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The reality of applying sports psychological measurements at the level of Algerian teams in the National Professional Football League clubs

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Abstract:

This study aimed to understand the reality of applying sports psychological measurement to the teams of the National Professional Football League. The importance of the study was represented in shedding light on the evaluation of the psychological, mental and intellectual state of professional football players. The research community for this study consisted of professional club teams, with the study sample comprising 16 teams. The study was conducted using a questionnaire to collect data, adopting the descriptive survey approach. The conclusion reached was that: There is no application of sports psychological measurements at the level of Algerian teams in the clubs of the National Professional Football League, while the study recommends the necessity of having a sports psychological preparer with the professional sports team, in addition to the diverse technical training staff who carry out psychological preparation and specialize in the tasks of sports psychological measurement for the team.

Keywords:

Sports Psychology Measurements - Algerian Teams - National Professional League - Football.

1. Introduction and problem of the study:

The subject of psychological measurement has occupied the minds of scientists and researchers interested in the field of sports. In the early stages of the search for objective methods, there was no alternative other than observation and case studies. One of the greatest obstacles facing the development of the objective measurement movement is that the nature of sports activity makes winning competitions the sole criterion for success and excellence. Modern training has given great importance to psychological and theoretical preparation, given their role in bringing athletes to the highest levels, whether in terms of conveying theoretical information and knowledge that facilitates the process of understanding various movements, skills and abilities on the ground, or in terms of preparing players and sharpening their spirits before and during sporting competitions. (Djamal Zahar, 2017, p. 107)

Sports psychology is a crucial process in the sports practices of coaches and players, as it helps assess the psychological state of athletes, identify their needs and requirements, and correct their paths and directions. The 1990s witnessed a continuation and expansion of interest in psychological measurement, which was evident in the 1980s. This growth is evident in the development of new tests, some of which represent novel approaches, as well as in the review of previous tests and the continuation of research related to existing tests. (Salah El-Din Mahmoud Allam, 2015, p. 12)

It is worth mentioning here that every area of life contains a set of problems that require scientific research to achieve the desired development and benefit for human societies. After psychologists have charted a special path for themselves in researching problems that they hope will be of clear benefit to societies according to their scientific specialization, they have created standards and tests. (Amer Said Khaikani and Ayman Hani Jabouri, 2019, p. 11).

In a study conducted by researcher **Fatahin Aisha in 2010** entitled “A Study of the Reality of Psychological Measurement and Sports Professionalism in Algeria,” the sample of her scientific study was 80 football coaches who were contacted at the National Institute for Higher Training in Sports Sciences and Technology during a training course to improve their level. Whereas the result was the absence of psychological tests and the general lack of dealing with them in sports practice, which is due to the marginalization of sports psychology.

There is no doubt that sports psychology is one of the most important elements in assessing the psychological, mental and intellectual state of football



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players in the Algerian Professional League, as it contributes to the psychological evaluation process and to understanding the morale of the team. Through what has been presented above in this context, we come to pose the general question of the study:

- Is there an application for sports psychological measurements at the level of Algerian teams in the National Professional Football League clubs?

The following sub-questions help us answer the general question mentioned above:

- Is there sports psychological preparation at the level of Algerian teams in the National Professional Football League?

- Is there knowledge of sports psychological measurements at the level of Algerian teams in the National Professional Football League?

- Is there a procedure for sports psychological measurements at the level of Algerian teams in the National Professional Football League?

- Is there any implementation of the results of sports psychological measurements at the level of Algerian teams in the National Professional Football League?

2. Hypotheses of the study:

2.1. General hypothesis:

- There is an application of sports psychological measurements at the level of Algerian teams in the National Professional Football League clubs.

2.2. Partial hypotheses:

- There is sports psychological preparation at the level of Algerian teams in the National Professional Football League.

- There is knowledge of sports psychological measurements at the level of Algerian teams in the National Professional Football League.

- There is a procedure for sports psychological measurements at the level of Algerian teams in the National Professional Football League.

- There is work on the results of sports psychological measurements at the level of Algerian teams in the National Professional Football League.

3. Objectives of the study:

The objectives of this scientific study are many and broad, and perhaps the most prominent of them are the following:

- To determine the extent to which sports psychological measurements are applied at the level of Algerian teams in the National Professional Football League.

- To determine the extent to which sports psychological preparation exists for

Algerian teams in the National Professional Football League.

- The extent of coaches' and players' knowledge of sports psychological measurements at the level of Algerian teams in the National Professional Football League.
- The extent to which sports psychological measurements are conducted at the level of Algerian teams in the National Professional Football League.
- The extent to which coaches and players act on the results of sports psychological measurements at the level of Algerian teams in the National Professional Football League.

4. Importance of the study:

The importance of this study, entitled "The Reality of Applying Sports Psychological Measurements at the Level of Algerian Teams in the Professional Football League Clubs," is evident in shedding light on one of the important elements in modern and contemporary sports training, which is the process of psychological measurement among athletes in general and among professional football players in particular, and how to evaluate and assess them from a psychological, mental, and intellectual perspective

5. Studies associated with research:

- A study by Aisha Fatahin (2010) entitled "The Reality of Psychological Measurement and Sports Professionalism in Algeria" aimed to determine the extent to which psychological measures and tests are applied by coaches to players in professional sports clubs in the first and second national leagues as a form of psychological preparation for sports. The descriptive approach was adopted in this scientific study by selecting a study sample consisting of 80 football coaches who were contacted by the National Institute for Higher Training in Sports Sciences and Technology during a training course to improve the level using a questionnaire as a tool for collecting data and information. Finally, after statistical studies, the following result was reached: The lack of any application of psychological tests and measures among sports club teams in the first and second divisions of the National Professional League.

6. Methodological procedures of the study:

The methodological procedures of a scientific study represent the organizational and applied foundations through which the research study is conducted, and they are as follows:

6.1. The appropriate scientific method followed in this study:

Based on the problem of the study that was presented, the appropriate scientific



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method for this study is: the descriptive survey method.

The descriptive approach is an organized and accurate description of the facts in a field of various fields of knowledge in an objective and correct manner. (Boudaoud Abdel-Yamine, 2010, p. 88).

6.2. Research community and study sample:

It is the study community from which field data is collected, and it is considered part of the whole, meaning that a group of individuals from the community is taken to be representative of the community to be studied. The sample is therefore a specific part or percentage of the individuals from the original community, and then the results of the study are generalized to the entire community. (Rachid Zerouati, 2012, p. 276).

The research community for this study was represented by the first teams of the National Professional Football League during the sports season (2024/2025), where the number of study sample members was 16 teams (the study was conducted on the entire research community of 16 teams in the National Professional Football League).

Areas of implementation of the study:

- **Time frame:** From September 1, 2024 to June 21, 2025.
- **Site frame:** Stadiums approved for the National Professional Football League (LFP) teams.
- **Human frame:** 16 coaches from 16 LFP clubs.

6.3. Tools for collecting data and information related to the study:

6.3.1. The questionnaire:

According to the nature of the descriptive survey study and what is appropriate for it, a closed questionnaire was used as a tool for collecting data and information with a sample of coaches (16 head coaches, for 16 teams representing the National Professional Football League in Algeria for the current sports season).

A questionnaire or survey is a convenient tool for obtaining information, data, and facts related to a specific reality. The questionnaire is presented in the form of a number of questions that are required to be answered by a number of individuals concerned with the subject of the questionnaire. (Boudaoud Abdel-Yamine, 2010, p. 59).

6.3.2. Psychometric properties of the study instrument:

6.3.2.1. The validity of the questionnaire:

The apparent validity of a questionnaire, which refers to whether the test appears

to measure, or does not measure, what it was designed to measure. (Mustafa Hussein Bahi and others, 2015, p. 93)

n	Number of phrases	v	Result
16	20	0,780	Fit for measurement

6.3.2.2. Reliability of the questionnaire:

The reliability of the questionnaire used for the study means that the test is reliable and dependable, and it also means stability. (Mustafa Hussein Bahi and others, 2015, p. 87)

n	Number of phrases	Alpha Cronbach's	Result
16	20	0,803	Fit for measurement

6.3.2.3. Objectivity of the questionnaire:

A good test is characterized by objectivity. An objective test is one that is unbiased and unbiased, as it gives the same results regardless of the different examiners. That is, it gives the same results regardless of the different examiners, meaning that the results are not affected by the examiner's subjectivity or personality. A test is objective if its questions and answers are specific, such that each question has only one answer, leaving no room for ambiguity. (Boudaoud Abdel-Yamine, 2010, p. 71).

6.4. Statistical analysis methods used in this study:

- Statistical coefficients to calculate the validity of measurement tools (internal consistency validity).
- Cronbach's alpha coefficient to calculate the reliability of measurement tools (scale reliability).
- Duplicates and percentages.
- Statistical software type:
- Excel spreadsheet program to collect, organize, and tabulate data.
- IBM SPSS 22 Statistical Package for the Social Sciences.

7. Display search results related to the study:

7.1. Displaying the research results for the first hypothesis of the study:

The first hypothesis of the study: there is sports psychological preparation at the level of Algerian teams in the National Professional Football League.

Responses	YES	NO	n
Duplicates	12	04	16
Percentages	75%	25%	
TOTAL	16		
	100%		

After conducting the One-Proportion Z-Test to determine whether the percentage of trainers who reported psychological preparation (75%) was significantly different from the reference percentage (usually 50%), which represents the percentage of random distribution or the absence of a clear preference, the data were as follows:

Sample size: Number of people who answered “yes”: → Because 75% of 16 = 12

Observed percentage (sample): Hypothesized percentage (null hypothesis):

Significance level: --- Hypothesis testing: Null hypothesis: There is no difference,

i.e., alternative hypothesis: There is a percentage greater than 50%. (One-tailed test) --- Calculating the Z-statistic: Z equation: $Z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1 - p_0)}{n}}}$

$Z = \frac{0.75 - 0.5}{\sqrt{\frac{0.5 \cdot 0.5}{16}}} = \frac{0.25}{\sqrt{0.015625}} = \frac{0.25}{0.125} = 2.0$ ---

Critical value (Z-Critical): For (One-tailed test): → Z-Critical = 1.645 --- Result:

$Z = 2.0$ $Z > 1.645$ → We reject the null hypothesis. Therefore, there is sufficient statistical evidence at the 0.05 significance level that the percentage of sports psychological preparation among Algerian teams is higher than 50%.

Therefore, the results are as follows:

"A ratio test was conducted on a sample of 16 coaches, 75% of whom reported the presence of sports psychological preparation within their team programs. The test results ($Z = 2.0$, $p < 0.05$) showed that this percentage differed significantly from the assumed reference percentage (50%). Therefore, it can be said that sports psychological preparation is actually present at the level of Algerian teams in the National Professional League."

7.2. Displaying the results of the research for the second hypothesis of the study:

The second hypothesis of the study: there is knowledge of sports psychological measurements at the level of Algerian teams in the National Professional Football League.

Responses	YES	NO	n
Duplicates	08	08	16
Percentages	50%	50%	
TOTAL	16		
	100%		

If 50% of the trainers answered "yes," this means that the percentage is equal to the assumed null hypothesis (0.5).

In this case, if you want to test whether the percentage is significantly different from 50% (in both directions), we use:

Two-tailed One-Proportion Z-Test --- Data: Sample size: Number of "Yes" answers: 8 Proportion in sample: Hypothesized proportion: --- Calculate Z: $Z = \frac{\hat{p} - p_0}{\sqrt{\frac{p_0(1 - p_0)}{n}}} = \frac{0.5 - 0.5}{\sqrt{\frac{0.5 \cdot 0.5}{16}}} = \frac{0}{0.125} = 0$ --- Critical value (Two-tailed, $\alpha = 0.05$): Z-crit = ± 1.96 --- Result: $Z = 0$ $|Z| < 1.96 \rightarrow$ We fail to reject the null hypothesis.

The ratio test was conducted on a sample of 16 coaches, where the percentage of knowledge of sports psychological measurements was 50%. The test results ($Z = 0.00$, $p > 0.05$) showed no significant difference from the assumed percentage (50%), indicating the lack of statistical significance of the existence of sufficient knowledge of sports psychological measurements at the level of Algerian teams.

7.3. Displaying the results of the research for the third hypothesis of the study:

The third hypothesis of the study: There is a procedure for sports psychological measurements at the level of Algerian teams in the National Professional Football League.

Responses	YES	NO	n
Duplicates	02	14	16
Percentages	12.5%	87.5%	
TOTAL	16		
	100%		

A statistical test was conducted to verify the existence of a sports psychology measurement procedure at the level of Algerian teams in the National Professional



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Football League, based on a sample of 16 teams. The results showed that only 12.5% of teams adopt this procedure, compared to a hypothetical rate of 50%.

The Z-test calculation yielded a value that is less than the critical value at the 0.05 significance level, which is equal to. Accordingly, the null hypothesis that 50% or more of teams conduct sports psychological measurements was rejected, indicating that this practice is not common or widely adopted among the teams studied. These results support the hypothesis that the procedure exists but is limited and needs to be strengthened and supported more widely in Algerian clubs.

7.4. Displaying the results of the research for the fourth hypothesis of the study:

The fourth hypothesis of the study: there is work on the results of sports psychological measurements at the level of Algerian teams in the National Professional Football League.			
Responses	YES	NO	n
Duplicates	00	16	16
Percentages	00%	100%	
TOTAL	16		
	100%		

Statistical decision: The critical value of Z at a significance level of 0.05 in a one-way test is -1.645 because if it is less than -1.645, we reject the null hypothesis.

Conclusion: The results indicate that the actual percentage of teams that rely on the results of sports psychological measurements at the level of Algerian teams in the National Professional Football League clubs is significantly less than 50%, as none of the coaches in the sample mentioned the existence of such work, which confirms the limitation or absence of this procedure in the reality studied.

8. Discussion of the scientific research results of this study:

Through what was presented in the research results of this scientific study, which was entitled “The Reality of Applying Sports Psychological Measurements at the Level of Algerian Teams in the Professional National Football League Clubs,” the following partial results were reached:

- Most Algerian teams in the National Professional Football League have sports psychology training.
- Only a few coaches in the Algerian National Professional Football League have

knowledge of sports psychology measurements.

- The absence of any sports psychology measures at the level of Algerian teams in the National Professional Football League.
- The absence and incompleteness of any action on the results of sports psychology measures at the level of Algerian teams in the National Professional Football League.

Accordingly, some of the reasons and backgrounds for the research results of this scientific study can be summarized in the following indicators:

- The absence of any sports psychology assessments among the teams in the Professional Football League, due to a lack of familiarity with this important aspect of assessing the team's psychological state and mental fitness.
- The absence of an assistant coach authorized to conduct sports psychology assessments for the teams, who would be the specialist and knowledgeable in these matters.
- Focusing on training by developing and enhancing the team's physical, skill, and tactical preparation, with little emphasis on psychological and mental preparation, despite the latter being the key to achieving success, achieving titles, and shaping the team's character.
- Training coaches in various sports training sciences and methods, without focusing on providing them with adequate training in the field of sports psychology preparation and assessment.
- The complete and total absence of sports psychological assessment in the psychological preparation process before, during, and after training and competition.
- The focus is on preparing players physically, skill-wise, and tactically, while neglecting the psychological preparation and assessment process.
- The absence of a person responsible for psychological preparation and sports psychological assessment.
- The coaches' lack of familiarity with sports psychological assessment, and the players' weak academic and cultural level.

From this, it can be said that the psychological assessment of sports in the Algerian Professional Football League teams remains far removed from the desired reality, and that the coaches' knowledge of the process of evaluating the psychological aspects of players remains relatively, if not weak, which makes the application of psychological assessment of sports a difficult matter, and it is not available and achieved, at least in the next five sports seasons. The absence of



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sports psychological measurement has made the Algerian player an incomplete player from the psychological and mental aspects due to the absence of a clear strategy and the lack of forward-looking visions regarding the employment of postgraduate graduates in the field of sports psychological preparation and granting them by the first professional league a license as a team psychological trainer, as well as a license for a head coach, physical trainer, and assistant coach. The relationship between our current study and the previous study by researcher **Fatahin Aisha** is a closely related and highly similar relationship, as the same result was repeated on the same sample and community. This, if it indicates anything, indicates that the recommendations and suggestions of the previous study were not taken into account. The results of our studies also showed that the issue of sports psychological measurement is not given the utmost importance in forming the healthy and ideal sports personality of professional football players in Algeria, developing mental fitness, raising the level of morale, and creating strong cohesion within professional football teams in Algeria.

9. Conclusion:

At the conclusion of this scientific study, which aimed to determine the extent of the application of sports psychological measurement at the level of Algerian teams in the National Professional Football League clubs, through different dimensions and angles on a study sample that represented the entire research community through a descriptive survey method. It was found that all coaches engage in sports psychological preparation at the level of their professional sports teams. However, their lack of complete knowledge of sports psychological measurement and how to conduct and apply it led us to draw the general conclusion: there is no application of sports psychological measurements at the level of Algerian teams in the National Professional Football League. This led this study to recommend the following suggestions and recommendations:

- The need for a sports psychology instructor to be present with the professional sports team, alongside the diverse technical training staff, to provide psychological preparation and undertake psychological assessments for the entire team.
- The National Professional Football League has approved the granting of a sports psychology instructor license, which is also granted to the head coach, physical trainer, assistant coach, and performance analysis instructor.
- Providing professional coaches and athletes with the opportunity to learn about

the latest developments in sports psychology in general and psychological measurement in the sports field in particular by opening training courses inside and outside the country to benefit from the experiences and expertise of other countries, especially Arab countries, in this regard.

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