



AN OVERVIEW OF PHYSICAL FITNESS TESTS CARRIED OUT FOR ACCESS TO THE CIVIL POLICE CAREER IN BRAZILIAN STATES: a strategic vision to contribute to the management of access to the Civil Police via TAF

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ABSTRACT

The Physical Aptitude Test is one of the selection criteria for entering the civil police career in Brazilian states, however, each state has the autonomy to define the tests included in the TAF. We found Paraná with 6 tests and Paraíba with 1 test performed in the selection. The objective of the study was to identify the characteristics of the physical tests adopted in the TAF of the Brazilian states and to carry out a comparative analysis of them. The data were obtained from the websites of the public security departments between 2014 and 2018. Descriptive statistics were adopted to characterize the sample (mean and standard deviation, and absolute and relative indexes). Inferential statistics was performed using the chi-square test, adopting a significance level of $p \leq 0.05$. The main results pointed to the 12-minute tests, Abdominal push-ups and fixed bar as the most prevalent, while jumps, runs, Legér and others were verified in a single state. If there was a lack of consistency in the tests, due to the discrepancy found between the states, as well as a weakness in the information obtained in some states that evaluated through 1 or 3 tests, seeming not to be capable of a more adequate evaluation of these candidates.

Key words: TAF; Civil police; Selection.

INTRODUCTION

It is everyone's knowledge and understanding that the regular and systematic practice of physical exercises works to promote health, well-being, quality of life, self-esteem, among other aspects. Through this observation, it is necessary to understand its importance for the population of civil police officers, who, due to the characteristics of their duties, suffer severe influences on their health, quality of life, etc.

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For the American College of Sports Medicine, ACSM (2016), cardiorespiratory endurance, body composition, muscle strength, muscle endurance and flexibility, integrate the components of physical fitness related to health

Public security in Brazil is the responsibility of the Federal Police, Federal Highway Police, Federal Railway Police in the states, the Civil Police, Military Police, Military Fire Brigade and Municipal Guards.

The TAF, Physical Fitness Test, is one of the evaluative prerequisites for entering the civil police career in all states of Brazil, where each state has the autonomy to manage its own test, choosing the types of physical tests to be included in this battery of tests. Thus, it is possible to verify divergences in the number of tests included and in the type of tests included according to the states.

According to Rhea and Peterson (2015) physical tests must be performed for different and varied reasons, among them, to identify strong and weak physiological aspects; classify people for selection purposes; predict future performance; evaluate the effectiveness of a training program or test; monitor performance over time; and determine and manipulate training dosages.

The TAF, in addition to allowing a diagnosis of the candidate's motor characteristics, allows obtaining information regarding his health, since it is known that health, among many aspects, is related to an active lifestyle which, in turn, is related to the regular and systematic practice of physical exercises, which may favor and maintain a good level of physical conditioning, an improvement in general well-being and quality of life, in addition to the reduction of stress resulting from the type of activity performed by the police (SANTANA; SILVA, 2019; OLIVEIRA; SILVA, 2019).

Trindade and Oliveira (2019) observed that the TAF tests also aim to stimulate the practice of physical exercises after the training course, providing physical and mental vigor to the police.

Barbosa (2012) indicates that the beginning of the policeman's career is supported by a high regular practice of physical exercises, however, with the passage of time in the function, they tend to substantially reduce this practice, which limits them in performing their functions in the police work, increase the risk of the appearance of diseases related to sedentary lifestyle.

Bernardo et al. (2016) indicate that physical exercise can be used as a health protection strategy, since they understand that physically active people have a lower risk of developing cardiovascular (systemic arterial hypertension), metabolic diseases (such as obesity, hypercholesterolemia and diabetes), and orthopedic (low back pain).

Volpato and Oliveira (2018) indicate that the first sign related to the inattention to health and the quality of life of the police is the significant weight gain, where, in the police officers of the Superior School of Civil Police, they found that 38% of the staff gained until 5 kg and 26% from 5 to 10 kg, after the first three years of police activity, where women gained more weight than men.

For Santana and Silva (2018) the practice of physical activity or physical exercise performed on a regular basis, is capable of influencing the health, as well as the functional capacity of the practitioner, promoting a reduction in cases of diabetes mellitus, arterial hypertension, depression and anxiety.

According to Oliveira e Silva (2019), when analyzing the results of the TAFs of the police in the states of São Paulo and Goiás in 2017, they indicate a disapproval of 20 to 40% of the candidates, suggesting that this is due to the fact that most candidates only prepare for the tests, without having a regular practice of exercises throughout their lives.

Soares (2016) observed in police officers with severe Burnout rates, low levels of physical activity; spends more hours sitting during the week and weekend; younger age; they experience problems in the family and / or in affective relationships; mourning or depression; perform little or no leisure activity; have recently been involved in a traumatic event (assault or firearm shooting); financial lack of control; completed or ongoing higher education and work on a rotating shift.

The objective of the study was to identify the characteristics of the physical tests adopted in the TAF of the states and to carry out a comparative analysis of these tests from different states.

METHODOLOGY

It is a cross-sectional study, with data obtained from the state websites of the public security departments in the period from 2014 to 2018. The data sought were related to the types of physical exercises applied in the TAF of each Brazilian state, in addition to some characteristics of these exercises and tests.

The data were treated statistically using the statistical package SPSS 22.0, where descriptive statistics was adopted to characterize the sample, using mean and standard deviation for quantitative data and absolute and relative indices for categorical data. Inferential statistics was performed using the chi-square test with a significance level of $p \leq 0.05$.

RESULTS AND DISCUSSION

The analysis was made on the TAF assessment protocols in the 25 states and in the Federal District, where 3.62 ± 0.85 physical tests were performed, with a minimum of 1 test in Paraíba and a maximum of 6 tests, in Paraná. It is important to note that the state of São Paulo did not carry out the TAF and therefore it is not included in the study.

In the analysis of table 1, the 12-minute test (aerobic resistance), abdominal flexion (localized muscle resistance), fixed bar (strength) and horizontal impulse (power), some of the components of physical fitness related to health (ACSM, 2016), important variables to be evaluated in the health context.

It is also possible to note that the 12-minute running test and the abdominal push-up test show a significant prevalence of performance in the TAFs of the Brazilian states, while the horizontal and vertical jump, high and long jump, balance and flexibility tests and coordination and agility, half sucked, climbing, Legér, swimming and speed, are those with a significant prevalence of states that do not perform them.

Within what has been seen in the literature, it might be interesting to seek a relative coherence in these TAFs carried out by the different states, since as can be seen, there is no similarity in them and, the function that is being discussed is the same, that of the civil police in Brazil.

Another aspect that must be considered is the fact that the TAF is performed and it seems that in most states there is no physical exercise continuity program, which according to Bernardo *et al.* (2016) physical exercise can be used as a health protection strategy, where TAF allows to obtain information related to health (SANTANA; SILVA, 2019; OLIVEIRA; SILVA, 2019), and which according to Trindade and Oliveira (2019) the results in the tests should stimulate the regular practice of physical exercise for Barbosa (2012) if it prevents the appearance of diseases related to sedentary lifestyle.

TABLE 1 - Prevalence of tests performed in the states of the northern region in absolute and relative values and comparison of prevalence (chi-square).

Variable	Classification	Prevalence		Comparison	
		N	%	x2	P
Fixed Bar	Not	11	42.3	0.62	0.43
	Yes	15	57.7		
Elbow Extension	Not	15	57.7	0.62	0.43
	Yes	11	42.3		
Horizontal Thrust	Not	20	76.9	7.54	0.01 *
	Yes	6	23.1		
Vertical Thrust	Not	25	96.2	22.15	<0.01 *

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	Yes	1	3.8		
Long jump	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
High jump	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
Abdominal	Not	5	19.2	9.85	<0.01 *
	Yes	21	80.8		
balance	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
Flexibility	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
Agility and Coordination	Not	24	92.3	18.62	<0.01 *
	Yes	2	7.7		
Half Sucked	Not	24	92.3	18.62	<0.01 *
	Yes	2	7.7		
Climbing	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
Legér	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
12 minutes	Not	1	3.8	22.15	<0.01 *
	Yes	25	96.2		
100 meter race	Not	25	96.2	22.15	<0.01 *
	Yes	1	3.8		
50 meter race	Not	24	92.3	18.62	<0.01 *
	Yes	2	7.7		
Swimming	Not	21	80.8	9.85	<0.01 *
	Yes	5	19.2		

Figure 1 shows the frequency distribution of the different tests carried out in the Brazilian states, where it can be confirmed that the state of Paraná is the one that requires the highest number of tests in its TAF (6 tests), while most states, 15 of them, apply 4 tests. On the other hand, the state of Paraíba is observed by applying a single test to its TAF, as if it were able to obtain relevant information about what is necessary for the performance of its civil police officers.

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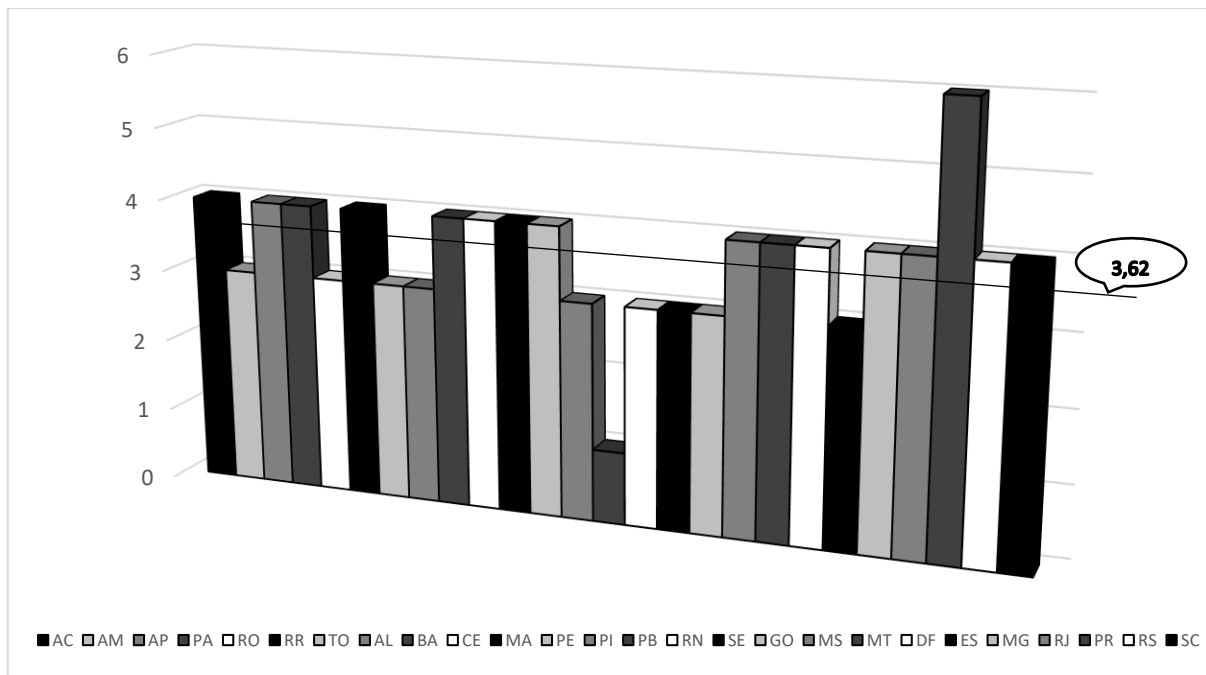


Figure 1 - Number of tests applied in the states and the Federal District

FINAL CONSIDERATIONS

With the results observed in the research, it is possible to conclude that the most prevalent tests in the Brazilian states are the 12 minutes to assess cardiorespiratory endurance (25 states), abdominal flexion to assess abdominal muscle strength (21 states, the fixed bar to assess upper limb strength (15 states) and elbow extension for upper limb resistance (11 states), while the tests of vertical impulse, long jump and high, balance, flexibility, climbing, Legér and 100 meter running were applied in a single state each test.

Another important aspect that was observed is that the average of tests carried out in the 26 investigated states was 3.62 tests, where it was verified that the state of Paraná performs 6 tests in its TAF, while Paraíba performs a single test, thus demonstrating a real inability to assess the minimum necessary for the function of the civil police, from the physical point of view.

It is important that the results of these tests are understood by corporations not only as a selection criterion, but also as indications of strengths and weaknesses, as a diagnosis and definition of collective and individual exercise programs to improve well-being, quality of life and life and physical and mental health of future civil police officers.

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It is possible, therefore, to suggest the inclusion of the flexibility test and the assessment of body composition, thus completing the components of physical fitness for the health of the candidates, if not as a direct selection criterion, but at least as a final classification criterion.

It is also suggested that there be a permanent incentive for civil police officers to participate in regular exercise programs, where the prescription of these exercises, in addition to being individualized, is specific to improve the efficiency of their functions within the police.

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