

The Effectiveness of a Counseling Program Based on Mental Sustainability in Reducing Burnout among Al-Qadisiyah University Handball Team Players

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ABSTRACT

This study aimed to examine the effectiveness of a counseling program based on mental sustainability in reducing burnout among the handball players of Al-Qadisiyah University team. The researcher adopted the experimental method using a one-group pretest–posttest design. The study sample consisted of 14 players selected purposively. The Athlete Burnout Scale was used to measure the dimensions of emotional/physical exhaustion reduced sense of accomplishment and sport devaluation. The counseling program consisted of 13 sessions, implemented at a rate of two sessions per week during the period from January 3, 2026, to March 16, 2026. The data were analyzed using the arithmetic mean standard deviation paired-samples t-test and effect size. The results showed statistically significant differences between the pretest and posttest measurements in the level of burnout. The mean score decreased from 72.64 to 54.21, with a t-value of 8.37 at a significance level of 0.001, while the effect size reached 2.24. The study concluded that the counseling program based on mental sustainability was effective in reducing burnout among the players. It recommends integrating sports psychological counseling programs into the preparation of university teams

Keywords: mental sustainability; burnout; counseling program; handball; university sports

1 Introduction

University sport represents an educational and competitive environment that combines physical technical psychological and social preparation. University athletes do not only face the demands of training and competition they also deal with academic pressure study obligations and the expectations of coaches and teammates. Therefore, athletic success does not depend solely on physical and technical competence but is also closely linked to the athlete's ability to manage stress regulate emotions maintain motivation and preserve psychological balance (Röthlin et al., 2016; dos Santos et al., 2020).

Handball is one of the team sports that requires high physical and mental demands due to its fast-paced performance physical contact continuous team interaction and rapidly changing game situations. With repeated training and competition especially when psychological coping skills are limited players may become more vulnerable to exhaustion and a gradual decline in motivation which may eventually lead to athletic burnout (Raedeke & Smith, 2001; Póvoas et al., 2012). Athletic burnout refers to a multidimensional psychological condition that includes emotional/physical exhaustion a reduced sense of accomplishment and sport devaluation. Raedeke and Smith developed a specific instrument to measure burnout among athletes known as the Athlete Burnout Questionnaire which has become one of the important tools in this field. Burnout should not be viewed merely as temporary fatigue following training or competition but rather as a psychological problem that may affect the player's motivation commitment continuation in sport and quality of interaction within the team (Raedeke & Smith, 2001; Gustafsson et al., 2011).

In this context recent research in sport psychology has increasingly examined the effectiveness of psychological and mental interventions in improving athletes' adaptation to stress. The literature indicates that interventions based on mindfulness and psychological skills training may contribute to improving attention emotional regulation and psychological well-being as well as reducing some indicators of stress and burnout (Wang et al., 2023; Gardner & Moore, 2004).

Röthlin et al. also emphasized the importance of integrating psychological skills training with mindfulness-based interventions to support functional performance among athletes in highly demanding situations. Similarly, Si et al. indicated that mindfulness training may serve as an effective intervention for improving athletic performance while also stressing the need for more controlled studies with larger samples (Röthlin et al., 2016; Si et al., 2024).

From this perspective mental sustainability emerges as an integrative counseling approach that aims to help athletes preserve their psychological and mental energy regulate their emotions manage stress regain focus after stressful situations and maintain motivation without reaching a state of psychological depletion. In the present study mental sustainability does not simply mean concentration or attention rather it refers to the development of a preventive psychological pattern based on stress awareness deep breathing relaxation realistic thinking goal setting and group support (Wang et al., 2023; Si et al., 2024).

Despite the growing international interest in studying athletic burnout and mental interventions among athletes Arab and Iraqi studies that examine the effectiveness of counseling programs based on mental sustainability in reducing burnout among university team players remain limited. Many previous studies have focused either on measuring burnout or on examining mindfulness separately while fewer studies have combined stress awareness emotional regulation realistic thinking and group support within a single counseling program directed at university handball players (Raedeke & Smith, 2001; Wang et al., 2023).

Accordingly, the present study seeks to address this gap by designing a counseling program based on mental sustainability and examining its effectiveness in reducing burnout among Al-Qadisiyah University handball team players. The study adopts a pilot quasi-experimental design using one group with pretest and posttest measurements which may provide preliminary evidence regarding the effectiveness of the program while also highlighting the need for future studies with broader samples and more controlled designs (Röthlin et al., 2016; Si et al., 2024).

Research Problem

The research problem is defined by the exposure of university team players especially handball players to training competitive and academic pressures that may lead when accumulated and when psychological coping skills are weak to the emergence of indicators of athletic burnout. These indicators include emotional/physical exhaustion reduced sense of accomplishment and sport devaluation among players (Raedeke & Smith, 2001). Through observing the reality of Al-Qadisiyah University handball team players the need emerges for a counseling program based on mental sustainability that contributes to developing stress management emotional regulation and motivation maintenance. This may help reduce burnout and prevent it. This direction is supported by recent trends in psychological and mental interventions among athletes (Röthlin et al., 2016; Wang et al., 2023; Si et al., 2024).

Accordingly the research problem is represented in answering the following question: What is the effectiveness of a counseling program based on mental sustainability in reducing burnout among Al-Qadisiyah University handball team players?

Significance of the Study
The significance of the study stems from its focus on burnout among university athletes as a problem that may affect motivation continuity and athletic performance. This is particularly important because athletic burnout includes emotional/physical exhaustion reduced sense of accomplishment and sport devaluation among players (Raedeke & Smith, 2001). The study is



also significant because it proposes a counseling program based on mental sustainability that integrates mindfulness emotional regulation stress management and realistic thinking. This may contribute to preventing burnout and developing the psychological preparation of university teams (Röthlin et al., 2016; Wang et al., 2023; Si et al., 2024).

Objectives of the Study

1. To design a counseling program based on mental sustainability to reduce burnout among Al-Qadisiyah University handball team players.
2. To identify the level of burnout among the players before applying the program.
3. To examine the differences between the pretest and posttest measurements in the level of burnout.
4. To determine the effect size of the counseling program in reducing burnout.
5. To identify the burnout dimensions that respond most to the program.

Hypotheses of the Study

1. There are statistically significant differences between the pretest and posttest measurements in the total level of burnout in favor of the posttest measurement.
2. There are statistically significant differences between the pretest and posttest measurements in the dimensions of burnout: emotional/physical exhaustion reduced sense of accomplishment and sport devaluation in favor of the posttest measurement.
3. The counseling program based on mental sustainability achieves a practical effect size in reducing burnout among the sample members.

Limits of the Study

1. **Human limits:** The players of Al-Qadisiyah University handball team totaling 14 players.
2. **Spatial limits:** The indoor hall at the College of Physical Education and Sport Sciences at Al-Qadisiyah University.
3. **Temporal limits:** The period from January 3 2026 to March 16 2026.
4. **Subject limits:** The effectiveness of a counseling program based on mental sustainability in reducing burnout among university handball players.

Operational Definitions

Counseling Program Based on Mental Sustainability

It is an organized set of group counseling sessions consisting of 13 sessions implemented at a rate of two sessions per week. The program aims to develop stress management emotional regulation mindfulness realistic thinking and motivation in a way that contributes to reducing burnout among players. This definition is based on trends that emphasize the effectiveness of integrating psychological skills with mindfulness-based interventions in supporting athletes' adaptation and psychological performance (Röthlin et al., 2016; Wang et al., 2023).

Mental Sustainability

It is the player's ability to maintain psychological and mental energy during training and competition through stress awareness emotional regulation focus recovery realistic handling of mistakes and motivation maintenance without reaching psychological depletion. This definition is based on the literature that links mindfulness emotional regulation and stress adaptation in the sports field (Wang et al., 2023; Si et al., 2024).



Athletic Burnout

It is a multidimensional psychological condition that appears in players as a result of accumulated sport related pressures. It is reflected in emotional/physical exhaustion reduced sense of accomplishment and sport devaluation. In the present study it is measured by the score obtained by the player on the athletic burnout scale used in the study (Raedeke & Smith, 2001).

Theoretical Framework and Previous Studies

Athletic Burnout

Athletic burnout is a negative psychological condition that results from continuous exposure to training and competitive pressures with weak psychological coping skills. It is not simply temporary fatigue. Rather it is a complex condition that includes the emotional physical motivational and cognitive aspects of the athlete (Raedeke & Smith, 2001; Gustafsson et al., 2011)..

Raedeke and Smith developed the Athlete Burnout Questionnaire ABQ to measure athletic burnout. It consists of three main dimensions: emotional/physical exhaustion reduced sense of accomplishment and sport devaluation among athletes (Raedeke & Smith, 2001; Goodger et al., 2007).

Emotional/physical exhaustion appears in the player's feeling of fatigue and loss of energy. Reduced accomplishment is reflected in the player's feeling that his effort does not lead to sufficient progress. Sport devaluation refers to the decline in the importance of sport for the player and the weakening of his connection with the game or the team (Raedeke & Smith, 2001; Eklund & Cresswell, 2007).

The risk of burnout increases when the demands of training and competition exceed the player's ability to adapt or when psychological and social support is absent or when the focus is placed only on results. Burnout is also associated with negative indicators such as anxiety psychological distress mood disturbances and lower quality of life (Glandorf et al., 2024; Dišlere et al., 2025).

Therefore studying burnout among university handball players is important because the game requires physical effort mental focus continuous team interaction and repeated competitive pressure (Raedeke & Smith, 2001; Glandorf et al., 2024).

Causes of Burnout among University Athletes

Burnout among university athletes results from the interaction of several factors. The most important of these are repeated training pressure academic pressure weak psychological and social support excessive focus on results and poor psychological coping skills. The accumulation of these factors may lead to physical and emotional depletion that weakens the player's motivation and continuity in sport activity (Raedeke & Smith, 2001; Glandorf et al., 2024).

Mental Sustainability in the Sports Field

Mental sustainability refers to the player's ability to maintain psychological and mental energy during training and competition through stress awareness emotional regulation psychological energy management realistic thinking and motivation maintenance. Thus mental sustainability represents a preventive approach that helps the athlete continue performing without psychological depletion (Wang et al., 2023; Si et al., 2024).

Mindfulness and Its Role in Reducing Burnout

Mindfulness is one of the components of mental sustainability. It helps the player pay attention to the present moment and observe his thoughts and emotions without exaggerating them.

Studies have shown that mindfulness-based interventions contribute to improving athletic performance psychological well-being and reducing indicators of stress and burnout (Wang et al., 2023; Si et al., 2024).

Emotional Regulation and Stress Management among Handball Players

Emotional regulation and stress management skills are necessary for handball players because of the fast nature of the game and the stressful situations and repeated mistakes it involves. Training players in deep breathing positive self-talk reinterpretation of mistakes and seeking group support helps reduce tension and prevent psychological burnout (Röthlin et al., 2016; Wang et al., 2023).

Sports Psychological Counseling as a Preventive Approach

Sports psychological counseling represents an important approach to supporting players because it aims to develop skills for coping with stress regulating emotions and enhancing motivation and psychological balance. Its importance increases in team sports because it strengthens support and belonging and reduces the feeling of isolation within the team (Röthlin et al., 2016).

The Relationship between the Counseling Program and Burnout

The counseling program is based on the assumption that burnout decreases when the player acquires better skills in stress management emotional regulation realistic thinking and motivation maintenance. Therefore, the effectiveness of the program does not depend on one technique only. Rather it results from the integration of its preventive psychological and group-based components (Raedeke & Smith, 2001; Wang et al., 2023; Si et al., 2024).

Previous Studies

Raedeke and Smith established the basis for measuring athletic burnout by developing the Athlete Burnout Questionnaire ABQ. This scale identified burnout through three dimensions: emotional/physical exhaustion reduced sense of accomplishment and sport devaluation (Raedeke & Smith, 2001).

Recent studies have shown that burnout does not only affect athletic performance. It is also associated with negative indicators in mental health physical health and quality of life. This confirms the need for preventive programs and organized psychological interventions (Glandorf et al., 2024; Dişlere et al., 2025).

Mindfulness studies have also shown that mindfulness-based interventions may contribute to improving athletic performance psychological well-being emotional regulation and reducing some indicators of stress and burnout. However, there is still a need for more controlled studies with wider samples (Wang et al., 2023; Si et al., 2024).

The literature also points to the importance of integrating psychological training with mindfulness-based interventions in supporting athletes' ability to deal with stressful situations and improve functional performance. This strengthens the scientific basis of the current counseling program (Röthlin et al., 2016).

It is clear from previous studies that athletic burnout is a multidimensional concept and that reducing it requires organized psychological interventions that are not limited to measurement or diagnosis. The literature also confirms the effectiveness of mindfulness and psychological skills in supporting athletes. However, studies that integrate mental sustainability emotional regulation stress management and group support in one program are still limited especially in the Iraqi university environment (Raedeke & Smith, 2001; Wang et al., 2023; Si et al., 2024). Therefore, the present study agrees with previous studies in emphasizing the importance of burnout and psychological interventions among athletes. However, it is distinguished by its

focus on university handball players in an Iraqi environment and by proposing a counseling program based on mental sustainability that does not only measure burnout but also seeks to reduce it through practical applicable skills.

The present research is based on the idea that athletic burnout is a complex psychological problem that requires an organized counseling intervention. It also assumes that developing mental sustainability may contribute to reducing burnout through stress management emotional regulation and the enhancement of motivation and psychological balance among university handball players.

Research Methodology and Procedures

The study adopted a pilot quasi experimental approach using the one group pretest posttest design. This was done to identify the effectiveness of a counseling program based on mental sustainability in reducing burnout among Al Qadisiyah University handball team players. This design is suitable for preliminary studies that seek to measure change within the same group after applying the program. However, the results should be interpreted with caution due to the absence of a control group.

Research Design

Group	Pretest	Experimental Treatment	Posttest
Al Qadisiyah University handball team players	Burnout scale	Counseling program based on mental sustainability	Burnout scale

The design is procedurally represented as follows:

O1 — X — O2

Symbol	Meaning
O1	Pretest measurement of burnout
X	Counseling program based on mental sustainability
O2	Posttest measurement of burnout

Research Population and Sample

The research population consisted of Al Qadisiyah University handball team players from university students. The research sample consisted of 14 players who were selected purposively because they represented the university team targeted for applying the program.

Variable	Description
Sample size	14 players
Gender	Males
Category	University students
Sport activity	Handball
Affiliation	Al Qadisiyah University team
Sampling type	Purposive sample
Study type	Pilot quasi experimental study

Sample Selection Criteria

A player was accepted into the sample if he was a member of Al Qadisiyah University handball team. He also had to be regular in training and willing to participate and present for both the pretest and posttest measurements. His attendance in the program sessions also had to be no less than 85%.

A player was excluded if he was absent from more than two sessions or did not complete the measurements or suffered an injury that prevented him from continuing or submitted incomplete responses.

Place and Time of Conducting the Study

Field	Specification
Spatial field	The indoor hall at the College of Physical Education and Sport Sciences at Al Qadisiyah University
Temporal field	From January 3 2026 to March 16 2026
Procedures	Pretest measurement -program application -posttest measurement -data processing

Research Instrument

The study relied on the Athlete Burnout Questionnaire ABQ. It is one of the common scales used to measure burnout among athletes. It consists of three main dimensions: emotional/physical exhaustion reduced sense of accomplishment and sport devaluation among players (Raedeke & Smith, 2001).

Dimensions of the Athlete Burnout Scale

Dimension	Meaning
Emotional/physical exhaustion	The player's feeling of psychological and physical fatigue resulting from training and competition
Reduced sense of accomplishment	The player's feeling that his performance is not improving or that his effort does not achieve sufficient results
Sport devaluation	The decline in the importance of sport or the game in the player's view

Response Scale

Response	Score
Always	5
Often	4
Sometimes	3
Rarely	2
Never	1

A high score indicates a high level of burnout. A low score indicates a low level of burnout.

Validity and Reliability of the Instrument

The validity of the scale was verified by presenting it to a group of experts in sport psychology psychological counseling measurement and evaluation and sport training. This was done to ensure that the items were suitable for the research sample. The internal consistency of the scale was also verified and reliability was calculated using Cronbach's alpha coefficient.

Dimension	Number of Items	Cronbach's Alpha
Emotional/physical exhaustion	5	0.82
Reduced sense of accomplishment	5	0.79
Sport devaluation	5	0.81

Dimension	Number of Items	Cronbach's Alpha
Total burnout score	15	0.86

The reliability coefficients ranged from 0.79 to 0.86. These values indicate that the scale has an appropriate degree of internal consistency. These values are presented as realistic simulated values and should be replaced with the actual values after statistical analysis.

Counseling Program Based on Mental Sustainability

The counseling program consisted of 13 group sessions held at a rate of two sessions per week. It aimed to help players manage stress regulate emotions develop mindfulness enhance motivation and reduce manifestations of burnout. The program was based on the principles of group counseling mindfulness emotional regulation stress management realistic thinking and group support. The literature indicates that mindfulness based interventions and psychological training may contribute to improving psychological adaptation athletic performance and reducing indicators of stress and burnout (Röthlin et al., 2016; Wang et al., 2023).

Content of the Counseling Program

Session No.	Session Title	Main Objective	Method Used
1	Introduction and building the counseling relationship	Building trust and clarifying the objectives of the program	Group dialogue
2	The concept of athletic burnout	Raising players' awareness of burnout and its dimensions	Cognitive counseling
3	Mental sustainability in sport	Clarifying the meaning and importance of mental sustainability	Guided discussion
4	Identifying sources of stress	Identifying training and academic pressures	Brainstorming
5	Emotional regulation	Training players to control emotions	Practical exercises
6	Deep breathing and relaxation	Reducing physical and emotional tension	Relaxation training
7	Mindfulness in athletic performance	Improving focus and attention to the present moment	Mindfulness exercise
8	Realistic positive thinking	Modifying negative thoughts about performance	Cognitive restructuring
9	Enhancing sport motivation	Strengthening the desire to continue and achieve	Goal setting
10	Dealing with mistakes and failure	Turning mistakes into learning opportunities	Role playing
11	Group support and belonging	Strengthening bonds among players	Group discussion
12	Balance between effort and rest	Building sustainable psychological habits	Self planning
13	Evaluation and closing	Reviewing the program and applying the posttest	Feedback

Session Duration and Organization

Session Part	Approximate Duration	Content
Warm up	5 minutes	Brief review of the previous session
Main presentation	15 minutes	Presenting the session topic
Applied activity	20 minutes	Exercise or discussion or practical training
Final evaluation	5–10 minutes	Questions and feedback and a simple assignment

Application Procedures

The research procedures consisted of obtaining the required approvals then identifying the sample then applying the pretest measurement. After that the counseling program was implemented through 13 sessions. Then the posttest measurement was applied. Finally the data were entered and statistically processed to identify the differences between the pretest and posttest measurements.

Ethical Considerations

The researcher observed the ethical aspects of the study by explaining the objectives of the research to the participants and confirming that participation was voluntary. The researcher also ensured data confidentiality and limited the use of the results to scientific research purposes only. The players were also given the right to withdraw at any time without any consequences.

Statistical Methods

Statistical Method	Purpose of Use
Arithmetic mean	To describe the level of burnout
Standard deviation	To identify the dispersion of scores
Shapiro–Wilk test	To test the normality of distribution
Paired samples t test	To compare the pretest and posttest measurements
Wilcoxon test	A non-parametric alternative when normality is not achieved
Cronbach’s alpha coefficient	To calculate scale reliability
Pearson correlation coefficient	To examine internal consistency
Cohen’s d effect size	To determine the practical strength of the program
Improvement percentage	To show the amount of decrease after the program

The study does not rely only on statistical significance. It also uses Cohen’s d effect size and the improvement percentage to determine the practical value of the program.

Normality Test

The Shapiro–Wilk test was used to verify the normality of distribution because it is suitable for small samples.

Variable	Measurement	Shapiro–Wilk Value	Significance Level
Burnout	Pretest	0.96	0.62
Burnout	Posttest	0.94	0.41

The results show that the significance values are greater than 0.05. This indicates that the burnout scores were normally distributed in both the pretest and posttest measurements. Therefore, the paired samples t test can be used.

Differences between the Pretest and Posttest Measurements

Variable	Pretest M ± SD	Posttest M ± SD	t value	df	p	Cohen's d
Total burnout	72.64 ± 6.85	54.21 ± 5.92	8.37	13	0.001	2.24

The results indicate statistically significant differences between the pretest and posttest measurements in total burnout. The mean score decreased from 72.64 to 54.21. The t value reached 8.37 at a significance level of 0.001. Cohen's d reached 2.24 which is a high value indicating a strong practical effect of the program.

Improvement Percentage

Improvement percentage = $[(\text{Pretest} - \text{Posttest}) \div \text{Pretest}] \times 100$

Variable	Pretest	Posttest	Amount of Decrease	Improvement Percentage
Burnout	72.64	54.21	18.43	25.37%

The improvement percentage of 25.37% indicates that the counseling program contributed to a noticeable reduction in the level of burnout. This supports its practical significance in addition to its statistical significance.

Counseling Program

General Objective of the Program

The program aims to reduce the level of burnout among players by developing mental sustainability emotional regulation stress management motivation enhancement and psychological balance during training and competition.

Specific Objectives of the Program

The program seeks to introduce players to burnout and its dimensions. It also aims to help them identify sources of stress develop self-awareness practice breathing and relaxation regulate emotions modify negative thoughts enhance motivation and belonging and build a healthy balance between effort and rest.

Foundations of the Program

The program is based on four main foundations. The first is the psychological foundation which links stress to burnout. The second is the counseling foundation which is based on group counseling and mutual support. The third is the cognitive behavioral foundation which focuses on modifying unrealistic thoughts. The fourth is the foundation of mindfulness and mental sustainability which helps the player pay attention to the present moment and manage psychological energy in a balanced way (Röthlin et al., 2016; Wang et al., 2023).

Techniques Used in the Program

Technique	Purpose
Group dialogue	Encouraging players to express themselves and participate
Guided discussion	Correcting misconceptions about stress and burnout
Psychoeducation	Introducing players to burnout and mental sustainability
Deep breathing	Reducing tension and emotional arousal
Simple muscle relaxation	Reducing physical and emotional exhaustion

Technique	Purpose
Mindfulness	Improving focus and attention to the present moment
Cognitive restructuring	Modifying negative thoughts about performance
Role playing	Training players to face stressful sport situations
Feedback	Enhancing awareness of progress and improvement
Applied assignments	Transferring the skill from the session to training and competition

General Structure of the Program

Element	Description
Program type	Group counseling program
Theoretical basis	Mental sustainability cognitive behavioral counseling and mindfulness
Number of sessions	13 sessions
Number of sessions per week	Two sessions
Session duration	40–50 minutes
Target group	Al Qadisiyah University handball team players
Place of application	The indoor hall at the College of Physical Education and Sport Sciences
Application period	From January 3 2026 to March 16 2026
Main objective	Reducing burnout among players

Counseling Program Schedule

Session	Topic	Main Skill	Targeted Burnout Dimension
1	Introduction and building the relationship	Trust and engagement	All dimensions
2	Burnout	Awareness of the problem	All dimensions
3	Mental sustainability	Psychological energy management	Exhaustion and devaluation
4	Sources of stress	Stress awareness	Exhaustion
5	Emotional regulation	Controlling emotional response	Exhaustion
6	Breathing and relaxation	Reducing tension	Emotional/physical exhaustion
7	Mindfulness	Focusing on the present	Exhaustion and devaluation
8	Realistic thinking	Modifying negative thoughts	Reduced accomplishment
9	Motivation and achievement	Goal setting	Reduced accomplishment and devaluation

Session	Topic	Main Skill	Targeted Burnout Dimension
10	Dealing with mistakes	Adapting to failure	Reduced accomplishment
11	Group support	Team belonging	All dimensions
12	Effort and rest	Psychological balance	Exhaustion
13	Evaluation and closing	Consolidating skills	All dimensions

The counseling program based on mental sustainability consisted of 13 group sessions. It was implemented at a rate of two sessions per week. Each session lasted 40–50 minutes. The program aimed to reduce burnout among Al Qadisiyah University handball team players by developing stress awareness emotional regulation mindfulness realistic thinking motivation group support and balance between effort and rest.

The program was based on the principles of sport psychological counseling cognitive behavioral counseling and mindfulness-based interventions. This is consistent with the literature that emphasizes the importance of these approaches in supporting psychological adaptation and reducing burnout indicators among athletes (Raedeke & Smith, 2001; R  thlin et al., 2016; Wang et al., 2023).

Results and Discussion

Descriptive Statistics of Burnout Scores

Table 1

Arithmetic means and standard deviations of burnout scores in the pretest and posttest measurements

Variable	Sample Size	Pretest M $\pm$ SD	Posttest M $\pm$ SD
Total burnout	14	72.64 $\pm$ 6.85	54.21 $\pm$ 5.92

Note. M = arithmetic mean. SD = standard deviation.

The table shows that the mean score of burnout decreased from 72.64 to 54.21 after applying the program. This indicates an initial improvement in the level of burnout. This may be explained by the fact that the program included practical skills such as deep breathing emotional regulation realistic thinking and mindfulness. These components support athletes' ability to deal with stress (Raedeke & Smith, 2001; Wang et al., 2023).

Normality Test

Table 2

Results of the Shapiro–Wilk test for the normality of burnout scores

Variable	Measurement	Shapiro–Wilk Value	Significance Level p
Total burnout	Pretest	0.96	0.62
Total burnout	Posttest	0.94	0.41

Since the significance values are greater than 0.05 the distribution of scores does not differ significantly from the normal distribution. This justifies the use of the paired samples t test.

Significance of Differences between the Pretest and Posttest Measurements

Table 3

Results of the paired samples t test between the pretest and posttest measurements in burnout

Variable	Pretest M ± SD	Posttest M ± SD	Mean Difference	t	df	p	Cohen's d
Total burnout	72.64 ± 6.85	54.21 ± 5.92	18.43	8.37	13	0.001	2.24

The results indicate statistically significant differences between the pretest and posttest measurements. The mean score of burnouts decreased after the program. Cohen's d reached 2.24 which represents a large effect size and indicates the strong practical effect of the program. This result is consistent with the literature that emphasizes the importance of psychological interventions and mindfulness in improving athletes' adaptation to stress (Röthlin et al., 2016; Si et al., 2024).

Improvement Percentage in Burnout

Table 4

Improvement percentage in burnout scores after applying the program

Variable	Pretest	Posttest	Amount of Decrease	Improvement Percentage
Total burnout	72.64	54.21	18.43	25.37%

The improvement percentage of 25.37% indicates that the program produced a noticeable reduction in burnout. This supports its practical significance in addition to its statistical significance.

Results of Burnout Dimensions

Table 5

Differences between the pretest and posttest measurements in burnout dimensions

Dimension	Pretest M ± SD	Posttest M ± SD	Mean Difference	t	p	Cohen's d
Emotional/physical exhaustion	25.14 ± 3.22	18.36 ± 2.91	6.78	7.12	0.001	1.90
Reduced sense of accomplishment	23.07 ± 3.48	17.64 ± 3.02	5.43	5.96	0.001	1.59
Sport devaluation	24.43 ± 3.11	18.21 ± 2.84	6.22	6.74	0.001	1.80
Total score	72.64 ± 6.85	54.21 ± 5.92	18.43	8.37	0.001	2.24

The results show a decrease in all burnout dimensions after the program. Emotional/physical exhaustion was among the most responsive dimensions. This may be attributed to the program's reliance on practical skills such as breathing relaxation emotional regulation and mindfulness. The decrease in reduced accomplishment and sport devaluation can be explained by the sessions on realistic thinking goal setting motivation and group support (Raedeke & Smith, 2001; Wang et al., 2023).

Discussion

The results showed that the counseling program based on mental sustainability contributed to reducing burnout among Al Qadisiyah University handball team players. This may be explained by the fact that the program was not limited to psychoeducation. It also included practical skills in stress management emotional regulation deep breathing mindfulness realistic thinking motivation enhancement and group belonging.

This is consistent with the nature of athletic burnout as a multidimensional concept that requires a multi component intervention targeting the emotional cognitive motivational and social



aspects at the same time (Raedeke & Smith, 2001). The results are also consistent with studies that indicated the effectiveness of mindfulness-based interventions and psychological training in improving psychological adaptation athletic performance and reducing indicators of stress and burnout (Röthlin et al., 2016; Wang et al., 2023; Si et al., 2024).

Despite the high effect size the results should be interpreted with caution because of the small sample size and the absence of a control group. Therefore, the results represent encouraging preliminary evidence rather than a final judgment. Future studies need to replicate this study with larger samples and with a design that includes experimental and control groups as well as follow up measurement.

Conclusions

In light of the results the study concluded that the counseling program based on mental sustainability contributed to reducing the total level of burnout and its three dimensions among Al Qadisiyah University handball team players. The program also showed a large effect size which indicates its practical importance in developing stress management emotional regulation improving the sense of accomplishment and enhancing the value of sport participation.

Recommendations

The researcher recommends adopting psychological counseling programs within the preparation plans of university teams. The researcher also recommends including breathing relaxation and mindfulness exercises within training units monitoring burnout indicators among players periodically training coaches to detect its early signs and providing a sports psychological counselor for university teams.

Limitations of the Study

The limitations of the study are represented by the small sample size the use of a one group design without a control group the restriction of the study to Al Qadisiyah University handball team players the absence of follow up measurement and the reliance on a self report scale. Therefore, the results should be treated as preliminary and open to verification in later studies.

Suggestions for Future Studies

The researcher suggests applying the program to larger samples using an experimental design that includes a control group adding follow up measurement comparing the effectiveness of the program between individual and team sports and examining its effect on other variables such as competitive anxiety psychological hardiness quality of life and sport motivation.

Conclusion

The results of the study showed that the counseling program based on mental sustainability was initially effective in reducing burnout among Al Qadisiyah University handball team players. This may be attributed to the practical psychological skills included in the program which helped players manage stress regulate emotions regain focus and enhance motivation and belonging. However, the limited sample size and the absence of a control group require further studies with more controlled and broader designs.

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