



EFFECTIVENESS OF HANDBALL CURRICULUM TO DEVELOP INTEGRATIVE CURRICULUM PRINCIPLES AMONG FACULTY OF PHYSICAL EDUCATION AND SPORTS SCIENCES STUDENTS AT HILLA UNIVERSITY FROM THEIR POINT OF VIEW

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<p>Kata kunci: Bola Tangan, Kurikulum Bola Tangan, Prinsip Kurikulum Terpadu, Siswa.</p>	<p>ABSTRAK</p> <p>Penelitian ini bertujuan untuk menentukan efektivitas kurikulum bola tangan saat ini dalam mengembangkan prinsip-prinsip kurikulum integratif (kognitif, keterampilan, fisik, dan emosional) di kalangan mahasiswa Fakultas Pendidikan Jasmani dan Ilmu Olahraga Universitas Hilla dari sudut pandang mereka. Penelitian ini menggunakan kurikulum deskriptif dan kuesioner sebagai alat utama untuk mengumpulkan data dari sampel survei yang terdiri dari (30) mahasiswa dan sampel dasar sebanyak (240) mahasiswa. Hasil penelitian menunjukkan bahwa kurikulum saat ini. Efektivitas program integratif: program pendidikan integratif dalam bola tangan telah membuktikan efektivitas ilmiahnya dalam pengembangan tiga dimensi (kognitif, keterampilan, emosional) di kalangan mahasiswa Fakultas Pendidikan Jasmani Universitas Hilla, di mana kelompok eksperimen mencapai keunggulan yang signifikan secara statistik dalam semua tes dibandingkan dengan kelompok kontrol. Peningkatan secara keseluruhan: kelompok eksperimental mencatat peningkatan yang signifikan antara pengukuran pra dan pasca dalam pencapaian kognitif (dari 18,5 menjadi 27,8), keterampilan dasar (pass +3,8, straighten +3,8, intonasi +4,6), dan skala afektif (+16,5 derajat), yang mengonfirmasi integrasi antara aspek teoritis, praktis, dan afektif. Berdasarkan hasil penelitian saat ini, rekomendasi berikut dapat diajukan: Penerapan Program Integratif: Fakultas Pendidikan Jasmani dan Ilmu Olahraga Universitas Hilla merekomendasikan penerapan Program Pendidikan Integratif dalam olahraga bola tangan sebagai bagian dari kurikulum untuk tim ketiga dan keempat, terutama dalam mata pelajaran permainan tim. Menerapkan kurikulum pada permainan lain: menggeneralisasi model program Integratif ke permainan tim lain (sepak bola, basket, olahraga air) untuk mengembangkan tiga dimensi (kognitif, keterampilan, dan emosional) di kalangan mahasiswa pendidikan jasmani.</p>
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<p>Keywords: <i>Handball, Handball Curriculum, Integrative Curriculum Principles, Students.</i></p>	ABSTRACT		
	<p><i>The research aims to determine the effectiveness of the current handball curriculum in developing the principles of the Integrative curriculum (cognitive, skill, physical and emotional) among students of the Faculty of physical education and sports sciences at the University of Hilla from their point of view. Using the descriptive curriculum and questionnaire as the main tool for collecting data on a survey sample consisting of (30) students and the basic sample of (240) students. The results showed that the current curriculum. The effectiveness of the Integrative program: the Integrative educational program in handball proved its scientific effectiveness in the development of three dimensions (cognitive, skill, emotional) among students of the Faculty of physical education at the University of Hilla, where the experimental group achieved a statistically significant superiority in all tests compared to the control group. Overall improvement: the experimental group recorded a significant improvement between the pre-and post-measures in cognitive achievement (from 18.5 to 27.8), basic skills (pass +3.8, straighten +3.8, intonation +4.6), and affective scale (+16.5 degrees), confirming the integration of theoretical, practical and affective. In light of the results of the current research, the following recommendations can be presented: adoption of the Integrative program: the Faculty of physical education and sports sciences at the University of Hilla recommends the adoption of the Integrative educational program in handball as part of the curricula for the third and fourth teams, especially in the subject of team games. Applying the curriculum to other games: generalizing the Integrative program model to other team (football, basketball, water sports) to develop the three dimensions (cognitive, skill, and emotional) among physical education students.</i></p>		
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INTRODUCTION

Handball is one of the team games that has a great ability to achieve educational, physical, skill and emotional goals among students of the faculties of physical education and sports sciences, if its curriculum is well planned and implemented in an integrated scientific manner. In light of modern educational trends towards the adoption of an integrative curriculum, the goal of teaching handball is no longer limited to mastering basic skills only, but has become a gateway to building knowledge, experiences, values and positive trends among students in a consistent and interrelated manner. Based on the importance of integrating the cognitive, skill, physical and emotional aspects in the preparation of a physical education teacher, coach and referee, there is a need to review the handball curriculum at the Faculty of physical education and sports sciences at Damietta University, and evaluate its effectiveness in developing the principles of the integrated curriculum from the point of view of its students.

Hence, this study came to identify the extent to which the handball curriculum currently applied contributes to the development of these principles among students, and to reveal the strengths and shortcomings, thus contributing to the development of the curriculum and improving its outputs in accordance with the requirements of comprehensive quality in university education. In this

context, the Integrative curriculum is defined as the curriculum that seeks to link the cognitive, skill, physical and emotional aspects in an interconnected educational framework, so that the student becomes the focus of the educational process and achieves comprehensive educational outputs commensurate with his future personal and professional needs. This curriculum is distinguished from traditional curricula by its focus on the interaction between theoretical content and practical application, which enhances the effectiveness of learning and reduces the gap between theory and practice.

Recent studies have confirmed that the adoption of an integrative curriculum in sports education leads to an improvement in the level of skill and cognitive achievement of students, especially in team games such as handball, which require integration between physical, tactical and social abilities. In the context of the faculties of physical education, the Integrative curriculum is an essential tool for preparing teachers and coaches who are able to deal with diversity in the classroom, hence the importance of assessing the extent to which handball curricula develop these principles among students of the Faculty of physical education at the University of Hilla. (15 : 45-67). Whereas the Integrative method in building the curriculum aims to enable the student to maintain the integrity of his personality through the integrated knowledge he provides and the various skills he acquires so that all his mental, physical, emotional and social aspects are developed and thus it is easier for him to adapt to his social and physical environment, and this means that integration does not mean studying a subject or a particular problem in an integrated way, but rather should be felt by the student and includes his whole being and is influenced by his personality and appears clearly in his behavior, and integration is a process that occurs in the individual himself, so what he learns becomes part of his personality and not just something it is added to the sum of what it has, but the use of the Integrative method in the construction of the curriculum The desired image and the way that enables him to achieve his goals can only be done through a teacher who understands the philosophy of integration, its basic idea and the educational procedures necessary to achieve it, as well as his belief in all this and enables him to achieve it. (9 : 39)

Moreover, the integrative approach in physical education is based on basic principles that include cognitive integration between theory and practice, skill integration between basic and advanced skills, physical integration between fitness and performance, and emotional integration between individual and group. Studies have proven that these principles enhance the efficiency of teaching in subjects such as handball, where the student learns not only skills, but also values such as cooperation and respect. In sports science faculties, the evaluation of these principles is essential for the quality of educational outputs, especially with the growing demand for multi-skilled sports teachers. Experiments in Egyptian universities have shown the success of integrative curricula in improving student satisfaction and academic performance. Thus, it is important to study the extent to which the handball curriculum has developed these principles at Damietta University to propose practical improvements. (12 : 15-28). Although handball is considered one of the basic subjects in the programs of physical education faculties, as it contributes to the development of physical abilities such as speed, agility and explosive power, in addition to tactical and social skills such as cooperation and teamwork; however, studies have shown that traditional handball curricula focus mainly on the skill aspect without sufficient integration of cognitive and emotional aspects, which limits the achievement of overall educational goals.

Research in Arab universities has pointed to the need to propose updated handball curricula that comply with academic standards, including general goals, targeted educational outcomes and various assessment methods. At Damietta University in particular, evaluation studies have shown a lack of integration of the principles of integration within the sports curricula, which necessitates a revision of the handball curriculum to become comprehensive. This reinforces the need to

examine the effectiveness of the current curriculum in developing these principles from the perspective of students as the main beneficiaries.(3 : 43- 72). In this regard, the evaluation studies of physical education curricula in Arab universities indicate that most of the faculty members in the faculties of Physical Education believe that the sports courses lack integration between the theoretical and practical aspects, which affects the quality of overall achievement. Research in Curriculum Assessment confirmed that excessive emphasis on basic skills without integrating social values and tactical knowledge reduces the efficiency of educational programs and reduces student satisfaction with practical courses. This imbalance hinders the achievement of the goals of preparing a balanced physical education teacher who combines physical and intellectual abilities. (14 : 58-63)

Analytical studies have also shown that evaluating sports curricula using the foundations of the Integrative curriculum reveals strengths in the skill side, but they lack cognitive and emotional integration, as in the case of Racket Sports curricula, where students showed only average satisfaction. This reflects an urgent need to apply the same approach to the handball curriculum, which is an ideal model of integration due to its collective nature combining physical effort, tactical planning and social interaction. Research in Physical Education has confirmed that the integration of integrative strategies improves the level of skill learning by up to 25% compared to traditional methods. In the Egyptian context, studies have indicated that sports science faculties need integrative curricula focused on balanced personality development to prepare teachers who are suitable for the labor market. Therefore, this study seeks to bridge this gap by evaluating the effectiveness of the handball curriculum in developing the principles of integration. (1 : 197-250)

By extrapolating the above, the problem of the research is clear that the handball curricula in the faculties of physical education and sports sciences are still largely influenced by the traditional approach that focuses on the skill aspects and physical performance in the first place, with the neglect or poor employment of the cognitive, emotional and social dimensions of the student within the educational situation, despite the fact that modern educational trends advocate the need to adopt an integrative curriculum that links knowledge, skill and values in one coherent framework. In light of this gap between what is theoretically put forward about the Integrative curriculum and what is actually applied in handball classes and courses, there is an urgent need to reveal the extent to which the current handball curriculum contributes to achieving this kind of integration among students in the university environment. In addition to the above, the Faculty of physical education and sports sciences at the University of Hilla – like other faculties of Physical Education – seeks to develop its programs and courses in accordance with quality standards and academic accreditation, which emphasizes the comprehensiveness of learning outcomes and not limited to the physical or skill side only. However, there are still not enough studies available to analyze and evaluate the handball curriculum in the light of the principles of the Integrative curriculum, especially from the point of view of the students themselves as the main recipient of this curriculum and affected by its quality or shortcomings. The absence of this type of studies results in the continued implementation of a curriculum that may not adequately achieve the balanced development of the cognitive, skill and emotional dimensions of students.

The research problem crystallizes into the main question to what extent does the handball curriculum applied at the Faculty of physical education and sports sciences at the University of Hilla contribute to the development of the principles of the integrated curriculum among students from their point of view In other words: does this approach achieve the desired integration of cognitive, skill, physical and emotional aspects, or does it need to be rebuilt in the light of these principles In order to contribute to the answer to this problem and propose approaches to the development of the curriculum, the researcher proposes to conduct a study entitled the effectiveness of the handball curriculum in the development of the principles of the Integrative

curriculum among students of the Faculty of physical education and sports sciences at the University of Hilla from their point of view. Accordingly, the study aims to answer key points about the effectiveness of the handball curriculum in developing the principles of integration, determine the level of student satisfaction with each integrative dimension, and propose recommendations for the development of the curriculum. The methodology will be based on the appropriate descriptive-analytical approach to the curriculum assessment, with a random sample of students from the Faculty of physical education at the University of Hilla.

The tools include a key questionnaire based on the Likert scale, with its truthfulness and consistency verified by expert opinions and empirical application. One of the hypotheses is that the current curriculum achieves intermediate development in integrative principles, which requires adjustments to strengthen the affective and cognitive aspect. The data will be statistically analyzed using SPSS to draw conclusions and recommendations. Research objective the study aims to determine the effectiveness of the current handball curriculum in developing the principles of the Integrative curriculum (cognitive, skill, physical and emotional) among students of the Faculty of physical education and sports sciences at the University of Hilla from their point of view. Research hypotheses there is a statistically significant difference between the tribal and dimensional measurements of the experimental group in all dimensions (cognitive, skillful, affective) in favor of the dimensional measurement. There is a statistically significant difference between the average scores of the control and experimental groups in the cognitive test under consideration in favor of the experimental group. There is a statistically significant difference between the average scores of the control and experimental groups in the skill tests under consideration in favor of the experimental group. There is a statistically significant difference between the average scores of the control and experimental groups on the affective scale under consideration in favor of the experimental group.

Study terms

Integrative approach An integrative approach is a methodological approach in which two or more content areas or areas of Learning (Cognitive, Affective, motor) are combined within one deliberate educational experience, so that the learner achieves simultaneously interrelated and meaningful outputs (29 : 4). The study of Samar Abdul Hamid al-Sayed (2023) entitled The impact of an educational program using the Integrative entrance to improve artistic aesthetic values and the level of skill performance in ballet, the study aims to find out the impact of an educational program using the Integrative entrance to improve artistic aesthetic values and the level of skill performance in ballet. He presented a conceptual framework that included the term (integral entrance). Rely on the experimental approach. The sample was deliberately selected from the students of the third group majoring in motor expression at the Faculty of physical education, Zagazig University girls for the academic year (2022-2023 ad), and their number was 48 students. The means of data collection included a set of devices and instruments (rastameter, medical balance). The results concluded that there were statistically significant differences between the averages of the two dimensional measurements of the experimental and control groups in some artistic aesthetic values and the level of free sentence performance in ballet in favor of the experimental group. The research concluded by presenting a set of recommendations, including: emphasizing the need to apply the integrated entrance strategy in learning the skills of various sports activities for all disciplines. (6)

A study by Osama Hamdi Mohammed (2025) entitled An Analytical Study in light of the foundations of the Integrative curriculum to evaluate the curriculum of racquet sports at the Faculty of Sports Sciences, Damietta University from the point of view of students, the study aimed to evaluate the curriculum of racquet sports at the Faculty of Sports Sciences, Damietta University in light of the foundations of the Integrative curriculum, the researcher used the descriptive

curriculum, for a sample of 301 students, and the results kinesthetics and affectivity are the foundations of the integrative approach. (1)

Tamer Mahmoud Al-Said's study (2010) entitled Building a proposed curriculum for the handball course for the preliminary stage of primary education according to the Integrative curriculum, and aims to build a handball curriculum according to the Integrative curriculum for the preliminary stage the researcher used the experimental curriculum, and the most important results were the Integrative curriculum is better than the traditional in all dimensions, and the researcher recommended the adoption of the Integrative curriculum in the handball curriculum. (3) - Study of Seijas, M., & Tafuri, D (2024) entitled Evaluating the effectiveness of an integrative handball educational program in improving the motor and social skills of middle school students, used the experimental curriculum for a sample of 150 experimental students, 150 officers, the most important results were improved motor skills and improved social skills, increased motivation and social integration, and recommended integrating handball as a structured educational activity in the school curriculum for comprehensive development. (30)

Study of Fernandez, J. R., & Ramos, A. C (2020) entitled A systematic review of 72 global studies on integrative practices in physical education (2009-2018), the researcher used quantitative analysis of studies from 5 global databases, the study showed an improvement of 86% of studies in motor skills with integrative approaches, 73% improvement in motivation and participation, group games (handball, football) were the most successful in integration, the challenges were in the lack of training for teachers in 68% of studies, recommended training teachers on the design of integrative curricula, and the integration of technology (video analysis) into integration, multidimensional cognitive, skillful, affective measurement (21).

METHOD

Participant

The research community includes all students of the Faculty of physical education and sports sciences at the University of Hilla for the academic year 2024-2025, and their number is about 800-1000 students in the morning and evening studies divided into three main scientific departments (Theoretical Sciences, individual games, group games), with the focus of the study on the students of the third and fourth stage who studied the handball course as a basic subject. The main sample: Students of the third and fourth stages in the Department of team games at the Faculty of physical education and sports sciences at the University of Hilla, there are 240 students (Morning 160, evening 80), aged 20-23 years, with a 100% male percentage.

Sample division:

1. Experimental group: 120 students (60 morning, 60 evening) applying the Integrative curriculum.
2. Control group: 120 students (60 morning, 60 evening) applying the traditional curriculum.
3. The survey sample is 30 students.

Sample size and method of selection: The sample was selected by a stratified random Sampling method (Random Stratified Sampling) to ensure a fair representation of the morning and evening study, based on the size of the community (about 600 students in the two target stages), and the Cochran equation was used to determine the size. $n = [N \times Z^2 \times p \times q] / [(N-1) \times E^2 + Z^2 \times p \times q]$ Where $N=600$, $Z=1.96$, $p=0.5$, $E=0.05$, which gave a sample size of 240 students (40% of the target community), evenly distributed between the experimental and control groups.

Research Design

The researcher used the experimental approach, where the integrative approach was applied to an experimental group and compared to a control group applying the traditional approach, with

pre-and post-measurements in the cognitive, skill and affective dimensions to determine the statistical differences between the two groups.

Checking moderation of total sample distribution for research

To ensure the homogeneity of the research sample, the number of (240) students of the third and fourth divisions at the Department of team games at the Faculty of physical education and sports sciences at the University of Hilla, with (120) students in the experimental group and(120) students in the control group, in addition to the survey study sample of (30) students; the researcher performed basic growth measurements (chronological age, height, weight), as shown in Table (1), as well as physical, skill and Cognitive the sample is in these variants, as shown in Table (1).

Table 1. The Statistical Significance Of The Measurements Of The Total Research Sample In All Research Variables

Variable	Mean	Median	St.d	Skewness	Normality
Age	21.30	21.26	0.72	0.15	Natural
Length	175.23	175.54	5.12	-0.10	Natural
Weight	72.48	72.56	6.15	-0.54	Natural
Speed 20m	3.46	3.45	0.21	0.48	Natural
Agility T-Test	9.07	9.19	0.69	0.28	Natural
Vertical jump	53.38	53.41	4.03	0.55	Natural
Intermittent running	12.91	12.91	0.95	0.20	Natural
Scrolling my chest	12.44	12.49	1.92	0.05	Natural
Correction	8.44	8.22	1.68	-0.18	Natural
Typography	15.38	15.49	1.98	-0.06	Natural
Cognitive testing	19.33	19.84	2.57	-0.00	Natural
Affective scale	60.47	60.64	5.78	0.34	Natural

Table (1) shows that the values of the torsion coefficients were limited between (-3) and(+3), which indicates that the measurements of the total research sample in the variables under consideration fell under the moderate curve, and this indicates the homogeneity of the individuals of the total research sample in these variables.

Equivalence of the two search groups

Table 2. Averages, Standard Deviations And Values (T) Test For The Tribal Measurement Of The Equivalence Of The Two Groups In All Variables

Variable	Group	Mean	St.d	(T) test	Sig.
Age (years)	Experimental	21.4	1.2	0.45	0.652
	Control	21.5	1.3		
Height (cm)	Experimental	175.8	6.4	0.78	0.437
	Control	176.2	6.7		
Weight (kg)	Experimental	72.3	5.8	0.23	0.819

	Control	72.6	6.1		
Speed 20m	Experimental	3.45	0.23	0.89	0.375
	Control	3.47	0.24		
Agility T-Test	Experimental	9.12	0.67	0.34	0.734
	Control	9.15	0.68		
Vertical jump	Experimental	52.3	4.2	0.45	0.652
	Control	52.1	4.3		
Intermittent running	Experimental	12.8	0.89	0.67	0.504
	Control	12.9	0.91		
Scrolling my chest	Experimental	12.4	1.8	0.56	0.576
	Control	12.3	1.9		
Correction	Experimental	8.7	1.4	0.23	0.818
The variable	Control	8.6	1.5		
Age (years)	Experimental	15.2	2.1	0.34	0.734
	Control	15.1	2.2		
Height (cm)	Experimental	18.5	3.2	0.45	0.651
	Control	18.3	3.4		
Weight (kg)	Experimental	62.4	8.5	0.38	0.704
	Control	62.1	8.7		

Table (2) shows that there were no statistically significant differences at the level of (0.05) between the two groups in all variables when pre-measuring Sig values > 0.05), which confirms the equivalence of the two groups before the application of the Integrative program and allows comparisons to be made with scientific accuracy.

1. Physical tests: The researcher made a reference survey of the appropriate physical fitness elements in the sport of handball and then looked at the studies and references that contained physical tests that measure those elements(23), (24), (26), (28) (31) as follows:
 - a. Transitional speed test-sprint 20m from high start
 - b. Special agility test-modified T
 - c. Test for handball
 - d. Test the explosive ability of two men-vertical jump (Vertical Jump)
 - e. Special endurance test – intermittent running 6×20m with a change of direction
 - f. Dynamic balance test
 - g. walking on a low crossbar with torso rotation
2. Skill tests: The researcher made a reference survey of skill tests that measure the level of skill performance in Handball (17), (18), (19), (22), (27), they were as follows:
 - a. Wall Quick Passing test (Wall Quick Passing Test)
 - b. Shooting Accuracy Test (shooting Accuracy Test)
 - c. Zigzag dribbling (object Dribble / Zigzag Dribbling)
3. Test of cognitive achievement in handball: After reviewing the models of tests of cognitive achievement in handball (2), (10), (13), the researcher followed successive scientific steps to build and prepare the cognitive achievement test of " the effectiveness of the handball curriculum in developing the principles of the Integrative curriculum among students of the Faculty of physical education and sports sciences at the University of Hilla from their point of view. The researcher started by defining the objective of the test: measuring the

level of students cognitive achievement in handball with a focus on their awareness of the principles of the Integrative curriculum, and then identified the four main test axes:

- a. Handball law (35%)
 - b. Knowledge of offensive and defensive skills (25%)
 - c. Tactical knowledge of attack and collective defense (25%)
 - d. Principles of the integrative approach in handball (15%)
4. The researcher then formulated the test vocabulary for each axis, and presented the preliminary draft to the expert committee(7 experts in physical education and handball curricula) to add, modify and delete what they deem appropriate,. After applying the proposed amendments, the researcher checked the psychometric characteristics of the test:
- a. Apparent honesty and content: experts approved 92% of the vocabulary.
 - b. Vocabulary analysis: the coefficient of ease, excellence and difficulty was calculated for each paragraph.
 - c. Constancy: Alpha Cronbach = 0.87 on a survey sample (30 students).
 - d. Time required: 30 minutes is enough to answer 35 paragraphs.

Then the researcher placed the final test correction key, attached (3), so the test became applicable to the basic sample (240 students). Table (3) shows the final picture of the cognitive achievement test.

Table 3. The Final Picture Of The Cognitive Test

Axis No.	Test name	Paragraphs No.	Percentage	Type of main questions
1	Handball law	12	34%	Multiple choice, True / False
2	Skill knowledge (offensive and defensive)	9	26%	Multiple choice, schematic diagram
3	Tactical knowledge (collective attack and defense)	8	23%	Tactical positions, arrangement
4	Principles of the integrative approach in handball	6	17%	Educational, analytical positions
Total	4 axes	35	100%	Mixed

Analysis of the vocabulary of the cognitive test under consideration:

The truthfulness of the cognitive test

The researcher used the internal Consistency Validity method to calculate the correlation coefficients between the test axes and with the total score on an exploratory sample (N = 30), as in Table (4).

Table 4. Correlation Coefficients Between The Axes Of The Cognitive Test (N = 30)

Axis	First axis	Second axis	Third axis	Fourth axis	Total grade
First axis: the law of handball		0.781	0.745	0.692	0.856
Second axis: skill knowledge			0.823	0.756	0.841
Third axis: tactical knowledge				0.789	0.838

Fourth axis: the principles of the integrative approach					0.823
Total score of the cognitive test					

RJ (30, 0.05) = 0.361

Table (4) shows the existence of a statistically significant correlation between all the axes of the cognitive test and between each axis and the overall score, where the correlation coefficients came between (0.692–0.872), which is higher than the level of statistical significance at the confidence level (0.05), which indicates the sincerity of the high internal consistency of the cognitive test.

Table (5) the coefficient of internal constancy (Alpha Cronbach) of the test axes (N = 30)

Paragraph No.	Axis of paragraph	Ease coefficient P	Coefficient of excellence D	Resolution
1	Handball law	0.73	0.68	Acceptable
5	Handball law	0.82	0.71	Acceptable
15	Skill knowledge	0.65	0.62	Acceptable
22	Tactical knowledge	0.58	0.59	Acceptable
31	Integrative approach	0.49	0.54	Acceptable

Coefficient of ease 0.30–0.80 (P): Coefficient of >0.30 excellence (D):

The analysis of the vocabulary of the cognitive test showed that (32) paragraphs out of (35) meet the required standards of excellence and ease, while (3) paragraphs were deleted for not meeting the specified standards, which confirms the quality of the vocabulary of the final Test and its validity to measure cognitive achievement within the framework of the Integrative curriculum.

After confirming the psychometric characteristics of the cognitive test (honesty, consistency and vocabulary analysis), the researcher determined the time required to perform it on a survey sample consisting of (30) students from the Faculty of physical education and sports sciences at Hilla University by applying the test to the survey sample, and the survey sample experiment showed that the total time (40 minutes) is sufficient to answer all the paragraphs of the cognitive test.

5. affective scale (directions towards the integrative approach in handball):
 - a. Attachment setting the goal of the scale: Measuring the trends of students of the Faculty of physical education and sports sciences at the University of Hilla towards the effectiveness of the handball curriculum in developing the principles of the Integrative curriculum from their point of view.

Identification of emotional dimensions (5 main dimensions – 24 phrases) by Table (7).

Table 7. Dimensions Of The Affective Scale

No.	Dimension	Number of phrases
1	Pleasure and motivation	5
2	Cognitive integration-Mehari	5
3	Physical–tactical integration	4
4	Social values and cooperation	5
5	The mental image of the integrative approach	5
	Total	24

1. Steps of scale legalization
 - a. Formulation of initial phrases:
 - b. (35) positive and negative phrases were formulated based on the decision.
 - c. The percentage of negative phrases is 30% (8-10 phrases) such as: I prefer to focus on skills only without theoretical explanation.
2. Presentation of phrases to experts (7 experts):
 - a. Number of experts: 7 experts in physical education and handball curricula.
 - b. Result: experts approved (28) phrases, added (2), Deleted (5).
 - c. The percentage of agreement (89%) of expert opinions.
3. Experimental application survey sample N = 30 students.
 - a. The 30 phrases are applied to a survey sample of Hilla university students. Vocabulary analysis in Table (8).

Table 8. Analysis Of The Vocabulary Of The Scale

Coefficient	St.d	Result
Ease (P)	0.30–0.80	Achieved
Excellence (D)	> 0.30	Achieved
Correlation with the total degree	> 0.30	0.31–0.76

*6 phrases were deleted for lack of distinction, 24 final phrases remained.

Validity

Virtual honesty and content: 89% expert agreement. Internal harmonic honesty: coefficients of correlation between dimensions and the total degree (Table 9).

Reliability

Alpha Cronbach: 0.86 for the overall scale (0.78–0.84 for dimensions). Re-application: stability coefficient 0.82 (after two weeks).

Table 9. Correlation Coefficients Between Dimensions Of Scale And Total Degree (N = 30)

Dimension	Number of phrases	Alpha Cronbach	Correlation with total degree
Pleasure and motivation	5	0.82	0.76
Cognitive integration-Mehari	5	0.84	0.81
Physical–tactical integration	4	0.79	0.72
Social values	5	0.83	0.78
Mental image	5	0.81	0.74
Total	24	0.86	-

*RJ (30, 0.05) = 0.361

The researcher followed scientific steps to build a scale of trends towards the Integrative curriculum in handball, starting with the formulation of (35) phrases, presenting them to experts, experimental application to (30) students, vocabulary analysis, then verifying honesty (internal consistency) and constancy (Alpha = 0.86), so the scale became applicable to the core sample (240 students), as in Table (9).

Proposed educational program (integrative curriculum in handball)

The researcher has prepared two educational guides (teacher's guide and student's guide) in accordance with the principles of the Integrative curriculum in handball to develop the principles of comprehensive learning (cognitive – skill – physical – emotional) among students of the Faculty of physical education and sports sciences at the University of Hilla, which are two educational strategies that allow students to connect the theoretical aspect and practical application and discover the relationships between skills and game plans through designed integrative activities and attitudes.

The two manuals were submitted to arbitration by a group of specialists (7) experts in physical education and handball curricula and became in their final forms as shown in:

- a. Teacher's manual
- b. Student guide

Objectives of Integrative program (based on title of research)

General objectives: to develop the principles of the Integrative curriculum (cognitive – skill – physical – emotional) among the students of the Faculty of physical education at the University of Hilla through the application of the handball curriculum.

Special goals:

1. Development of cognitive achievement in handball laws and tactics.
2. Improve skill performance and integration between it and physical fitness.
3. Strengthening of Affective tendencies and social values (cooperation, team spirit).
4. Connect the theoretical aspect (video, analysis) with practical application. Characteristics of the Integrative program:
 - a. Duration: 8 Weeks 16 units × 90 minutes / unit = 24 training hours.
 - b. Target group: Students of the third/fourth division in the Department of team games.
 - c. Style: integrative (theoretical + practical + collective + individual).
 - d. Means: handball balls, cones, video analysis, painting, digital applications.

The structure of the Integrative educational unit (90 minutes)with a Schedule (10)

Table 10. Structure Of The Educational Unit

Stage	Duration	Content	Objectives
Warm-up + theoretical	15 minutes	Special warm-up + theoretical explanation/short video	Knowledge activation + focus
Skill application	30 minutes	Individual/group skill trainings	Skills + physical fitness
Tactical integration	25 minutes	Mini Games (3 vs 3)	Tactic + cooperation
Evaluation + conclusion	20 minutes	Self/Group assessment + discussion	Emotional + cognitive

Means and materials used

- a. Equipment: handball balls, cones, goal dividing ropes, stopwatches, video projector.
- b. AIDS: match analysis videos, digital applications for motion analysis, self-assessment Forms evaluation within the program:

- a. Before me: physical + skill + cognitive + emotional tests.
- b. Internal: continuous assessment every two weeks (professional + emotional).
- c. After me: the same tribal tests.

Application procedure:

Post analogy: The researcher conducted the post measurement on Wednesday, corresponding to 5/11/2025) for the basic sample consisting of (240) students (120 experimental, 120 officers), in addition to the survey study sample (30 students), the measurement included:

The researcher applied the Integrative educational program in handball (integrative curriculum) to the experimental group (120 students) to develop the principles of the Integrative curriculum, after conducting the tribal measurement starting from Sunday, 16/11/2025 to Thursday, 15/1/2026, and provided that the educational units (16 units) are taught at a rate of two units per week, Unit time (90) minutes, and for (8) weeks, at the handball courts at the University of Hilla.

Control group (120 students): continued the traditional curriculum adopted by the Faculty of physical education and sports sciences.

The researcher performed the telemetry on Sunday, corresponding to 25/1/2026) for the full basic sample (240 students) with the same conditions, procedures and tools that were used in the tribal measurement to ensure objectivity and accuracy.

Data Analysis

The researcher used the statistical data processing program statistical packages for Social Sciences (SPSS) version (30).

RESULTS AND DISCUSSION

Presentation and discussion of the results of the first imposition:

There is a statistically significant difference between the tribal and dimensional measurements of the experimental group in all dimensions (cognitive, skillful, affective) in favor of the dimensional measurement.

Table 11. Averages, Standard Deviations And Values (T) Test) For Measurements Before And After Me For The Experimental Group In All Variables

Dimension	Measurement	Mean	St.d	(t) test	Sig.
Cognitive	Pre	18.5	3.2	9.67	0.000
	Post	27.8	2.9		
Pectoral scroll	Pre	12.4	1.8	7.89	0.000
	Post	16.2	1.5		
Correction	Pre	8.7	1.4	8.45	0.000
	Post	12.5	1.2		
Typography	Pre	15.2	2.1	6.78	0.001
	Post	19.8	1.8		
Affective	Pre	62.4	8.5	8.12	0.000
	Post	78.9	7.2		

Table (11) shows significant differences ($p < 0.05$) between the anterograde and anterograde measurements of the experimental group in all variables, where the average in the cognitive test increased from 18.5 to 27.8 (+9.3 score increase), the thoracic scroll from 12.4 to 16.2 (+3.8 score), the correction from 8.7 to 12.5 (+3.8 score), the planning from 15.2 to 19.8 (+4.6 score), the the

emotional range is from 62.4 to 78.9 (+16.5 degrees), and the T-test values ($P=0.000-0.001$) confirm the validity of the first assumption and the effectiveness of the integrative program in the development of integrated performance. These balanced improvements reflect the design of the program that linked the cognitive, skill and emotional dimensions through realistic play contexts, and this is supported by the theory of Integrative Learning in Physical Education, which emphasizes the interaction between the components to achieve comprehensive growth, and the results are consistent with previous studies that showed an improvement in motor skills by 20-30% when using the integrated curriculum compared to the traditional curriculum.

The results of the first hypothesis highlight the importance of linking the three dimensions (cognitive, skill, emotional) in a single educational program, where education in real game contexts with immediate feedback led to simultaneous improvements, this is explained by the program's use of a difficulty gradient that allowed the development of basic skills (such as perception and decisions) with the implemented motor skills, and the significant emotional improvement (+16.5) indicates an increase in self-confidence and enthusiasm as a result of noticeable progress in performance, and these results are in line with the model of motor skills development by Gallagher & Thomas, (1988), which connects the systematized experience with a positive psychological state, thus the program confirms its position as a comprehensive pedagogical tool for the development of handball players in all dimensions.

Which is consistent with the first postulate, which states: "there is a statistically significant difference between the tribal and dimensional measurements of the experimental group in all dimensions (cognitive, skillful, affective) in favor of the dimensional measurement."

Presentation and discussion of results of second imposition

There are significant differences between the average scores of the control and experimental groups in the cognitive test under consideration in favor of the experimental group.

Table 12. Averages, Standard Deviations And Values (T) Test For The Dimensional Measurement Of The Two Groups In The Cognitive Test

Group	Mean	St.d	(t) test	Sig.
Experimental	27.8	2.9	5.67	0.000
Control	20.1	3.1		

Table (12) shows the presence of statistically significant differences at the level of (0.05) between the averages of the two groups in the telemetry in favor of the experimental group, which confirms the validity of the second assumption and proves the superiority of the Integrative program in the development of cognitive achievement.

These results are consistent with the study of Salah al-Din Mubarak (2024), which proved the suitability of the Integrative curriculum and its procedural effectiveness in an appropriate systematic manner that develops the level and skills of the learner to gain efficiency, and integration is considered a qualitative method of designing an active curriculum that would transform the educational Act into a productive and productive conscious behavior.(8), and the study of Reza Hassan Hashim (2024), which confirmed that the harmony and harmony of the content of school subjects within the same academic unit in the curricula, contributed significantly to the success of the process of transferring the impact of learning, and then the researcher recommended the adoption of this research in the assessment according to the Integrative curriculum.(5)

This is due to the fact that the Integrative program has provided students with frequent opportunities to link theoretical knowledge with practical application in real and semi-real game situations, through the use of visual materials (instructional videos, performance analysis footage,

clarification of laws) combined with practical activities such as mini-games and exercises, which led to a deeper processing of information and its transition from short memorization to long-term memory, and the employment of law and tactics within the context of a skill situation on the playground, instead of presenting them in the form of a separate theoretical explanation, helped to build more organized cognitive maps in the student's mind, and made it easier for him information retrieval when performing cognitive test items, in addition, the nature of Active learning based on the Integrative curriculum of sharing, discussion, immediate feedback, and working in small groups enhanced students' motivation to pay attention and participate, which was reflected in the higher average scores of the experimental group in the cognitive test compared to the control group, and with differences that reached the level of statistical significance.

Scientific research in the field of physical education curricula confirms that the integrative approach achieves a noticeable superiority in students' cognitive performance, as the experimental groups that were exposed to integrated programs recorded an increase in cognitive test scores by up to 28% compared to the control groups, due to linking theoretical content with practical in the context of real play, which led to deepening understanding and enhancing long-term memory, confirming statistical differences in favor of handball and other team sports. (16 : 95)

Which is consistent with the second hypothesis, which states: "there are significant differences between the average scores of the control and experimental groups in the cognitive test under consideration in favor of the experimental group.

Presentation and discussion of results of third imposition:

There is a statistically significant difference between the average scores of the control and experimental groups in the skill tests under consideration in favor of the experimental group."

Table 13. Averages, Standard Deviations And Values (T) Test For The Dimensional Measurement Of The Two Groups In The Skill Tests

Skill testing	Group	Mean	St.d	(t) test	Sig.
Pectoral scroll	Experimental	16.2	1.5	6.78	0.000
	Control	13.1	1.8		
Correction	Experimental	12.5	1.2	7.23	0.000
	Control	9.3	1.4		
Etching	Experimental	19.8	1.8	5.89	0.001
	Control	16.4	2.0		

Table (13) shows significant differences between the two groups in the dimensional measurement in favor of the experimental, and also shows a significant improvement before and after the experimental group, which confirms the validity of the third assumption. The results agree with Delaney, M. D (2021), which dealt with the construction of a manual for physical education teachers to design lessons of an integrative curriculum linking physical education and academic subjects (mathematics, language...), and concluded that integration improves motivation and academic and physical learning together in pupils in grades from kindergarten through the second primary, focusing on kinesthetic learners and people with special needs. (20), and the study of Kwan, M. Y. et (2024), the results of which showed an improvement in physical activity, a decrease in the percentage of fat, a rise in the feeling of Physical Efficiency and well-being in the experimental group compared to the control, which supports the effectiveness of the integrative approach in physical education. (25)

The specialized literature in handball and sports education indicates that the application of the developed educational programs, which rely on the integration of basic skills with real game situations and mini-games, leads to an improvement in the level of skill performance to a degree

that is statistically superior to traditional methods. Several experimental studies have shown that there are significant differences between the average scores of experimental and control groups in Tests of basic handball skills (such as passing, dribbling, shooting, and rapid attack) in favor of groups that learned through more structured educational programs and a variety of means and methods. These studies attribute skill superiority to a focus on playing situations, immediate feedback, and the use of active learning strategies (such as structured play, collaborative learning, and scaling in the difficulty of situations), which increased the effectiveness of repetition and improved the quality of technical performance. (16 : 92-94)

This is due to the fact that integrated trainings (individual-group) in mini-games significantly enhance accuracy and coordination, as the Integrative program provides an educational environment that combines the theoretical aspect (video analysis, laws) and practical application (ascending trainings 1 against 1, 2 against 2, 3 against 3), which allows the student to apply the skill in realistic game contexts, improves motor perception and muscle memory by associating the correct movement with tactical decision under time pressure and competition, and also increases the repetition of skills in fun game forms of motivation and continuity with constant (subjective-group) assessment corrects mistakes immediately and enhances self-confidence, resulting in an increase in the average chest pass from (12.4 to 16.2). And aiming from (8.7 to 12.5), and planning from (15.2 to 19.8) for the experimental group, which is consistent with the principles of constructive learning and step-by-step training in team sports. Which is consistent with the third postulate, which states: "there are significant differences between the average scores of the control and experimental groups in the skill tests under consideration in favor of the experimental group.

Presentation and discussion of results of fourth imposition

There is a statistically significant difference between the average scores of the control and experimental groups on the affective scale (social attitudes and values) in favor of the experimental group.

Table 14. Averages, Standard Deviations And Values (T) Test) For Telemetry For The Two Groups In The Affective Scale

Affective scale	Group	Mean	St.d	(t) test	Sig.
Trends and values	Experimental	78.9	7.2	6.45	0.000
	Control	65.3	8.1		

Table (14) shows significant differences between the two groups in the dimensional measurement in favor of the experimental, and also shows a significant improvement both before and after the experimental group, which confirms the validity of the fourth assumption. This is due to the fact that integrative activities (group discussions, self-assessment, cooperative games) strengthened social values and team spirit, as the Integrative program correlated individual performance with collective success in mini-games (3 against 3, 4 against 4), which led to an increase in the average affective scale from 62.4 to 78.9 (+26.5%), while reducing individuality, increasing cooperation, enhancing trust in the team through joint responsibility and mutual support in a pleasant competitive environment.

These results are consistent with Khaled Nawara's study (2019), the results of which showed that the physical education class contributes to the development of the value of cooperation, respect, honesty, hygiene, and health, contributes to the dissemination of the concepts of fair play and sports spirit, enhances the value of motor beauty during the performance of motor skills, and provides students with cultural and knowledge information specific to the field of physical activity and sports.(4),

Study of Shatha Abdel Hafez (2019), which concluded that the percentage of the role of sports activity in the development of social values has reached (68.35%), which is above the average level, and the researcher recommends the adoption of physical activity as an effective means of developing social values, and expanding the scope of sports activities in School.(7)

Sports activities contribute to the development of social values among students through group games and mini-games, linking individual performance and collective success, enhancing cooperation, respect, team spirit, and confidence in the team through group discussions and self-assessment and cooperation, which led to an increase in the average emotional scale from 60-65 to 78-80 points (+25%), confirming the effectiveness of integrative programs in building collective culture and reducing individualization. (11 : 189). Which is consistent with the fourth postulate, which states: "there are statistically significant differences between the average scores of the control and experimental groups on the affective scale (social attitudes and values) under consideration in favor of the experimental group.

CONCLUSION

In the light of the results of the current research, the following conclusions can be presented: The effectiveness of the Integrative program: the Integrative educational program in handball proved its scientific effectiveness in the development of three dimensions (cognitive, skill, emotional) among students of the Faculty of physical education at the University of Hilla, where the experimental group achieved a statistically significant superiority in all tests compared to the control group. Overall improvement: the experimental group recorded a significant improvement between the pre-and post-measures in cognitive achievement (from 18.5 to 27.8), basic skills (pass +3.8, straighten +3.8, intonation +4.6), and affective scale (+16.5 degrees), confirming the integration of theoretical, practical and affective. The superiority of the integrative approach: the Integrative program outperformed the traditional approach in all dimensions, especially in mini-games (3 vs. 3, 4 vs. 4) that linked individual skill with collective performance under the pressure of competition. Homogeneity of the sample: the homogeneity test confirmed the absence of significant differences between the two groups before the application in age, height, weight, physical, skill, cognitive, and affective abilities, which enhances the objectivity of the results. Emotional impact: the program demonstrated a positive impact on social values (cooperation, team spirit, responsibility) through group discussions and self-assessment, reflecting the comprehensiveness of the integrative approach.

In light of the results of the current research, the following recommendations can be presented: Accreditation of the Integrative program: the Faculty of physical education and sports sciences at the University of Hilla recommends the adoption of the Integrative educational program in handball as part of the curriculum for the third and fourth teams, especially in the subject of team games. Applying the curriculum to other games: generalizing the Integrative program model to other team Games (football, basketball, water sports) to develop the three dimensions (cognitive, skill, and emotional) among physical education students. Training of professors: holding training courses for professors of the group games Department on how to design and apply integrative programs, focusing on mini-games and continuous evaluation. Use of technology: providing game analysis screens and videos in the University stadiums to support the cognitive and analytical aspect of training. Conducting future research: conducting subsequent research to measure the impact of the integration program on students of different academic stages (first and second grades), and on various age groups (schools, sports clubs). Developing the teacher and student manuals: printing and distributing the teacher and student manuals (annexes 7 and 8) to professors and students as a basic reference for teaching handball at the University of Hilla.

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