The Effect of the Round House Strategy on Learning Some Football Skills and Motor Creativity in Physical Education Classes for Preparatory Stage Students

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Introduction and Research Problem

In the ever-evolving world of football, the need for innovative strategies that break away from traditional patterns becomes increasingly apparent. The "Round House" strategy emerges as a dynamic approach, emphasizing player movement and flexible positioning to create space and exploit gaps in the opponent's defense. This tactical method integrates seamlessly with "motor creativity," encouraging players to express their individual skills and perform unpredictable movements on the field. By combining the Round House strategy with motor creativity, a team can transform into a diverse and unpredictable attacking force, granting players greater freedom in decision-making and execution. This introduction explores how this integration can revolutionize modern playing styles, opening new horizons for achieving tactical superiority and exceptional performance in football.

Raed Hadi (2018) stated that the Round House Strategy is considered one of the successful learning tools used to reduce the amount of information presented to the individual by organizing it into

meaningful units. This organization allows the information to occupy less space in the student's memory , leaving more capacity for information processing and operation. As a result, it leads to better performance by demonstrating the relationships between facts and fundamental concepts related to both prior and new knowledge intended to be learned , These visual forms assist both the teacher and the student in engaging in positive activities that explore new relationships , understand existing connections within the educational material, and manage the cognitive processes they undertake , considering it as a visual aid (9:36).

Muwafaq Mahmoud (2008) explains that the objective of teaching students the basic skills in football is to enable them to handle the ball with any part of their body, in accordance with the rules of the game, at any moment during the match. This ability allows them to execute strategies efficiently. When a student reaches the stage of performing all football skills accurately and proficiently, they can be relied upon to carry out any task or strategy developed in cooperation with their teammates (19:21).

Al-Anoud bint Saeed (2007) emphasizes the importance of early detection of motor creativity through testing innovative thinking via performance and movement. Motor creativity is considered one of the types of creative production in the field of physical activity, and it is manifested through motor responses that reflect students' creative abilities, as well as their capacity to perform a set of movements characterized by motor fluency, flexibility, motor imagination, and motor originality (2:38).

Cheung, Rebecca (2010) believes that motor activities can be a powerful tool for enhancing students' motor creativity. Many teachers have acknowledged that motor activities are among the essential

components for developing creativity, particularly motor creativity. Therefore, motor activities are designed for students to encourage self-expression, utilizing body movements combined with expressive, cognitive, and emotional ideas (21:35).

Hassan Abu Abduh (2011) adds that the physical education lesson represents the designated time allocated for teaching a particular subject, which, in physical education, is determined according to the educational plan for each level, ranging between 35 to 45 minutes. It is considered the fundamental form of the educational process within the school, with approximately 95% of students participating in physical education classes. The lesson represents a small unit within the curriculum and serves as the cornerstone of every physical education program. Therefore, its importance and its components must be emphasized to achieve the highest level of effectiveness. Through the lesson, all experiences and educational materials that fulfill the curriculum objectives can be provided. Moreover, the physical education lesson has educational purposes alongside skill-based and cognitive goals, contributing together with both internal and external activities to achieving the overall aims of the school physical education curriculum (8:21).

Afaf Othman (2013) states that the basic education stage is one of the most important phases in a student's life, as it significantly contributes to the improvement, development, and evaluation of the fundamental foundations of their future. Caring for students at this stage is considered a national responsibility in order to build a strong, balanced, and aware generation. Basic education plays a vital role in their upbringing, as it greatly influences their behavior and takes on the responsibility of building the future of society, since everything begins with the child This stage provides the child with a variety of experiences and situations that support

comprehensive learning across all dimensions: physical, psychological, cognitive, and social. It also contributes to shaping and directing the child's personality in a way that benefits society. Therefore, it plays a major role in refining the student's self and behavior to become a productive and integrated member of the community Indeed, this stage is considered a central pillar that reflects the progress of society, as quality education enhances students' capacity for critical scientific thinking (16:67).

Through the field visits conducted by the researchers to several schools, and based on a comprehensive review of the preparatory stage curricula, the researchers found that football, which is supposed to be practiced outside the classroom, receives little to no attention from physical education teachers. The activities provided to students at this stage are mainly classroom-based, where students remain seated at their desks, despite the fact that movement is critically important and should be utilized positively However, physical activity is nearly absent during this stage and lacks any form of creative motor activities that stimulate students' imagination. Moreover, the existing programs fail to achieve the educational goals of this developmental phase. The researchers also observed that the activities provided do not contribute to the development of students' creative abilities, as many of them lack opportunities for imaginative and creative motor expression. As a result, the value and importance of football—as a means of providing enjoyment and teaching behavioral skills—are significantly diminished This led the researchers to emphasize the urgent need to implement football-related activities in a way that contributes to the development of imaginative and creative aspects of preparatory stage students.

The researchers reviewed numerous scientific references that addressed the Round House Strategy, such as Hossam Saleh (2016)(7) and Bahira Ibrahim (2014)(5), as well as literature related to motor creativity, including Ismail Abdel Kafi (2009)(1) and Tariq Al-Suwaidan & Mohamed Al-Adlouni (2004)(11) , They also examined previous studies on the same topic, such as the study by Marwa Abdel Azim (2021)(18), and studies by Osman Mostafa, Abdel Aziz Mohamed, Taher Mostafa, and Sherine Labib (2018)(14), Amira Abdel Wahid & Fatima Ne'ma (2014)(3), Wafaa Ghali (2013)(20), and Habib Abdo (2010)(6) , In addition, the researchers reviewed a wide range of references focused on measurement methods, including Kamal Ismail (2016)(17), Abdul Hussein Razouqi & Yassin Hamid (2012)(13), and Sami Melhem (2009)(10), in order to understand the process of constructing a valid and reliable scale , Based on this theoretical and empirical foundation, the researchers designed a motor creativity scale for selected football skills appropriate for preparatory stage students.

- **Research Objective:**

The current research aims to identify the effect of the Round House Strategy on selected football skills and to design a motor creativity scale for third-grade preparatory students.

- **Research Hypotheses:**

In light of the research objective, the researchers formulated the following hypotheses:

1. There are statistically significant differences between the mean scores of the pre- and post-tests for the experimental group in learning selected football skills and motor creativity, in favor of the post-test.

2. There are statistically significant differences between the mean scores of the pre- and post-tests for the control group in learning selected football skills and motor creativity, in favor of the post-test.

3. There are statistically significant differences between the post-test scores of the experimental and control groups in learning selected football skills and motor creativity, in favor of the experimental group.

- **Research Terms:**

Motor Creativity:

It is a type of creative production in the field of movement, manifested through motor responses that reflect the individual's creative abilities and their capacity to perform movements characterized by motor fluency, motor flexibility, motor originality, and motor imagination (1:9).

The Circular House Strategy:

The Circular House Strategy is a learning strategy based on constructivist theory, which requires students to build their knowledge by creating visual mental representations. It consists primarily of two circles: an inner circle, where the main concept is placed, and an outer circle, divided into seven sections, where the sub-concepts are placed (8:5).

Research Plan and Procedures:

First: Research Method: The researchers used the experimental method as it is suitable for achieving the research goal and aligns with the nature of its procedures, using an experimental design with a single group.

Second: Research Population and Sample:

The research population included third-grade preparatory students, totaling 90 students across three classes at Sheikh Aissa Preparatory School in Minya. The research sample was selected using a purposive sampling method, consisting of 20 students, representing 22.22% of the total population, for the academic year 2023/2024, second semester.

-Data Collection Methods:

The distribution of the sample members was done proportionally:

The researchers ensured the proportional distribution of the members of both the experimental and control groups in light of the following variables: "growth rates (age, height, weight, intelligence)," and Table (1) illustrates this.

Table(1)

The Arithmetic Mean, Standard Deviation, Median, and SkewnessCoefficient For the Research Sample in Growth Rates

(N = 20)

Skewness Coefficient	Median	Standard Deviation	Arithmetic Mean	Unit of Measurement	Variables
-0.29	**172.80**	**3.07**	**172.5**	Months	Age
-0.08	**155.50**	**4.26**	**155.38**	cm	Height
-0.27	**65.50**	**4.91**	**65.06**	kg	Weight
0.36	**49.50**	**3.30**	**49.90**	Score	Intelligence

Table (1) shows the arithmetic mean, standard deviation, and skewness coefficient values for the research sample in growth rates (age, height, weight) and intelligence test. It is evident that the skewness coefficient values for the research sample ranged between (±3), indicating a proportional distribution of the sample in these variables.

Table(2)

The Arithmetic Mean, Standard Deviation, Median, and Skewness Coefficient for the Research Sample in Physical Tests

(N = 20)

Skewness Coefficient	Median	Standard Deviation	Arithmetic Mean	Unit of Measurement	Variables
0.75	**26.50**	**2.11**	**27.03**	Count	Sit-ups from lying position
0.66	**5.50**	**0.82**	**5.68**	Score	Kicking accuracy on overlapping circles
0.81	**5.30**	**0.78**	**5.51**	cm	Trunk bend forward from standing
0.73	**28.50**	**0.91**	**28.72**	Seconds	Standing on longitudinal foot on a 10×10 cm cube
0.91	**18.50**	**1.55**	**18.97**	cm	Vertical jump from standing
0.70	**29.00**	**0.77**	**29.18**	Count	Running in place for 30 seconds

Table (2) shows the arithmetic mean, standard deviation, and skewness coefficient values for the research sample in the physical test variables (muscular endurance, accuracy, flexibility, balance, power characterized by speed, and speed endurance). The skewness coefficient values for the research sample ranged between (−3 and +3), indicating a normal distribution of the sample in these variables.

Table(3)

The Arithmetic Mean, Standard Deviation, Median, and Skewness Coefficient for the Research Sample in Skill Variables

(N = 20)

Skewness Coefficient	Median	Standard Deviation	Arithmetic Mean	Unit of Measurement	Variables
0.77	**7.00**	**0.98**	**7.25**	Seconds	Ball Control While Moving
0.67	**25.50**	**0.54**	**25.62**	Seconds	Kicking the Ball with the Outside of the Foot at Small Goals
0.80	**34.00**	**0.71**	**34.19**	Meters	Kicking the Ball with the Inside of the Foot for Maximum Distance
0.81	**15.40**	**0.63**	**15.57**	Seconds	Dribbling the Ball with the Outside of the Foot for 25m

Table (3) shows the arithmetic mean, standard deviation, and skewness coefficient values for the research sample in skill variables (kicking the ball, dribbling, ball control, and shooting). It is evident that the skewness coefficient values for the research sample ranged between (−3 and +3), indicating a normal distribution of the sample in these variables

To collect the research data, the researchers used the following: The researchers designed a motor creativity scale for preparatory stage students. Below is an explanation of this scale and the steps taken to prepare it.

- **Motor Creativity Scale for Preparatory Stage Students: (Prepared by the Researchers) (Appendix 3).**

To design the scale under investigation, the researchers followed these steps:

Defining the objective of the scale.

- Determining and formulating the scale dimensions.
- Drafting the initial items of the scale.
- Preparing instructions for the scale.
- Identifying the pilot sample.
- Determining the time required to complete the scale.
- Validity.
- Reliability.
- Final version of the scale.

The researchers followed the following steps in preparing the scale:

(1) Defining the objective of the scale:

This scale aims to measure the level of motor creativity among preparatory stage students in the research sample, specifically in the football skills under investigation.

(2) Defining the Scale Dimensions and the Relative Importance of Each Dimension:

The researchers reviewed a range of scientific references related to scale design, such as Kamel Ismail (2016), Abdul-Hussein Razouqi and Yassin Hameed (2012), as well as references addressing motor creativity, including Ismail Abdel-Kafi (2009), Tareq Al-Suwaidan and Mohammed Al-Adlouni (2004). They also examined previous studies on the same topic, such as the studies by Marwa Abdel Azim (2021), Ameerah Abdel Wahid and Fatima Neamah (2014), Wafaa Ghali (2013), and Habib Abdo (2010) , Additionally, the scale was presented to a panel of experts from the Faculty of Physical Education, specializing in curricula and teaching

methods, sports psychology, team sports, and individual sports, to define the dimensions of the motor creativity scale (Appendix 2) , In light of the objective to be measured, the researchers identified a set of dimensions, as shown in the following table.

Table(4)

Dimensions of the Motor Creativity Scale for Preparatory Stage Students

Dimensions of the Motor Creativity Scale	NO
Motor Fluency	1
Motor Flexibility	2
Motor Originality	3
Motor Imagination	4

The researchers prepared an expert opinion survey form to determine the most suitable dimensions for the motor creativity scale (Appendix 2) and presented it to a group of experts. The group consisted of seven experts from the Faculty of Physical Education, specializing in curricula and teaching methods, as well as team sports and individual sports, all with over 10 years of experience in the field (Appendix 1). The experts were asked to provide their opinion on the appropriateness of the dimensions for the research topic and the design of the motor creativity scale, through approval, deletion, merging, rephrasing, or adding new dimensions to the scale. The researchers accepted dimensions that received 70% or more approval. The following table illustrates this.

Table(5)

The Percentage of Expert Opinions on the Dimensions of the Motor Creativity Scale (N = 7)

Expert Opinion		Dimensions	NO
Approval Percentage %	Approved		
100	**7**	Motor Fluency	1
100	**7**	Motor Flexibility	2
100	**7**	Motor Originality	3
85.71	**6**	Motor Imagination	4

It is evident from Table (5)

that the percentage of expert opinions regarding the suitability of the dimensions of the scale under investigation ranged between (85.71%: 100%). The dimensions that received 70% or more of the total expert opinions were selected. In light of this, the dimensions for the motor creativity scale were determined.

Table(6)

The Relative Importance of the Dimensions of the Motor Creativity Scale

Relative Importance	Dimensions	NO
27.78%	Motor Fluency	1
18.52%	Motor Flexibility	2
22.23%	Motor Originality	3
31.48%	Motor Imagination	4

Table (6) shows the relative importance of expert opinions regarding the dimensions of the scale:

(3)Formulating the Scale Items:

The researchers developed a set of 60 statements divided across four dimensions: motor fluency, motor flexibility, motor originality, and motor imagination. In drafting these statements, care was taken to avoid using ambiguous or multi-meaning words, ensuring that the language was correct, easy to understand, and concise.

(4) Determining the Type of Statements:

The statements were selected to avoid contradictions, ensure a single clear meaning, and maintain comprehensiveness and accuracy in covering the full scope of motor creativity in football skills.

(5) Scale Instructions:

The scale instructions were clearly outlined as follows, with emphasis on not leaving any statement unanswered:

1. Write your name, class, age, and the date in the designated space.
2. The scale consists of a series of statements. The student should place a (✓) mark next to the statement they choose.
3. Make sure to read each statement carefully before selecting your answer.

4. Choose your answer by placing a (✓) in the appropriate box on the answer sheet.
5. Select only one answer for each statement.
6. At the end of the scale, make sure you have answered all the statements.
7. Do not begin answering until you are instructed to do so.

(6) Preparing the Motor Creativity Scale and Presenting It to Experts:

The scale was prepared with a focus on including a diverse set of statements that reflect motor creativity, totaling 60 statements (Appendix 3). The initial version was presented to a group of experts (Appendix 1) to gather their opinions on the appropriateness of the scale in relation to its intended purpose, the number of statements, and their wording. The experts unanimously (100%) agreed on the suitability of the scale for its intended purpose and the number of items, with some suggestions to revise the phrasing of certain statements. The researchers implemented the recommended modifications and prepared the final version of the scale, which consisted of 54 statements (Appendix 4). Table (7) presents these details.

Table(7)

Distribution of Statements According to the Dimensions of the Motor Creativity Scale

Statement Numbers	Number of Statements	Scale Dimensions	NO
1-15	15	Motor Fluency	1
16 –26	11	Motor Flexibility	2
27 –41	15	Motor Originality	3
42 –60	19	Motor Imagination	4
60		Total	

The researchers presented the initial version of the Motor Creativity Scale (Appendix 3) to a group of experts specializing in curriculum and teaching methods at the Faculty of Physical Education, as well as in team and individual sports (Appendix 1), to ensure the validity of the statements and their ability to measure the intended constructs. The experts were asked to provide feedback regarding the deletion, addition, or modification of statements. Based on their feedback, six (6) statements were removed from the scale, resulting in a final version consisting of 54 statements. Table (7) illustrates these details.

Table(8)

Numbers and Count of Statements That Were Deleted or Modified from the Initial Version of the Motor Creativity Scale

Number of Statements in the Initial Version	Number of Deleted Statements	Number of Statements in the Final Version
54	**6**	**60**

(7) Duration of the Scale:

The researchers determined the appropriate time to complete the Motor Creativity Scale based on the results of a pilot study, using the following formula:

(Time taken by the first student + Time taken by the last student) / 2

Accordingly, the researchers established the duration of the scale to be **50 minutes**.

(8) Scoring the Scale:

The scale is scored as follows: each statement marked "Agree" is given 3 points, "Somewhat Agree" is given 2 points, and "Disagree" is given 1 point.

(9) Scientific Coefficients of the Motor Creativity Scale:

The researchers calculated the scientific coefficients of validity and reliability during the period from Sunday, February 11, 2024, to Monday, February 19, 2024, as follows:

- **Validity:**

  To assess the validity of the scale, the researchers used the following methods:

- **Content Validity**
- **Internal Consistency Validity**

-Content Validity:

The researchers presented the final version of the scale (Appendix 4) to a group of experts (Appendix 1) to evaluate the appropriateness of the Motor Creativity Scale for its intended purpose. Experts were asked to assess the relevance of the scale's dimensions and the suitability of each statement in relation to its corresponding dimension. They were instructed to mark (✓) under "Agree" if the statement was appropriate, under "Disagree" if it was not, and under "Revise" if the statement required rephrasing. The experts unanimously agreed on the appropriateness of the scale for its intended purpose, with a 100% agreement rate.

-Internal Consistency Validity:

To calculate the internal consistency validity of the scale, the researchers applied it to a sample of ten (10) students from the research population but outside the main research sample. Correlation coefficients

were calculated between the score of each item on the scale and the total score of the entire scale. Additionally, correlations were calculated between each item's score and the total score of the dimension to which it belongs. The correlation coefficients between the total scores of each dimension and the overall scale score were also computed. Table (9) presents the results

Table(9)

Internal Consistency Validity of the Items and Dimensions of the Motor Creativity Scale for Preparatory Stage Students (N = 10)

"Correlation coefficients between the score of each axis and the total score of the scale."		"Correlation coefficients between each item's score and the total score of the overall scale"						"Correlation coefficients between each item's score and the total score of the corresponding dimension"							
								Motor Imagery		Motor Flexibility		Motor Originality		Motor Fluency	
Correlation Coefficient	Axis	Correlation Coefficient	Item Number	Correlation Coefficient	Item Number	Correlation Coefficient	Item Number	Correlation Coefficient	Item Number	Correlation Coefficient	Item Number	Correlation Coefficient	Item Number	Correlation Coefficient	Item Number
0.81	Motor Fluency	**0.75**	**37**	**0.74**	**19**	**0.77**	**1**	**0.82**	**38**	**0.70**	**26**	**0.86**	**16**	**0.71**	**1**
		0.88	**38**	**0.83**	**20**	**0.78**	**2**	**0.71**	**39**	**0.71**	**27**	**0.85**	**17**	**0.73**	**2**
0.75	Motor Originality	**0.91**	**39**	**0.78**	**21**	**0.73**	**3**	**0.77**	**40**	**0.77**	**28**	**0.69**	**18**	**0.68**	**3**
		0.74	**40**	**0.84**	**22**	**0.79**	**4**	**0.75**	**41**	**0.78**	**29**	**0.75**	**19**	**0.79**	**4**
0.77	Motor Flexibility	**0.87**	**41**	**0.85**	**23**	**0.80**	**5**	**0.69**	**42**	**0.85**	**30**	**0.80**	**20**	**0.74**	**5**
		0.88	**42**	**0.73**	**24**	**0.84**	**6**	**0.84**	**43**	**0.81**	**31**	**0.84**	**21**	**0.87**	**6**
0.84	Motor Imagery	**0.73**	**43**	**0.90**	**25**	**0.86**	**7**	**0.71**	**44**	**0.71**	**32**	**0.74**	**22**	**0.79**	**7**
		0.74	**44**	**0.88**	**26**	**0.90**	**8**	**0.77**	**45**	**0.77**	**33**	**0.79**	**23**	**0.89**	**8**
		0.79	**45**	**0.81**	**27**	**0.75**	**9**	**0.82**	**46**	**0.73**	**34**	**0.72**	**24**	**0.75**	**9**
		0.88	**46**	**0.74**	**28**	**0.81**	**10**	**0.69**	**47**	**0.69**	**35**	**0.71**	**25**	**0.72**	**10**
		0.89	**47**	**0.89**	**29**	**0.85**	**11**	**0.73**	**48**	**0.86**	**36**			**0.80**	**11**
		0.74	**48**	**0.88**	**30**	**0.84**	**12**	**0.71**	**49**	**0.71**	**37**			**0.75**	**12**
		0.81	**49**	**0.90**	**31**	**0.88**	**13**	**0.77**	**50**					**0.77**	**13**
		0.88	**50**	**0.74**	**32**	**0.74**	**14**	**0.70**	**51**					**0.72**	**14**
		0.73	**51**	**0.91**	**33**	**0.83**	**15**	**0.69**	**52**					**0.80**	**15**
		0.74	**52**	**0.88**	**34**	**0.74**	**16**	**0.89**	**53**						
		0.84	**53**	**0.88**	**35**	**0.86**	**17**	**0.75**	**54**						
		0.88	**54**	**0.74**	**36**	**0.85**	**18**								

The tabular value of (r) at the significance level of (0.05) = 0.444

It is evident from Table (9) that:

The correlation coefficients between the score of each item in the Motor Creativity Scale and the total score of the axis it belongs to ranged between (0.68: 0.89) The correlation coefficients between the score of each item in the Motor Creativity Scale and the total score of the scale ranged between (0.73: 0.91) The correlation coefficients between the total scores of each axis in the Motor Creativity Scale and the total score of the scale ranged between (0.75: 0.84) All of these correlation coefficients are statistically significant, as the calculated (r) values are greater than the tabulated (r) value at the significance level of (0.05), indicating the internal consistency validity of the scale.

B - Reliability:

To calculate the reliability of the Motor Creativity Scale, the researchers used the method of test-retest on a sample of (10) students from the research population, who were not part of the original sample. A time interval of (10) days was maintained between the first and second applications. Table (10) shows the correlation coefficients between the two applications.

Table(10)

Correlation coefficients between the test and retest of the Moto Creativity Scale for middle school students (N = 10)

Correlation Coefficient	Retest		Test		Unit of Measurement	Domains
	(SD)	(M)	(SD)	(M)		
0.84	**1.33**	**9.84**	**1.25**	**9.54**	Degree	**Motor Fluency**
0.91	**1.57**	**5.81**	**1.54**	**5.61**	Degree	**Motor Originality**
0.75	**1.33**	**3.73**	**1.25**	**3.43**	Degree	**Motor Flexibility**
0.79	**1.26**	**7.63**	**1.18**	**7.33**	Degree	**Motor Imagination**
0.88	**2.98**	**19.30**	**2.81**	**18.78**	Degree	**Total Score**

The critical value of (r) at a significance level of (0.05) = 0.444.

It is clear from Table (10) that the correlation coefficients between the pretest and retest for the domains of the motor creativity scale ranged between (0.75 to 0.91), and the correlation coefficient for the total score of the scale was (0.88). These correlation coefficients are statistically significant, as the calculated (r) values are greater than the critical (r) value at a significance level of (0.05), indicating the reliability of the scale.

(10) - Final Version of the Scale: (Appendix 4)

The final version of the motor creativity scale for middle school students (Appendix 4) was reached based on the opinions of the experts (Appendix 1), and the scale consists of 54 items in its final form.

Statistical Method Used:

The researchers used the following statistical methods to analyze the results:

Arithmetic mean, median, relative importance, correlation coefficient. The SPSS program was used to calculate some of the statistical measures, and the researchers accepted a significance level of (0.05)

Discussion of the Results:

Based on the results from the previous tables, it is evident that the developed Motor Creativity Scale for middle school students is suitable, as it effectively distinguishes between different levels of students, meaning it accounts for individual differences in football skills under investigation. This indicates the accuracy of the scale's items. The researchers used internal consistency validity, based on correlation coefficients between the scale items, the subscale total, and the overall scale, to ensure that each item is associated with and belongs to the intended subscale. All results related to internal consistency validity fell within the statistical significance range, meaning that each item in the scale represents its intended concept Furthermore, the scale's reliability is another indication that it is not affected by any external factors, and it provides consistent results regardless of changes in the sample or application conditions. Reliability is a fundamental condition for a scale to be suitable for application, as it helps avoid measurement errors that could impact the scale's results. The researchers also used Cronbach's alpha coefficient to calculate validity, as it is known for being unaffected by environmental factors or the test subjects, which enhances the accuracy of the results obtained from the scale.

The researchers attribute the improvement of middle school students in motor creativity to the positive impact of using diverse statements in terms of ease, difficulty, and variety in style. This approach provided students with the opportunity to develop a motor representation of how to perform the football skills under investigation. As a result, students became more motivated to learn and more eager to exert additional effort to achieve better performance. This aligns with the studies of "Amina Abdullah" (2019), "Tarek Ali" (2013), and "Osman Mustafa,

Haitham Abdel Majid" (2006), which highlighted the positive contribution to teaching various skills to students. This indicates the coherence of the scale items with one another and the complete harmony between the selected words that make up the items of the Motor Creativity Scale.

Conclusions and Recommendations

First: Conclusions:

1. The Motor Creativity Scale for middle school students is valid, reliable, and statistically significant, providing direct benefits in both research and practical applications.
2. The final version of the Motor Creativity Scale includes four main domains, which are:
    - **Motor Fluency**
    - **Motor Flexibility**
    - **Motor Originality**
    - **Motor Imagination** Under these domains, there are a total of 54 items used to measure motor creativity in the middle school students of the research sample.

Second: Recommendations:

In light of the results, the researchers recommend the following:

1-The necessity of applying the motor creativity scale to preparatory stage students.

2-Paying attention to designing motor creativity scales for samples from other educational stages

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