

## INTERCORRELATIONS OF MOTOR ABILITIES OF YOUNG SCHOOL-AGE STUDENTS

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**Abstract:** *In this paper, the authors present the intercorrelation of the motor abilities of young school-age children, obtained by the use and influence of the coordination and speed training program. The sample of respondents consisted of elementary school students aged 9 and 10 ( $\pm 6$  months) in Niš. The sample of 64 subjects was divided into two groups, the experimental and the control group, with 32 subjects in each group. Subjects of the experimental group were involved in the process of practicing coordination and speed in supplementary physical education classes, while subjects of the control group were only included in regular physical education classes. The paper presents the basic statistical parameters of the subjects of the experimental and control groups at the initial and final measurements, as well as the intercorrelation matrices of the experimental and control groups at the initial and final measurements of motor abilities. The results tell us that at the initial measurement of the experimental group, the 30 meters running motor tests with a high start (M30HS) and 20 meters running with a high start (M20HS) have the greatest correlation, and that at the final measurement, standing long jump motor test (SLJMT) and standing triple jump (STJMT) have the highest correlation. In the control group, at the initial measurement, the motor tests of splits (MSP) and deep forward bend on the bench (MDFB) have the highest correlation, while at the final measurement, the motor tests of squats (MSQ) and deadlifts on the bench (MDLB) have the highest correlation.*

**Key words:** *intercorrelation, motor skills, younger school age, coordination, speed*

### INTRODUCTION

Starting from children's needs for physical movement-exercise, we observe that physical activity plays an important role in a child's daily life.

Young school age is an extremely sensitive period for the development of children's motor skills, and taking into account all the advantages that this period has in the formation of motor skills, it is very important not to miss it.

Their further proper growth and development depends to a large extent on the degree of development of the motor skills in primary school age.

However, world trends are such that there is an increase in body weight in children, an increasing lack of physical activity accompanied by a growing intake of calories (Gopinath et al, 2012; Berkey et al., 2000; Boreham & Riddoch, 2001). Lack of physical activity and excess weight directly affect the degree of development of motor skills (Bala, Stojanović & Stojanović, 2007; Strel, Bizjak, Starc, & Kovač, 2009; Tomkinson, Olds & Gulbin, 2003).

Motor abilities are those forms of motor activity that appear in moving structures that can be described by the same parametric system, that can be measured by the same set of measures and in which analogous physiological, biological and psychological processes, or mechanisms, occur.

They are partly inherited, and partly acquired primarily through physical movement-exercise. In the case of certain motor skills, genetic factors have a greater, in others, much less importance. In addition, their development can be influenced, to a certain extent, by applying specific training methods, methodical organizational forms of work, etc.

The teaching of physical education has an increasing need to find the most optimal models and forms of work in order to significantly increase the effectiveness of the lessons, and one of those solutions is supplementary physical education classes (Milanović, 2006; Malacko, 2003; Višnjić, 2006).

### METHODOS

Population from which a sample of 64 respondents has been taken is consisted of primary school pupils from Niš, of male sex, age 9 and 10 year ( $\pm 6$  months). The sample of 64 respondents was divided into two groups, an experimental and control group. The first, experimental group consists of 32

respondents who were involved in the process of exercising coordination and speed in additional physical education classes, lasting 8 weeks with 24 hours of training. The second, control group also consists of 32 respondents who were involved only in regular physical education classes.

In this research, the following variables of motor abilities were set: speed, agility, flexibility, explosive strength, repetitive strength and segmental speed. The measuring instruments used for assessing motor abilities included the standing start running on 20 meters (M20VS), standing start running on 30 meters (M30VS), envelope test (MKOT), aside steps (MKUS), deep forward bend on the bench (MDPK), split (MŠPA), standing long jump (MSDM), standing triple jump (MTRS), trunk lifting on the Swedish bench (MDTK), squats (MČUČ), foot tapping (MTAN) and hand tapping (MTAP).

The set of motor variables applied was taken from the research of Kurelić et al. (1975).

The methods used in this work are descriptive and statistical methods, the basic statistical parameters and intercorrelation matrices of the experimental and control groups at the initial and final measurement of motor skills are presented.

## RESULTS

The research results are the following:

**Table 1** Basic statistical parameters for the assessment of motor skills of the experimental group during the initial measurement

| Variables | N  | Mean   | Min.   | Max.   | Std.dev. | Skewn. | Kurtos. |
|-----------|----|--------|--------|--------|----------|--------|---------|
| M20VS     | 32 | 4.26   | 3.84   | 4.90   | 1.60     | 0.335  | -1.189  |
| M30VS     | 32 | 5.83   | 5.42   | 6.38   | 6.29     | 0.858  | 1.118   |
| MKOT      | 32 | 21.56  | 18.70  | 24.60  | 4.39     | 0.811  | 0.798   |
| MKUS      | 32 | 16.28  | 14.10  | 19.26  | 10.17    | 0.861  | 1.590   |
| MDPK      | 32 | 36.82  | 28.00  | 48.00  | 2.98     | 0.056  | -0.883  |
| MŠPA      | 32 | 128.36 | 112.00 | 138.00 | 7.29     | 0.483  | 0.048   |
| MSDM      | 32 | 136.54 | 114.00 | 186.00 | 14.39    | -0.122 | 0.308   |
| MTRS      | 32 | 410.73 | 370.00 | 460.00 | 6.96     | -0.173 | 0.611   |
| MDTK      | 32 | 4.67   | 2.00   | 9.00   | 5.83     | 0.249  | 1.451   |
| MČUČ      | 32 | 6.24   | 3.00   | 12.00  | 2.60     | 0.487  | 0.285   |
| MTAN      | 32 | 22.18  | 18.00  | 27.00  | 2.76     | 0.978  | 1.728   |
| MTAP      | 32 | 28.64  | 24.00  | 35.00  | 2.70     | 0.101  | 1.404   |

Legend: Arithmetic mean (Mean), minimum (Min), maximum (Max), standard deviation (Std. dev.), skewness (Skewn.), kurtosis (Kurtos.)

Table 1. shows the results for the participants from the experimental group regarding their motor skills assessment, and it indicates that there is no statistically significant deviation of the results from the normal distribution. The results of the tests that assess the participants' motor skills indicate that the distribution is positive. This is confirmed by the results of the distribution asymmetry (skewness) which does not exceed 1.00, which means that the tests are not difficult (up to +1.00) or easy (up to -1.00), but correspond to the surveyed participants and the value is below one. The homogeneity (kurtosis) indicates that there is a good sensitivity of the tests, because the obtained values are below 2.75. The results obtained regarding the motor skills do not deviate from the results of similar studies conducted in our country on this population of examinees, thus it is possible to apply the multivariate analysis methods in this research as well. Generalization of the results on the population from which the sample of these respondents was derived is thus possible

**Table 2** Basic statistical parameters for the assessment of motor skills of the experimental group during the final measurement.

| Variables | N  | Mean   | Min.   | Max.   | Std.dev. | Skewn. | Kurtos. |
|-----------|----|--------|--------|--------|----------|--------|---------|
| M20VS     | 32 | 3.84   | 3.62   | 4.57   | 0.71     | 0.746  | -0.253  |
| M30VS     | 32 | 5.26   | 4.82   | 6.42   | 0.38     | -0.433 | -0.403  |
| MKOT      | 32 | 18.85  | 17.02  | 23.76  | 0.42     | 0.977  | -0.729  |
| MKUS      | 32 | 14.52  | 13.90  | 18.90  | 6.55     | 0.372  | -0.294  |
| MDPK      | 32 | 47.23  | 30.00  | 50.00  | 13.26    | 0.201  | 4.286   |
| MŠPA      | 32 | 141.62 | 115.00 | 141.00 | 17.96    | 0.410  | 0.392   |
| MSDM      | 32 | 157.25 | 130.00 | 188.00 | 9.37     | 0.180  | 1.032   |
| MTRS      | 32 | 515.38 | 385.00 | 472.00 | 53.00    | -0.039 | -0.353  |
| MDTK      | 32 | 5.12   | 4.00   | 10.00  | 43.61    | 0.443  | -0.269  |
| MČUČ      | 32 | 7.65   | 5.00   | 12.00  | 6.30     | -0.522 | -0.552  |
| MTAN      | 32 | 29.63  | 20.00  | 29.00  | 2.47     | 0.084  | 0.122   |
| MTAP      | 32 | 37.28  | 26.00  | 38.00  | 2.54     | 0.405  | 1.352   |

Legend: Arithmetic mean (Mean), minimum (Min), maximum (Max), standard deviation (Std. dev.), skewness (Skewn.), kurtosis (Kurtos.)

Table 2. shows the results for the participants from the experimental group regarding their motor skills assessment during the final measurement, and it indicates that there is no statistically significant deviation of the results from the normal distribution. The results of the tests that assess the participants' motor skills indicate that the distribution is positive. This is confirmed by the results of the distribution asymmetry (skewness) which does not exceed 1.00, which means that the tests are not difficult (up to +1.00) or easy (up to -1.00), but rather correspond to the surveyed participants and the value is below one. The homogeneity (kurtosis) indicates that there is a good sensitivity of the tests, because the obtained values are below 2.75. The results obtained regarding the motor skills do not deviate from the results of similar studies conducted in our country on this population of examinees, thus it is possible to apply the multivariate analysis methods in this research as well. Generalization of the results on the population from which the sample of these respondents was derived is thus possible.

**Table 3** Basic statistical parameters for the assessment of motor skills of the control group during the initial measurement

| Variables | N  | Mean   | Min.   | Max.   | Std.dev. | Skewn. | Kurtos. |
|-----------|----|--------|--------|--------|----------|--------|---------|
| M20VS     | 32 | 4.29   | 3.94   | 4.83   | 2.55     | 0.207  | 2.195   |
| M30VS     | 32 | 6.05   | 5.38   | 6.27   | 2.21     | 0.416  | -0.136  |
| MKOT      | 32 | 21.28  | 17.90  | 23.82  | 6.22     | 0.823  | 1.058   |
| MKUS      | 32 | 16.63  | 14.00  | 18.76  | 4.31     | 0.029  | 0.921   |
| MDPK      | 32 | 37.52  | 22.00  | 46.00  | 10.52    | 0.002  | 2.240   |
| MŠPA      | 32 | 129.27 | 115.00 | 140.00 | 3.23     | 0.846  | 0.015   |
| MSDM      | 32 | 130.95 | 122.00 | 182.00 | 11.73    | 0.190  | 1.516   |
| MTRS      | 32 | 420.62 | 385.00 | 475.00 | 15.78    | 0.129  | -0.271  |
| MDTK      | 32 | 5.10   | 3.00   | 12.00  | 4.29     | -0.023 | 1.380   |
| MČUČ      | 32 | 6.78   | 4.00   | 14.00  | 4.68     | 0.727  | 0.637   |
| MTAN      | 32 | 23.52  | 19.00  | 26.00  | 2.60     | 0.043  | 2.449   |
| MTAP      | 32 | 30.24  | 24.00  | 38.00  | 2.62     | 0.715  | 2.206   |

Legend: Arithmetic mean (Mean), minimum (Min), maximum (Max), standard deviation (Std. dev.), skewness (Skewn.), kurtosis (Kurtos.)

Table 3. shows the results for the participants from the control group regarding their motor skills assessment during the initial measurement, and it indicates that there is no statistically significant

deviation of the results from the normal distribution. The results of the tests that assess the participants' motor skills indicate that the distribution is positive. This is confirmed by the results of the distribution asymmetry (skewness) which does not exceed 1.00, which means that the tests are not difficult (up to +1.00) or easy (up to -1.00), but rather correspond to the surveyed participants and the value is below one. The homogeneity (kurtosis) indicates that there is a good sensitivity of the tests, because the obtained values are below 2.75. The results obtained regarding the motor skills do not deviate from the results of similar studies conducted in our country on this population of examinees, thus it is possible to apply the multivariate analysis methods in this research as well. Generalization of the results on the population from which the sample of these respondents was derived is thus possible.

**Table 4** Basic statistical parameters for the assessment of motor skills of the control group during the final measurement

| Variables | N  | Mean   | Min.   | Max.   | Std.dev. | Skewn. | Kurtos. |
|-----------|----|--------|--------|--------|----------|--------|---------|
| M20VS     | 32 | 4.23   | 3.89   | 4.80   | 7.11     | 0.553  | -0.233  |
| M30VS     | 32 | 5.96   | 5.26   | 6.24   | 12.56    | 0.912  | 1.650   |
| MKOT      | 32 | 21.75  | 17.68  | 23.47  | 17.83    | 0.282  | -0.852  |
| MKUS      | 32 | 16.48  | 14.00  | 18.19  | 9.02     | -0.359 | 0.272   |
| MDPK      | 32 | 38.13  | 26.00  | 50.00  | 42.60    | -0.219 | -0.941  |
| MŠPA      | 32 | 131.62 | 120.00 | 145.00 | 30.18    | -0.201 | 0.739   |
| MSDM      | 32 | 134.24 | 129.00 | 187.00 | 6.38     | -0.285 | 0.387   |
| MTRS      | 32 | 432.79 | 390.00 | 482.00 | 4.24     | 0.247  | 0.896   |
| MDTK      | 32 | 5.83   | 4.00   | 12.00  | 3.50     | -0.042 | -0.953  |
| MČUČ      | 32 | 8.24   | 5.00   | 16.00  | 0.86     | -0.341 | -0.827  |
| MTAN      | 32 | 24.10  | 21.00  | 29.00  | 0.61     | 0.568  | -0.580  |
| MTAP      | 32 | 31.45  | 26.00  | 41.00  | 0.34     | -0.814 | -0.084  |

Legend: Arithmetic mean (Mean), minimum (Min), maximum (Max), standard deviation (Std. dev.), skewness (Skewn.), kurtosis (Kurtos.)

Table 4. shows the results for the participants from the control group regarding their motor skills assessment during the initial measurement, and it indicates that there is no statistically significant deviation of the results from the normal distribution. The results of the tests that assess the participants' motor skills indicate that the distribution is positive. This is confirmed by the results of the distribution asymmetry (skewness) which does not exceed 1.00, which means that the tests are not difficult (up to +1.00) or easy (up to -1.00), but rather correspond to the surveyed participants and the value is below one. The homogeneity (kurtosis) indicates that there is a good sensitivity of the tests, because the obtained values are below 2.75. The results obtained regarding the motor skills do not deviate from the results of similar studies conducted in our country on this population of examinees, thus it is possible to apply the multivariate analysis methods in this research as well. Generalization of the results on the population from which the sample of these respondents was derived is thus possible.

Table 5 shows the intercorrelation matrix of the experimental group at the initial measurement and motor abilities. The 30-meter run motor tests with a high start (M30HS) and 20-meter run test with a high start (M20HS) have the highest correlation with a value of -.54.

**Table 5** Intercorrelation matrix of motor abilities of the experimental group at the initial measurement

|       | M20VS | M30VS | MKOT | MKUS | MDPK | MŠPA | MSDM | MTRS | MDTK | MČUČ | MTAN | MTAP |
|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| M20VS | 1.00  |       |      |      |      |      |      |      |      |      |      |      |
| M30VS | -.54  | 1.00  |      |      |      |      |      |      |      |      |      |      |
| MKOT  | .25   | .38   | 1.00 |      |      |      |      |      |      |      |      |      |
| MKUS  | .27   | -.38  | .37  | 1.00 |      |      |      |      |      |      |      |      |
| MDPK  | .25   | .35   | .16  | .34  | 1.00 |      |      |      |      |      |      |      |
| MŠPA  | .15   | -.34  | .15  | .15  | .04  | 1.00 |      |      |      |      |      |      |
| MSDM  | .14   | -.31  | -.04 | .54  | .37  | .15  | 1.00 |      |      |      |      |      |
| MTRS  | .04   | -.37  | -.06 | .35  | .27  | .16  | .13  | 1.00 |      |      |      |      |
| MDTK  | .15   | -.29  | .02  | .13  | .26  | .28  | .38  | .12  | 1.00 |      |      |      |
| MČUČ  | .22   | -.32  | .22  | -.66 | .61  | .07  | .04  | -.24 | .25  | 1.00 |      |      |
| MTAN  | .05   | .15   | .09  | .54  | .23  | .04  | .05  | .08  | .25  | .35  | 1.00 |      |
| MTAP  | .18   | -.04  | .25  | -.02 | -.21 | -.25 | -.07 | -.17 | .04  | .22  | .47  | 1.00 |

**Table 6** Intercorrelation matrix of motor abilities of the experimental group at the final measurement

|       | M20VS | M30VS | MKOT | MKUS | MDPK | MŠPA | MSDM | MTRS | MDTK | MČUČ | MTAN | MTAP |
|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| M20VS | 1.00  |       |      |      |      |      |      |      |      |      |      |      |
| M30VS | .24   | 1.00  |      |      |      |      |      |      |      |      |      |      |
| MKOT  | .34   | .28   | 1.00 |      |      |      |      |      |      |      |      |      |
| MKUS  | .15   | .17   | .10  | 1.00 |      |      |      |      |      |      |      |      |
| MDPK  | .18   | .11   | .25  | .17  | 1.00 |      |      |      |      |      |      |      |
| MŠPA  | .28   | .08   | .29  | .17  | .58  | 1.00 |      |      |      |      |      |      |
| MSDM  | -.05  | .57   | .31  | .15  | .46  | .29  | 1.00 |      |      |      |      |      |
| MTRS  | .24   | .35   | .38  | .18  | .42  | .18  | .59  | 1.00 |      |      |      |      |
| MDTK  | .11   | .22   | .48  | .22  | .41  | .24  | .25  | .58  | 1.00 |      |      |      |
| MČUČ  | .33   | .10   | .31  | .07  | .12  | .38  | .19  | -.07 | .19  | 1.00 |      |      |
| MTAN  | .03   | .04   | .37  | .24  | .16  | .15  | .33  | .37  | .49  | .23  | 1.00 |      |
| MTAP  | .28   | .24   | .20  | -.15 | .12  | .44  | .09  | .09  | .07  | .34  | .23  | 1.00 |

Table 6 shows the intercorrelation matrix of the experimental group at the final measurement of motor skills. The standing long jump motor test (SLJMT) and standing triple jump (STJ) have the highest correlation, which is .59.

**Table 7** Intercorrelation matrix of motor abilities of the control group at the initial measurement

|       | M20VS | M30VS | MKOT | MKUS | MDPK | MŠPA | MSDM | MTRS | MDTK | MČUČ | MTAN | MTAP |
|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| M20VS | 1.00  |       |      |      |      |      |      |      |      |      |      |      |
| M30VS | .29   | 1.00  |      |      |      |      |      |      |      |      |      |      |
| MKOT  | .15   | .05   | 1.00 |      |      |      |      |      |      |      |      |      |
| MKUS  | .14   | .05   | .17  | 1.00 |      |      |      |      |      |      |      |      |
| MDPK  | .05   | .26   | .16  | .26  | 1.00 |      |      |      |      |      |      |      |
| MŠPA  | .05   | .14   | .31  | .23  | .50  | 1.00 |      |      |      |      |      |      |
| MSDM  | .01   | .15   | .36  | .19  | .45  | .30  | 1.00 |      |      |      |      |      |
| MTRS  | .22   | .21   | .26  | .12  | .24  | .25  | .44  | 1.00 |      |      |      |      |
| MDTK  | .12   | .35   | .38  | .11  | .34  | .37  | .47  | .45  | 1.00 |      |      |      |
| MČUČ  | .35   | -.24  | -.05 | .12  | -.17 | -.24 | -.18 | .18  | .27  | 1.00 |      |      |
| MTAN  | .28   | -.18  | .15  | -.05 | -.25 | .56  | .25  | .17  | .14  | .25  | 1.00 |      |
| MTAP  | -.17  | -.25  | .29  | -.15 | -.14 | .10  | .12  | .15  | .25  | .48  | .47  | 1.00 |

Table 7 shows the intercorrelation matrix of the control group at the initial measurement of motor skills. The motor tests of splits (MSP) and deep forward bend on the bench (MDFB) have the highest correlation, which is .50.

**Table 8** Intercorrelation matrix of motor abilities of the control group at the final measurement

|       | M20VS | M30VS | MKOT | MKUS | MDPK | MŠPA | MSDM | MTRS | MDTK | MČUČ | MTAN | MTAP |
|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|
| M20VS | 1.00  |       |      |      |      |      |      |      |      |      |      |      |
| M30VS | .47   | 1.00  |      |      |      |      |      |      |      |      |      |      |
| MKOT  | .25   | -.28  | 1.00 |      |      |      |      |      |      |      |      |      |
| MKUS  | .38   | .26   | .28  | 1.00 |      |      |      |      |      |      |      |      |
| MDPK  | .27   | .15   | .16  | .03  | 1.00 |      |      |      |      |      |      |      |
| MŠPA  | -.34  | -.05  | .19  | .30  | .16  | 1.00 |      |      |      |      |      |      |
| MSDM  | .55   | .34   | -.36 | .23  | .38  | .25  | 1.00 |      |      |      |      |      |
| MTRS  | -.21  | .37   | -.09 | .14  | .25  | .21  | .32  | 1.00 |      |      |      |      |
| MDTK  | -.31  | -.08  | .19  | .19  | .14  | .14  | .31  | .14  | 1.00 |      |      |      |
| MČUČ  | .43   | .05   | .19  | -.25 | .05  | -.25 | -.13 | -.23 | -.64 | 1.00 |      |      |
| MTAN  | .35   | .14   | -.22 | .28  | .12  | -.18 | -.03 | -.51 | -.07 | .52  | 1.00 |      |
| MTAP  | .27   | -.03  | .11  | .27  | .16  | -.22 | .10  | -.08 | -.05 | .25  | .28  | 1.00 |

Table 8 shows the intercorrelation matrix of the control group at the final measurement of motor skills. The motor tests of squats (MSQ) and deadlifts on the bench (MDLB) have the highest correlation, which is -.64.

## DISCUSSION AND CONCLUSION

The basic statistical parameters for assessing motor skills of the experimental and control groups, both at the initial and at the final measurement, indicate that there are no statistically significant deviations of results from normal distribution. The results of the tests that assess the participants' motor skills indicate that the distribution is positive. This is confirmed by the results of the distribution asymmetry (skewness) which does not exceed 1.00, which means that the tests are not difficult (up to +1.00) or easy (up to -1.00), but correspond to the surveyed participants and the value is below one. The homogeneity (kurtosis) indicates that there is a good sensitivity of the tests, because the obtained values are below 2.75. The results obtained regarding the motor skills do not deviate from the results of similar studies conducted in our country on this population of examinees, thus it is possible to apply the multivariate analysis methods in this research as well. Generalization of the results on the population from which the sample of these respondents was derived is thus possible.

The results of the presented intercorrelation matrices of the experimental group indicate that at the initial measurement (Table 5), the 30-meter run motor tests with a high start (M30HS) and 20-meter run with a high start (M20HS) have the highest correlation, which is .54, while at the final measurement (Table 6), the standing long jump motor tests (SLJMT) and standing triple jump motor test (STJ) have the highest correlation, which is .59.

The results of the displayed intercorrelation matrices of the control group indicate that at the initial measurement (Table 7), the motor tests of splits (MSP) and deep forward bend on the bench (MDFB) have the highest correlation, which is .50, while at the final measurement (Table 8), motor tests of squats (MSQ) and deadlift on the bench (MDLB) have the highest correlation, which is -.64.

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## INTERKORELACIJE MOTORIČKIH SPOSOBNOSTI UČENIKA MLAĐEG ŠKOLSKOG UZRASTA

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**Sažetak:** Autori u ovom radu predstavljaju interkorelacije motoričkih sposobnosti učenika mlađeg školskog uzrasta dobijene primenom i uticajem programa vežbanja koordinacije i brzine. Uzorak ispitanika činili su učenici osnovnih škola, uzrasta 9 i 10 godina ( $\pm 6$  meseci) u Nišu. Uzorak od 64 ispitanika podeljen je u dve grupe, eksperimentalnu i kontrolnu grupu, po 32 ispitanika u svakoj grupi. Ispitanici eksperimentalne grupe bili su uključeni u proces vežbanja koordinacije i brzine u dodatnoj nastavi fizičkog vaspitanja dok su ispitanici kontrolne grupe bili uključeni samo u redovnu nastavu fizičkog vaspitanja. U radu su predstavljeni osnovni statistički parametri ispitanika eksperimentalne i kontrolne grupe na inicijalnom i na finalnom merenju kao i interkorelacione matrice eksperimentalne i kontrolne grupe na inicijalnom i finalnom merenju motoričkih sposobnosti. Rezultati nam govore da na inicijalnom merenju eksperimentalne grupe najveću korelaciju imaju motorički testovi trčanje na 30 metara visokim startom (M30VS) i trčanje na 20 metara visokim startom (M20VS) a da na finalnom merenju najveću korelaciju imaju motorički testovi skok u dalj iz mesta (MSDM) i troskok iz mesta (MTRS). Kod kontrolne grupe na inicijalnom merenju najveću korelaciju imaju motorički testovi špagat (MŠPA) i duboki pretklon na klupi (MDPK) dok na finalnom merenju najveću korelaciju imaju motorički testovi čučnjevi (MČUČ) i dizanje trupa na klupi (MDTK).

**Ključne reči:** interkorelacije, motoričke sposobnosti, mlađi školski uzrast, koordinacija, brzina