

Comparison of the partial and total method and its impact on learning some basketball skills Developing the sportsmanship of the students of the first intermediate grade

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Abstract:

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The research aims to identify - Identifying the differences between the partial - and total methods and the command method in learning some basketball skills among the students of the first intermediate grade.- Identifying the differences between the partial and total methods and the command method in developing the sportsmanship among the students of the first intermediate grade. The researcher used the experimental method for its suitability and the nature of the research and its problem, the research sample was selected in a deliberate way represented by the students of the first intermediate grade in the Euphrates Middle School for Boys, who are (60) students, and the main experimental sample consisted of (45) students representing (75%) of the research sample, and this sample was divided into three experimental groups by following the random selection method using lottery with (15) students for each experimental group and the first experimental group was selected to which the partial method will be applied, the second experimental group to which the total method will be applied, and the third experimental group (control) to which the command method will be applied, and for the purpose of avoiding the effect of previous experiences in some students, as well as the presence of some anomalous values in the data of the research sample members that may affect the results of the research, the researcher relied on the exclusion of a number of students from the research sample in determining the research sample. This study was conducted in the first half of the academic year (2024/2025), as well as the sportsmanship scale was used for the third experimental groups under study, and the researcher used the following statistical methods, (standard deviation, variance analysis, percentage, Pearson correlation coefficient, Spearman correlation coefficient, Levens test for homogeneity).
Keywords: partial - total method - basketball skills- Developing the sportsmanship - intermediate grade.

1- Introduction to the research

1.1 Introduction and Importance of Research

Modern education aims to educate a generation that is physically and mentally integrated and spiritually within the frameworks of societal values, traditions and norms with the aim of preparing and raising a rising generation of good citizens, and physical education plays an important and prominent role in this integrated and interconnected education, and just as each of the subjects of study is concerned with the individual mentally, spiritually and intellectually, so too physical education that has its own methods of teaching and that these methods are based on scientific foundations derived from the principles and theories of education, if we want to achieve

Physical education has its goals, which contribute greatly and effectively to the preparation of the rising generations in our society, as it was necessary to pay attention and care to the appropriate teaching methods in achieving educational and educational goals , and the game of basketball is a team game that is characterized by the element of suspense and accuracy, as well as it needs work and joint interaction between the members of the same team, so it needs to master these offensive skills because of its great importance in building a strong and good base in developing the various skills of the game to reach the The good and correct performance of skills by students , sportsmanship is of great and extreme importance to express the personality of players in all sports and contributes significantly to refining the personality of players such as forgiveness and justice, as well as self-control, courage and determination, and sportsmanship is considered comprehensive of all these qualities, and it should be noted that sportsmanship varies from one sports game to another and according to the athletic level, gender as well as experience, as many previous studies have indicated that the nature of the sports game is practice. It may affect the development and promotion of sportsmanship, as in team games, especially basketball, if the players are characterized by aggression, as a result of direct contact, which may show a weakness in sportsmanship compared to swimming, for example, which shows a high level of sportsmanship. (Miller & Jormam, 1988, p. 72)

1- 2 Research problem

The teaching method of physical education is considered an artistic process for the teacher itself in how to deliver and teach the scientific material to the learner, which is of great and great importance in teaching sports skills and events in various sports games, whether it is group or individual games, and here every individual working in the educational field must know these various methods and have a guide and a rule on which to base and follow with his students at various stages and the style that suits this stage from others. Stages in order to obtain a better and good level of learning, and since the researcher works as an educational supervisor for the subject of physical education, he noticed through his field visits to schools and despite the availability of modern teaching methods and methods, he has noticed in teaching the subject of physical education the teacher's reliance in most of our schools on the (commanding) method, and this is what prompted the researcher to use different methods and apply them to the students of the first intermediate grade, in order to detect the effectiveness of these methods on Developing the student's physical, skillful, and intellectual ability in learning some basketball skills and the impact of these methods on developing the sportsmanship of learners.

1-3 Research Objectives

- Identifying the differences between the partial and total methods and the command method in learning some basketball skills among the students of the first intermediate grade.
- Identifying the differences between the partial and total methods and the command method in developing the sportsmanship among the students of the first intermediate grade.

1-4 Research Areas:

- 1- Human Field: Middle School Students of Al-Furat School for Boys for Displaced People in Duhok Governorate
- 2- Temporal Domain: From 3 /11/2024 to 19/12/2024
- 3- Spatial Area: Al-Furat School for Boys in Duhok Governorate

1.5 Defining the Terms

Partial Method

He defined it (Othman & Lutfi, 1963):

The teaching is done through small parts and then they are connected to form a complete unit (Othman, Lotfi, 1963, p. 62)

The researcher defines it procedurally

It is one of the teaching methods that depends on the division of the skill into multiple parts in order to master it optimally. The Overall Method Arafah (Allawi, 1977)

Movement is indivisible, but presented to students as a single, undivided unit, and then they learn it without division, and this method is called total cognition, (Allawi, 1977, p. 66)

The researcher defines it procedurally

It is one of the teaching methods that depends on the presentation of the skill completely without fragmentation and its application by the learners in order to master it.

Sportsmanship

Arafa (Arnold, 2003) The sportsmanship is represented by respect, magnanimity, good dealing, love of others, empathy and generosity, as well as he believes that good behavior in dealing with others during different situations of play can be evidence of sportsmanship (Arnold, 2003)

The researcher defines it procedurally

Identifying the level of sportsmanship through the scores obtained by students in the sportsmanship scale for the first intermediate grade students.

Research Methodology3

The researcher used the experimental method for its suitability and the nature of the research and its problem

3-1 Research Population and Sample:

The research sample was deliberately selected represented by (60) students of the first intermediate grade at Al-Furat School for Boys for Displaced Persons , and the main experimental sample consisted of (45) students representing (75%) of the research sample, and this sample was divided into three experimental groups by following the random selection method using lottery and (15) students for each experimental group, and this study was conducted in the first half of the academic year (2024/2025).

It is worth mentioning that the researcher excluded the players who were conducted in the survey experiment, as well as some anomalous values in the data of the research sample members that may affect the research results, and Table (1) shows the number of members of the research sample, the main experiment sample, and the students participating in the survey experiment as well as their percentages.

Table (1)

Information on the number of members of the research sample, the main experiment sample, and the sample of the exploratory experiment and their percentages

Percentage	Number	Number and percentages
		Variables
%100	60	Research Sample
17 %	10	Sample Exploratory Experiment
75 %	45	Main Experience Sample

3-2 Homogeneity and parity:

3.2.1 Homogeneity in the basic variables (height, mass, age):

Parity in research variables works to achieve better results and serves the correct scientific procedures for experimenting and starting from a single starting point for all groups, so it is necessary to work to find equal groups with regard to research variables.

Homogeneity of the research sample:

Homogeneity was performed by (Levene's) test for the variables of height, weight and age as shown in Table (2) as follows:

Table (2) Shows the homogeneity of the research sample in the variables of height, weight, and age

Significance of the differences	sig	levene's	±	Going to-	Unit of Measurement	Variables
Insignificant	0.060	4.102	0.05	1.35	Meter	Length
Insignificant	0.648	0.189	11.03	40.92	Kilogram	Weight
Insignificant	0.241	1.435	0.62	13.25	year	lifetime

Table (2) shows that the significance level of the research variables (height, weight, age) was respectively (0.060, 0.648, 0.241) and because all of them are greater than the approved significance level (0.005), which indicates that the sample is homogeneous in the three variables.

3.3 Parity in Basketball Skills Tests and the Sportsmanship Scale

After the skills were selected by the experts and specialists, the researcher conducted the parity between the research groups

Table (3) shows the process of equivalence between the research groups.

Table (3) Shows the parity between the three groups of research in the selected skill tests

Significance of the differences	Significance Level	(F) Calculated	Pre-test						Unit of Measurement	auditions	t
			Group C		Group II		Group A				
			±on	Q ⁻	±on	Q ⁻	±on	Q ⁻			
Insignificant	0.742	0.300	3.62	25.13	3.35	26.13	3.97	25.86	degree	Thoracic	1
Insignificant	0.103	2.404	0.68	12.91	0.65	13.06	0.81	12.50	time	Dialogue	2
Insignificant	0.607	0.506	0.54	6.46	0.61	6.60	0.50	6.40	degree	Scoring	3

The value of the significance level of the tests was (0.742, 0.103, 0.607) respectively and the fact that all of them were greater than the approved significance value (0.05), so it was found that there were no significant differences between the three groups of research in the test skills (accuracy of the chest pass, dialogue by changing direction, scoring from behind the free throw line). This indicates the parity of the totals in these tests.

Table (4) Shows the parity between the three groups of research in the level of sportsmanship

Significance of the differences	Significance Level	(F) Calculated	Pre-test						Unit of Measurement	Scale
			Group C		Group II		Group A			
			±on	Q ⁻	±on	Q ⁻	±on	Q ⁻		
Insignificant	0.952	0.207	3.89	77.91	4.18	78.46	3.98	78	degree	Sportsmanship

The value of the significance level of the scale was (0.952), and it was greater than the value of the approved significance (0.05), so it was found that there were no significant differences between the three groups in the level of sportsmanship, which indicates the equivalence of the totals.

3.4 Means of Data Collection:

1. Questionnaire Form Opinions of Experts and Specialists
2. Personal Interviews
3. Sources and References

3-5 Exploratory Experiment:

(Al-Mandalawi, et al., 1990)

It is "a practical training conducted by the researcher in order to identify the pros and cons that the researcher encounters during his work in conducting the tests to avoid them", and accordingly, the researcher conducted the exploratory experiment on 3/11/2024, which numbered (10) from the research community from outside the research sample, and they were randomly selected in order to identify the following:

1. In order to overcome errors, if any, and before performing the main experiment tests.
2. In order to determine the location of the main experiment and the conditions that accompany the implementation of the pre- and post-tests.
3. To know the researcher's ability to conduct tests related to the research.
4. In order to identify the obstacles that accompany the conduct of the tests.
5. In order to know the extent of the ability of the assistant work team to carry out the tests.
6. To know the time taken to perform the tests for the research and to confirm the validity of the tools used.

(Al-Mandalawi et al., 1990, p. 107)

3-6 Scientific Conditions for Tests:

3.6.1 Honesty

In order to confirm and know the validity of the tests, the researcher presented these tests to a group of experts, and after emptying the questionnaires presented to the experts, the researcher obtained a percentage of agreement (100%), and this indicates the experts' judgment that these tests measure what was set for him in this study.

3.6.2 Stability

The researcher conducted a constancy on a sample of (6) students from the research community outside the research sample, and in light of this, the researcher, on 6/11/2024,

conducted the selected tests, then these tests were reapplied after a week and on the same sample, and the simple correlation coefficient (Pearson) was calculated between the scores of the two tests, and the results of the correlation showed that there is a significant correlation relationship of (84).0%), which confirms the stability of the tests selected by the specialists.

3.6.3 Objectivity

In order to identify the objectivity of the selected tests applied, the researcher calculated the Pearson correlation coefficient between the scores of the two judgments and it was concluded that the value of objectivity was high (0.82%).

3-7 Description of the Sportsmanship Scale:

The researcher used the Robert et al. scale (Robert & etal, 1997), after translating the scale from English to Arabic, as the scale used in the research includes (25) items to measure sportsmanship, and is evenly distributed over (5) items for each field as shown in Table (5).

Table (5) Areas of the Sportsmanship Scale and Paragraphs for Each Field

Paragraphs	Number of paragraphs	Areas of Sportsmanship
1-7-13-17-25	5	Respect for social traditions
2-8-14-18-20	5	Respect for Regulations and Laws
3-9-12-15-21	5	Full commitment to sport participation
4-10-16-19-22	5	Respecting the Opponent
5-6-11-23-24	5	The Field of Negative Attitudes to Sport
1-25	25	Total

The weights of the responses related to the paragraphs of the scale were distributed according to the Likert method of five responses, namely

(Applies to a very large degree, applies to a large degree, applies to a moderate degree, applies to a small degree, applies to a very small degree), the highest degree of response is (5) degrees, and the lowest degree of response is (1) degree, and the negative paragraphs of the scale are (5-6-11-12-18-23) and they were reversed before performing the statistical analysis so that all the results become in the positive direction Appendix No. (1). (Robert et al., 1997, pp. 197-206)

3.7.1 *VALIDITY OF THE Sportsmanship Scale:*

" Honesty is the possibility of measuring the test for the phenomenon that is to be measured, and the test is honest when it measures what it was designed for", if a questionnaire is designed for the purpose of knowing the validity of the scale, as it has been presented to experts and specialists in the field of sports psychology in order to identify the ability and validity of the scale to measure what it was designed for. Experts and specialists agreed on (100%), which indicates the validity of the scale and can be applied to the research sample. (Allawi, & Nasreddin, 2000)

3.7.2 Stability of the Sportsmanship Scale:

The researcher conducted the stability of the sportsmanship scale on a sample of (6) students from the research community outside the research sample in a classroom in the school on 6/11/2024, then the test was repeated on the same sample after a week, and the stability was calculated by the correlation coefficient, where the correlation value reached (5.8%), which is a high correlation and suitable for the use of this scale.

3.8 Devices and Tools Used:

1. Basket balls (20).
2. Indicators (20).
3. Stopping Clock (2)
4. Measuring tape (1).
5. Medical ball (1).
6. An electronic scale to measure (mass).

3.9 Implementation of the main experiment:

After the researcher completed all the requirements of the experiment in identifying the research groups and achieving parity between them, the main research experiment was applied on 17/11/2024, the physical education teacher taught the experimental and control research groups and used it in teaching the first experimental group (partial method), and the second experimental group (the total method). While the third control group was taught (in the command method) and the teaching continued over a period of (33) days for the academic year 2024-2025 according to the teaching plan prepared by the researcher, and the implementation of the experiment was completed on 19/12/2024 3-10 Post-Tests:

The researcher conducted the post-tests for the research sample under study on 22/12/2024, as the post-tests were conducted under the same conditions as the pre-tests in terms of the tools used, the time and the place of the test, and the data were recorded in a special form for registration.

3.10: Statistical Methods

- 1- Standard deviation.
- 2- Analysis of variance.
- 3- Percentage.
- 4- Pearson correlation coefficient.
- 5- Spearman's correlation coefficient.
- 6- Levans test for homogeneity.

4.1 Presentation of results

The results will be presented and discussed in the light of the statistical data obtained from the research sample according to the approved basic variables and in order to verify the validity of the hypotheses and objectives set by the researcher, as various statistical methods were used to achieve the research objectives, as the data were processed using the statistical program known as the (Statistical Package for Social Sciences) SPSS , as follows:

4.1.1 Identifying the Variation in the Level of Sportsmanship according to the Teaching Style Variable

Table (6) Shows the arithmetic media, standard deviations, calculated F value and significance level

The significance of the differences is the sportsmanship of the three groups according to the teaching style variable.

Significance of the differences	Sig	(F)	±	Going to-	Instructions
Moral	0.000	27.310	11.43	95.60	Group A
			4.43	77.86	Group II
			1.64	78.46	Group C

Table (6) shows that the arithmetic mean of the three groups was respectively (95.60, 77.86, and 78.46) with standard deviations respectively (11.43, 4.43, and 1.64) and the calculated

value of (F) was 27.310, while the value of the significance level was (0.000) at an error rate of $\leq (0.05)$. Since the value of the significance level is less than the value of the approved significance, this means that there are significant differences between the three groups in the level of sportsmanship.

4.1.2 Identify the differences between the arithmetic averages of the three groups in the level of sportsmanship.

Table (7) Shows the differences between the arithmetic averages of the third methods and the level of significance and significance of the differences.

Significance of the differences	Sig	Difference Q-	Totals
Moral	0.000	17.73	First – Second
Moral	0.000	17.13	I.III
Insignificant	0.974	0.60	II. III

It is clear from Table (7) that the differences in the arithmetic median of the three groups were respectively (17.73, 17.13, and 0.60), while the value of the significance level was respectively (0.000, 0.000, and 0.974), and this indicates that there is a significant difference between the group (the first and the second, the first and the third) and there are no differences between the group (the second and the third) in The level of sportsmanship .

4.1.3 Identify the variation in the level of skill tests according to the teaching style variable for the three groups

Table (8) It shows the arithmetic media, standard deviations, the calculated value of (F), the level of significance and the significance of the differences for the skill tests according to the teaching style variable.

Significance of the differences	Sig	(F)	Group C		Group II		Group A		Unit of Measurement	Skill
			±	Going to-	±	Going to-	±	Going to-		
Moral	0.000	32.774	3.53	25.33	3.82	25.93	3.46	34.86	degree	Thoracic
Moral	0.000	42.744	0.61	12.83	0.60	13.06	0.27	11.43	time	Dialogue

Moral	0.006	2.498	0.51	6.53	0.48	6.66	1.45	7.60	degree	Scoring
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It is clear from Table (8) that the arithmetic mean of the chest pass in the group (first, second, and third) were respectively (34.86, 25.93, and 25.33) with standard deviations respectively (3.46, 3.82, and 3.53) and the calculated value of (F) was (32.774), while the value of the significance level was (0.000) and since the value of the significance level was less than the value of the approved significance (0.05).), this means that there are significant differences between the three totals in the chest pass accuracy test.

The arithmetic averages of the dialogue in the group (first, second, and third) were respectively (11.43, 13.06, and 12.83) with standard deviations respectively (0.27, 0.60, and 0.61) and the calculated value of (F) was (42.744), while the value of the significance level was (0.000) and since the value of the significance level was less than the value of the approved significance of 0.05, this means that there are significant differences between the three sets of the dialogue test by changing the direction.

The arithmetic averages of scoring in the group (first, second, and third) were respectively (7.60, 6.66, and 6.53) with standard deviations respectively (1.45, 0.48, and 0.51) and the calculated value of (F) was (2.498) while the value of the significance level was (0.006) and since the value of the significance level was less than the value of the approved significance (0.05), this means that there are significant differences between the three groups of the scoring test from behind the free throw line.

4.1.4 Identify the differences between the arithmetic averages of the three groups.

Table (9)

Shows the differences between the arithmetic averages of the three groups and the level of significance

The significance of the differences for the three tests

Group C			Group II			Group A			Skill
Significance of the differences	sig	Difference Q-	Significance of the differences	sig	Difference Q-	Significance of the differences	sig	Difference Q-	
Insignificant	0.893	0.60	Moral	0.000	1.63	Moral	0.000	8.93	Thoracic
Insignificant	0.441	0.23	Moral	0.000	1.39	Moral	0.000	1.63	Dialogue

Insignificant	0.91 9	0.13	Moral	0.00 9	1.06	Moral	0.02 4	0.93	Scoring
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It is clear from Table (9) that the differences in the arithmetic median of the chest pass in the group (first, second, and third) were respectively (8.93, 1.63, and 0.60) while the value of the significance level was respectively (0.000, 0.000, and 0.893), and since the value of the significance level was smaller than the value of the approved significance of 0.05, this means that there are significant differences between There are no differences between the group (second and third) in the chest pass accuracy test because the level of significance is greater than the approved significance level .

The differences in the arithmetic median of the dialogue in the group (first, second, and third) were respectively (1.63, 1.39, and 0.23), while the value of the significance level was respectively (0.000, 0.000, and 0.441), and since the value of the significance level was less than the value of the approved significance (0.05), this means that there are significant differences between There are no differences between the group (second and third) in the interview test by changing the direction because the level of significance is greater than the level of the approved significance .

The differences in the arithmetic median of scoring in the group (first, second, and third) were respectively (0.93, 1.06, and 0.13), while the value of the significance level was respectively (0.024, 0.009, and 0.919), and since the value of the significance level was smaller than the value of the approved significance (0.05), this means that there are significant differences between Group (First, Second, First and Third) There are no differences between the group (second and third) in the scoring test from behind the free throw line, as the level of significance is greater than the level of significance.

4.1.4 Discussion of the results

The current results indicate the clear superiority of the partial method in teaching the selected skills for basketball as well as the development of the psychological aspect represented by the sports rogue compared to the total method and the command method, the success of this method was not limited to one skill, but its positive effect extended to include all the measured variables, making it the most effective strategy in this aspect.

As expected , the first group that was learned in the partial method showed great superiority in it, and this superiority is due to the fact that it enables the learner to focus on mastering each of the complex skill stages separately (e.g. standby, putting hands on the ball, pushing,

following), this reduces the cognitive load and facilitates Providing accurate and targeted feedback, which works to build a more precise, streamlined and efficient final movement, this is fully in line with the principles of motor learning emphasized by Schmidt & Lee (2014), where the partial method is optimal for high-complexity skills.

Although some traditional literature may favor the holistic method, the current results have proven the opposite, as the first group achieved superiority over the macro method and was not a coincidence, but rather the result of building a more solid and efficient mechanical foundation. The researcher explains this superiority because the partial method does not teach the skill superficially, but rather builds a solid mechanical foundation. This is done by focusing on the quality of a stage of skill such as (ball height, finger position, wrist use, low torso position) which contributed to building a more efficient movement mechanically, and when these elaborate stages were combined and installed, the result was a more fluid, faster and more controlled overall movement. Bradde & Mezzaroba (2022) supports the current finding as it concludes that complex motor skills, even if they appear continuous and fluid, are essentially made up of sub-stages that must be mastered, while the second and third groups learned holistically with the skill but with inherent errors in the fundamentals of movement that limited their maximum speed and prevented them from reaching the high level of performance achieved by the first group. This proves that mastering parts does not necessarily hinder the flow of movement in its full form, but may be a prerequisite for reaching the highest levels of performance.

The partial method achieved absolute dominance in the psychological aspect, which was embodied through the achievement of repeated successes in small and simplified tasks, the student acquires a sense of competence, self-confidence and motivation, and this is directly reflected on his positive behavior and interaction with his colleagues, especially that the partial method requires close and continuous interaction between the teacher and the learner. Providing feedback creates a positive classroom atmosphere that encourages mutual respect and fair play, and it is the origin of the principle of sportsmanship, and as pointed out (Osama Rateb, 2004), success in motor performance and achieving personal goals is one of the most important factors that develop positive psychological traits in athletes, and this study supports the current result, where researchers García-González et al. (2021) An Educational Intervention to Create a Mastery Environment in Physical Education Lessons. They found that students in this environment showed a significant increase in social behaviors such as cooperation and teammate encouragement, which is the main component of sportsmanship.

In conclusion, in the light of the comprehensive analysis of the results, it is clear that the partial method was the most successful and comprehensive educational strategy as it proved its superior ability not only to teach closed skills precisely, but also to develop continuous skills quickly and efficiently by building a sound motor foundation, in addition to its pivotal role in promoting positive values and sportsmanship.

5. Conclusions and Recommendations:

5.1 Conclusions:

- 1- The effectiveness of the partial method in learning the skills of basketball.
- 2- The second experimental group that implemented the holistic method had a significant improvement in learning basketball skills.
- 3- The effectiveness of the partial method in raising the level of sportsmanship.

5.2 Recommendations:

- 1- Emphasizing the use of the partial method in learning skills in basketball as a better way than the total method and the command method in our schools.
- 2- Benefiting from the sportsmanship scale periodically by the subject teacher in order to determine the level of sportsmanship among the school's students.

References

- 1- Al-Mandalawi, Qasim, et al. (1990): Tests and Measurement in Physical Education and Physical Education, Higher Education Press.
- 3- Rateb, Osama Kamel (2004), Sport Psychology: Concepts-Applications (Fourth Edition). Cairo: Dar Al-Fikr Al-Arabi.
- 4- Allawi, Mohamed Hassan (1977): The Psychology of Training and Competition, Cairo, Dar Al-Ma'arif.
- 5- Othman, Hussein Rushdy, Lotfi, Abdel Fattah (1963): Physical Education for Public Teachers' Institutes, Cairo, Egyptian Office of Angelo.
- 6- Allawi, Mohamed Hassan and Radwan Mohamed Nasr El-Din (2000): Measurement in Physical Education and Sport Psychology, 2nd Edition, Dar Al-Fikr Al-Arabi, Cairo.
- 7- Bradde, A., & Mezzaroba, R. (2022). The role of analytical and progressive-part practice in the acquisition of complex sequential motor skills in young athletes. Journal of Motor Learning and Development, 10(3), 425-440. <https://doi.org/10.1123/jmld.2021-0051>



- 8- García-González, L., Jiménez-Martín, P. J., & Moreno-Murcia, J. A. (2021). The effects of a mastery-oriented environment intervention on prosocial behaviors, motivation, and psychological well-being in physical education. *International Journal of Environmental Research and Public Health*, 18(9), 4752.
<https://doi.org/10.3390/ijerph18094752>
- 9- Magill, R. A., & Anderson, D. I. (2020). Motor learning and control: Concepts and applications (12th ed.). McGraw-Hill Education.
- 10- Schmidt, R. A., & Lee, T. D. (2014). Motor learning and performance: From principles to application. Human Kinetics.
- 11- Arnold p. (2003). Three approaches toward an understanding of sportsmanship . In J. Boxill (Ed), Sports ethice. Malden, MA: Blackwell Publishers Ltd.
- 12- Miller, R. E., & Jarman, B. O. (1988). Moral and ethical character development views from past leaders. *Journal of Physical Education, Recreation, and Dance*, 59 (6), 72.
- 13-16 Robert J. Vallerand, Nathalie M. Brière, Céline M. Blanchard, & Pierre Provencher. (1997). Development and Validation of the Multidimensional Sports personship Orientation Scale. *Journal of Sport and Exercise Psychology*, 19, 197-206.

Accessories (1)

(Sportsmanship Scale)

Please place an "x" in the appropriate place to the left of each paragraph as applicable to you.

t	Paragraphs	Applicable to a very large degree	Highly applicable	Applicable to medium degree	Applies to a lesser degree	Applies to a very small degree
1	When I lose, I congratulate the opposing team, whoever it is.					
2	I obey the judge in all his decisions					
3	In the competition I participate in the game even if I am almost sure of losing					
4	Help the opposing team after losing					
5	I compete for personal honors, awards and medals					

6	I often play hard to win the game					
7	The coach of the opposing team shook hands after the loss of his team					
8	Respect the rules of the game					
9	I don't give up even after making many mistakes					
10	If you can, ask the referee to allow the opposing team to stay in the event of withdrawal.					
11	Criticize what the team asks of me					
12	In the case of defense, play violently to prevent the opposing team from scoring points					
13	After the competition, I congratulate the opposing team for its good performance					
14	In fact, I obey all the laws of sports.					
15	I think about ways to address my weaknesses					
16	When an opposing team player is injured, ask the referee to stop play.					
17	After the competition I apologize for my misbehavior					
18	I will try to win when the result is close even if it means breaking the rules					
19	After winning, acknowledge (admit) the good performance of the opposing team					
20	Respect the referee even if he is bad in refereeing					
21	It is important that I attend all the training for my male					
22	If I find that the opposing team is punishing unjustly, I try to correct the situation					
23	After the competition, I refuse to listen to the coach about my mistakes in the competition					

24	I always try to play hard in order to scare the opposing team					
25	In winning or losing, I shake hands with the opposing team after the game					