

GENDER DIMORPHISM IN MOTOR ASSESSMENT AND SELF-ASSESSMENT CAPABILITIES OF STUDENTS OF THE FACULTY OF SECURITY SCIENCES

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ORIGINAL SCIENTIFIC ARTICLE

Abstract: On a sample of 147 students (78 male and 69 female), in the first year of the Faculty of Security Studies from Banja Luka, research was conducted with the aim of determining the differences between the achieved grade and the self-assessment of motor skills between male and female students, based on the results obtained by applying adequate tests for assessment and self-assessment of students motor status. Assessment of the motor abilities was performed through a battery of six tests: the maximum number of push-ups performed in 10 seconds (MSKL) - used to assess the dynamic strength of the arms and shoulder girdle, the standing long jump (MSDM) - used to assess the explosive power of the lower extremities, agility with with a club (MOKP) - used to assess the coordination of the whole body, the maximum number of trunk lifts performed in 30 seconds (MPTR) - used to assess the dynamic strength of the trunk, hand tapping (MTAR) - used to assess the frequency of arm movements, forwardroll – back roll - running (MKNT) – used to assess the motor ability of agility. For the self-assessment of motor skills, a constructed questionnaire with six answers was used: excellent (5), above average (4), average (3), below average (2), bad (1) and very bad (0). The respondents showed a good self-assessment of motor skills, where a statistically significant difference between male and female students was recorded only in the variable for self-assessment of dynamic arm and shoulder girdle strength. Male students showed better self-assessment in the variables for assessing dynamic arm and shoulder girdle strength, dynamic trunk strength, body coordination and hand movement frequency, while female students showed better self-assessment in variables for assessing explosive leg strength and agility. The authors recommendation is that the method of self-assessment of motor skills be implemented in the teaching process, when teaching the subject Special Physical Education 1, in order to improve awareness of the role and importance of the anthropological status of students and to encourage them to exercise regularly.

Keywords: students, motor abilities, assessment, self-assessment

INTRODUCTION

Police officers perform their daily tasks in very complex and unpredictable situations, which include physical conflicts with persons, whose resistance must be surmount, repel an attack on themselves or another person, and establish complete

control over their further behavior. A large part of official work and tasks takes place in populated areas with urban infrastructure, in open and closed spaces, where activities related to overcoming certain obstacles, sprints, fast movement between shelters, lateral movements, agility and reaction speed come to the fore, which most often characterize short sessions running, starting accelerations, changes in the form of movement with frequent changes of direction and direction of movement, which requires exceptional physical fitness from police officers. According to Marins, David, & Del Vecchio, (2019), the diverse nature and physicality of professional tasks require from police officers to be in above-average physical condition compared to the general population, in order to be able to successfully perform their work tasks (Streetman et al., 2022).

Special physical education (SPO), as a part of physical culture, is studied as a part of the teaching process of the Faculty of Security Studies through the basic, directed, and the situational training phase, with the main goal of psychosomatic improvement of students, which is reflected in the achievement and maintenance of basic and special knowledge and abilities (Blagojević, Dopsaj, & Vučković, 2006), whereby a well-defined educational and training treatment should transform general and special physical abilities and knowledge in accordance with the professional needs of workers of the Ministry of Internal Affairs and other agencies that deal with security affairs (Milošević, 1985; Milošević & Zulić, 1988; Milošević, Gavrilović, & Ivančević, 1988; Blagojević, 1996; Vučković, 2002; Dopsaj, Milošević, Blagojević, & Vučković, 2002). The program activities of the SPO belong to the polystructural acyclic activities characterized by a multitude of the technical elements, rich tactics of action, diversity of movements of the whole body and individual parts of it in different directions with variable strength and pace of action, where motor abilities have a dominant role in relation to other adaptive characteristics and abilities (Milošević, Mudrić, Jovanović, Amanović, & Dopsaj, 2005). The definition of educational and training process of the teaching subjects of the SPO comes from the need to transform the knowledge and motor skills of students, with the aim of improving them in accordance with the professional requirements of the employees of the Ministry of Internal Affairs and other agencies dealing with security affairs (Blagojević, 1996; Dopsaj et al., 2002), where the specificities of professional tasks require that students, as future members of the Ministry of Internal Affairs and other security agencies, must have motor skills at a higher level than the average civilian population. The processes of selection, guidance and monitoring in the field of SPO are unimaginable without information about the motor skills of students, from which it follows that for serious programming of kinesiology training operators, knowledge of the structure of motor skills, which are responsible for the efficiency of the motor behavior of students of the Faculty of Security Studies, is necessary when solving situational-motor problems of different levels of complexity in conceptual and situational conditions. In order to be able to fully adopt and apply the planned teaching content in the field of SPO, for students it is necessary to be involved in organized or individual training activities, which aim, in addition to acquiring certain knowledge, to improve the development of motor skills. Having in mind what we mentioned, we can conclude that well-developed motor skills and an adequate level of training in specific motor

tasks are one of the basic factors that ensure the conditions for success in the work of the employees of the Ministry of Internal Affairs and other agencies dealing with security affairs (Milošević, 1985; Blagojević et al., 2006; Dopsaj et al., 2002). Also, it is necessary to develop students awareness of the positive impact of physical exercise on the health status and improvement of the bodys motor skills. It is known that students who regularly practice physical exercise have a higher level of self-confidence, and that they act more rationally and make more efficient decisions in specific situations.

Motor skills are most often understood as the individuals properties that express his physical readiness to perform certain work and the ability to creatively express his personality, and which in experimental research are usually reduced to operationally defined latent dimensions derived from a system of measuring instruments. Bearing in mind mentioned above, we can conclude that the essence of motor skills consists of aspects of physical activities, which appear in moving structures and which can be described by the same parameter system. Previous research on the hierarchical functional model of motor skills (Zaciorski, 1975; Gredelj, Metikoš, Hošek, & Momirović, 1975; Đorđević, 1989; Kukolj, 1996), indicate that in the space of the first order, the hypothetical factors of the phenomenological model are defined, which include coordination, strength, endurance, speed, flexibility, precision and balance, while based on the research Kurelić et al., (1975), from the aspect of functional mechanisms in second-order space, defined hypothetical factors that include: a mechanism for structuring movement, a mechanism for regulating tone and synergistic regulation, a mechanism for regulating the intensity of excitation and a mechanism for regulating the duration of excitation. It is certain that the mentioned motor skills and their subsystems play a significant role in the performance of daily official duties and tasks, of varying levels of complexity, in solving problematic situations that are full of uncertainty and that require police officers to quickly solve the problems that have arisen. In order to determine the state of motor skills of students, it is necessary to apply tests with the good metric characteristics, which are objective, reliable, valid, calibrated, sensitive and economical. In addition to the above, the state of motor skills can also be assessed using the self-assessment method. Sporiš, Šiljeg, Mrgan, & Kević, (2011), state in their work that self-assessment contributes to the self-actualization of the individual, who thereby additionally builds awareness of his values, physical abilities and his own body. In their work, the same authors also state that a large number of authors believe that the ability to self-assess depends on the level of self-confidence and involvement of respondents in physical activity programs. The results of previous research (Eccles, Wigfield, Rena, Blumenfeld Harold, & Phyllis, 1993; Marsh, 1993; Crocker, Eklund, & Kowalski, 2000; Jürimäe & Rego, 2002; Raudesep & Liblik, 2002; Daley, 2002; Planinsec & Fosnaric, 2005; Bosnar & Vukmir, 2008), showed a high level of correlation on the overall development of the motor skills and self-assessment of the current state of motor skills, with special emphasis on endurance, strength, flexibility and morphological characteristics. The aim of this paper is to determine the relationship between the self-assessment of motor skills of students of the Faculty of Security Studies and the results of motor skills obtained based on the application of adequate tests for assessing the motor

status of students, as well as to determine the difference between male and female students in self-assessment of motor skills. The assumption of the research is that the differentiation of students according to gender will project certain differences in the self-assessment of motor skills. The obtained results of the self-assessment of motor skills will enable the students of the Faculty of Security Studies, a more objective and realistic assessment of their own abilities and knowledge, which could contribute to increasing the quality of the teaching process in the adoption and application of the program contents of the SPO, in solving problematic situations of different levels of complexity, with whom the graduated students will meet when performing official duties and tasks.

RESEARCH METHODOLOGY

The research was conducted as part of the Special Physical Education 1 course, with first-year students of the Faculty of Security Studies, during the summer semester of the 2021/2022 school year. The test of motor skills was carried out in the Athletic Hangar of the Faculty of Physical Education and Sports, University of Banja Luka and on the athletics track of the Borac football club within the City Stadium in Banja Luka. Seven days before the motor skills test, the students used a self-assessment questionnaire to anticipate their abilities in the explosive strength of the lower extremities, dynamic strength of the arms and shoulder girdle, dynamic strength of the trunk, coordination, agility and frequency of hand movements. Likert scale methodology and contained six possible answers: excellent (5), above average (4), average (3), below average (2), bad (1) and very bad (0). When filling out the questionnaire of self-assessment variables for the assessment of motor abilities, the normative status of the numerical symbols of each manifest variable for the assessment of motor abilities was explained to the students, along with a table with norms and grades for the assessment of motor abilities.

Sample of respondents

The sample consisted of 147 respondents of both sexes (78 men and 69 women, clinically healthy, without morphological aberrations), first-year students of the Faculty of Security Studies, University of Banja Luka, aged between 19.73 ± 1.3 years. The basic anthropomorphological indicators of the male respondents were: body height 182.23 ± 6.25 cm, body weight 81.73 ± 10.67 kg and body mass index 24.59 ± 2.80 kg/m², while the basic anthropomorphological indicators female respondents were: body height 169.84 ± 5.58 cm, body weight 60.65 ± 5.66 kg and body mass index 21.06 ± 1.72 kg/m². Given that all respondents successfully passed the candidate selection process for enrollment at the Faculty of Security Studies, which in addition to general success included a health examination and motor skills check, the sample can be considered relatively homogeneous in terms of the quality of health status and level of physical fitness. All subjects were familiar with the testing protocol and participated in the testing voluntarily. It should be noted that during the semester, all respondents regularly attended classes in the course Special Physical Education 1, with a weekly workload of one hour of theoretical lectures and four hours of practical lectures with exercises.

Sample of variables

A battery of six tests was used to assess the motor skills of the subjects, which are used as tests to assess the motor skills of students when enrolling at the Faculty of Security Studies: long jump from a standing position (MSDM), used to assess the explosive power of the lower extremities, the maximum number of lifts performed in 30 seconds (MPTR) – used to assess the dynamic strength of the upper body, arm tapping (MTAR) – used to assess the frequency of arm movement, the maximum numbers of push-ups performed in 10 seconds (MSKL) – used to assess the dynamic strength of the arms and shoulder girdle, agility with a stick (MOKP) – used to assess coordination, forward roll- reverse roll-running (MKNT) – used to evaluate agility. The mentioned tests contain the necessary metric characteristics with a clearly defined protocol and conditions of application and are an integral part of the structure of the entrance exam when checking motor skills as a part of the selection process of candidates for the enrollement at the Faculty of Security Studies. In addition to the above, the same tests are also conducted as part of the pre-examination requirements of students from the subject Special Physical Education 1, where all students must successfully meet the passing level in the motor skills status check, in order to be able to take the theoretical part of the exam.

Data processing methods

All the data was processed using the procedures of descriptive and comparative statistics. From the perspective of of descriptive statistics, measures of the central tendency (arithmetic mean) and measure of dispersion (standard deviation) were calculated for each variable, while the Kolmogorov-Smirnov test was used to test the normality of the distribution of the results. To determine the difference in the variability of individual variables between men and women, Students T-test was used for independent samples, while Students T-test was used to determine the difference between the achieved grades, related to the assessment of motor skills and the level of self-assessment of motor skills for the male and female groups of respondents, – test for dependent samples. Statistical data processing was performed on a Pentium 4 PC using the statistical software program SPSS Statistics 17.0 (Hair, Anderson, Tatham, & Black, 1998).

RESULTS

Table 1 shows the descriptive parameters of the results of the variables for the assessment of the motor skills for the male and female groups of respondents, obtained during the test of the motor skills.

Table 1 Results of the motor skills of male and female respondents

Groups		MALE			FEMALE			
Variables	Number of respondents	Average value	Deviation from the average value	KS Significance	Number of respondents	Average value	Deviation from the average value	KS Significance
MSDM	78	230.96	21.93	0.60	69	187.27	15.51	0.56
MSKL	78	12.85	2.77	0.03	69	3.95	3.96	0.00
MPTR	78	29.76	4.73	0.09	69	27.55	3.75	0.28
MOKP	78	6.02	1.58	0.03	69	5.75	1.13	0.30
MKNZ	78	6.05	0.51	0.75	69	6.80	0.52	0.42
MTAR	78	54.57	3.51	0.39	69	51.72	3.14	0.24

Legend: MSDM – standing long jump, MSKL – maximum number of push-ups in 10 seconds, MPTR – maximum number of trunk lifts in 30 seconds, MOKP – agility with the stick, MKNZ – roll forward-reverse roll – running, MTAR – hand tapping.

It is evident from the table that the results of descriptive statistics at the level of selected subsamples are well grouped and that there are no major deviations from the mean values of the results. The increased values of the standard deviation for the assessment of the explosive strength of the legs indicate an increased variability of the results around the arithmetic mean, but considering the sample size, we can consider this phenomenon to be normal. The results of the Kolmogorov-Smirnov test for the analysis of the normality of the schedule, show a normal distribution of results in the male group of subjects for four variables for assessing motor skills, while for the variables the maximum number of push-ups in 10 seconds (MSKL) and agility with a club (MOKP), a recorded deviation from normal distribution of results. When it comes to the results of female subjects, five variables have a normal distribution of results, while only the variable maximum number of push-ups in 10 seconds (MSKL) does not have a normal distribution of results.

Table 2 shows the results of the motor skills assessment for the male and female groups of respondents, obtained during the motor skills test.

Table 2 Results of the assessment of motor abilities of the male and female respondents

Groups		MALE			FEMALE			
Variables	Number of respondents	Average value	Deviation from the average value	KS Significance	Number of respondents	Average value	Deviation from the average value	KS Significance
OMSDM	78	1.96	1.72	0.00	69	1.82	1.40	0.04
OMSKL	78	3.64	1.33	0.00	69	1.04	1.60	0.00
OMPTR	78	3.91	1.21	0.00	69	3.78	1.07	0.00

OMOKP	78	3.20	1.38	0.00	69	4.18	1.07	0.00
OMKNZ	78	3.19	0.85	0.00	69	3.20	0.83	0.00
OMTAR	78	3.97	0.85	0.00	69	4.02	0.72	0.00

Legend: OMSDM – standing long jump assessment, OMSKL – assessment for the maximum number of push-ups in 10 seconds, OMPTR – assessment for the maximum number of trunk lifts in 30 seconds, OMOKP – assessment for the agility with the stick, OMKNZ – assessment for the forward roll-reverse roll-running OMTAR – assessment for the hand tapping.

The obtained results of the motor skills assessment showed a statistically significant deviation of the results for all variables for the assessment of motor skills. Based on the value of the results of the Kolmogorov-Smirnov test, for male and female subjects, all variables for the assessment of motor skills showed a deviation from the normal distribution of the results, which points to a large dispersion of the achieved grades.

Students T-test for dependent samples was used to assess the difference between the results achieved and the self-assessment of motor skills for male and female subjects (Table 3).

Table 3 The difference in the achieved results between the assessment and the self-assessment of the assessment of motor abilities for the male and female groups of respondents.

Groups	MALE				FEMALE			
	Number of respondents	Average value	Deviation from the average value	Two-way significance	Number of respondents	Average value	Deviation from the average value	Two-way significance
OMSDM	78	1.96	1.72	0.00	69	1.81	1.40	0.00
SOMSDM	78	2.51	1.58		69	2.21	1.25	
OMSKL	78	3.64	1.33	0.01	69	1.04	1.60	0.00
SOMSKL	78	3.97	1.06		69	1.53	1.52	
OMPTR	78	3.91	1.21	0.64	69	3.78	1.07	0.33
SOMPTR	78	3.84	1.04		69	3.62	0.95	
OMOKP	78	3.20	1.98	0.01	69	4.18	1.07	0.00
SOMOKP	78	2.89	1.15		69	3.13	1.31	
OMKNZ	78	3.19	0.85	0.02	69	3.20	0.83	0.82
SOMKNZ	78	3.41	1.01		69	3.17	1.12	
OMTAR	78	3.97	0.85	0.64	69	4.02	0.72	0.11
SOMTAR	78	3.92	0.89		69	3.82	1.02	

Legend: OMSDM – standing long jump assessment, SOMSDM – standing long jump score self-assessment, OMSKL – assessment for the maximum number of push-ups in 10 seconds, SOMSKL –self-assessment of the score for the maximum number of push-ups in 10 seconds, OMPTR – assessment for the maximum number of trunk lifts in 30 seconds, SOMPTR – self-assessment of the score for the maximum number of trunk lifts, OMOKP – assessment for agility with the, SOMOKP – self-assessment of

the score for agility with the stick, OMKNZ – assessment for the roll forward-reverse roll-running, SOMKNZ – self-assessment of the score for forward roll-reverse roll-running, OMTAR – assessment for the hand tapping, SOMTAR – self-assessment of the score for the hand tapping

In the male group of respondents, the smallest deviation between the achieved rating and the self-assessment of the level of motor skills was recorded in the variables of hand tapping (MO=3.97; MSO=3.92) and the maximum number of trunk lifts in 30 seconds (MO=3.91; MSO=3.84), in which students, achieved better grades in the motor skills test than in the self-assessment and in which there was no statistically significant difference between the achieved grade and the self-assessment of the achieved results. Also, a better evaluation of the achieved results compared to the self-assessment was achieved by the students in the variable of dexterity with the bat (MO=3.20; MSO=2.89). In terms of variables long jump (MO=1.96; MSO=2.51), maximum number of push-ups in 10 seconds (MO=3.64; MSO=3.97) and roll forward-reverse roll-running (MO=3.19; MSO=3.41), recorded is a statistically significant difference between the achieved grade and the self-assessment of the motor skills assessment, in which case the students achieved lower grades on the motor skills test than the self-assessment of the motor skills assessment. With the mentioned variables, the students predicted a higher grade for themselves by predicting their own abilities.

In the female group of respondents, the smallest deviation between the achieved grade and the self-assessment of motor skills was recorded in the variables forward roll - back roll - running (MO=3.20; MSO=3.17), the maximum number of trunk lifts in 30 seconds (MO=3.78; MSO=3.62) and hand tapping (MO=4.02; MSO=3.82), in which the female students achieved better grades based on the achieved results in the motor skills test, than in the self-assessment of the same and in which there was no statistically significant difference between the achieved grade and the self-assessment of the achieved results. Female students achieved a better assessment of the achieved result in relation to the self-assessment and in the variable of agility with a bat (MO=4.18; MSO=3.13), where a statistically significant difference was recorded between the achieved assessment and the self-assessment of motor abilities. A statistically significant difference between the evaluation of the achieved results and the self-assessment was also recorded for the variables: jump distance from the standing position (MO=1.81; MSO=2.21) and the maximum number of push-ups in 10 seconds (MO=1.04; MSO=1.53), in which female students predicted of their own abilities predicted a higher grade for themselves.

Students T-test for independent samples (Table 4) was used to assess the difference in the results of the assessment and self-assessment of motor skills between the male and female groups of respondents.

Table 4 Results of Students T – for the independent samples of results obtained in the assessment and self-assessment of the assessment of motor skills between male and female groups of respondents.

Variables	Gender of the respondents	ASSESSMENT OF MOTOR SKILLS			SELF-ASSESSMENT OF MOTOR SKILLS			
		Average value	Deviation from the average value	Two-way significance	Gender of the respondents	Average value	Deviation from the average value	Two-way significance
MSDM	Male	1.96	1.72	0.60	Male	2.51	1.58	0.21
	Female	1.82	1.40		Female	2.21	1.25	
MSKL	Male	3.64	1.33	0.00	Male	3.97	1.07	0.00
	Female	1.04	1.60		Female	1.53	1.52	
MPTR	Male	3.91	1.21	0.45	Male	3.84	1.04	0.18
	Female	3.76	1.07		Female	3.62	0.95	
MOKP	Male	3.20	1.38	0.00	Male	2.89	1.15	0.25
	Female	4.18	1.07		Female	3.13	1.31	
MKNZ	Male	3.19	0.85	0.94	Male	3.41	1.01	0.18
	Female	3.20	0.83		Female	3.17	1.12	
MTAR	Male	3.97	0.85	0.67	Male	3.92	0.89	0.54
	Female	4.02	0.72		Female	3.82	1.02	

Legend: MSDM – standing long jump, MSKL – maximum number of push-up in 10 seconds, MPTR – maximum number of trunk lifts in 30 seconds, MOKP – agility with the stick, MKNZ – forward roll-reverse roll-running, MTAR – hand tapping

Based on the obtained results, it is evident that there is no statistically significant difference ($p=0.60$) in the assessment of the achieved results, in the variable for assessing the explosive power of the lower extremities (MSDM). The average score for men is 1.96, and for women 1.82. During the self-assessment of the grade for the same variable, men (2.51) and women (2.21) performed quite well in the self-assessment of the achieved grade. Although both groups of subjects evaluated the achieved results more in relation to the grade achieved, there is no statistically significant difference in the self-assessment ($p=0.21$) of the achieved results.

Based on the achieved results, men achieved a better rating for the variable for assessing the dynamic strength of the arms and shoulder girdle (MSKL) and it is statistically significant at the level ($p=0.00$). For men, the average achieved grade is 3.64, and for women it is 1.04. Both men (3.97) and women (1.53) gave significantly higher values of the self-assessment grade in relation to the achieved grade in the same test. There is a statistically significant difference between the grade and the self-assessment grade ($p=0.00$).

Men (3.91) and women (3.76) achieved similar values for the dynamic trunk strength assessment variable (MPTR). The achieved results are not statistically

significant ($p=0.45$). Both men (3.84) and women (3.62) showed a good self-assessment of the same variable, without a statistically significant difference ($p=0.18$).

Unlike the previous test, men achieved a lower score (3.20) than women (4.18) in the body coordination assessment variable (MOKP). The same is statistically significant at the level ($p=0.00$). When self-assessing the achieved grade for the above-mentioned variable, there is no statistically significant difference ($p=0.25$) between men (2.89) and women (3.13).

The closest assessment based on the achieved results was achieved by men and women with the agility assessment variable (MKNZ). The achieved results of men (3.19) and women (3.20) are not statistically significant ($p=0.94$). Both men (3.41) and women (3.17) gave a fairly good self-assessment of the achieved grade for this variable, and it is not statistically significant ($p=0.18$).

Men (3.97) and women (4.02) achieved similar evaluation results for the variable for assessing the frequency of hand movements (MTAR), without statistical significance ($p=0.67$). Both men (3.92) and women (3.82) gave a good self-assessment of the achieved grade in relation to the open grade in the motor skills test, without statistical significance ($p=0.54$).

DISCUSSION

The results obtained by the T-test for independent samples show that male and female students differ statistically significantly in the self-assessment of motor skills only in the variable maximum number of push-ups in 10 seconds (MSKL), while in the self-assessment of other motor skills no statistically significant difference was recorded between valorization and motor skills scores achieved between the male and female groups of respondents. In the overall results, female students achieved better evaluations of the achieved results in relation to the assessment of their own abilities in the variables of the maximum number of the body raises in 30 seconds (MPTR), agility with a stick (MOKP), roll forward - roll back - running (MKNZ) and hand tapping (MTAR), while they predicted a higher score for the variables long jump from a standing position (MSDM) and maximum number of push-ups in 10 seconds (MSKL). In the male group of respondents, students achieved better ratings of the achieved results compared to the assessment of their own abilities, for the variables maximum number of trunk lifts in 30 seconds (MPTR), agility with the stick (MOKP) and hand tapping (MTAR), while they predicted a higher rating for themselves for the variables long jump from a standing position (MSDM), maximum number of push-ups in 10 seconds (MSKL) and roll forward - roll back - running (MKNZ). From the above results, it is evident that both male and female students overestimated their abilities in the self-assessment of the explosive strength of the lower extremities and the dynamic strength of the arms and shoulder girdle, while they underestimated their abilities in the self-assessment of the dynamic strength of the trunk, body coordination and frequency of hand movements. In the self-assessment of agility, male students overestimated their abilities, while female students underestimated their abilities. The biggest discrepancy between the achieved grade and the self-assessment was recorded in the agility with the stick variable, where female students on the self-assessment

assigned themselves one grade less than the grade they received based on the achieved result, while male students assigned themselves half a grade less than the grade achieved at the test of motor skills. Given that the stick agility test is intended to assess the coordination of the whole body, which shows the ability to coordinate the movements of one's own body in handling the prop, whereby the movements of the parts of the body and the prop are coordinated, it is very important that the who performs the test has a good kinesthetic feeling, good movement control, spatial perception and concentration time, which requires the ability to coordinate the central nervous system and the muscular system in new circumstances, until the automation of movements has occurred. Bearing in mind the fact that during the performance of the test there are simultaneously phases related to the way of thinking about the movement itself in time and space, as well as the way of its interpretation, it can be said that this test represents a very complex motor ability, which can be characterized as one form of motor intelligence. Since cognitive abilities and conative characteristics play a very important role in the stick agility test, in addition to motor skills, it can be assumed that due to a reduced level of self-confidence, the students were quite insecure about forming attitudes towards their own abilities, and that they evaluated their potentials when performing this test quite critically. Also, the reason for this self-assessment can be found in the fact that during the winter semester, not all students attended classes on the elective course Sports Skills in Safety, and that between the time of taking the entrance exam for admission to education and the beginning of the summer semester, when the students started with listening to classes from the subject Special Physical Education 1, a time period of eight months has passed, due to which a greater number of students most likely received a certain percentage of subcutaneous fatty tissue as ballast mass, which in a certain percentage could affect their self-assessment of motor skills. According to Sporiš et al., (2011), based on the results of previous research conducted by (Fox & Corbin, 1989; Sonstroem, Speliotis, & Fava, 1992), on a sample of boys and adolescent girls, it was concluded that boys almost always overestimate their abilities, while girls are often insecure and self-critical and therefore more realistic in their self-assessment of their motor abilities. Based on the results of this research, it is evident that male and female students showed a good ability to realistically judge their own possibilities in motor skills, which is most likely due to the participation in the assessment of motor skills achieved during the motor skills check as part of the selection process for enrollment at the Faculty of Security Studies. In addition to the above, during the winter semester, as part of the teaching process, a certain number of students attended classes from the optional subject Sports skills in safety, which covered content related to the improvement of more complex forms of movement, with the expected outcome of fully acquiring biotic motor skills and develop motor skills, which will have a positive effect on the easier application of specific knowledge and skills characteristic for the performance of official duties and tasks, which students as future workers in security jobs will encounter when solving problem situations of different levels of complexity, which require the application of an appropriate tool force, in order to overcome the person's resistance and establish control over his further behavior. During the summer semester, all students attended classes from

the subject Special Physical Education 1, where, in addition to learning and adopting simple and complex motor programs with the aim of applying them in practice, a certain part of the class was dedicated to the development of motor skills, which is why, according to the author's opinion, the continuous iteration of teaching contents that primarily contribute to the development of motor skills, probably resulted in a significant level of accuracy in the self-assessment of the total potential of one's own abilities in tests for the assessment of motor skills. This is supported by the researches of (Daley, 2002; Crocker, Eklund, & Kowalski, 2000), who in their research came to the conclusion that frequent participation in physical activities increases the ability to self-assess one's own capabilities. The reasons for the differences in the average ratings of self-assessment of motor skills in our sample can be attributed to the specifics of the age and gender of the respondents.

CONCLUSION

This is the first research that investigated the self-assessment of motor skills of students of the Faculty of Security Studies. For a certain number of variables for the assessment of motor skills, students showed an overestimated self-assessment of motor status, which can create excessive self-confidence in them, which is not accompanied by an appropriate status of motor skills, which creates an unrealistic picture of the state of their own capabilities, which can result in inadequate behavior when solving problem situations, which will require the application of physical strength, as an appropriate means of force, when overcoming the person's resistance and establishing complete control over his further behavior. The obtained results, in addition to showing the students ability to assess their capabilities, also indicate certain differences in self-assessment between the male and female groups of respondents, where a statistically significant difference was recorded between male and female students in the variable for self-assessment of the dynamic strength of the arms and shoulder girdle (MSKL), while with the other variables there is a certain difference that is not at the level of statistical significance. Male students showed better self-assessment in the variables for assessing arm and shoulder girdle dynamic strength (MSKL), trunk dynamic strength (MPTR), body coordination (MOKP) and arm movement frequency (MTAR), while female students showed better self-assessment in variables for assessing explosiveness leg strength (MSDM) and agility (MKNZ). Regardless of the mentioned differences in self-assessment results, both showed low ability in self-assessment of trunk dynamic strength (MPTR), body coordination (MOKP) and hand movement frequency (MTAR). In addition to modern measuring instruments and objective tests that are used to assess motor abilities, the authors suggest that the method of self-assessment of motor abilities be implemented in the teaching process, in the implementation of teaching content from the subject Special Physical Education 1, in order to improve awareness regarding the role and the importance of regular physical exercise and its impact on the anthropological status of students and the level of practical knowledge. From the above, it follows that during their education and professional training at the Faculty of Security Studies, students should be fully introduced to the role and importance of motor skills in performing official duties and tasks, as well as methods for their development. Students should also, through self-assessment of

motor skills, develop awareness and acquire certain knowledge about improving health status and motor skills, and through individual work, by applying physical exercise, improve their status, which in the future will have an effect on reducing sick leave and increasing work productivity in performance of official duties and tasks.

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