

Physical Abilities and Gender Differences: Binary Logic or Gender Dualism of the Police Organisation?

Radivoje Janković¹, Danijela Spasić², Nenad Koropanovski³, Dane Subošić⁴, Milivoj Dopsaj⁵, Goran Vučković⁶, Raša Dimitrijević⁷

The purpose of this paper is to investigate whether there are any differences between male and female police officers when performing a job-related fitness test, as well as to determine the individual level of specific strengths and motor abilities (hereinafter: SSMA) as an indicator of work ability. The research was conducted in Serbia on a sample of 111 respondents (40 female and 71 male). In order to determine the SSMA, this research applied the Obstacle Course test for assessing specific abilities of police officers (OC_{SAP01}). Three variables were observed during the test: time needed for the completion of the test (t_{SAP01}), maximum heart rate and capillary blood lactate concentration. On average, men completed the test statistically significantly more efficiently than women, i.e. by 10.3%. According to the percentile distribution of t_{SAP01}, 5% of women and 14.1% of men proved to be significantly above the average level of all tested respondents. However, based on test results, 11.3% of men and 47.5% of women needed to improve their SSMA in order to meet occupational requirements. The OC_{SAP01} test could be further used as one of the criteria that could help to further classify police officers for various types of police work according to their physical abilities. It could be used to assess the SSMA relevant for a particular job position according to individual merits and regardless of gender, which would provide the conditions necessary for achieving “equal opportunities” for women and thus do away with the system of binary logic and gender dualism of the police organisation as a context of masculine culture, which, *a priori*, excludes women by using physical abilities as the strongest argument in favour of maintaining the existing gender practice.

Keywords: police organisation, gender dualism, physical abilities, job-related fitness test

UDC: 351.741+ 796.012.1

1 Introduction

The specific nature of law enforcement jobs requires employees to be healthy, psychologically strong and physically fit, which is why physical abilities (hereinafter: PAs) play a significant role in the training period, as well as throughout their career (Sorka & Sawicki, 2014). There are two main reasons why police officers' PAs ought to be tested. The first one is related to health. It was demonstrated that throughout the years of active duty, a significant number of police officers (hereinafter: POs) undergo certain negative changes, such as an increased number of chron-

ic diseases, reduced physical fitness and considerable weight gain (Rossomanno, Herrick, Kirk, & Kirk, 2012; Sørensen, Smolander, Louhevaara, Korhonen, & Oja, 2000). Since these changes may potentially lead to the development of certain illnesses, adhering to physical activity may be vital for both health preservation and work ability (Boyce, Glenn, Schendt, Lloyd, & Edward, 2009). Therefore, it is of utmost importance that POs be occasionally tested for the purpose of assessing their physiological or general physical fitness (GPF), by means of tests designed to measure cardiovascular or health-related fitness (Bonneau & Brown, 1995). Furthermore, police organisations consider PAs to be one of the parameters for determining the level of employees' professional performance and competence.

¹ Radivoje Janković, Ph.D., Assistant Professor of Specialized Physical Education, University of Criminal Investigation and Police Studies, Serbia. E-mail: radivoje.jankovic@kpu.edu.rs

² Danijela Spasić, Ph.D., Associate Professor of Organization of the Police, University of Criminal Investigation and Police Studies, Serbia. E-mail: danijela.spasic@kpu.edu.rs

³ Nenad Koropanovski, Ph.D., Associate Professor of Specialized Physical Education, University of Criminal Investigation and Police Studies, Serbia. E-mail: nenad.koropanovski@kpu.edu.rs

⁴ Dane Subošić, Ph.D., Full Professor of Organization of the Police, University of Criminal Investigation and Police Studies, Serbia. E-mail: dane.subosic@kpu.edu.rs

⁵ Milivoj Dopsaj, Ph.D., Full Professor of Sports Sciences, Faculty of Sport and Physical Education, University of Belgrade, Serbia and Institute for Sport, Tourism and Service, South Ural State University, Russia. E-mail: milivoj.dopsaj@fsfv.bg.ac.rs

⁶ Goran Vučković, Ph.D., Full Professor of Specialized Physical Education, University of Criminal Investigation and Police Studies, Serbia. E-mail: goran.vuckovic@kpu.edu.rs

⁷ Raša Dimitrijević, Ph.D., Teacher, University of Criminal Investigation and Police Studies, Serbia. E-mail: rasa.dimitrijevic@kpu.edu.rs

Apart from being healthy and fit, POs are expected to be capable of meeting all occupational requirements, many of which require more than average physical fitness. Moreover, there are numerous activities that may be required in the course of problem solving, such as running to the place of an incident, making sharp turns and overcoming the opponent who could use or threaten to use cold weapons or firearms, and lastly, after seizing the suspect, lifting, dragging, pulling or pushing a person (Anderson, Plecas, & Segger, 2001; Arvey, Landon, Nutting, & Maxwell, 1992; Birzer & Craig, 1996; Lonsway, 2003). Since the abovementioned tasks might be extremely physically challenging, physical fitness is one of the key requirements for performing them successfully (Courtright, McCormick, Postlethwaite, Reeves, & Mount, 2013).

The criteria of physical competence, ability and strength, as preconditions for an efficient performance of law enforcement jobs, are used during the candidate selection process for the admittance to the police organisation (Dimitrijević, Koropanovski, Dopsaj, Vučković, & Janković, 2014; Lagestad & van den Tillaar, 2014). These criteria are simultaneously the strongest stereotypical argument for the disqualification of women, within or outside the scope of the police system. In the organisational and functional approach thus disposed, the distinctive features of a masculine culture and gender practice within police organisations is easily recognisable. It is generally held that objective anatomical and physiological differences between men and women cause women to have, on average, a lower level of PAs, particularly in terms of strength and endurance. Nevertheless, objective gender differences are not to be taken as a general predictor in the selection of candidates, nor are the results of physical ability testing to be generalised according to gender. The realisation of the innate potentials of male and female POs could be influenced by the structure and content of the selection process, as well as by the training and the manner of physical ability testing (Spasić, Đurić, & Mršević, 2015).

In this case, the empirical research used qualitative indicators with a view to proving the supposition that not all female POs are weaker than their male counterparts, and that their qualitative abilities and skills may be compatible with the specific requirements of those law enforcement jobs, which, *a priori*, do not set PAs as a predictor of successfulness and efficiency, i.e. as the dominant selection criterion (Lagestad & van den Tillaar, 2014).

2 Masculine Culture in the Police

For years, police work was considered a man's job. The police, as an organisational structure and a personnel system

entitled to use means of coercion (physical strength) in order to perform its duties, "strengthens" the gender practice based on unexamined assumptions, which support not only the beliefs of male and female roles, but also of their abilities and values (Rabe-Hemp, 2009: 115). However, contemporary police forces require that women and men work side by side exercising equal police powers and responsibilities (Kenneth, Robert, & Brown, 2011). Nevertheless, it is evident that there are anatomical and physiological differences between men and women creating distinctions in the morphology and physical ability (Astrand, Rodahl, Dahl, & Stromme, 2003; Boyce et al., 2009). Previous research on the police population showed that men were, on average, taller, had a larger body mass, higher percentage of muscle and lower percentage of fat tissue, and higher level of speed, strength and endurance (Lagestad & van den Tillaar, 2014; Yanovich et al., 2008). Having said that, the relationship between gender and the type of job within police organisations can be burdened precisely by heightening not only objective gender differences, which are biologically (anatomically, physiologically) conditioned, but also PAs developed on the basis of such differences (Anderson, Plecas, & Segger, 2001; Lonsway, 2003).

The key findings of the study conducted by Schuck et al. show that women do not consider physical strength to be the most significant indicator of efficiency in their job performance, and that not all men are stronger than women. The study shows that physical strength, as a factor of disqualifying women as a gender unequal to men, rapidly weakens as the career advances (Lockie et al., 2018; Schuck & Rabe-Hemp, 2005). Likewise, certain studies conducted in the USA investigated the attitudes of police women towards the use of physical force as a crucial activity of the police profession. The findings of these studies showed a marked discontent of female POs who perform typically masculine assignments in the police (Hoffman & Hickey, 2005; Rabe-Hemp, 2009).

Gender practice raises the question of gender efficiency in those moments, in which the only solution to resolving an incident appears to be the use of force, i.e. physical strength (Courtright et al., 2013). However, in this case, too, the desired level of police officers' PAs may be achieved by adequate selection, provided that it is gender-neutral, i.e. unburdened by the demands of masculine management. Formal obstacles arise in the very standards of the selection process: the demands related to height, weight and PAs for male and female candidates, grounded in the stereotype of physical strength as one of the essential prerequisites for a career in law enforcement, disregard the fact that between 80% and 90% of police interventions end without the use of force (Balkin, 1988).

3 Gender Perspective of the Police in Serbia

According to the data provided by the Human Resources Department, a total of 42,817 POs were employed by the Ministry of the Interior of the Republic of Serbia during the period of this research. Out of the total number of employees, 66% are uniformed POs (28,266 in total), while 34% of them are non-uniformed (plainclothes) POs (14,551 in total). According to the same source, women make up 22.7% (9,850) of the total number of employees at the Ministry (considering both uniformed and non-uniformed POs) (Spasić & Radovanović, 2019). The percentage of women in relation to the total number of employees as per organisational units within the police (having the status of uniformed authorised officers and authorised officers) is lower than the percentage of their male counterparts, and they are mostly employed in the following organisational units:

- Border police – 23%
- Criminal investigation – 22.3%
- Traffic safety – 15.8%
- Security unit protecting specific persons and facilities – 14.3% and
- General competence police – 11.6% (working as uniformed POs).

Women (working as uniformed authorised officers / authorised officers) make up 1.2% of the total number of employees in the special units of the Police Directorate headquarters (Special Antiterrorist Unit and Helicopter Unit), while 2.3% of them are employed in the Gendarmerie.

Pursuant to the Police Act, a structure of job positions was defined in accordance with the Act on the Internal Systematisation and Organisation of Job Positions in the Ministry of the Interior with Accelerated Years of Service (No. 01-3332/12-8 of 3 April 2012 and No. 01-1207/15-5 of 2 March 2015). After considering the gender aspect of the structure, the following conclusions may be drawn:

– Job positions with the status of uniformed authorised officers and authorised officers, which involve the exercise of police powers and the application of special means of coercion, are the positions characterised by the highest level of complexity and exposure to danger, which is why they require the highest level of physical fitness in the selection process, as well as continuous maintenance and advancement of PAs by means of regular training throughout the years of service. This applies particularly to the positions within the Special Antiterrorist Unit, as well as to the jobs performed by uniformed POs within special police units.

– In certain organisational units of the police, a very small number of women is assigned to operational positions,

precisely due to the fact that they did not pass the physical fitness testing, which was a key section of the selection process. Decades-long prejudice and stereotypes among police managers that women are incapable of meeting the requirements of the selection system, i.e. that women do not belong to the “elite male police units”, have created “invisible”, albeit realistic barriers and discriminatory obstacles for women’s entry into these units (Spasić et al., 2015).

4 Selection of Candidates for Police Work: Previous Research

The link between health and general work abilities on one side, and physical ability on the other is the main reason why PAs are one of the selection criteria, as well as one of the methods for assessing the work ability of a police officer (Courtright et al., 2013; Dimitrijevic et al, 2014; Orr, Ford, & Stierli, 2016). In performing police work, there are no differences either between the tasks performed by men and those performed by women, or in the occupational load they carry (Kukic et al., 2020). On the other hand, anatomical and physiological differences between men and women potentially lead to a lower level of certain PAs in the latter, thus begging the question whether the selection criteria and assessments for determining professional competence may have an unfavourable impact on female candidates (Lonsway, 2003; Jackson & Wilson, 2013). In other words, if the same job requires the application of the same standards, particularly when it comes to more physically demanding jobs, it may happen that women or senior officers fail to act properly in life-threatening situations (Jackson & Wilson, 2013; Strating, Bakker, Dijkstra, Lemmink, & Groothoff, 2010).

Throughout the years of active duty, there is a number of standardised physical ability tests aiming to assess employees’ strength and endurance, functioning as indicators of their level of professional performance and competence (Lagestad & van den Tillaar, 2014; Lockie et al., 2018). These tests strive to evaluate and improve specific strengths and motor abilities (SSMAs), which are important for accomplishing some of the core tasks of police work (Janković, Dopsaj, Dimitrijević, Savković, Vučković, & Koropanovski, 2015; Strating et al., 2010), while their results serve as predictors of efficiency in resolving critical incidents (Lockie et al., 2018). Some of the tests used for these purposes include the Police Officers’ Physical Abilities Test – POPAT (Anderson & Plecas, 2000), the Police Physical Competency Test – PCT (Strating et al., 2010), the Gender-Neutral Timed Obstacle Course – GeNOCT (Jackson and Wilson, 2013), the obstacle course for the assessment of specific abilities of POs – OC_{SAPOI}, etc (Janković et al., 2015).

Physical ability testing is an intrinsic part of the job selection process for POs, which may have an unfavourable impact on women, especially if one considers that selection criteria are not adjusted to gender specificities (Birzer & Craig, 1996; Lonsway, 2003). However, it has been established that a job-related fitness test result cannot be considered discriminatory, if it determines the Bone Fide Occupational Requirement (BFOR) or the Bone Fide Occupational Qualification (BFOQ) (Bonneau & Brown, 1995). Voluminous research has documented that the GPF may, at least to a certain degree, be predicted by health-related fitness tests (Lonsway, 2003; Rossomanno et al., 2012; Sörensen, 2005; Sörensen et al., 2000; Sorka & Sawicki, 2014), in which it is necessary to acknowledge the anatomical and physiological differences between genders that condition males to achieve better average scores than females (Arvey et al., 1992; Courtright et al., 2013). If this is the case, then the standards in GPF tests ought to be adjusted to each group (i.e. separate standards for females) in order to make such tests non-discriminatory (Lonswey, 2003). When PAs are set as one of the selection criteria for the performance of law enforcement jobs, bearing in mind that various studies confirm police women's physical strength to be lower in comparison with their male counterparts, wherefore some intend to be excluded from certain domains of the police work, physical training may bring about a change in gender practice. Hence, training could indeed have the potential of challenging the importance placed on physical strength, leading ultimately to the acknowledgement of women's abilities. As several studies have observed, not only can a training programme lead to significant improvement of PAs in both genders (Lagestad & van den Tillaar, 2014; Orr et al., 2016; Rossomanno et al., 2012), but it can also narrow gender differences. One such study was conducted on the members of the Israeli Army Ground Forces Headquarters. Before basic training (BT), men scored significantly higher than women. However, after 4 months of BT, the differences were reduced by up to 4% in each category, except for push-up performance, where the gap increased by 16.6%, and the abdomen endurance, which exhibited no gender difference (Yanovich et al., 2008).

In order to improve job performance in critical situations, aside from the general physical ability (GPA) development programmes, there are also programmes aiming at the improvement of SSMA. Within the scope of such programmes, students also learn martial arts, adjusted to their occupational requirements. Significantly, the success of their application largely depends on the GPF, primarily on muscle strength, the ratio between total muscle tissue mass and the percentage of muscle tissue (Kukic et al., 2020). Apart from the level of PAs and the mastery of martial arts, the successful implementation of defence tactics and arrest control techniques are directly related to the characteristics of the suspect. Namely,

when arresting a heavier belligerent offender, female officers (and smaller, lighter male officers) will need to overcome a larger relative resistance, meaning that such duties are gender independent. Therefore, aside from physical ability and skill, body size and composition, as well as occupational load, are all relevant factors for the outcome of a critical incident (Dawes, Lindsay, Bero, Elder, Kornhauser, & Holmes, 2017; Kukic et al., 2020).

In the process of assessing the PAs of men and women, police officers' individual abilities disregarding their gender ought to be taken into account. Gender neutrality provides objective conditions for overcoming gender dualism in the management of police organisations, meaning that the profile of a PO would meet the requirements of a workplace in terms of their PAs (Paoline & Terrill, 2004). Due to all of the above-mentioned reasons, the selection of candidates for police work aims to recruit individuals with adequate morphological characteristics and an advanced GPF level in comparison with the general population, whereas training helps improve these abilities and acquire the SSMA, all in the view of increasing work efficiency. Throughout work career, adequate functional performance tests aim at determining the level of development in the GPA and the SSMA, since these are indispensable for resolving critical incidents in an efficient manner (Dawes et al., 2017; Dimitrijević et al., 2014; Orr et al., 2016). However, studies have shown that women fail physical ability tests significantly more frequently than men (Birzer & Craig, 1996; Jackson & Wilson, 2013; Lonsway, 2003). Thus, the question which poses itself is: can setting the standards and norms for PAs adequate for performing police officer's job be non-discriminatory for women?

The stereotypically corroborated and prejudice-based masculine culture and gender dualism disqualify women in a police organisation in various ways. The initial level of functional gender disqualification involves physical (in)abilities, i.e. tests that can be an effective means of such practice. Thus, the aims of this study were to investigate if there were any differences between men and women during the performance of the OC_{SAPOL} test from the aspect of efficiency and its influence on metabolic-functional reactions in the body. Furthermore, according to the results achieved in the OC_{SAPOL} , the individual level of the SSMA was established, which could represent work abilities essential for resolving critical situations regardless of gender.

5 Methodology

The research was conducted at the Academy of Criminalistic and Police Studies and the Faculty of Sport and Physical Education in Belgrade during 2017. The conceptual

framework of gender practice in police organisations forms the foundation upon which the methodology of this research was based. Tests' preparation was based on the long-term experience in the process for selecting candidates for the performance of law enforcement jobs, while their verifiability and applicability confirmed the validity and justifiability of this approach, which bears a particular significance in terms of gender-sensitive practices and procedures. The quantitative approach enabled the exact measurement, analysis and objective assessment of the abilities of both genders, indicating that the empirical approach was largely liberated from gender stereotypes and prejudice.

5.1 Sample

A total of 111 respondents with the average age of 26.34 ± 5.25 participated in the study conducted in Serbia, out of which 36% (40) were women and 64% (71) were men. The respondents were selected by means of random sampling in relation to the population of police academy students and POs of general competence working in the city of Belgrade. Only those respondents who voluntarily accepted the invitation to participate in this research were tested. All respondents were informed of the purpose and methodology of the research and willingly agreed to participate in it. The average age was 25.1 ± 4.0 for women and 26.9 ± 5.6 for men. Out of the total number of women, 53% (21 women) were employed as POs of general competence, with an average of 4.4 years of service, while 47% (19 women) were third-year female students at the Academy of Criminalistic and Police Studies (ACPS). The male population consisted of 55% (39 men) of POs of general competence, with an average of 6.7 years of service and 45% (32 men) third-year male students of the ACPS. The basic morphological characteristics of female respondents were as follows: body height (BH) - 169.1 ± 4.4 cm, body weight (BW) - 60.5 ± 6.5 kg and body mass index (BMI) - 21.1 ± 1.5 kg/m²; while the characteristics of male respondents were: BH - 181.6 ± 5.5 cm, BW - 84.9 ± 10.1 kg and BMI - 25.7 ± 2.8 kg/m² (Table 1).

Table 1: Respondents' basic data

	No (%)	Age (years)	ACPS students	POs / years of service	Basic morphological characteristics		
					BH (cm)	BW (kg)	BMI (kg/m ²)
Women	40 (36%)	25.1 ± 4	19 (47%)	21 (53%) / 4.4	169.1 ± 4.4	60.5 ± 6.5	21.1 ± 1.5
Men	71 (64%)	26.9 ± 5.6	32 (45%)	39 (55%) / 6.7	181.6 ± 5.5	84.9 ± 10.1	25.7 ± 2.8

The sample was obtained by means of convenience sampling, by which the following limitations were taken into consideration:

- Testing of respondents already employed in the police – POs with less work experience were tested, with the average work experience of 4.4 years for women and 6.7 years for men. This approach was applied due to the fact that the highest standards of physical ability are required in the period between the age of 20 and 30, while the norms of physical ability testing decrease every 10 years;

- Testing of students – students were tested upon their completion of the third year of studies, when their training usually ends, thus confirming the competence in resolving incidents by using their PAs.

5.2 Testing Procedure

Testing procedure included measurement of the time needed to complete the task as an indicator of efficiency, i.e. the level of specific motor abilities, and the measurement of metabolic and functional indicators in order to determine the workload.

In this research, the OC_{SAPOL} job-related fitness test was used, since it is less time-consuming than other tests, which is in line with the findings applied during the revalidation of the POPAT, stating that the time of running during an incident in real circumstances is shorter and the segments related to combat should be reduced (Anderson et al., 2001).

The candidates performed the OC_{SAPOL} test presented in Figure 1. The test is conducted in the zone of anaerobic-lactate work and assesses specific physical tasks for POs, such as handling and overcoming obstacles while holding a gun, the use of a baton, self-defence techniques and the use of handcuffs.

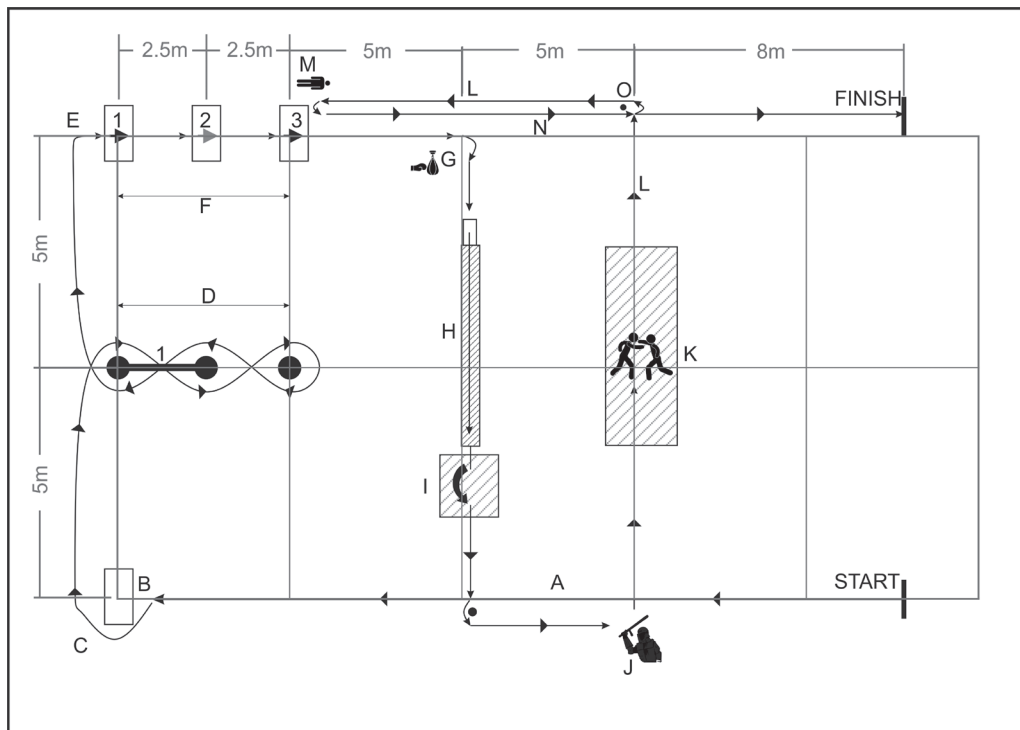


Figure 1. Obstacle course for the assessment of specific abilities of POs: A. Start at the sound signal and sprint 20 m in a straight line; B. Stop, take cover and reach for a firearm; C. While holding the gun in the firing position, leave the cover from the left; D. Pass the cones from the outer side and crawl underneath the rope set at a height of 55 cm in marked spots. Distance between the cones is 250 cm; E. Stop and take cover, change the magazine and put the firearm back into the duty belt; F. Three-part task: 1) Cross over a 110 cm-high obstacle; 2) Crawl beneath a 55 cm-high obstacle (F'); 3) Cross over a 110 cm-high obstacle. Distance between the obstacles is 250 cm; G. Approach the focus pad (held by an assistant), throw 4 punches and 2 kicks with maximum speed and intensity; H. Climb a 70 cm-high platform and cross a 120 cm-high and 500 cm-long balance beam; I. Leap on a mat with a forward roll; J. Approach a punching bag, take a baton, hit the bag 4 times with maximum efficiency and put the baton back on the duty belt; K. Reach the mats and defend against a predetermined attack, overcome the attacker using defence tactics, control and handcuff the suspect; L. Sprint 15 m at maximum speed, with a change of direction, towards the dummy (weighing 60 kilos); M. Reach the dummy; N. Carry the dummy (or drag it – optional for women) to a marked point (10 m); O. Safely place the dummy on the ground and run through the finish line.

The test followed a standard procedure, which requires all candidates to get acquainted with the tasks and the manner of testing. On the first day of preparation, respondents practiced performing each task separately, with a total duration of 30 minutes. At first, they completed the entire test in a slow pace and then with a high level of intensity. The next day, having adequately warmed up, respondents completed the course with maximum intensity. Thus, they became familiar with the tasks, load, duration and exertion, i.e. they became competent to perform the test. Having completed Test 1, respondents commenced their 15-minute recovery with slow jogging and walking, followed by a 5-minute stretching session. After 48 hours, i.e. the period of time enabling a full recovery, as well as the abovementioned warm-up procedure, respondents were tested wearing their sports equipment (sweatshirts, sweatpants and sneakers) and a duty belt with a service gun, baton and handcuffs. The following variables were measured: the efficiency of performance observed through the time necessary for the completion of the OC_{SAPOL} test, lactate concentration in capillary blood and maximum heart rate (Janković et al., 2015).

5.3 Measuring Obstacle Course Completion Efficiency for Assessing Police Officers' Specific Strengths and Motor Abilities

The time necessary for field test completion (t_{SAP01}) was measured with a computer system for physical ability testing – *Physical Ability Test 02* (PAT 02), which consists of a data acquisition device, a set of power cords and cables, application software and running sensors (UNO-LEX, NS, Serbia). Respondents activated the chronometer by passing the first sensor and deactivated it by passing the sensor at the end of the field test.

5.4 Measurement of Metabolic and Functional Indicators

Two parameters were used to assess the metabolic and functional indicators of physiological exertion (Astrand et al, 2003):

1. Maximum heart rate (HR_{max}), expressed in beats per minute (bpm), as a functional exertion of the cardiovascular system measure, and
2. Lactate concentration in capillary blood (La_s), expressed in millimoles per litre (mmol/L), as a metabolic acidosis measure.

The maximum heart rate was measured with the SIGMA PC 15 heart rate monitor (Sigma Electro GmbH, Germany). For measuring the lactate concentration, a sample of 0.7 μ l of capillary blood was extracted from a finger in the fifth minute of recovery. The sampling of capillary blood was conducted by means of a *Unistik 3 Comfort* sterile disposable lancet (Owen Mumford, Ltd, UK). The lactate concentration was determined by using a portable lactate analyser (*Lactate Plus NOVA biomedical, USA*) and applying a biosensor method based on lactate oxidation (*Lactate Methodology - Lactate oxidase biosensor*) (Hart, Drevets, Alford, Salacinski, & Hunt, 2013).

5.5 Statistical Analysis

All data were analysed using descriptive statistics in order to calculate the basic parameters of the central tendency and dispersion of data: arithmetic mean (mean), standard deviation (SD) and coefficient of variation (cV%). The regularity of result distribution was determined by applying the Kolmogorov-Smirnov non-parametric test (KS test). The general variability between the groups was determined by the multivariate analysis of variance (MANOVA). The statistical significance was defined at 95 percent probability, i.e. at the level of 0.05. Individual values of the t_{SAP01} of all respondents were analysed by determining the percentile distribution. The results are presented in the below Table by the frequency of the 10th, 25th, 50th, 75th and 90th percentile. The relation of variables used to determine the prediction was obtained by means of linear regression (Hair, Anderson, Tatham, & Black, 1998). The entire statistical analysis was conducted by using the IBM SPSS® software package for Windows, R. 22.0.

6 Results

Basic descriptive indicators of all observed variables and the determined statistical significance of their differences between women and men are presented in Table 2.

The KS test results (t_{SAP01} , HR_{max} and La_s) of male respondents are as follows: 0.061, $p=0.200$, 0.068, $p=0.200$ and 0.061, $p=0.200$, respectively; while the results of female respondents are: 0.072, $p=0.200$, 0.106, $p=0.200$ and 0.116, $p=0.185$, respectively. The results indicate a regular distribution in relation to the hypothetically ideal and general data validity. Considering the fact that the CV% for the t_{SAP01} is 11.1%, 3.8% for HR_{max} and 17.5% for La_s , i.e. below 30% for each of the variables, the results may be considered as homogenous and interpreted objectively on a general level (Figures 2, 3 and 4).

Table 2: Basic descriptive indicators showing the performance efficiency of the OC_{SAP01} test and the metabolic and functional indicators of physiological exertion

	Men N = 71 (64%)				Women N = 40 (36%)				Total N = 111	
	Mean	SD	Min	Max	Mean	SD	Min	Max	Mean	SD
t_{SAP01} (s)	90.34*	8.85	69.51	115.08	99.65*	10.48	75.04	118.58	93.70	10.43
La_s (mmol)	11.97*	2.20	7.1	16.7	10.71*	1.27	8.4	15.3	11.52	2.01
HR_{max} (bpm)	184.60	7.17	167	201	185.08	6.76	168	200	184.77	6.96

* Significant difference between men and women, $p < 0.01$.

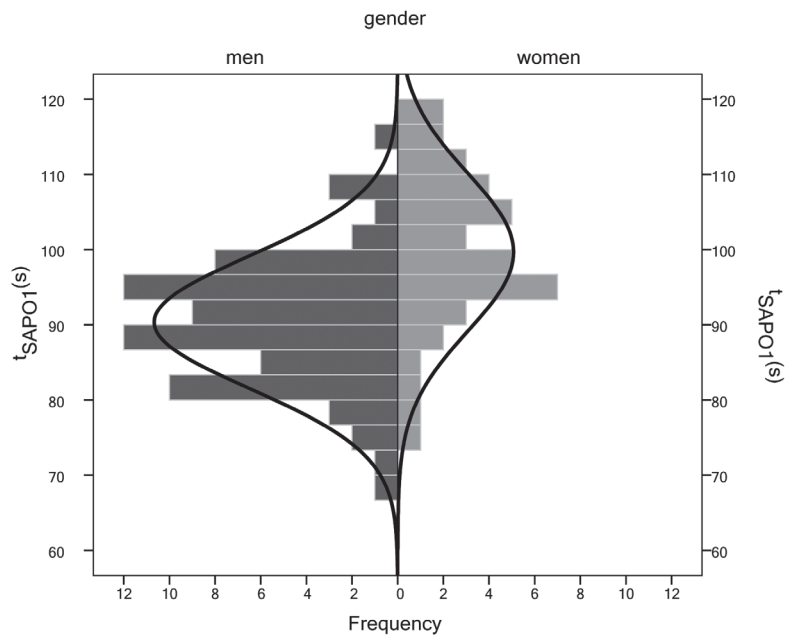


Figure 2: Distribution of the t_{SAPO1} results

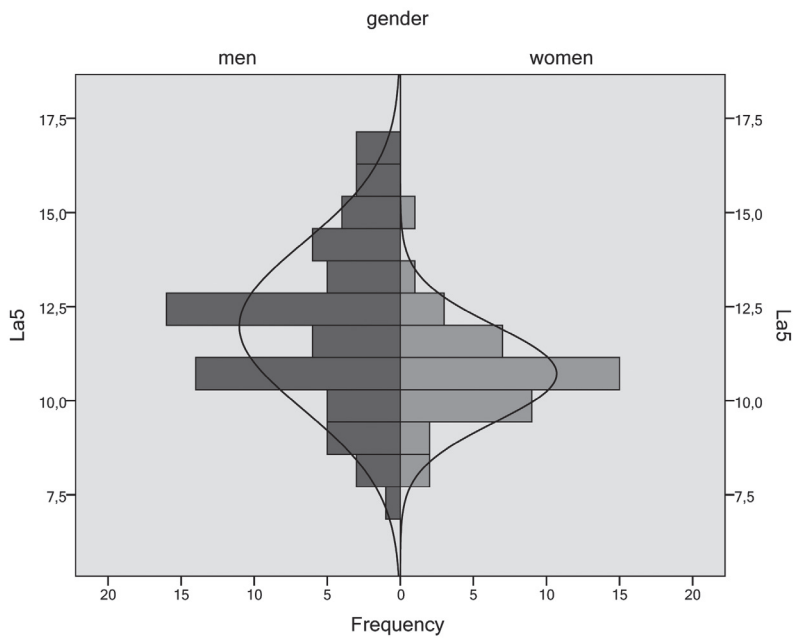


Figure 3: Distribution of the La_5 results



Figure 4: Distribution of the HR_{MAX} results

The results of the study show that there is an overall statistically significant difference between the observed groups at the level of Wilks' Lambda of 0.761 ($F = 11.223, p < 0.001$). A statistically significant difference was determined in the t_{SSP1}

($F = 24.736, p < 0.001$) and the La_5 ($F = 11.095, p = 0.001$). In the HR_{max} , no statistically significant difference was found ($F = 0.125, p = 0.724$) (Figure 5).

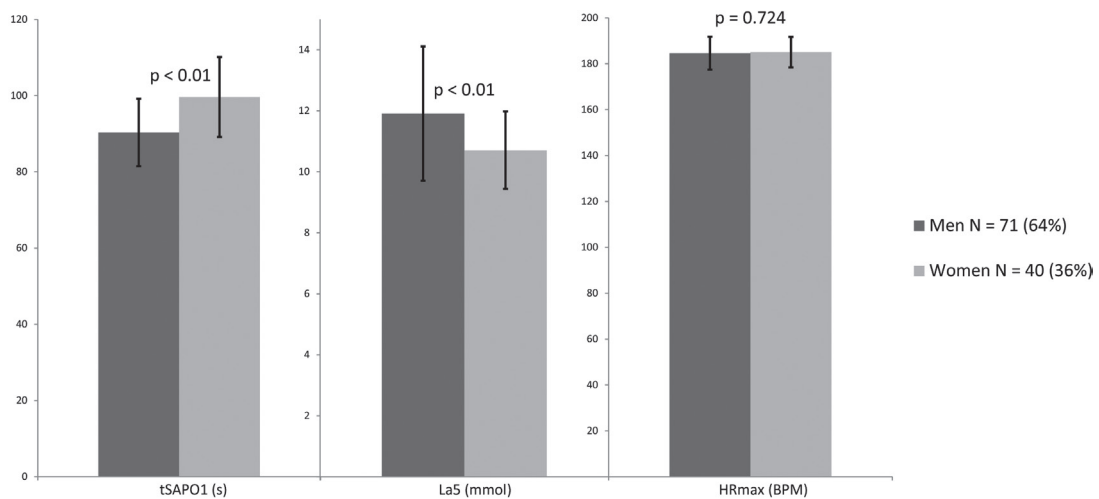


Figure 5: The difference between males and females in the t_{SAPO1} , La_5 and HR_{max}

The results show that 5% of women and 14.1% of men are above the 90th percentile. Also, 5% of women and 19.7% of men are between the 90th and the 75th percentile, whereas 31% of men and 15% of women were in the range from the 50th to the 75th percentile. In the range between the 25th and the 10th percentile, there are 23.9% of men and 27.5% of women. Finally, it was determined that 11.3% of men and 47.5% of women were below the 10th percentile (Table 3).

similar level. Previous studies had found that the standard time required for the completion of the POPAT is the same for both men and women. The test must be completed within 4 minutes and 15 seconds, and men completed it statistically significantly faster, by 14.1% (Anderson & Plecas, 2000). Similarly, the average PCT completion time for both genders is 3 minutes and 23 seconds, and men complete the test faster by 11.7% (Strating et al., 2010). Finally, the cut-off score for the GeNTOC being

Table 3: Percentile indicators of the OC_{SAP01} performance efficiency

Percentiles	t _{SAP01} (s)	Women		Men	
		N	%	N	%
90	81.34	2	5	9	12.7
75	86.93	2	5	14	19.7
50	93.86	6	15	23	32.4
25	99.68	11	27.5	17	23.9
10	108.89	19	47.5	8	11.3

The results of a linear regression with defined coefficients and a predictive equation are shown in Table 4.

3 minutes and 45 seconds regardless of gender, the results of women as compared to men were weaker by 11.1% (Jackson & Wilson, 2013).

Table 4. Prediction of the tSAP01 results in relation to the BMI based on a linear regression

Model		Unstandardised Coefficients		t	p	Equation
		B	Std. Error			
Men	(Constant)	70.817	9.321	7.598	0.000	tSAP01 = 70.817 + 0.759 · BMI
	BMI	0.759	0.360	2.108	0.039	
Women	(Constant)	68.435	23.679	2.890	0.006	tSAP01 = 68.435 + 1.480 · BMI
	BMI	1.480	1.120	1.321	0.194	

7 Discussion

The results of the MANOVA show that men's completion of the test was statistically significantly more efficient than that of their female counterparts by 9.3 seconds (10.3%). Likewise, the former's La₅ was higher by 1.2 mmol/L (11.2%) in comparison with the latter's. On the other hand, there was no statistically significant difference in the HR_{max}, which was over 180 bpm for the respondents of both genders (Table 2). After comparing the results achieved by men and women in job-related tests, it was found, even though the completion of the OC_{SAP01} test takes less time than the POPAT, PTC and GeNTOC, that the percentage variation between the efficiency of men and women was at a

The results of the research presented herein show that both men and women completed the OC_{SAP01} test in a time interval that corresponds to the zone of maximum and sub-maximum physical exertion, when the work energy is obtained predominantly from anaerobic-lactate mechanisms. After the test, the measured La₅ was significantly higher than the border value of anaerobic threshold, which is 4 mmol/L, while the HR_{max} was at the level above 95% in relation to the hypothetical physiological maximum (Astrand et al., 2003; Hart et al, 2013). Notwithstanding the fact that men generally perform the OC_{SAP01} test statistically significantly faster and exhibit higher efficiency, the performance of the tasks induces high physical fatigue in the respondents of both genders, which is corrobo-

rated by the measured values of the La_3 and HR_{max} . Namely, the fact that the La_3 in men was higher than in women was only to be expected. The reason could lie in the fact that, in muscle fibres type I, exercise-induced glycogen reduction is smaller in women than in men. Therefore, the lactate content in type I fibres is lower in women after the same intensive strain (Esbjörnsson-Liljedahl, Sundberg, Norman, & Jansson, 1999). In addition, previously conducted tests, such as the 800 m race (Lacour, Bouvat, & Barthélémy, 1990) and the Wingate test, had also confirmed that men had higher lactate concentration in capillary blood after test completion (Gratas-Delamarche, Le Cam, Delamarche, Monnier, & Koubi, 1994).

Evidently, there is a physiological difference between men and women, resulting in the latter being potentially limited in exhibiting PAs that pertain to lower muscle mass, aerobic and anaerobic capacities, and a higher percentage of fat, compared to those of men (Arvey et al., 1992; Lockie et al., 2018; Yanovich et al., 2008). All of the abovementioned elements affect the performance of the field tasks, hence the significance of job-related performance tests for determining the POs. It was established that during the performance of the Illinois agility test, men had better scores compared to women by approximately 15%. However, when respondents perform the test with an occupational load weighing 10 kg, the difference increases and amounts to approximately 19%. Furthermore, the results suggest that women, who are more muscular, performed better at these tests. The results also showed that officers, who are stronger and more powerful, may have better body composition (i.e. more muscles and less fat). Accordingly, they may have a better potential to perform the PAs assessment tests. Finally, the results could suggest that body composition and the GPA, possibly even more so than gender, may explain the performance results of POs (Orr et al., 2019; Kukic et al., 2020). Based on the results of predictive statistics, it was determined that the increase of the BMI in both genders has a negative effect on the t_{SAPO1} . Presumably, the adverse effect of the BMI could be a corollary of the total body mass increase, at the expense of the fat component. Hence, it is understandable that POs of both genders achieve weaker results on physical ability test if they have a higher percentage of fat tissue, which could be aggravating in situations when POs of both gender and different body composition are required to perform equally demanding physical tasks (Kukic et al., 2020). Likewise, previous studies show that there is a high statistically significant correlation between the t_{SAPO1} and the GPF, whereas the highest positive correlations were found in tests assessing the strength of abdominal muscles, agility, anaerobic and aerobic endurance (Janković & Koropanovski, 2017). What is more, the factor analysis determined that the OC_{SAPO1} could be applied in the selection and evaluation of police officers' complete motor space, inasmuch as it is one of the tests that mostly assess POs based on their GPA and the SSMA (Janković, Koropanovski, & Dimitrijević, 2018). Given that the present research study

shows that 25% of women and approximately 65% of men are below the 50th percentile (Table 3), it could be presumed that their morphological characteristics, their GPA, and SSMA, being a corollary of adequate training, contribute to high scores in the OC_{SAPO1} , irrespective of gender.

Be that as it may, the results of physical ability testing show solely the current situation, thus not revealing the real subsequent potential of the respondents in question (Astrand et al., 2003). The level of physical performance depends on the systems of selection, education programmes, as well as on testing procedures themselves. After the selection process, the application of adequate training methods could represent an effective way to enable police cadets to adapt to their future tasks (Galimova et al., 2018). Programmes pertaining to the enhancement of PAs should enable adequate progress to everyone employed in a police organisation. In other words, quality programmes focusing on the development of muscle strength and cardiovascular endurance (precisely those abilities where women appear to achieve, on average, lower results than men) ought to promote the improvement of these abilities. This could be a practical measure taken to reduce gender differences in physical ability tests (Courtright et al., 2013)

Thus, when the results obtained in the study are viewed in the context of the BFOR and BFOQ, based on the percentile distribution of the t_{SAPO1} presented in Table 3, it is possible to distinguish between the respondents according to their SSMA. Namely, 5% of women and 14.1% of men proved to be above the 90th percentile, meaning that these POs, both women and men, were significantly above the average level of all tested respondents. Based on these findings, their SSMA enable them to qualify for work in special police units. The tested candidates between the 10th and the 90th percentile could be considered eligible for performing certain police jobs according to their abilities, i.e. tasks that require a certain level of physical fitness. Finally, 11.3% of men and 47.5% of women, who were in the range of the lowest ten percentiles, should greatly improve their abilities in order to meet the level of the SSMA required for police work. These results could help bring into focus the significance and value of various training programmes that may upgrade the level of PAs required for the successful performance of law enforcement jobs. The organisation could help, first and foremost, by defining the level of PAs necessary for a certain job position and then by conducting adequate testing procedures to assess these abilities. Lastly, the police organisation could establish appropriate training programmes with a view to help each and every police officer achieve the requested norms.

In critical situations, when PAs are a vital prerequisite for success, insufficiently physically prepared officers may fail. Significantly enough, failure in the performance of all occupational requirements may jeopardise the safety of staff members

or even members of the public. Therefore, if one agrees that certain standards are of utmost importance for job performance, those who fail to meet them should not be recruited (Bonneau & Brown, 1995). Consequently, if the tasks of a test are identified as the key ones for efficient operations, all individuals in similar positions should be asked to meet the same standard (Anderson et al. 2001, Yanovich et al., 2008). These standards and norms ought to be defined on the basis of the requirements of police work, which could be singled out as the most relevant criteria to be considered (Jackson & Wilson, 2013).

However, when SSMA, defined as the predictors of overall professional capabilities, are tested, it is only the individual level of abilities that ought to be considered. It should lead to a reliable determination of work ability, the final goal of which is a safe and efficient performance of all occupational requirements (Birzer & Craig, 1996; Lockie et al., 2018). In this case, if certain tasks are considered crucial to the successful performance, all POs performing such tasks ought to be expected to reach the same standard. Moreover, since assessing such PAs does not derive from the association with a particular group (i.e. women), but is based solely on individual merits, it is highly unlikely for discrimination to occur (Anderson et al., 2001). In this respect, job-related fitness tests could be used to classify individual professional SSMA, which are truly relevant for police work and should thus not be considered discriminatory.

8 Conclusion

This present study demonstrates that, even though both groups invested maximum efforts (as proven by physiological parameters), there is, on average, a difference in the efficiency of performing the OC_{SAP01} test between male and female respondents. However, according to the percentile distribution, the efficiency of the OC_{SAP01} completion could define the level of the SSMA of POs in order to determine individual professional competences from the point of view of the BFOR and BFOQ. In this light, average differences aside, a certain number of both women and men did score very high, which makes them competent for certain law enforcement jobs, whereas a certain number of men and women failed to obtain the level necessary for a satisfactory performance of job requirements. In the scope of overcoming the existing gender practice in police organisations, the findings of this study indicate that:

— Different workplaces do not require the same level of PAs. Appropriate testing procedures, accompanied by the norms established in accordance with the BFOR and BFOQ could serve to determine the adequate level of occupational competences. The position within a police organisation should be determined according to the abilities required by a specific workplace. This being the case, the required norms in

specific PA assessment tests should not be considered gender discriminatory.

— Police organisations are in charge of assessing the level of PAs. Given that adequate training programmes may enhance the development of PAs, it is essential to organise and conduct them properly. Apart from enhancing PAs in both genders, this could also help narrow gender differences. Thus, a more active involvement of the organisation would enable each and every law enforcement officer to achieve the norms deemed necessary for an efficient resolution of critical incidents.

Mastering the techniques and specific procedures for determining the level of job-related physical fitness could contribute to a better selection process, as well as to establishing occupational competences of POs. Thus, the OC_{SAP01} could be used to further classify POs according to their PAs. The present research aimed at proving that tests and norms, which serve to determine the work abilities that are indispensable for a quality performance of law enforcement jobs, should be considered non-discriminatory towards women, i.e. gender neutral. In other words, POs could be assessed according to their individual merits, regardless of gender, hence creating a possibility of “equal opportunities” for women, which could further lead to doing away with gender dualism present in police organisations.

The scientific contribution of this study stems from the fact that it may lead to a further accumulation of knowledge regarding the methodology of determining SSMA based on professional requirements of police work, while considering the aspect of gender equality. The practical significance may be recognised in the definition of new potential selection standards and criteria related to SSMA pertaining to both male and female POs. The limitation of this research is related to uncontrolled factors, such as respondents’ individual motivation for maximum strain during the test, their previous level of professional duties, as well as the training level of each individual. Additional limitations arise from the fact that it was conducted on a sample only involving Serbian respondents, as well as that it was based solely on the application of the OC_{SAP01} test to assess PAs. A greater number of variables would enable a further analysis of the differences in PAs, their interconnectedness and a higher possibility of prediction. In future studies, the same testing should be conducted with respondents of different age groups, as well as with POs having various professional competences (criminal, traffic, special units, administration, fire police).

References

1. Anderson, S. G., & Plecas, D. (2000). Predicting shooting scores from physical performance data. *Policing: An International Journal of Police Strategies & Management*, 23(4), 525–537.

2. Anderson, G., Plecas, D., & Segger, T. (2001). Police officer physical ability testing re-validating a selection criterion. *Policing: An International Journal of Police Strategies & Management*, 24(1), 8–31.
3. Arvey, R., Landon, T., Nutting, S., & Maxwell, S. (1992). Development of physical ability tests for police officers: a construct validation approach. *Journal of Applied Psychology*, 77(6), 996–1009.
4. Astrand, P. O., Rodahl, K., Dahl, A. H., & Stromme, B. S. (2003). *Textbook of work physiology – Physiological bases of exercise* (4th ed.). Leeds: Human Kinetics.
5. Balkin, J. (1988). Why policemen don't like policewomen. *Journal of Police Science and Administration*, 16(1), 29–38.
6. Birzer, M., & Craig, D. (1996). Gender differences in police physical ability test performance. *American Journal of Police*, 15(2), 93–108.
7. Bonneau, J., & Brown, J. (1995). Physical ability, fitness and police work. *Journal of Clinical Forensic Medicine*, 2(3), 157–164.
8. Boyce, R., Glenn, J., Schendt, K., Lloyd, C., & Edward, B. (2009). Longitudinal changes in strength of police officers with gender comparisons. *Journal of Strength and Conditioning Research*, 23(8), 2411–2418.
9. Courtright, S. H., McCormick, B. W., Postlethwaite, B. E., Reeves, C. J., & Mount, M. K. (2013). A meta-analysis of sex differences in physical ability: Revised estimates and strategies for reducing differences in selection contexts. *Journal of Applied Psychology*, 98(4), 623–641.
10. Dawes, J., Lindsay, K., Bero, J., Elder, C., Kornhauser, C., & Holmes, R. (2017). Physical fitness characteristics of high versus low performers on an occupationally specific Physical Agility Test (PAT) for patrol officers. *The Journal of Strength and Conditioning Research*, 31(10). Retrieved from https://journals.lww.com/nsca-jscr/Fulltext/2017/10000/Physical_Fitness_Characteristics_of_High_vs_Low.19.aspx
11. Dimitrijević, R., Koropanovski, N., Dopsaj, M., Vučković, G., & Janković, R. (2014). The influence of different physical education programs on police students' physical abilities. *Policing: An International Journal of Police Strategies & Management*, 37(4), 794–808.
12. Esbjörnsson-Liljedahl, M., Sundberg, C. J., Norman, B., & Jansson, E. (1999). Metabolic response in type I and type II muscle fibers during a 30-s cycle sprint in men and women. *Journal of Applied Physiology*, 87(4), 1326–1332.
13. Galimova A. G., Kudryatsev M. D., Galimov G. Ya., Dagbaev B. V., Doroshenko S. A., Arutyunyan T. G. et al. (2018). Functional training as an effective way for adaptation of the military students and students of educational institutions in the system of the Ministry of Internal Affairs of the Russian Federation. *Human Sport Medicine*, 18(2), 119–125.
14. Gratas-Delamarche, A., Le Cam, R., Delamarche, P., Monnier, M., & Koubi, H. (1994). Lactate and catecholamine responses in male and female sprinters during a Wingate test. *European Journal of Applied Physiology and Occupational Physiology*, 68(4), 362–366.
15. Hair, J., Anderson, R., Tatham, R., & Black, W. (1998). *Multivariate data analysis* (5th ed.). New Jersey: Prentice Hall Inc.
16. Hart, S., Drevets, K., Alford, M., Salacinski, A., & Hunt, E. B. (2013). A method comparison study regarding the validity and reliability of the Lactate Plus analyzer. *BMJ Open*. Retrieved from <https://bmjopen.bmj.com/content/3/2/e001899>
17. Hoffman, P., & Hickey, E. (2005). Use of force by female police officers. *Journal of Criminal Justice*, 33(2), 145–151.
18. Jackson, C. A., & Wilson, D. (2013). The gender-neutral timed obstacle course: A valid test of police fitness? *Occupational Medicine*, 63(7), 479–484.
19. Janković, R., & Koropanovski, N. (2017). The interconnectedness of morphological characteristics, general motor abilities, and specific abilities of police officers. In *Thematic journal managing police organization in prevention and repression of threats to safety in the Republic of Serbia* (pp. 137–153). Belgrade: Academy of Criminalistic and Police Studies.
20. Janković, R., Dopsaj, M., Dimitrijević, R., Savković, M., Vučković, G., & Koropanovski, N. (2015). Validity and reliability of the test for assessment of specific physical abilities of police officers in anaerobic-lactate work regime. *Facta Universitatis – Series: Physical Education and Sport*, 13(1), 19–32.
21. Janković, R., Koropanovski, N., & Dimitrijević, R. (2018). Evaluation of tests for the assessment of police officers physical abilities. In *Proceeding book of: International scientific conference Archibald Reiss Days*, (pp. 73–83). Belgrade: University of Criminalistic and Police Studies.
22. Kenneth, J. N., Robert A., & Brown J. F. (2011). Women on patrol: An analysis of differences in officer arrest behaviour. *Policing: An International Journal of Police Strategies & Management*, 34(4), 566–587.
23. Kukic, F., Koropanovski, N., Jankovic, R., Cvorovic, A., Dawes J. J., Lockie G. R. et al. (2020). Association of sex-related differences in body composition to change of direction speed in police officers while carrying load. *International Journal of Morphology*, 38(3), 731–736
24. Lacour, J. R., Bouvat, E., & Barthélémy, J. C. (1990). Post-competition blood lactate concentrations as indicators of anaerobic energy expenditure during 400-m and 800-m races. *European Journal of Applied Physiology and Occupational Physiology*, 61(3–4), 172–176.
25. Lagestad, P., & van den Tillaar, R. (2014). A comparison of training and physical performance of police students at the start and the end of three-year police education. *Journal of Strength and Conditioning Research*, 28(5), 1394–1400.
26. Lockie, R. G., Dawes, J. J., Balfany, K., Gonzales, C. E., Beitzel, M. M., Dulla, J. M. et al. (2018). Physical fitness characteristics that relate to work sample test battery performance in law enforcement recruits. *International Journal of Environmental Research and Public Health*, 15(11). Retrieved from <https://pubmed.ncbi.nlm.nih.gov/30404195/>
27. Lonsway, K. (2003). Tearing down the wall: Problems with consistency, validity, and adverse impact of physical agility testing in police selection. *Police Quarterly*, 6(3), 237–277.
28. Orr, R. M., Ford, K., & Stierli M. (2016). Implementation of an ability-based training program in police force recruits. *Journal of Strength and Conditioning Research*, 30(10), 2781–2787.
29. Orr, R. M., Kukic, F., Cvorovic, A., Koropanovski, N., Jankovic, R., Dawes, J. et al. (2019). Associations between fitness measures and change of direction speeds with and without occupational loads in female police officers. *International Journal of Environmental Research and Public Health*, 16(11), 1947. Retrieved from <https://doi.org/10.3390/ijerph16111947>
30. Paoline, E., & Terrill, W. (2004). Women police officers and the use of coercion. *Women & Criminal Justice*, 15(3-4), 97–119.
31. Rabe-Hemp, C. (2009). POLICEwomen or PoliceWOMEN? Doing gender and police work. *Feminist Criminology*. 4(2), 114–129.
32. Rossomanno, C. I., Herrick, J. E., Kirk, S. M., & Kirk, E. P. (2012). A 6-month supervised employer-based minimal exercise program for police officers improves fitness. *Journal of Strength and Conditioning Research*, 26(9), 2338–2344.
33. Schuck, A., & Rabe-Hemp, C. (2005). Women Police. *Women & Criminal Justice*, 16(4), 91–117.

34. Sörensen, L. (2005). Correlates of physical activity among middle-aged Finnish male police officers. *Occupational Medicine*, 55(2), 136–138.
35. Sörensen, L., Smolander, J., Louhevaara, V., Korhonen, O., & Oja, P. (2000). Physical activity, fitness and body composition of Finnish police officers: a 15-year follow-up study. *Occupational Medicine*, 50(1), 3–10.
36. Sorka, A., & Sawicki, B. (2014). Physical activity levels as a quantifier in police officers and cadets. *International Journal of Occupational Medicine and Environmental Health*, 27(3), 498–505.
37. Spasić, D., & Radovanović, I. (2019). "Always a Woman, Never a Colleague": Policewomen in Serbia. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)*, 24(1), 31–40.
38. Spasić, D., Đurić, S., & Mršević, Z. (2015). Survival in an "all boys club": Policewomen in Serbia. *Women's Studies International Forum*, 48, 57–70.
39. Strating, M., Bakker, R., Dijkstra, G., Lemmink, K., & Groothoff, J. (2010). A job-related fitness test for the Dutch police. *Occupational Medicine*, 60(4), 255–260.
40. Yanovich, R., Evans, R., Israeli, E., Constantini, N., Sharvit, N., Merkel, D. et al. (2008). Differences in physical fitness of male and female recruits in gender-integrated army basic training. *Medicine and Science in Sports and Exercise*, 40(11), S654–S659.

Fizične sposobnosti in razlike med spoloma: binarna logika ali spolni dualizem v policijski organizaciji?

Dr. Radivoje Janković, docent za specializirano športno vzgojo, Univerza za kriminalistične in policijske študije, Srbija.
E-pošta: radivoje.jankovic@kpu.edu.rs

Dr. Danijela Spasić, izredni profesor za področje organizacije policije, Univerza za kriminalistične in policijske študije, Srbija.
E-pošta: danijela.spasic@kpu.edu.rs

Dr. Nenad Koropanovski, izredni profesor za specializirano športno vzgojo, Univerza za kriminalistične in policijske študije, Srbija.
E-pošta: nenad.koropanovski@kpu.edu.rs

Dr. Dane Subošić, redni profesor za področje organizacije policije, Univerza za kriminalistične in policijske študije, Srbija.
E-pošta: dane.subosic@kpu.edu.rs

Dr. Milivoj Dopsaj, redni profesor za športne vede Fakulteta za šport in telesno vzgojo, Univerza v Beogradu, Srbija in Inštitut za šport, turizem in storitve, Južnouralska državna univerza, Rusija. E-pošta: milivoj.dopsaj@fsfv.bg.ac.rs

Dr. Goran Vučković, redni profesor za specializirano športno vzgojo, Univerza za kriminalistične in policijske študije, Srbija.
E-pošta: goran.vuckovic@kpu.edu.rs

Dr. Raša Dimitrijević, učitelj, Univerza za kriminalistične in policijske študije, Srbija. E-pošta: rasa.dimitrijevic@kpu.edu.rs

Namen prispevka je raziskati, ali med opravljanjem testa telesne pripravljenosti obstajajo razlike med policistkami in policisti, ter določiti individualno raven specifičnih moči in motoričnih sposobnosti (SSMA) kot kazalnika delovne sposobnosti. Raziskava je bila opravljena v Srbiji na vzorcu 111 anketirancev (40 žensk in 71 moških). V raziskavi je bil za določitev SSMA uporabljen tečaj za ovire za oceno specifičnih sposobnosti policistov (OC_{SAPO1}). Opazovane so bile tri spremenljivke: čas izvedbe OC_{SAPO1} (t_{SAPO1}), maksimalna srčna frekvenca in koncentracija laktata v kapilarni krvi. Moški so v povprečju zaključili OC_{SAPO1} statistično značilno bolj učinkovito kot ženske za 10,3 %. Po porazdelitvi percentilov t_{SAPO1} se je 5 % žensk in 14,1 % moških izkazalo za precej nad povprečjem vseh testiranih anketirancev. 11,3 % moških in 47,5 % žensk mora na podlagi tega testa izboljšati svoj SSMA, da bi izpolnili poklicne zahteve. Test OC_{SAPO1} bi lahko bil uporabljen tudi kot eno od meril, ki bi lahko dodatno pomagalo razvrstiti policiste za različne vrste policijskega dela glede na njihove fizične sposobnosti. OC_{SAPO1} bi lahko ocenjeval SSMA, ki je pomemben za določeno delovno mesto, glede na posamezne zasluge, ne glede na spol. S tem se ustvarjajo pogoji »enakih možnosti« za ženske, s čimer se odpravlja sistem binarne logike in spolni dualizem policijske organizacije kot kontekst moške kulture, ki *a priori* izključuje ženske na podlagi fizičnih sposobnosti kot najmočnejšega argumenta za ohranitev obstoječe spolne prakse.

Ključne besede: policijska organizacija, spolni dualizem, fizične sposobnosti, z delom povezan kondicijski test

UDK: 351.741+ 796.012.1