

THE IMPORTANCE OF PSYCHOMOTOR ASSESSMENT IN STRUCTURING THE TRAINING PROGRAM OF THE UNIVERSITY OF BUCHAREST'S REPRESENTATIVE FOOTBALL TEAM

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Abstract. *Background.* Within non-profile higher education, football stands out as one of the most highly regarded sports disciplines, consistently ranking among the top preferences of students at the University of Bucharest. Furthermore, students who have previously engaged in football at a competitive level, or those who demonstrate an advanced level of motor skills and sport-specific abilities, may be considered for selection to join the University of Bucharest Representative Football Team, hence the need to approach the selection process and the specific training in a more modern and objective manner.

Objectives. This study aims to underscore the significance of assessing the initial stage of psychomotor development in prospective members of the University of Bucharest Representative Football Team. Furthermore, it seeks to emphasize the necessity and timeliness of integrating psychomotor evaluation as a complementary element within the selection process and the specific training.

Methods. The participants in this study, totaling 20 male individuals, age between 19–21 years old, are first-year students enrolled in various faculties within the University of Bucharest. At the commencement of the 2024–2025 academic year, they expressed their intention to take part in the selection process for admission into the University's Representative Football Team. In addition to the motor assessments specific to the discipline, the participants underwent psychomotor evaluation through the administration of four subtests drawn from the Second Edition of the Bruininks-Oseretsky Test of Motor Proficiency.

Results. The four subtests selected from the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, for the purposes of this study included Bilateral Coordination, Balance, Running Speed and Agility, and Strength. The results obtained from the subtests assessing Running Speed and Agility, Bilateral Coordination, and Balance, while relatively homogeneous, predominantly fell within the average range when compared to the specific sample. In contrast, the scores obtained in the Strength subtest were, in the majority of cases, above the average for the specific sample of participants in the assessment.

Conclusion. The results obtained from the current research, despite being subject to certain limitations primarily related to the number of participants and the absence of the logistical resources required for the full implementation of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, affirm the significance and necessity of understanding the psychomotor profile of the students who are members of the University of Bucharest's Representative Football Team.

Keywords: students, football, psychomotor evaluation



Introduction

As a sporting discipline, football has undergone remarkable development, progressing simultaneously in qualitative terms (motor performance) and quantitative terms (an increasing number of participants). Its practice is governed by the official rules of the game and adheres to the principles of sports ethics, thereby contributing to the fulfillment of the human drive for competition (Gozu, B., 2023).

Due to the evolution of the game of football, the organization and implementation of the processes of selection, training, and development can no longer be carried out without a theoretical and practical scientific foundation, continuously adapted to the latest innovations and trends in this sport discipline (Ciolcă, S. 2006).

Hence, there is a continuous concern to identify modern methods and means of selection and training that lead to increased efficiency of activities and the achievement of specific objectives (Hun-Hee, L., Suk-Jun, L., Hyun-Wook, K., 2024; Seitmuratov T., S., 2021; Deepak, S., Navaraj Chelliah, J., R., Yuni, A., Nirmal, M., S., Debajit, K., Masilamani, E., Soumya, J., Ethiraj, B., Bekir, E., O., 2024).

Within non-profile higher education, football stands out as one of the most highly regarded sports disciplines, consistently ranking among the top preferences of students at the University of Bucharest. Furthermore, students who have previously engaged in football at a competitive level, or those who demonstrate an advanced level of motor skills and sport-specific abilities, may be considered for selection to join the University of Bucharest Representative Football Team, hence the need to approach the selection process and the specific training in a more modern and objective manner.

Purpose

This study aims to underscore the significance of assessing the initial stage of psychomotor development in prospective members of the University of Bucharest Representative Football Team. Furthermore, it seeks to emphasize the necessity and timeliness of integrating psychomotor evaluation as a complementary element within the selection process and the specific training.

Research Methods

The participants in this study, totaling 20 male individuals, age between 19–21 years old, are first-year students enrolled in various faculties within the University of Bucharest. At the commencement of the 2024–2025 academic year, they expressed their intention to take part in the selection process for admission into the University's Representative Football Team. In addition to the motor assessments specific to the discipline, the participants underwent psychomotor evaluation through the administration of four subtests drawn from the Second Edition of the Bruininks-Oseretsky Test of Motor Proficiency. The Bruininks-Oseretsky Test of Motor Proficiency, Second Edition (BOT-2) is an individually administered, standardized battery designed with clearly defined and targeted objectives aimed at assessing a wide range of motor skills in individuals aged 4 to 21 years. This test battery was specifically developed for use by professionals such as physical therapists, psychologists, physical education teachers, and coaches, providing them with a reliable and effective tool for evaluating both fine and gross motor skills (Bruininks, R.H., & Bruininks, B.D., 2005). The BOT-2 assesses abilities across four distinct motor areas:

- *Fine Manual Control* (comprising the subtests of *Fine Motor Precision* and *Fine Motor Integration*);
- *Manual Coordination* (including the *Manual Dexterity* and *Upper-Limb Coordination* subtests);
- *Body Coordination* (encompassing *Bilateral Coordination* and *Balance* subtests);
- *Strength and Agility* (including *Running Speed and Agility* and *Strength* subtests).

Due to the absence of the logistical resources required for the full implementation of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, for this research I opted for the use of only four subtests deemed relevant to the proposed objectives, namely *Bilateral Coordination, Balance, Running Speed and Agility, and Strength*, each comprising the following specific items:

Bilateral Coordination:

1. Touching Nose with Index Fingers–Eyes Closed
2. Jumping Jacks
3. Jumping in Place–Same Sides Synchronized
4. Jumping in Place–Opposite Sides Synchronized
5. Pivoting Thumbs and Index Fingers
6. Tapping Feet and Fingers–Same Sides Synchronized
7. Tapping Feet and Fingers–Opposite Sides

Balance:

1. Standing with Feet Apart on a Line–Eyes Open
2. Walking Forward on a Line
3. Standing on One Leg on a Line–Eyes Open
4. Standing with Feet Apart on a Line–Eyes Closed
5. Walking Forward Heel-to-Toe on a Line
6. Standing on One Leg on a Line–Eyes Closed
7. Standing on One Leg on a Balance Beam–Eyes Open
8. Standing Heel-to-Toe on a Balance Beam
9. Standing on One Leg on a Balance Beam–Eyes Closed

Running Speed and Agility:

1. Shuttle Run
2. Stepping Sideways over a Balance Beam
3. One-Legged Stationary Hop
4. One-Legged Side Hop
5. Two-Legged Side Hop

Strength:

1. Standing Long Jump
2. Full Push-ups
3. Sit-ups
4. Wall Sit
5. V-up

Results

Statistical processing of the research results was carried out using the BOT–2 ASSIST™ Scoring and Reporting System (software specific to the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition) as well as Microsoft Excel 2013. The BOT–2 ASSIST™ software converts the raw total scores obtained by the participants into derived scores, enabling a standardized interpretation across subtests and age groups.

As part of the scientific methodology, the interpretation of results was based on two types of derived scores: *scale scores* (which indicate the extent to which a participant's raw score deviates from the mean score of individuals within the same age group, while accounting for the standard deviation observed in the normative sample) and *descriptive category* (which offer a qualitative representation of the approximate distance between a subject's score range and the age-normed group mean).

Table 1. Descriptive Categories Corresponding to Scale Score

<i>Descriptive Category</i>	<i>Scale Score Range</i>
Well-Above Average	25 or greater
Above Average	20–24
Average	11–19
Below Average	6–10
Well-Below Average	5 or less

Table 2. Scale Scores on Bilateral Coordination, Balance, Running Speed and Agility and Strength Subtests

Nr.	Name	<i>Scale Score</i>			
		<i>Bilateral Coordination</i>	<i>Balance</i>	<i>Running Speed and Agility</i>	<i>Strength</i>
1.	A.G	16	14	16	18
2.	A.Z.	12	13	15	21
3.	M.M.	14	15	16	21
4.	R.S.	12	12	15	20
5.	H.D.	15	13	14	18
6.	D.F.	19	18	19	24
7.	F.F.	17	19	17	22
8.	T.M.	16	16	14	21
9.	M.T.	14	13	13	23
10.	C.R.	15	18	17	20
11.	B.R.	18	17	18	24
12.	N.M.	16	15	15	19
13.	D.C.	17	12	13	21
14.	M.A.	15	12	15	22
15.	P.G.	18	18	17	23
16.	S.I.	15	15	13	23
17.	P.D.	19	17	19	24
18.	G.C.	14	13	18	22
19.	O.M.	13	14	15	20
20.	R.D.	18	16	18	24

Table 3. Descriptive Categories Corresponding to Scale Scores Results

Nr.	Name	<i>Descriptive Categories</i>			
		<i>Bilateral Coordination</i>	<i>Balance</i>	<i>Running Speed and Agility</i>	<i>Strength</i>
1.	A.G	Average	Average	Average	Average
2.	A.Z.	Average	Average	Average	Above Average
3.	M.M.	Average	Average	Average	Above Average
4.	R.S.	Average	Average	Average	Above Average
5.	H.D.	Average	Average	Average	Average
6.	D.F.	Average	Average	Average	Above Average
7.	F.F.	Average	Average	Average	Above Average
8.	T.M.	Average	Average	Average	Above Average

9.	M.T.	Average	Average	Average	Above Average
10.	C.R.	Average	Average	Average	Above Average
11.	B.R.	Average	Average	Average	Above Average
12.	N.M.	Average	Average	Average	Average
13.	D.C.	Average	Average	Average	Above Average
14.	M.A.	Average	Average	Average	Above Average
15.	P.G.	Average	Average	Average	Above Average
16.	S.I.	Average	Average	Average	Above Average
17.	P.D.	Average	Average	Average	Above Average
18.	G.C.	Average	Average	Average	Above Average
19.	O.M.	Average	Average	Average	Above Average
20.	R.D.	Average	Average	Average	Above Average

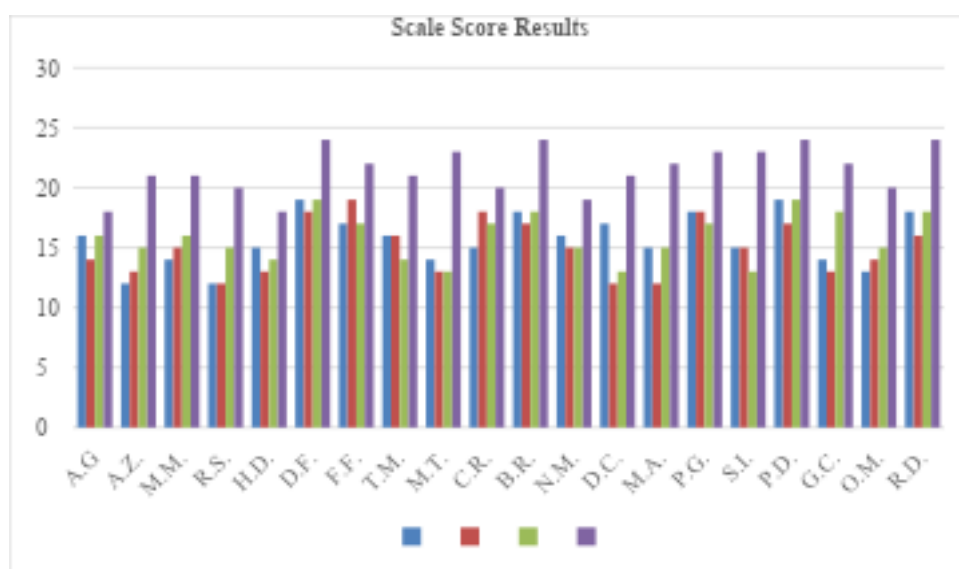


Figure 1. Scale Score Results on the Bilateral Coordination, Balance, Running Speed and Agility and Strength Subtests

Conclusions

As shown by the tables and the chart presented above, the results obtained from the subtests assessing Running Speed and Agility, Bilateral Coordination and Balance, while relatively homogeneous, predominantly fell within the average range when compared to the specific sample, which necessitates a prioritized training approach aimed at the targeted enhancement of performance indicators specific to each subtest. In contrast, the scores obtained in the Strength subtest were, in the majority of cases, above the average for the specific sample of participants in the assessment, the specific objective of this component, pursued during training, being related to maintaining high performance levels and, where applicable, further enhancing them.

The results obtained from the current research, despite being subject to certain limitations primarily related to the number of participants and the absence of the logistical resources required for the full implementation of the Bruininks-Oseretsky Test of Motor Proficiency, Second Edition, affirm the significance and necessity of understanding the psychomotor profile of the students who are members of the University of Bucharest's Representative Football Team.

Authors' contributions

The authors have equally contributed to this study.

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