

The effect of a proposed physical-psychological program on improving the motor sense and emotional state associated with junior football

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Abstract: The research paper aimed to know the effect of a proposed physical and psychological program in improving the motor sense and emotional state associated with football in juniors, the experimental method was used with an experimental design for two equal groups, and the study sample consisted of (10) players from Mouloudia ouricia club, selected by random method for reasons that serve the research procedures (group control 05, group experimental 05), and the program included physical and motor exercises and (08) psychological sessions, one session per week. The program included physical and motor exercises and (08) psychological sessions (one session per week): - There are differences between the experimental group and the control group in improving the motor sensation and the emotional state associated with football in juniors.

Keywords : Psycho-physical program , motor sensation, emotional state, football, juniors.

الملخص

هدفت الورقة البحثية الى معرفة اثر برنامج بدني ونفسي مقترح في تحسين الاحساس الحركي و الحالة الانفعالية المصاحبة بكرة القدم لدى الناشئين ، تم استخدام المنهج التجريبي ذو التصميم التجريبي لمجموعتين متكافئتين ، وتكونت عينة الدراسة من (10) لاعبا من نادي مولودية اوريسيا ، تم اختيارهم بالطريقة العمدية لأسباب تخدم إجراءات البحث (05ضابطة 05تجريبية)، واشتمل البرنامج على تمارين بدني وحركي و على (08) جلسات نفسية بواقع جلسة في. الأسبوع واستمرت مدة (08) أسابيع ، وخلصت نتائج الدراسة : - وجود فروق بين المجموعة التجريبية والمجموعة الضابطة في تحسين الاحساس الحركي و الحالة الانفعالية المصاحبة بكرة القدم لدى الناشئين

الكلمات المفتاحية : برنامج بدني- نفسي، الاحساس الحركي ، الحالة الانفعالية ، كرة القدم ، الناشئين

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I- Introduction :

Recent developments of sports science indicate an increasing tendency to apply athlete psychology based theories and methods based on their crucial significance in producing success and in sport performance. The role of the psychological factors on sport performance has gained an increasing attention in the sport field. Many of these works have shown that an athlete's motion is not limited to physical -actions and that it is the product of a complex interaction among cognitive and -emotional factors. They encompass such central processes as attention, perception, and consciousness and the ability to adjust and recall past successful and unsuccessful experiences with movements. Also, performance is generally preceded by psychological and emotional states that include motivation, resolve, fear, anxiety and negative thinking structures, all of which play a critical role in shaping athletic execution. (Ali Abdulaziz Najm, Omar Nazir Dhanun, 2021).

Feeling your body move and having a tuned-in mindset during practices and matches really matters when it comes to better performance. Athletes who want to excel must boost their ability to notice and react to even the slightest movement signals—a skill that often makes a difference. Regular sessions of cognitive and psychological workouts tend to sharpen motor learning and spark improved brain activity, in most cases turning potential into tangible results. Ultimately, these training routines work best when they're adapted to match each athlete's own physio-logical makeup, ensuring that every program fits personal needs just right. Athletes can increase their adaptability in many game settings and perform at their best in formal tournaments by practicing complex skills and simulating match conditions, The research objectives were to:

- Designing a psychophysical program aimed at enhancing motor sensation in young footballers.
- Examining the effectiveness of the proposed psychophysical program in improving both motor sensation and the emotional state associated with football performance in junior players.
- Identifying the differences between pre- and post-assessments within the research group to evaluate the program's impact.

II –Methods

- Research Methodology:

The study employed an experimental design with equivalent groups, as it aligns with the research objectives and ensures methodological rigor.

- Research Population and Sample:

The research population comprised football players from clubs in the state of Sétif. The study sample included ten (10) players from Mouloudia Ouricia Club, who were purposefully selected based on criteria that support the research requirements.

- Sample Equivalence:

Table (01) presents the statistical parameters and the calculated (T) value for selected research variables to verify the equivalence between the two study groups.

	Control group		Group Experimental		Calculate d T-Value	Sig	Significance
	X	S	X	S			
Age/Year	15,20	0.37	14.80	0.38	0.75	0.471	No Significant
Length/cm	1.55	0.032	1.47	0.206	0.921	0.384	No Significant
Weight/kg	51.60	3.43	51.40	3.57	0.877	0.930	No Significant
Training age	3.80	0.836	4.2	0.84	-0.76	0.47	No Significant
Kinetic sensation	16	1.58	15.40	1.14	0.688	0.511	No Significant
Emotional state	12.00	.149	12.40	1.34	0.431	0.678	No Significant
Level of significance:0.05, df= 8 , T = 2.30							

Source: Prepared by researchers

-Study Tools

In this study, the researcher used: - Scale "mental perception (motor sensation - emotional state) in the sports field " (Jassim Abbas Ali, 2009, p. 144).

- Scientific underpinnings of the instrument:

Discriminant validity:

Table (02) represents the discriminant validity of the scale

	Calculated T-Value	T Tabular	Significance
Mental perception scale	3.15	2.77	Significant

Source: Prepared by researchers

Table (02) shows the difference in truth of the Scale. From the numbers seen in this table, we can see that the counted (T) numbers are more than the matching listed (T) numbers which means there is a big noticeable difference between the top and bottom scores taken from the survey sample. This points to a high level of truth in scale.

Stability of the instrument:

The check-check way was used to see how steady the tool is. These were put back into a group at a set time and were given again the same tool by the test; the right number for this was the link value counted between the first and second checks. By doing this, it was found that the steady

number was (0.84) From this finding, researcher said that scale is good enough for study purpose. Also, the easy link measure of the scale was.

Table (03) shows the correlation coefficient of the scale

	Correlation coefficient value R	Coefficient of stability
Mental perception Scale	0.72	0.84

Source: Prepared by researchers

-Pre Tests:

The sample for the study had previously undergone a pre-test which was conducted after the pilot study in the case the scientific foundation for the test had been developed. The tests were done on October 7, 2023 at 9:00 A.M.

Training Program:

The program was systematically structured designed and executed during eight (08) weeks.

A - Training Sessions (Three Sessions per week)

A specialized training regimen prepared for MC Ouricia club with inputs from various experts and specialists in sports training sciences, as well as relevant scientific literature..

The content of the program comprised of a set of general endurance patches as well as patches related to physical, motor training. It was composed of 24 training sessions lasting two months and with three (3) weekly sessions. The control group received its usual training and the experimental group had been trained using the suggested hypothetical program, including physical and motor exercises.

-Pre-measurement: Pre-test of the study variables, it was conducted prior to the initiation of the implementation of the suggested training programme on 7/10/2023.

-Post-Test: The post- test was completed by the study sample on December 14, 2023, two days after the training program concluded.

B-Psychological and Counseling Session:

Each session of psychological and counselling was undertaken once a week making up eight (08) sessions of the program.

III- Results and discussion :

-Presentation of the results of the first hypothesis, which states:

- The existence of statistically significant differences between the pre-measurement of the control group in improving the motor sense and the emotional state associated with football in juniors.

Table (05) between the values of (T) and the arithmetic mean and the standard kinetic deviation of the control group in the pre- and post-measurement

	Control group				Calculated T-Value	Sig	Significance
	Pre-test Measurement		Post-test Measurement				
	X	S	X	S			
Kinetic sensation	16.00	1.58	15.80	0.84	0.535	0.511	No Significant

Emotional state	<i>12.00</i>	1.49	13.00	0.707	1.58	<i>0.678</i>	No Significant
Level of significance:0.05, df= 4 , T = 2.77							

Source: Prepared by researchers

Table (05) presents the results of the pre- and post-tests conducted on the control group, evaluating the mental perception scale across two dimensions:

Motor Sensation Dimension :

The calculated t-value (0.535) is lower than the critical t-value (2.77) at a significance level of 0.05. Additionally, the obtained significance value ($p = .621$) exceeds 0.05. These results indicate that there are no statistically significant differences between the pre- and post-test scores of the control group in the motor sensation dimension of the mental perception scale.

Emotional State Dimension:

Similarly, the calculated t-value (1.58) is lower than the critical t-value (2.77) at a significance level of 0.05. Furthermore, the derived significance value ($p = 0.189$) is greater than 0.05. This suggests that no statistically significant differences exist between the pre- and post-test assessments of the control group in the emotional state dimension of the mental perception scale.

-Presentation of the results of the second hypothesis which states:

-There are statistically significant differences between the pre-measurement of the experimental group in improving the motor sensation and emotional state associated with football in juniors.

Table (06) between the values of (T) and the arithmetic mean and the standard kinetic deviation of the experimental group in the pre- and post-measurement

	Group Experimental				Calculated T-Value	Sig	Significance
	Pre-test Measurement		Post-test Measurement				
	X	S	X	S			
Kinetic sensation	15.40	1.14	17.00	0.70	4.00	0.016	Significant
Emotional state	12.40	1.34	14.40	0.55	4.47	0.011	Significant
Level of significance:0.05, df= 4 , T = 2.77							

Source: Prepared by researchers

Table (06) presents the pre- and post-test results for the experimental group on the mental perception scale, specifically in the dimensions of motor sensation and emotional state. The findings reveal the following:

Motor Sensation Dimension:

$4.00 > 2.77$ (t calculated > t critical) and this shows that at 0.05 significance level the difference is significant. Second, is the significance value ($p = 0.016$), obtained is less than 0.05, which means there is a difference of post-test measurements with the pre-test of the experimental group in the dimension of motor sensation of mental perception scale..

Emotional State Dimension:

The critical t-value (2.77) at 0.05 level is less than the calculated t-value (4.47). Moreover, the p value ($p = 0.011$) obtained after transformation is significant with less than 0.05 ($p \leq 0.05$), showing a significant difference between the pre- and post-tests of the experimental group to the mental perception scale-emotional state dimension.

The findings of the third hypothesis can now be shared, which aims to prove the following:

-There is a noteworthy difference on telemetry telemetry with regard to control and experimental groups, juniors motor sense and emotional state, associated with football, differ.

Table (07) illustrates the relationship from the values of (T) and the means, and the Kinetic standard deviation on the control experimentalism composites.

	Post-test Measurement				Calculated T-Value	Sig	Significance
	Control group		Group Experimental				
	X	S	X	S			
Kinetic sensation	15.80	0.84	17.00	0.707	2.449	0.040	Significant
Emotional state	13.00	0.707	14.40	0.55	3.50	0.008	Significant
Level of significance:0.05, df= 8 , T = 2.30							

Source: Prepared by researchers

Table (07) shows the results after the test that compare control group and experiment group on mental sense scale, especially in areas of movement feeling and mood. The findings show these:

Motor Sensation Dimension:

The computed t-value (2.449) is greater than the critical t-value (2.30) at $p < .05$. Also, because the p-value obtained is 0.040, which is < 0.05 ; we identify that there is statistically significant difference in the post-test scores for the motor sensation dimension of the mental perception scale between the control and the experimental groups..

Emotional State Dimension:

The found t-number (3. 50) is more than the key t-number (2. 30) at a 0. 05 meaning level. Also, the gotten meaning number ($p = 0. 008$) is less than 0. 05, showing the presence of important differences between a control group and experimental group in the after-test scores for emotional state part of mental view scale.

According to the analysis reported above and in light of the fact that there were no statistically significant differences in the pre- tests and post-tests of the control group on the mental perception scale of the motor stimulation or emotional state dimension, we consider that the control group did not participate in the voluntary program. Due to the lack of physical and motor activities and of the psychological intervention sessions, it is possible that the effects of the intervention were maintained..

In contrast, between the pre-test and the post-test of the experimental group, the findings showed significant differences in both dimensions (motor sensation, emotional state) of the mental perception scale. The effectiveness of the intervention might be attributed to the combined targeted physical and motor exercises, and the structured psychological counseling sessions in the proposed program, as the researchers suggested. These factors seem to have had a pivotal role in strengthening the mental image of the participants. In light of this, a study by Hisham Khanfour, Abdel Karim Maamoun and Fathi Wada (2014) had revealed that a psychomotor therapy programme proved to be effective in enhancing the psychological safety of blind children by achieving lasting positive effects.

Also the findings support the statistical significance of the post-test differences between experimental and control group for the two dimensions of the mental perception scale. The authors also attributed the contribution to learning of underlying changes in their program to the constructive framework plan, comprising physical and motor activities and exercises and psychological interventions, the specially selected use of motor field control as an instructional method because the motor area was trained according to performance influence factors (i. e. gravity influence, movement dynamics aspects) related to the learning process. This is quite consistent with the conclusion of Nazem Ahmed Akab (2018) on the importance of motor field control in developing muscle groups needed for motor performance. It also minimizes variables that hinder the effective utilization of cognitive and motor skills.

IV- Conclusion:

In line with the research topic (which was planned to investigate the effects of a proposed physical-psychological program on improvement of motor sensation and that associative emotional state), several hypotheses were defined for the interim solution of the problem to be identified.

These hypotheses were developed based on a comprehensive review of theoretical frameworks and prior relevant studies, which formed the theoretical foundation of the research. The reasonableness of these hypotheses was evaluated through debate and interpretation of evidence with the result as follows:

- There was not a statistically significant difference between the control group and the weekly in relation to pre-test on changes in Motor sensation and their impact on emotional condition among young footballers.
- There were statistically significant differences in the comparison of pre-test experimental group results when mobilizing the motor sense and mood of young players.
- Significant statistical differences were evident in the post-test comparisons between the control and experimental groups, demonstrating the effectiveness of the proposed program in enhancing motor sensation and its associated emotional state among young footballers.

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