

THE PSYCHOLOGICAL-SOCIAL CLIMATE AND ITS RELATION TO SPORTS ACHIEVEMENT AMONG UNDER-20 ATHLETES IN SOME TRACK AND FIELD EVENTS

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ABSTRACT

The research aims to identify the level of psychological climate and achievement among athletes under 20 years old (both males and females) in some track and field events. It also aims to understand the correlation between psychological climate and sports achievement among young athletes under 20 years old (both males and females) according to their events. The researcher used the descriptive method with correlational studies, as it is suitable for achieving the research objectives. The study included 99 participants (62 males and 37 females) in events such as 100m hurdles for females, 110m hurdles for males, 800m run, long jump, and discus throw. Based on the research results, the following conclusions were made High levels of psychological climate among males and low levels among females, Increased needs negatively impact achievement levels, Lack of attention to educational, psychological, social, and health aspects by teachers and coaches.

Keywords: *Psychological-Social Climate, Sports Achievement, Under-20 Athletes*

INTRODUCTION

The psychological-social climate is the environment perceived by the individual, which affects and is affected by it, arousing his interest, activity, and attitudes. It is necessary to prepare a positive psychological climate that helps control emotions, regulate behavior, and increase psychological balance. The psychological climate is an important and fundamental concept connected to the athlete's personality, mental health, and adaptive relationship with the environmental and social surroundings. It is a psychological phenomenon studied by those interested in sports psychology, explaining the psychological preparation of athletes during the training phase, attempting to utilize positive factors contributing to victory and avoiding negative factors causing defeat. According to Allawi (1998), the psychological climate of a sports team is the extent of cohesion and interaction among players within the sports team framework. Therefore, the current research's importance lies in studying the psychological climate as one of the factors affecting the nature of achievement and highlighting the player's perception of the psychological climate within the team, his relationship with colleagues, and evaluating these relationships clearly to serve the game and how to fulfill them to reach a better level, which may help achieve the best sports achievements.

Research Problem

The researcher decided to delve into this study due to the lack of studies addressing these variables and understanding the real reasons within our Iraqi society, especially in the field of physical education and sports sciences, regarding the relationship between psychological climate and sports achievement among athletes and the relationship between them.

Research Objectives

The research aims to:

1. Identify the level of psychological climate and achievement among athletes under 20 years old (both males and females) in some track and field events.
2. Identify the correlation between psychological climate and sports achievement among young athletes under 20 years old (both males and females) according to their events.
3. Identify individual differences in the psychological climate among athletes under 20 years old (both males and females) according to their events.

RESEARCH METHODOLOGY

The researcher used the descriptive method with correlational studies as it is suitable for achieving the research objectives.

Research Community and Sample

The research community consists of track and field athletes (both males and females) representing first-class clubs in Iraq, totaling 260. The researcher selected a sample of 99 participants (62 males and 37 females) in events such as 100m hurdles for females, 110m hurdles for males, 800m run, long jump, and discus throw. The training age was used to determine the homogeneity of the sample using the skewness coefficient, which showed a normal distribution for the sample members.

Table 1: Homogeneity of the Sample in the Variable of Training Age

Variables	Gender	Unit of Measurement	Mean	Standard Deviation	Median	Skewness Coefficient
Age	Males	Month	220	834	219	-0.621
Training Age	Males	Year	5.082	0.682	5	-0.360
Age	Females	Month	210	455.5	209	-0.549
Training Age	Females	Year	4.211	0.894	4.5	-0.969

The table shows that the skewness coefficient for the training age variable was less than (+1), indicating sample homogeneity.

Table 2: Number of Research Sample Members According to Events

Event	Number of Males	Number of Females	Total
100m hurdles females - 110m hurdles males	15	7	22
800m run	14	9	23
Long jump	16	11	27
Discus throw	17	10	27
Total	62	37	99

The participating clubs in the championship were (Electricity, Al-Mashkhab, Peshmerga Sulaymaniyah, Al-Khawarnaq, Nasiriyah, Baghdad Oil, Victory and Peace, Al-Hilla Green Army, Baqubah, Bani Saad Al-Shu'ala, Al-Mahawil, Central Oil, Al-Jamaheer, Al-Mina, Specialized School, Ministry of Youth, Al-Husseiniyah, Tarmiyah, Al-Hur).

FIELD RESEARCH PROCEDURES

Research Tools: The tools used in this study include the (Mohammad Hassan Allawi) scale for the psychological (or climatic) environment of the sports team (1998) to measure the nature of the psychological climate of the sports team, which indicates the cohesion and interaction of players within the sports team framework. The scale consists of 20

statements or opposites, detailed in Appendix (1). The researcher presented it to a group of experts, and it received their approval for use with this age group.

PSYCHOLOGICAL CLIMATE SCALE

Description: The psychological climate scale for the sports team was designed by (Mohammad Hassan Allawi) to measure the nature of the psychological climate of the sports team, indicating the extent of cohesion and interaction among players within the sports team framework. The scale includes 20 statements and their opposites, and the sports team member responds to the scale statements according to the degree to which he believes these descriptive statements apply to the psychological climate of his sports team, using a three-point scale (to a great extent, to a moderate extent, to a little extent, neither this nor that, to a little extent, to a moderate extent, to a great extent).

Instructions:

Below are some attributes and their opposites, and some descriptive statements and their opposites, which the player can use to describe the prevailing psychological climate he believes represents the current situation of his sports team. You are required to specify the extent to which these attributes and their opposites apply to the climate of your team. The following example illustrates this:

Pilot Experiment

To achieve reliable results, it is necessary to produce recognized scientific contexts recommended by experts and specialists in the field of scientific research. One of these contexts is conducting a pilot experiment, which is "a preliminary experimental study on a small sample before the researcher carries out his research to test the research methods and tools." Therefore, the researcher conducted the pilot experiment of the scale on a sample taken from the research community, consisting of 20 participants (10 males and 10 females) from outside the main research sample, selected deliberately on 1/10/2023. It took 5-10 minutes to respond to the psychological climate scale. The aims of the pilot experiment were:

- Ensure the validity of the tools used in the research.
- Identify the time required for each scale.
- Ensure the adequacy of the assistant research team.
- Identify and overcome the obstacles faced by the researcher during the main experiment.
- Ensure the scientific basis of the research tools.

Scientific Basis of the Used Scales Validity of the Scale: To estimate the validity of the scales in achieving their intended purpose, the researcher presented the psychological climate scale to a group of experts and specialists, as shown in Appendix , and the experts confirmed the validity of the psychological climate scale with 100% agreement on all items of the scale, as shown in the appendix.

Reliability of the Scale: Reliability of the scale refers to "the accuracy of the test in measurement and the consistency of its results when applied multiple times to the same individuals." To verify the reliability of the scales used in the research, the researcher used the split-half method, dividing the items of the psychological climate scale into two halves: the first half included the odd-numbered items, and the second half included the even-numbered items. The researcher then found the simple correlation coefficient Pearson between the two halves, which was 0.890, and corrected the reliability using the Spearman-Brown formula, resulting in a value of 0.942, indicating a high degree of reliability of the scale.

MAIN EXPERIMENT

After ensuring the validity and reliability of the psychological climate scale, the researcher distributed the psychological climate questionnaire, with the assistance of the research team, to the research sample of 99 participants in events such as 100m hurdles for females, 110m hurdles for males, 800m run, long jump, and discus throw during the first-class clubs championship in Iraq, held at the Jadriya Stadium, Faculty of Physical Education, on 4/10/2023. The researcher explained the research's objective and encouraged the athletes to respond honestly and accurately. It took 5-10 minutes to respond to the psychological climate scale. Afterward, the researcher collected the questionnaires from the athletes, checked them, and prepared the data for statistical processing.

Achievement was then calculated as a score measured by time for events such as 100m hurdles for females, 110m hurdles for males, 800m run, and as a score measured by meters for events such as long jump and discus throw. The achievement scores of the athletes were taken from the referees' committee during the first-class clubs championship in Iraq.

Statistical Means

The researcher used the SPSS statistical program, extracting the following:

- Descriptive statistics to determine the mean, standard deviation, standard error, and hypothetical mean of the scale, as shown in Table (3).

Table 3: Descriptive Statistics of the Psychological Climate and Achievement Scales for Males and Females in Some Track and Field Events

Measure	Unit of Measurement	Field Activities	Sample	N	Mean	Standard Error	Standard Deviation	Hypothetical Mean
Psychological Climate	Score	Hurdle Run	Males	15	93.07	1.300	5.035	40
			Females	7	79.14	1.405	3.716	
		800m Run	Males	14	88.5	2.145	8.026	
			Females	9	75.11	1.195	3.586	
		Long Jump	Males	16	94	0.940	3.759	
			Females	11	78.82	1.35	3.763	
		Discus Throw	Males	17	93.65	1.432	5.905	
			Females	10	78.2	1.428	4.517	
Achievement	Seconds and parts	Hurdle Run	Males	15	17.363	0.807	3.126	Not specified
			Females	7	20.093	0.511	1.353	
		800m Run	Males	14	120.04	0.0072	0.0271	
			Females	9	146.96	10.484	31.452	
	Meters and parts	Long Jump	Males	16	5.736	0.123	0.492	
			Females	11	3.510	0.0203	0.675	
		Discus Throw	Males	17	31.361	1.1877	0.741	
			Females	10	16.326	1.1899	6.007	

Achievement (seconds and parts of it)

*The hypothetical mean of the scale = number of items × highest rating of the item ÷ 2

Discussion of Descriptive Results of the Psychological Climate and Achievement Scales for Males and Females According to Their Events:

From reviewing the level of the psychological climate, it is observed that males' scores exceeded the hypothetical mean, while females had low scores in all events. The researcher attributes this to the nature of the environment and the social upbringing of females, which leads many of them to refrain from practicing sports, especially achievement sports, resulting in a lack of cooperation and harmony, unclear roles, and a state of dissatisfaction that affected their psychological climate. Track and field events are characterized by individual training according to specificity, except in some cases that require competition, leading to dissatisfaction in their psychological climate. In terms of achievement, males outperformed females due to biological differences in muscle anatomical structure and physiological indicators, leading to superior physical abilities for each track and field event studied. The researcher presents the statistical parameters for further clarification of the correlation.

Presentation of the Relationship Between Psychological Climate Scores and Achievement Results for Males and Females in Some Track and Field Events, and Their Analysis and Discussion:

To find the relationship between psychological climate scores and achievement results in some track and field events for both males and females individually, the researcher used Pearson's simple correlation coefficient, as shown in Table (4):

Table 4: Simple Correlation Matrix of the Relationship Between Psychological Climate Scores and Achievement Results in Some Track and Field Events for Both Males and Females

Event	Sample	N	Psychological Climate Score	Significance
Hurdles	Males	15	0.624*	0.039
	Females	7	0.769*	0.046
800m Run	Males	14	0.691*	0.048
	Females	9	0.593*	0.041
Long Jump	Males	16	0.611*	0.046
	Females	11	0.644*	0.019
Discus Throw	Males	17	0.533*	0.034
	Females	10	0.694*	0.045

• Degrees of freedom = N-2 * Significant at the 0.05 level

Table 5: Partial Correlation Matrix of the Relationship Between Psychological Climate Scores and Achievement Results in Some Track and Field Events for Both Males and Females

Event	Sample	Psychological Climate Score	Significance
Hurdles	Males	0.868*	0.000
	Females		
800m Run	Males		
	Females		
Long Jump	Males		
	Females		
Discus Throw	Males		
	Females		

N = 99 * Significant at the 0.05 level

Discussion of the Results of the Relationship Between Psychological Climate Scores and Achievement Results in Some Track and Field Events for Both Males and Females:

From reviewing Table (4) related to the statistical significance of simple correlation coefficients between psychological climate scores and achievement results in some track and field events, it is observed that the correlation values and their significance are positive for all events. Table (5) related to the statistical significance of partial correlation coefficients of psychological climate for both males and females in the four track and field events under study shows significant positive correlations with achievement levels. This indicates that the psychological climate of young athletes is positively correlated with their achievement, according to their specific events. The researcher attributes this to the fact that a suitable psychological climate for each athlete leads to cohesion, cooperation, effectiveness, and a sense of success, enhancing self-confidence and satisfaction, which is a crucial part of the athletes' mental health that coaches aim to integrate as much as possible to reduce pressure on young athletes in these events that require self-challenge and improvement with the availability of various incentives.

Discussion of the Results of the Relationship Between Psychological Climate Scores and Achievement Results in Some Track and Field Events for Both Males and Females:

To identify the relationship between psychological climate scores and achievement results in some track and field events under study, the researcher used multiple correlation coefficients, as shown in Table (6):

Table 6: Multiple Correlation Coefficient for Psychological Climate with Achievement in Some Track and Field Events

Variables	Achievement in Track and Field Events (hurdles, 800m run, long jump, discus throw)
Psychological Climate Score	0.881*

N = 99 * Significant at the 0.05 level

Discussion of the Results of the Relationship Between Psychological Climate Scores and Achievement Results in Some Track and Field Events:

From reviewing the multiple correlation table, it is observed that the correlation is significant and positive. The researcher attributes this result to the fact that as the psychological climate score increases, achievement also increases according to the results of the total sample in the four events under study. This indicates that their psychological climate helped increase the sense of belonging to the group, contributing to the appearance of a positive correlation in the psychological climate. Brandet and Linde (2005) state that achieving a positive psychological climate means that it has been satisfied in one way or another, even if this satisfaction has not reached the desired level. Internal structural and external environmental factors act as distinguishing influences affecting individuals' perceptions of climate dimensions. These distinguishing stimuli cause organized changes in climate assessments. At the individual level, researchers have discovered that psychological climate is related to individual satisfaction, productivity, and general needs. This type of force, "attraction to the group," indicates an individual's desire for personal interactions with other group members and participation in group activities. Being with the group and interacting with its members gives members a sense of satisfaction and happiness. They face many burdens in addition to their studies, encountering numerous psychological, social, or academic problems. The most critical issue is planning for the future awaiting them. Here, we realize the importance of conducting the current research to identify the most critical counseling needs of university students and how to deal with their problems, minimizing their impact on their mental health and psychological compatibility as much as possible, to confidently and robustly move towards academic success and scientific excellence.

Amin Fawzi and Tarek Badr El-Din emphasize the importance of measuring social relationships among sports team members as an objective understanding of the nature of social interaction among them. This measurement, showing the extent of interaction among team members, should be the first step towards improving the team's interactive efficiency and productivity.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions: Based on the research results, the researcher concluded:

1. High psychological climate scores among males and low scores among females.
2. High needs negatively impact achievement levels.
3. Lack of attention to educational, psychological, social, and health aspects by teachers and coaches.
4. Lack of institutions concerned with awareness and guidance in all areas within schools and sports clubs.
5. There is a positive correlation between psychological climate and achievement in some track and field events.

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