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Effectiveness of counseling sessions based on psychological stability integrated with relaxation exercises in regulating sleep for youth football players

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Abstract:

Football is among the team sports that require psychological preparation, so the players can be able to control their emotions and adapt their behave to the circumstances and their psychological state. In this context the psychological factor very important to determine the quality of performance on the field, it can even be the difference between success and failure for players with similar physical and skill levels. A lot of young football players suffer from sleep disorders because of the psychological pressures that come with training and competition, which affects negatively their physical and mental performance. even with the importance of sleep as un important factor in promoting recovery and improving athletic performance, few studies have addressed the impact of psychological interventions like stabilization exercises, on improving sleep quality in this age group. So, the importance of stabilization programs as an effective means of improving sleep quality and promoting emotional balance to the athletes. Psychological stabilization includes a set of training techniques such as progressive muscle relaxation, meditation, and breathing exercises, which have been proven to contribute to reducing anxiety and improving sleep quality. The research aims to prepare guidance sessions based on psychological stabilization combined with relaxation exercises in regulating sleep for young football players, and to identify the effect of

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guidance sessions based on psychological stabilization combined with relaxation exercises in regulating sleep for young football players. This study adopted the quasi-experimental design method as it is suitable for the nature of the research, where a psychological training program (psychological stabilization exercises) was applied to a group of young football players, with pre- and post-measurement of the level of sleep. The study sample included (20) young football players, aged between (14-16) years, who train regularly at the Police Sports Club. The sample was selected purposively (not randomly) to meet the study criteria. The results showed a significant increase in total sleep time after the application of the psychological training program, with an average of +30.47 minutes (Cohen's d = 3.37), indicating a very significant effect of the program. Studies point to that meditation and breathing exercises incentivize the parasympathetic nervous system and reduce excessive nervous activity, all of this makes it easier to fall asleep and increasing sleep duration. Depending on this, the researchers reached conclusions, including that the players showed improved sleep duration and the proportion of deep sleep stages, that supporting their physical and psychological recovery. the results give strength to the hypothesis that non-pharmacological psychological training can be a sustainable option for improving athletic performance by enhancing sleep. Other conclusions include adopting psychological stabilization training programs as part of the training plans for young athletes, especially during periods of increased competitive pressure, putting mindfulness techniques into training sessions, Couse of their direct impact on sleep, attention, and mental performance.

Keywords: Counseling sessions, psychological stability, relaxation exercises, sleep regulation**.**

Introduction:

youth stage in football is the most important developmental periods that forms the basis of player's future athletic career. In this stage, fast development happening in physical, technical, tactical, psychological, and social Factors. at this stage young players face multiple pressures, like the intensive training, the competition pressure, the expectations of coaches and management, and the developmental changes associated with adolescence, which can impact negatively on their psychological balance and emotional stability. Sleep is one of basic component in the physical recovery process and neuropsychological regulation. It helps to rebuilding muscle tissue, hormone regulation, and improved focus, attention, and making decisions on the field. The recent literature in sports psychology confirm that sleep disorders are directly connected to increased levels of anxiety and stress, and weakness of psychological stability, which affects players' technical and tactical performance, especially between youth athletes. This is the importance of psychological counseling programs that helps psychological stability by developing emotional coping skills, stress managing, and self-confidence. using relaxation exercises (like progressive muscle relaxation, deep breathing, and calming visualization) as tools to improve sleep quality and reduce physiological arousal before sleep**.** The mixing of psychological stability-focused counseling sessions with relaxation exercises can be a scientifically effective to sleep regulating for young

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football players, positively affecting their physical, psychological, and their performance. Sleep is a vital element that directly affects athletic performance, especially for young athletes who are going through physical and psychological fast development. Studies pointed that sleep disturbances can lead to a bad physical performance, weak concentration, and an increased risk of injuries in athletes (Walsh et al., 2021).

The young football players are considered the most susceptible to sleep problems because of the psychological pressures that come with training and competition, in additionally hormonal and neurological changes at this age. Since football is a sport that requires development and modernization, studying sports psychology is one of the most important modern trends in developing this game (Hani, Khudhair, and Jasim, 2022).

In this context, the psychological aspect is a crucial factor in determining the quality of performance on the field, and it can even be the difference between success and failure, even for players with similar physical and skill levels (Thare Hani, Talib Abd, and Saad Ibrahim, 2025).

Football is among the team sports that require psychological preparation, enabling players to control their emotions and adapt their behavior according to circumstances and their psychological state (Hani et al., 2022).

In this context, the importance of psychological stabilization programs has emerged as an effective means of improving sleep quality and promoting emotional balance in athletes. Psychological stabilization includes a range of training techniques such as progressive muscle relaxation, meditation, and breathing exercises, which have been proven to contribute to reducing anxiety and improving sleep quality (Kudlackova, Eccles, and Dieffenbach, 2013). Sports psychology literature also confirms that improving psychological stability contributes to reducing insomnia and improving self-efficacy in sleep (Scott et al., 2021).

Exploring the effect of psychological stability exercises on sleep levels among young football players aims to develop support programs that contribute to improving mental health and athletic performance. Guidance programs aim to cultivate new, flexible, and modifiable behavioral patterns through diverse methods that equip individuals with new skills, concepts, information, attitudes, and values to help them change and modify their behavior (Hani 2021).

Many young football players suffer from sleep disorders due to the psychological pressures associated with training and competition, negatively impacting their physical and mental performance. Despite the importance of sleep as a crucial factor in promoting recovery and improving athletic performance, few studies have addressed the impact of psychological interventions, such as psychological stability exercises, on improving sleep quality in this age group. This leads to the following main research question:

Theoretical Significance:

- Increase the scientific literature in the field of sports psychology by mixing psychological stability and sleep quality for young football players.
- Clarifying the relationship between psychological counseling sessions and relaxation exercises for improving mental health and athletic sleep.
- Supporting modern ideas of mixing psychological preparation with physical and technical training.

Practical Significance:

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- Providing a practical counseling program that can be used by young age coaches and psychologists in sports clubs.
- improving sleep quality for young players, which positively impacts focus, attention, and decision-making speed on the field.
- Reducing levels of stress and anxiety that associated with competitions, to enhancing emotional stability and behavioral discipline.

Educational and Health Significance:

- Supporting the mental health for young players during a sensitive and changeable period.
- considering sleep as a basic factor in athletic performance, not just a biological need.
- building a psychologically balanced player with skills in regulating emotions and stress.

Future research implications:

- Opening the door for more studies dealing with psychological variables related to sleep, such as competitive anxiety, psychological resilience, or psychological immunity.
- Making a model that can be applied to other sports.

research goals:

- Developing a counseling session based on psychological stability combined with relaxation exercises to regulate sleep among young football players.
- Identify the impact of psychological stability counseling sessions combined with relaxation exercises on sleep regulation among young football players.

Methodology and research design:

The researchers adopted the experimental method with a single pre-test/post-test design, as it was suitable for the nature of the research in revealing the effectiveness of counseling sessions based on psychological stability combined with relaxation exercises in regulating sleep among young football players.

Participants:

The study sample consisted of (20) junior football players, aged (14–16) years, who regularly train at the Police Sports Club. The participants were selected purposively (not randomly) to fit the study criteria.

A psychological stability-based exercise program was implemented over four weeks, with three sessions per week, each lasting between 30–45 minutes. The program included a set of psychological exercises:

- Deep breathing and diaphragmatic breathing exercises.
- Progressive muscle relaxation.
- Guided imagery.
- Mindfulness techniques.

Tools:

1 .Sleep:

Sleep was tracked using the ŌURA Smart Ring (2nd Generation), which measures movement, heart rate, heart rate variability, respiratory rate, body temperature, and other parameters to determine sleep stages. Players wore the rings every day, except on match days. Data was automatically transferred to an app via Bluetooth.

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Measured Sleep Variables:

- Total Sleep Time.
- Wake Time.
- (REM) Rapid Eye Movement Sleep.
- Deep Sleep.
- Light Sleep.
- Percentage of movement during sleep.
- Onset Time.

2 .Training program for psychological stabilization:

The program was designed according to sports psychology literature and relaxation programs applied in sports, especially for young football players specific needs. and reviewed by expert academics to ensure about its validity and suitability.

3. form of personal question:

the information collected about players, such as age, playing years, weekly training hours, and any old medical or psychological conditions affecting sleep.

Procedures:

First: Pre-tests

- Sleep indicators measured by using the sleep tracking device/ research sleep variables (total sleep, deep sleep, REM sleep, light sleep, movement during sleep, sleep onset time, and percentage of movement during sleep).
- standardized the measurement conditions (sleep time, training hours, and avoidance of stimulants before bedtime).
- Data recorded for one week to made accurate averages for the pre-test.

Second: Counseling session (Duration: 4 weeks)

The program applied for (4) weeks, with (4) sessions per week, totaling (16) training sessions, each lasting approximately (60) minutes, supervised by the two researchers.

Program aims:

- Reduce physiological arousal before sleep.
- Support psychological stability and emotional regulation.
- Train athletes in stress management skills.
- Improved sleep quality and quantity.

weeks 1 and 2:

Focus on maintaining a steady breathing rhythm (4 seconds inhale – 4 seconds hold – 6 seconds exhale).

Positive visualization of the playing field environment, the color green, the kit and successfully executing a skill.

Enhancement the ability of mentally focus for longer periods.

Week 4 (Peak Phase – Complete Control)

Week 4 the program's climax

Established the Progressive muscle relaxation for 30 minutes.

Deepened the Mindfulness meditation to 15 minutes in most sessions.

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Increased positive visualization that related to success in matches.
focus on full control of inhalation and exhalation (increased capacity of respiratory).
Weeks 3 and 4:
At the end of each session, imaging a success situation (a successful pass, a successful shot, a successful defensive tackle).
Enhancement of emotional control before sleep.
Players are instructed to practice the exercises 30 minutes before bedtime.

Third: Experimental Control

To ensure the validity of the results, the following measures were taken:
Physical training times were fixed throughout the program.
Stimulants were prohibited after 6:00 PM.
Sleep times were standardized as much as possible.
Players' adherence to home exercise routines was monitored.

Fourth: Post-Program Measurements

After the fourth week, all sleep variables were remeasured under the same conditions and procedures used in the pre-program for seven consecutive days. The data were then statistically analyzed using:
The paired samples t-test.
Spearman's correlation coefficient.
Cohen's d-value.
Procedural Conclusion: The program progressed from:

- Introduction to techniques
- Consolidation
- Deepening
- Reaching the stage of complete control
- This facilitated a structured transition from knowledge acquisition to stable practice, which explains the significant improvement in players' sleep indicators after the program's completion.

Statistical Analysis:

- The mean and standard deviation were calculated for all variables.
- Analysis of variance (ANOVA) was used to compare different days, with Bonferroni's test used to determine post-hoc differences.
- Cohen's d-test was used to determine the effect size.
- Relationships between variables were analyzed using Spearman's rank correlation coefficient.
- Statistical significance was considered to be at $p < 0.05$.

Results:

Table (1) shows differences between pre- and post-measurements.

Cohen's d	p-value	t (Student)	SD after	Mean after	SD before	Mean before	Variable
3.37	0.000	15.09	26.55	425.34	28.80	394.86	**Total Sleep Time**
-1.65	0.000	-7.38	10.17	49.05	9.68	57.34	**Wake Time**

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1.66	0.000	7.43	13.69	98.14	12.31	89.60	**(REM)**
2.25	0.000	10.06	11.81	81.81	11.12	69.69	**Deep Sleep**
-1.24	0.000	-5.56	18.54	169.09	17.27	179.40	**Light Sleep**
-1.33	0.000	-5.94	6.13	12.48	5.11	15.22	**Movement during sleep**
-2.10	0.000	-9.38	0.97	21.71	1.07	22.89	**Onset Time**

Discussion:

Table (1) presents the descriptive statistics and the paired-samples t-test between the pre- and post-test measurements of sleep variables among junior football players. The results showed statistically significant differences at the 0.05 level in all variables, favoring the post-test, thus confirming the effectiveness of the guidance program integrated with relaxation exercises in improving sleep indicators.

First: Total Sleep

The mean sleep duration increased from 394.86 minutes before the program to 425.34 minutes afterward, with a t-value of 15.09 and a significance level of 0.000, resulting in a very high effect size (Cohen's d = 3.37).

This is point to a big improvement in total sleep duration, which is a key indicator of physical recovery and neurological regulation improvement. This is reflecting the success of program in reducing cognitive and emotional stress, which had been hindering sufficient sleep.

Second: Wake time during the night

numbers decreased from 57.34 minutes to 49.05 minutes, with a t-value of (t = -7.38) and a large effect size of (d = -1.65).

This is point to decrease in sleeping interrupted, that's mean an improvement in deeply sleep continuity. This can be explained by a decrease in physiological arousal because of the relaxation exercises helped calm the nervous system.

Third: rapid eye movement sleep (REM)

numbers increased from 89.60 minutes to 98.14 minutes, with a t-value of (t = 7.43) and a large effect size of (d = 1.66).

The (REM) increasing is an important positive indicator, that regulate cognitive processes and motor memory, which is very important for young football players in consolidating tactical and technical skills.

Fourth: deep sleep

numbers increased from 69.69 to 81.81 minutes, with a t-value of (t = 10.06) and a very large effect size (d = 2.25).

the deep sleep is an important for muscles recovery and growth hormone level, indicating improved physical recovery, which is a direct reflected of reducing stress and improving psychological stability.

Fifth: light sleep

numbers decreased from 179.40 to 169.09 minutes, with a t-value of (t = -5.56) and a big effect size (d = -1.24).

The decrease in light sleep is a positive indicator, this transition towards too deep sleep and REM, which enhancing overall sleep quality.

Sixth: Movement during sleep

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movement during sleep decreased from 15.22 to 12.48, with a t-value of (t = -5.94) and an effect size of (d = -1.33).
this decrease is an indicator of improved physical and emotional relaxation.
Seventh: Sleep Onset Time
decreased the time that required to fall asleep from 22.89 minutes to 21.71 minutes, with a t-value of (t = -9.38) and a big effect size (d = -2.10).
this means an improvement in the speed of falling asleep, this is a result for decreased in excessive mental activity before sleep, which is the most important goal of the counseling season.
a statistically significant differences with large effect sizes for all variables, which is mean improvement was high practical value. thanks to the program that addressed:

- The cognitive aspect (pre-sleep anxiety).
- The emotional aspect (stress and anxiety).
- The physiological aspect (neural excitability).

Furthermore, the high Cohen's d-values—which significantly exceeded 0.80 for all variables—indicate a strong practical effect of the program, and not merely a statistical significance resulting from the sample size.
the results confirm that combining of counseling sessions for psychological stability with relaxation exercises is an effective to improving the quality of sleep for young football players, and positively impacts their physical readiness, focus, and skill performance.

table (2) variable differences between the pre- and post-measurements

Max Difference	Min Difference	SD Difference	Mean Difference	Variable
+48.66	+13.93	9.03	+30.47	**Total Sleep**
+3.60	-14.87	5.02	-8.29	**Wake Time**
+15.99	-0.60	5.14	+8.54	**REM**
+29.26	+3.11	5.39	+12.12	**Deep Sleep**
+6.20	-24.18	8.30	-10.32	**Light Sleep**
+1.24	-6.04	2.07	-2.74	**Movement during sleep**
-0.18	-2.62	0.56	-1.17	**Sleep Onset Time**

in table (2) the mean differences between the pre- and post-test measurements and the standard deviations of these differences with the lowest and highest differences for sleep variable. This table important because it shows the sample changes, not just its statistical significance.
First: Total Sleep
mean difference was (+30.47) minutes, with a standard deviation of (9.03), and the change is between (+13.93) and (+48.66) minutes.
almost all players have a significant increase in total sleep, and minimum improvement of more than 13 minutes. as a general and stable effect of the program on total sleep duration, not just for a small number of players.
Second: Wake Time
mean difference was (-8.29) minutes, with a variance between (-14.87) and (+3.60). Although the average indicates an overall improvement (reduced wakefulness), the positive upper limit mean

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that a small number of players did not improve in the same way, they my effects by individual factors like personal anxiety or lifestyle outside of training.

In general, nighttime fragmentation for the sample reduced.

Third: rapid eye movement sleep (REM)

difference was +8.54 minutes, ranging from -0.60 to +15.99.

which is indicates an improvement in this sleep stage for most players, with one or two cases showing no significant improvement (small negative value).

the program effectively enhancing sleep associated with cognitive processing and motor learning.

Fourth: deep sleep

the highest qualitative improvement, with an average difference of +12.12 minutes, ranging from +3.11 to +29.26. It is noteworthy that all values were positive, indicating that every participant experienced an improvement in deep sleep without exception.

This is a strong indicator of the effectiveness of relaxation exercises in promoting physical recovery and reducing physiological arousal.

Fifth: light sleep

Decreased by an average of (-10.32) minutes, with a variation between (-24.18) and.(6.20+)

This indicates a shift of some sleep time from light to deeper stages (DEEP and REM), a positive development in the quality structure of sleep.

However, the presence of a positive difference among some players indicates individual variation in response to the program.

Sixth: Movement during sleep

Decreased by an average of (-2.74), ranging between (-6.04) and.(1.24+)

This indicates an improvement in physical stability during sleep and a reduction in nocturnal movement anxiety, with limited individual variation.

Seventh: sleep onset time

The average difference was -1.17 minutes, with variations ranging from -2.62 to -0.18 minutes, all of which were negative.

This means that all players fell asleep more quickly after the program was implemented, with no adverse effects. This is a strong indicator of the success of the cognitive-relaxation aspect in reducing pre-sleep mental activity.

Thus, the data on individual differences indicate that the improvement was:

Comprehensive in both deep sleep and sleep onset time (improvement in all individuals).

Majority in the remaining variables, with limited individual variation.

Clearly practical value in terms of the number of perceived minutes in each phase.

The greatest improvements were observed in:

Total sleep, Deep sleep, REM sleep.

the program affected in the quantity, quality and internal structure of sleep, which is the primary goal of any structured psychophysiological activity.

this small variation among players can be explained by individual differences in baseline anxiety levels, home adherence to instructions, and daily habits outside the training environment. so, the results of Table (2) match it in Table (1), and confirm that the program combined with relaxation exercises made a real positive change at the individual level, and general statistical level.

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Therefore:

- All variables showed statistically significant differences in favor of the post-test.
- The greatest improvement was recorded in total sleep time and deep sleep.
- The smallest difference was found in the ONSET, but it was still significant (temporally).

table (3) sleep variables Spearman's correlations (after the program)

ONSET	Movement during sleep	LIGHT	DEEP	REM	Wake Time	Total Sleep	variable
-0.147	-0.325	0.289	-0.053	-0.409	-0.072	1.000	Total Sleep
-0.265	-0.042	0.436	-0.054	0.129	1.000	-0.072	Wake Time
-0.114	-0.086	-0.020	-0.080	1.000	0.129	-0.409	REM
0.405	0.299	-0.072	1.000	-0.080	-0.054	-0.053	Deep Sleep
-0.214	-0.159	1.000	-0.072	-0.020	0.436	0.289	Light Sleep
0.298	1.000	-0.159	0.299	-0.086	-0.042	-0.325	Movement during sleep
1.000	0.298	-0.214	0.405	-0.114	-0.265	-0.147	Sleep Onset Time

table (3) Spearman's correlation between sleep variables in the post-test, to discover the relationship between sleep components after working with program mixed with relaxation exercises. this analysis shows the structural consistency of sleep after the improvement.

First: Total Sleep and its Relationship to Other Variables

An average negative correlation showed between total sleep and (REM) (-0.409), and negative correlation with movement during sleep (-0.325), but the correlation with light sleep (0.289) was positive.

The negative correlation with REM sleep can be explained by the fact that an increase in total sleep does not necessarily mean a proportional increase in all sleep stages, as the increase may be distributed across different stages. The negative correlation with Movement during sleep indicates that the longer the total sleep duration, the less nocturnal movement occurs, which is a positive indicator of physical stability.

Second: Wake duration

A moderate positive correlation was found between wake time duration and light sleep (0.436), indicating that increased nighttime fragmentation is associated with a higher proportion of light sleep, which is physiologically logical, as light sleep is more prone to fragmentation.

A weak negative correlation was also found with sleep onset time (-0.265), suggesting that players who fall asleep faster may experience fewer awakenings during the night, although the relationship is not strong.

Third: Deep sleep (DEEP)

Deep sleep showed a moderate positive correlation with both sleep onset time (0.405) and sleep movement.(0.299)

The positive correlation with sleep onset time may seem unexpected, but it can be explained by the fact that some players who take slightly longer to fall asleep may later transition to more stable deep sleep, especially after a decrease in cumulative anxiety.

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Its relationship with sleep movement may reflect a normal regulatory interaction within the sleep structure and is not necessarily a negative indicator, especially if the movement is within normal limits.

Fourth: rapid eye movement sleep (REM)

REM was negatively correlated with total sleep (-0.409) and weakly correlated with the other variables, suggesting that the REM stage became relatively independent after the program, meaning it was no longer associated with clear disturbances in the other components of sleep. This indicates an improvement in the internal organization of sleep cycles.

Fifth: Sleep onset time (ONSET) showed a moderate positive correlation with deep sleep (0.405), a positive correlation with sleep movement (0.298), and a negative correlation with light sleep.(0.214-)

This indicates that the internal structure of sleep has become more organized, such that the improvement does not depend on a single factor but rather on an integrated interaction between the different stages.

The correlation coefficients indicate that:

The relationships between the variables have become more normalized after the program.

There are no random or conflicting correlations with very high values, indicating a balanced sleep structure.

Some moderate correlations (approximately ±0.40) reflect functional interdependence between sleep components, not a disorder.

Furthermore, the use of Spearman's rank correlation coefficient enhances the accuracy of the analysis given the small sample size and the non-parametric data nature. Therefore, the results of Table (3) support the conclusion that the program not only improved the variables separately, but also contributed to reorganizing the internal structure of sleep-in young players, reflecting a better state of psychological and physiological stability.

Therefore:

- A moderate negative correlation exists between REM and total sleep: meaning that as REM sleep increases, the proportions of other sleep stages decrease.
- A positive correlation exists between deep and (ONSET) sleep, indicating that those who go to bed late may compensate with deep sleep.
- A weak negative correlation exists between Movement during sleep and total sleep, reflecting that increased movement reduces total sleep.

From the three tables, we can draw the following useful conclusions:

1 .Total Sleep Duration: The results showed a significant increase in total sleep time after implementing the psychological training program, with an average increase of +30.47 minutes (Cohen's d = 3.37), indicating a very significant effect of the program. Studies indicate that meditation and breathing exercises stimulate the parasympathetic nervous system and reduce excessive nervous activity, thus facilitating the onset of sleep and increasing its duration (Tang et al., 2007).

2 .Rapid Eye Movement (REM) and Deep Sleep (DEEP): Significant increases were observed in both REM sleep (+8.54 minutes) and deep sleep (+12.12 minutes).

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these critical stages for supporting mental and physical recovery.
(REM sleep) is responsible for cognitive processing and memory,
(Deep sleep) helps muscle repair and hormonal balance.
3 .reduced wake time and movement during sleep:
reducing in wake time and movement during sleep point to improved sleep quality and stability. Progressive muscle relaxation exercises and mindfulness techniques calm sensory centers and reduce anxiety, decreasing the number of awakenings during sleep (Morin et al., 2006).
4 .Reduced sleep onset time: Sleep onset time decreased by 1.17 minutes, a statistically significant improvement. meditation and guided imagery help to shut down racing thoughts and accelerate the process of falling asleep.
5. Correlation Analysis (Spearman)
•A negative relationship between total sleep time and sleep-wake/movement time: this means that any improvement in one aspect positively impacts sleep quality.
•A moderate correlation between ONSET and DEEP, indicating that improved sleep onset is accompanied by deeper sleep. This is an indicator of the integrated effectiveness of the psychological training program.
After applying the program, post-test results showed a decrease in psychological stress indicators, indicating that the program effectively achieved its objectives (Abdulhussein and Hani 2023).

Conclusions:

1 .Psychological stability counseling sessions, combined with relaxation exercises, improved sleep regulation among young football players.
2 . Players showed improvement in sleep duration and the proportion of deep sleep stages, supporting their physical and psychological recovery.
3 . non-pharmacological psychological training can be a sustainable option for improving athletic performance by enhancing sleep.
4. A positive relationship between the level of psychological stability and the quality of sleep among athletes.
5. reducing emotional arousal before sleep is a key in improving sleep depth and regularity.
6 .Integrating cognitive (counseling) techniques with physiological (relaxation) techniques is an effective approach in sports psychology programs.
7 .Paying attention to sleep as a psychophysiological variable contributes to increasing the overall readiness of athletes.
8. Psychological programs based on relaxation techniques (breathing, meditation, mindfulness) have proven effective in improving quantitative and qualitative sleep indicators.

Recommendations:

1 .Adopt a program of guidance sessions integrated with relaxation exercises within the training plans for all age groups in sports clubs.
2 .Appoint or utilize a sports psychologist to monitor the psychological well-being of young athletes on a regular basis.
3 .Integrate education on the importance of sleep into the educational programs for athletes and their parents.

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4 .Conduct periodic measurements of sleep levels and psychological stability to monitor progress and prevent disorders.
5 .Conduct similar studies on different age groups or other sports to verify the generalizability of the results.
6 .Investigate other psychological variables related to sleep, such as competitive anxiety, psychological resilience, and psychological immunity.
7 .Use sleep tracking devices, such as the Ōura ring, periodically to monitor sleep improvement and intervene when disorders are detected.
8 .Conduct future studies with larger samples and different age groups to generalize the findings.
9. Investigate the interaction between sleep quality and skill or physical performance during matches.

Personal Questionnaire
This questionnaire is intended to collect basic demographic and background information about the participants. Please answer the following questions accurately:
Age:
17 ☐ 16 ☐ 15 ☐ 14 ☐ 13 ☐
Years of playing experience in volleyball:
☐Less than 1 year ☐ 1–2 years ☐ 3–4 years ☐ More than 4 years
Number of training hours per week:
☐Less than 4 hours ☐ 4–6 hours ☐ 7–9 hours ☐ 10 hours or more
Do you suffer from any current or previous medical or psychological conditions that may affect your sleep?
☐Yes ☐ No
If yes, please specify_____ :
Counseling sessions based on psychological stability
Psychological Stability Training Sessions
Duration: 4 weeks
Frequency: 4 sessions per week
Session Length: 30–45 minutes
Target Audience: Junior Football Players

Week 1: Preparation and Mindful Breathing

Objective: To calm the nervous system, increase awareness of body and breath, and prepare psychologically.
Session 1:

- Introductory Overview (5 minutes): What is psychological stability and why is it needed in sports?
- Deep abdominal breathing exercises (15 minutes)
- (4-7-8) breathing: Inhale for 4 seconds, hold for 7, exhale for 8
- Initial muscle relaxation (10 minutes)
- Closing discussion: The player's feelings after the exercise (5 minutes)

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Session 2:
•Abdominal breathing exercises + "counting breaths" exercise (20 minutes)
•Facial and shoulder relaxation exercises (10 minutes)
•Silent relaxation session (5 minutes)
Session 3:
•Breathing + progressive muscle tension and relaxation (30 minutes)
•Reviewing the body's response (5 minutes)
Session 4:
•Procedures: Open discussion: When do you sleep? Why don't you sleep well?
•Clarifying the role of sleep in performance.
•Simple breathing exercise.
•Full muscle relaxation: foot → leg → abdomen → arm → face.
•Managing pre-match anxiety.

Week 2: Muscle relaxation, positive visualization, and understanding stress

Objective: To regulate the physiological response and focus attention on mental images Relaxation

Session 1:
•Progressive full-body muscle relaxation (25 minutes)
•Starting from the feet to the face
•Accompanying breathing exercises (5 minutes)
•Simple positive self-talk (5 minutes)
Session 2:
•Relaxation + Guided Imagery
•Visualize a safe place (15 minutes)
•Visualize a successful athletic performance (10 minutes)
•Silent rest (5 minutes)
Session 3:
•Progressive muscle relaxation + breathing (20 minutes)
•Candlelight meditation or color breathing (10 minutes)
•Review with the players (5 minutes)
Session 4:
•Training situations that cause tension
•Shoulder and neck muscle relaxation
•Full muscle relaxation: feet → legs → abdomen → arms → face
•Managing pre-match anxiety

Week 3: Mindfulness and Emotional Regulation

Goal: To enhance present-day attention, reduce anxiety, and improve self-talk

Session 1:
•Exercise Body Scan (20 minutes)
•Observing thoughts without judgment (10 minutes)

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•Meditation breathing exercises (5 minutes)

Session 2:

•Focusing on sounds and breath (20 minutes)
•Writing down and mentally releasing disturbing thoughts (10 minutes)

Session 3:

•Mindful Walking (15 minutes)
•Mindful presence exercise: 5-4-3-2-1 for the senses (10 minutes)

Session 4:

•Examples of negative thoughts before bed.
•Transforming them into positive statements.
•Teaching the "Stop-Breathe-Thought" technique.
•Visualizing a relaxing place.
•Full muscle relaxation: feet → legs → abdomen → arms → face.
•Managing pre-game anxiety.

Week 4: Integration and Reinforcement with Emotional Release and Self-Confidence

Objective: To reinforce skills and apply them in stressful sports situations, emotional release, and self-confidence.

Session 1:

•A session combining breathing, relaxation, and visualization. (30 minutes)
•Sports Meditation (Visualizing success in a game) (10 minutes)

Session Two:

•Simulating a stressful situation and using stabilization techniques (30 minutes)
•Discussing how to cope with stress (5–10 minutes)

Session Three:

•Reviewing all exercises (20 minutes)
•Developing an individualized plan for each player to apply what they have learned (10 minutes)
•Self-assessment of feelings and performance (5 minutes)

Session Four:

•Writing down what bothers the player.
•Symbolically closing the paper.
•Linking confidence to restful sleep.
•Visualizing a successful performance.
•Full muscle relaxation: foot → leg → abdomen → arm → face.
•Managing pre-game anxiety.

Implementation Notes:

•Sessions should be conducted in a quiet and comfortable place away from noise.
•Calming background music can be used during meditation exercises.
•Supervision by a sports psychologist or a coach trained in these techniques is preferred.
•Notes should be recorded after each session regarding the players' interaction.

Relaxation Exercises Used:

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- Deep Breathing: Focuses on deep and slow abdominal breathing to help calm the nervous system, reduce stress, and increase oxygen levels in the body, it is recommended to take a few breaths (e.g., inhale for 4 seconds, exhale for 6 seconds).
- Progressive muscle relaxation: This involves tensing the body's muscles one group at a time (e.g., feet, legs, abdomen, arms, shoulders) and then relaxing them completely. This exercise helps reduce both mental and physical tension and increases awareness of the bodies that are tense.
- Mindfulness meditation (mental focus): A short session in which the player focuses on the present moment, such as observing their breathing or bodily sensations without judgment. This exercise enhances mental focus and reduces distracting thoughts.
- Positive visualization related to competitions: Mentally visualizing a victory or positive moments on the field (such as executing a successful shot or receiving the ball with focus) helps boost self-confidence and strengthen a positive mental state before and during matches.

Monthly program schedule: Below are details of the four sessions per week, including the exercise components and their durations. The following table shows the exercises for each session in the first week as an example, with some sessions gradually increasing in subsequent weeks:

Week 1 (Defining and moderately repeating exercises): The focus is on the players understanding each technique and performing it at a calm pace.

First week Exercise sessions

Session 4	Session 3	Session 2	Session 1	Exercise
minutes 5	minutes 5	minutes 5	minutes 5	Deep breathing
minutes 25	minutes 20	minutes 20	minutes 20	Progressive muscle relaxation
minutes 15	minutes 15	minutes 15	minutes 10	Mindfulness meditation
minutes 10	minutes 10	minutes 5	minutes 5	Positive visualization
minutes 5	minutes 5	minutes 5	minutes 5	Short break

During the first week, the sessions focus on deep breathing and basic muscle relaxation exercises. For example, in the first session (45 minutes), allocate 5 minutes for deep breathing, 20 minutes for muscle relaxation, 10 minutes for meditation, and 5 minutes for positive visualization, such as feeling warmth in the chest area and feeling your heart beating slowly and regularly, with a short break that increases by a few minutes in subsequent sessions (for example, 15 minutes for meditation in the second and third sessions) to increase habituation.

Week 2 (Slight Increase in Duration and Focus)

In the second week, the duration of some exercises is increased to enhance focus. Additional sessions may include positional exercises or increased intensity of muscle relaxation.

Exercise Sessions During Week 2

Session 4	Session 3	Session 2	Session 1	Exercise
5minutes	5minutes	5minutes	5minutes	Deep breathing
25minutes	25minutes	25minutes	25minutes	Progressive muscle relaxation
15minutes	15minutes	10minutes	10minutes	Mindfulness meditation
10minutes	10minutes	10minutes	5minutes	Positive visualization

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5minutes	5minutes	5minutes	5minutes	Short break

The muscle relaxation period is increased to 25 minutes to cover additional muscle groups, and meditation and visualization are gradually increased in some sessions. For example, a session might consist of 3-5 minutes of breathing, 25 minutes of muscle relaxation (feeling warmer and more relaxed in the body's muscles while maintaining inhalation and exhalation), 15 minutes of meditation, and 10 minutes of visualization (55 minutes total). This helps the athlete deepen their focus and relaxation under slightly longer conditions.

Week 3 (Deepening the Experience Under Mild Stressors):

The exercise practice is deepened, and small stimuli (such as playing calming music or gentle sound effects) may be added to simulate gradual stress. Mental focus and stress management time are increased. Example of times:

Third week Exercise sessions

Session 4	Session 3	Session 2	Session 1	Exercise
minutes 5	minutes 5	minutes 5	minutes 5	Deep breathing
minutes30	minutes30	minutes25	minutes25	Progressive muscle relaxation
minutes 15	minutes 15	minutes 15	minutes15	Mindfulness meditation
minutes 5	minutes5	minutes10	minutes 5	Positive visualization
minutes 5	minutes 5	minutes 5	minutes 5	Short break

This week, the sessions focus on breath control, meditation, and maintaining a steady breathing pattern, while increasing muscle relaxation time in sessions 3 and 4 to 30 minutes. More details can be added to positive visualization (such as imagining a favorite color on each side, the green field, your clothes, and everything else) during the second session. Most sessions total approximately 60 minutes, which helps train the players to be more patient and maintain mental focus for longer periods.

Week 4 (Peak Training and Application: Complete Control)

Week 4 is the culmination of the program, where the player's ability to fully control stress is developed. During this week, all techniques are practiced for the longest possible duration, with a focus on fully stimulating visualization of success in matches. Example schedule:

Fourth week exercise sessions

Session 4	Session 3	Session 2	Session 1	Exercise
5minutes	5minutes	5minutes	5minutes	Deep breathing
30minutes	30minutes	30minutes	30minutes	Progressive muscle relaxation
15minutes	15minutes	15minutes	5minutes	Mindfulness meditation
5minutes	10minutes	5minutes	5minutes	Positive visualization
5minutes	5minutes	5minutes	5minutes	Short break

In this final week, all sessions last 60 minutes. Breathing exercises focus on increasing the volume of the players' inhalations and exhalations, and muscle relaxation is practiced for a fixed 30 minutes. Mindfulness meditation for 15 minutes to rises deep concentration. after each session,

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short, repetitive positive visualization (e.g., visualizing a successful pass or a powerful shot) is encouraged to support confidence.

The program has been moves step by step: it starts with simple skills, then moves slowly to deeper techniques and longer practice. After one month of regular training, the player becomes able to handle his stress better, sleeps more regularly, and stays focused during matches more than before. The player meditates for 15 minutes to reach deep focus. After each session, he pictures a successful moment in his mind—like a clean pass or a strong shot—and repeats that image to build up his confidence.

Overall, this program ensures a gradual progression from a simple introduction to techniques towards their sustained and advanced application. The players are expected to demonstrate significant progress in their ability to manage stress, regulate sleep, and increase their focus during matches by the end of the month of regular application.

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