	07.01.2002	C.S OLIMPIA BUCURESTI	40	14/14	19,21	25	142	3	20/18	1	1.57
12	P. C.	22.09.2002	CS TC CAPELA RM VALCEA	23	11/10	18,75	23	170	5	20/16	2	1.54
13	C. M. N.	08.12.2002	ATLETIC C.S LUDUS	26	11/12	19,41	19	176	4	20/16	2	1.55
14	L. R. B.	14.03.2002	CSS PETROSANI	34	11/11	20,14	21	179	5	20/20	2	1.58
15	C. I. A.	30.12.2002	AS CS TENIS MASTERS	38	12/12	19,50	18	181	5	20/20	1	1.58
16	P. N. F.	24.01.2002	C.S MAJOR BUCURESTI	35	11/10	19,40	17	171	4	20/17	2	1.55
17	M. M. A.	15.02.2002	CSM TIMISOARA	24	11/10	21,52	18	172	5	20/20	1	1.56
18	P. V.	08.05.2002	CS SPORT 4 FUN TIMISOARA	31	12/11	22,14	19	176	4	20/18	1	1.57
19	S. G. C.	13.03.2002	C.S DINAMO BUCURESTI	41	16/14	20,37	19	177	5	20/18	1	1.58
20	P. R. D.	04.08.2002	CSS SOIMII SIBIU	41	14/13	20,15	16	168	5	18/11	2	1.57
21	G. S. C.	07.12.2002	CSS MIRCEA ELIADE BUC.	38	10/8	22,18	20	160	4	20/13	3	1.54
22	B. A. C.	26.12.2002	TC WILSOR BUCURESTI	37	12/12	21,15	20	180	5	20/18	1	1.55
23	F. E. W.	26.05.2002	CS SANATATEA ERGOLEMN S.M	42	11/10	22,51	19	172	5	20/20	2	1.56
24	O. M. V.	03.01.2002	TENIS CLUB ENACHE	12	15/16	22,44	24	150	5	20/20	3	1.57
25	P. P. P.	28.08.2002	AS CS TENIS MASTERS	40	15/15	20,05	16	200	3	20/20	3	1.56

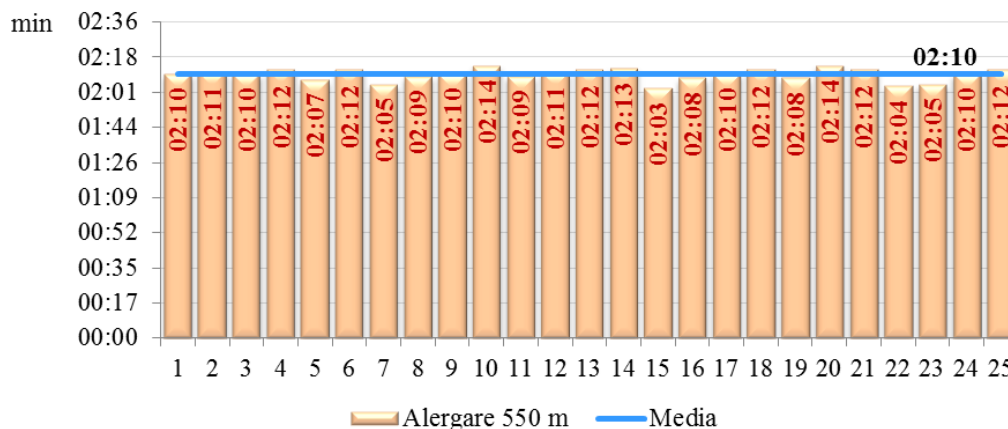
Table 3

GROUP	Average	Median	Standard deviation	Module	Minimum	Maximum	Amplitude	Variation quotient
Fete	02:10	02:10	00:03	02:12	02:03	02:14	00:11	2.3%

The average time at the 550m-running test in the girls' group equals 2:10 min. The spread of values of the average is homogenous; the variation quotient has the value of 2.3%. The most frequent time within the group is of 2:12 min. The amplitude equals 1:11 min, the highest time at the group level equals 2:14, while the lowest 2:03 min. the running times at the 550m-running test and their averages are shown in figure 27.



# Preliminary Evaluation for Children Tennis Players-Age 11-14 Years Old



## SPECIFIC DRIVING TESTS

Table 4 550m-Running test for boys

GROUP	Average	Median	Standard deviation	Module	Minimum	Maximum	Amplitude	Variation quotient
Boys	01:54	01:54	00:03	01:54	01:49	01:58	00:09	2.2%

The average time achieved by the boys' group in the 550m-running test equals 1:54 min. The spread of times around the average is homogenous and the variation quotient has the value of 2.2%. The time with the biggest frequency equals 1:54 min. The amplitude equals 0:09 min, the biggest time at the group level being equal with 1:58, while the minimum with 1:49 min. The times in the 550m running test

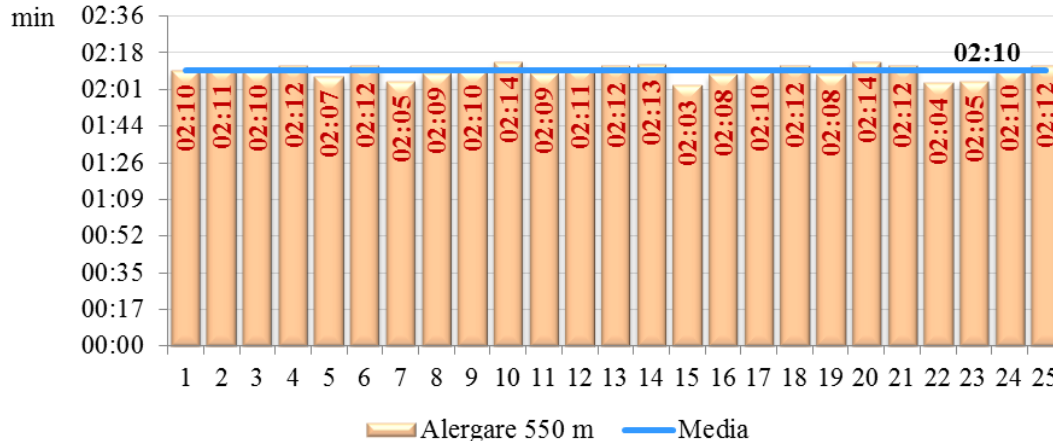


Figure 2. 550m Running test- boy



#### 4. Discussions and conclusions

We notice that the average number of push-ups performed in 30 seconds equals 19.6. The average value of the long jump without momentum is 172.4 cm. The average number of the correct jumps in five repetitions equals 4.5. The average time to maintain balance at the first try, in the boys' group equals 19.8 sec, at the second try equals 17.5 sec. The average number of chin-ups performed on the pull-up bar is of 1.7. The average time obtained at the 550m-running test equals 1:54 min. In the specific motor tests, the average time obtained in the boys group at the 550m-running test equals 1:54 min.

The data obtained from the statistical-mathematical processing of the performances achieved in the tests revealed an increased potential from the psychomotor point of view.

The resulted data from the unfolding of the preliminary research revealed that the used means had significant influences on the performances in the following tests: Analogical Transfer, Space-orientation test, Test for the amplitude of suppleness and the Commutation Test.

The individual results had a heterogeneous distribution, aspect also underlined by the value of the variability quotient, that demonstrates for the majority of the tests an average or low homogeneity of the participants.

#### Acknowledgements

Comparing the results obtained from the participants, depending on their gender, it outlined the fact that the development of the psychomotor qualities in boys is superior as compared to that in girls.

#### REFERENCES

1. Thomas, R., Eclache, J., P. & Keller, J. (1995), *Driving skills, structure and evaluation* (pp. 71-82). Bucharest.
2. Buzarnescu, M., (2015), *Progress report 2, Preliminary study on operational research*, Bucharest.