Impact Of Using Two Methods Of Teaching (Reciprocal And Small Groups) On Learning Some Ground Movement Skills In Artistic Gymnastics for Men

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Abstract

This study aimed at identifying the impact of using the two methods of teaching (reciprocal and small groups) on learning some ground movement skills in the sport of gymnastics. The study sample consisted of (30) students from the faculty of sports sciences at Mu'tah University who enrolled in the course of Gymnastics (1) during the first semester of the university academic year (2019/ 2020), they were equally and randomly distributed into two groups; the first group used the reciprocal method and the second group used the method of small groups. In order to achieve the study objectives, the researcher used the experimental approach due to its compatibility to the study nature. The researcher used the statistical methods represented by means, standard deviations, Pearson test, and (t-test).

The results showed that the methods of (reciprocal teaching and small groups) had a positive impact on learning gymnastic skills (back roll, human wheel, front somersault). After comparing the results of pre and post measurements, the results indicated that there is superiority for the group that used small groups.

In the light of the results, the study recommended the necessity of using the teaching methods of (reciprocal teaching and small groups) due to their positive impact on learning skills.

Key words: reciprocal teaching method, small groups, basic skills in gymnastics.

Introduction:

Teaching is a purposive activity that aims to transfer the educational objectives into experiences and situations with which students interact; therefore, students can acquire the targeted behavior based on the diverse teaching methods used by the teacher in order to control the variables within the educational unit. In this vein, the teacher has to perform a more effective role in explaining the different skills and filling the existing gaps in the educational situations, in that education becomes more interesting and attractive for students (13).

Shaltout and Khafaja, (2002) suggested that teaching methods interact diversity in teaching methods represents an important case in the educational process, since it promotes experience among learners. Gymnastics is considered as one of the individual games that requires achieving more success and progress by mastering the skilled performance. We noticed that conventional methods are often used in teaching the skills that depend on the teacher in making decisions and the learners have to be committed the instructions; a situation that could result in boredom among learners.

Education represents the basic element in teaching and training the various skills; teaching in its various methods is particularly important, since it is directly linked to all the elements of the curriculum. Teaching is related to the educational objectives, content, methods, activities and evaluation. It is also related to the processes of planning, preparing, implementing and evaluating the lesson of physical education; therefore, teaching with all its methods play an effective role in developing the complete personality of the learner in all the
social, mental, psychological and physical domains in order to achieve the planned objectives. Accordingly, selecting the appropriate and interesting teaching methods stimulates the learner to practice effectively during the lesson and satisfies his needs which, in turn, leads to a better learning experience. In order to achieve the targeted specific and general outcomes of the physical education lesson, a suitable educational method should be selected for the content of the material that is to be taught in order to change the objectives into educational situations that are easily achieved and evaluated (16), (6), (8), (21).

Hurwitz, (1985) Suggested that the success of the educational process is based on several factors, including the employed educational method, the way educational experiences are introduced, the conditions of the educational situation as well as the degree of positivity of learners, their abilities, readiness and activity to obtain the educational experience.

Khanfar, (2010) confirmed that the basic objective of educational methods is to introduce a complete theory in teaching that could lead learners to be more able to innovate and be influential in making the decisions related to teaching and learning. He suggested that the objective of the series of teaching methods is to demonstrate the position of each method and identify its relationship with the other methods in order to be more flexible and effective in the process of learning.

Teaching methods used in the sports domain are multiple, and include the reciprocal teaching as well as small games (Mosston and Ashworth). As for the reciprocal method, the teacher selects a colleague according to his level and degree of compatibility between them in relation to the achievement of the motor task; it implies that teachers should provide multi-level trainings and skills with varying degrees of difficulty in order to achieve the final objective, where the method is used during the most period of the lesson to give training about the skill. This method allows for the participation of all the learners in the educational process according to the level of each participant- a task that can't be easily achieved by the other methods.

In small games method, the teacher selects a number of students with various levels of skills and distributes roles among them. In this way, the learner acquires the skill according to the technical aspects of the performance by guiding colleagues according to the criterion set for this purpose. Using this method aims to train learners in the targeted skill to improve it by observing the performance and comparing it to the restricted criterion as well as obtaining feedback from his peers and teacher to modify and improve performance. The learner in this method is responsible for the evaluation process according to the learning outcomes determined by the teacher.

Gymnastics is one of the sports that contribute to preparing and developing athletes through the exercises that they practice on the various devices. The sport of gymnastics is indispensable for all athletes in the various sports activities; gymnastics exercises promote the educational, mental, and physical domains among individuals. By using the exercises of gymnastics we can develop the body muscles and enhance the respiratory system, nervous system and blood circulation, in addition to demonstrating personal characteristics and traits, such as courage, decision-making, team work and cooperation (20).

The importance of the current study lies in using two methods of teaching, these are reciprocal teaching and small groups, which are classified within the methods of direct
teaching (Mosston and Ashworth). These methods give learners the opportunity to develop their level based on their own abilities and take their dispositions into consideration. They also provide them with the opportunity to perform activities in accordance with capabilities, in addition to the chance to step back to a lower level in order to succeed in performing the activity and realize the relationship between the individual's ambition and the reality of his performance, in addition to providing choices within the alternative levels in performing the task. These methods also give learners advanced roles in evaluation, making them as the core of the educational process. The study also unique, since it linked between some teaching methods in physical education and the level of performance in gymnastics skills- these are considered as vital topics that contribute to developing learner's potentials to learn.

**The study problem:**

The success of the educational process and promoting it mainly depends on the good selection of the appropriate method for teaching according to the targeted category, the available resources and the educational environment; diversity in using new methods and strategies open more new horizons in front of students, where both teachers and learners have experience to choose the best strategies to promote the educational process, and thus reach global levels in establishing the educational process. Based on the researcher's review of the previous studies and literature relevant to teaching methods and strategies, and based on the researcher's pursuit of several lessons in physical education in the different educational materials and the course of artistic gymnastics, especially in the Jordanian Universities as well as making interviews with some teachers, he noticed that many teachers still use the old traditional methods. He also noticed that many teachers are ignorant about several strategies and methods and that the currently used methods don't satisfy the basic needs, don't achieve the desired objectives of the educational policies and don't evoke their motivation and enthusiasm. Therefore, the researcher attempted to look for new strategies and methods that satisfy the needs of learners, achieve their ambitions and evoke their enthusiasm, in that the learner is the basic core of the educational process. The new applied strategies would alleviate the burdens imposed on teachers and transfer some of the teacher's roles to learners- one of the objectives of educational policies that mainly focuses on activating the role of learners to be more involved in the educational process. We believe in developing all the interactive, social, physical and personal domains.

Based on the above-mentioned, the researcher realizes that motor skills require a sufficient amount of time and effort. This study is an attempt to identify the impact of using the two methods of reciprocal teaching and small groups on learning some basic ground movement skills in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

**The study objectives:**

This study aimed at identifying:

- The impact of employing an educational program using the method of teaching small groups on learning some basic skills on the mat of ground movements in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

- The impact of employing an educational program using the method of reciprocal teaching on learning some basic skills on the mat of ground movements in gymnastics among the students of the faculty of sports sciences at Mu'tah University.
Comparing the impact of using the method of teaching small groups and reciprocal method on learning some basic skills on the mat of ground movements in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

The study hypotheses:
The study aimed to respond to the following hypotheses:

1- There are statistically significant differences at (α≤0.05) for using the teaching method of small groups on learning some basic skills on the ground movements mat in gymnastics.

2- There are statistically significant differences at (α≤0.05) for using the reciprocal method on learning some basic skills on the ground movements mat in gymnastics.

3- There are statistically significant differences at (α≤0.05) between using the teaching method of small groups and reciprocal method on learning some basic skills on the ground movements mat in gymnastics.

Study Terms:
The educational method: it represents a set of educational patterns specific and preferred by teachers, where they are closely related to the teacher's personal characteristics; they are the procedures that take place in a certain educational situation (18).

Reciprocal Method:
In this method, the student could be given a main role in the educational process, where the students is delegated more decisions that are mainly specialized by evaluation in order to give a direct feedback that transfers him to the stage of implementing skills in order to correct the motor path of performance and reach the targeted objective in practicing work. When the learner quickly learns how to do things, he will have more chances to perform well. In this context, the teacher organizes students in groups of two students according to the length scale and delegates a specific role for each individual, where one of the students performs the movement while the other observes him. Accordingly, work is implemented by the performing student who makes the decisions granted to him as the case in the training method, while the other student observes the way of performing the movement, gives explanation about it and correct any committed mistakes based on the data previously prepared by the teacher in the assignment paper during the theoretical exploration of the lesson; the player is given feedback during or after finishing work.

Small Groups Method:
This method is based on the participation of more than two students in implementing the process of participation, practice, observation and role playing where the practicing becomes observer and the registering becomes practicing; the observer corrects mistakes and encourages the player, while register documents notices. In short, the teacher divides students into small groups and assigns certain role for each student, in that the exchange role playing as practicing, observer and registering.
limitations:
The spatial limits: gymnastics hall/ the faculty of sports sciences at Mu'tah University. The temporal limits: the proposed educational program was applied during (3/10/ 2019 – 8/2/2020).
The human limits: the students of the faculty of sports sciences at Mu'tah University who are enrolled in the course of Gymnastics (1).

The study procedures:
The study methodology:
The study used the experimental approach due to its compatibility to the nature and procedures of this study in order to identify the impact of the teaching methods ( small groups and reciprocal teaching) on some ground movement skills in gymnastics.
The study population:
The study population consisted of the faculty of sports sciences at Mu'tah University in the course of Gymnastics (1), with a total of (44) students during the first academic semester for the University Year 2019/ 2020.
The study sample:
The study sample was selected purposively and consisted of (30) new students who didn't practice the sport of gymnastics and had no idea about it. They were distributed randomly into two identical groups, where each group was taught using a different teaching method: small groups and reciprocal teaching. Tables (1,2)show the results.

Table (1)
Means, standard deviations and t-value between the two groups for the variables of age, length and height

<table>
<thead>
<tr>
<th>Physical variables</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Small groups</td>
<td>19.54</td>
<td>0.27</td>
<td>0.20</td>
<td>0.840</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>19.56</td>
<td>0.26</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Length</td>
<td>Small groups</td>
<td>172.15</td>
<td>4.48</td>
<td>0.18</td>
<td>0.982</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>171.84</td>
<td>3.44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weight</td>
<td>Small groups</td>
<td>68.36</td>
<td>5.33</td>
<td>0.28</td>
<td>0.778</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>69.67</td>
<td>4.92</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tabulated t-value at (α≤0.05)= 2.16

Table (1) shows the calculated values of means, standard deviations and t-value between the experimental and control groups concerning the variables of length, age and weight. calculated t-value ranged between (0.18 – 0.28) as compared to tabulated t-value (α≤0.05) = 2.16, which means that there are no statistically significant differences in these variables between the two groups.
Table (2)

Means, standard deviations and calculated t-value between the two groups in the skills of ground movements in gymnastics in the pre measurement

<table>
<thead>
<tr>
<th>Skilled variables</th>
<th>Group</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back roll</td>
<td>Small groups</td>
<td>12.44</td>
<td>6.186</td>
<td>0.82</td>
<td>0.418</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>10.90</td>
<td>3.751</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human wheel</td>
<td>Small groups</td>
<td>15.66</td>
<td>7.658</td>
<td>0.27</td>
<td>0.782</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>16.46</td>
<td>6.254</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front somersault</td>
<td>Small groups</td>
<td>6.12</td>
<td>4.77</td>
<td>1.77</td>
<td>0.088</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>5.66</td>
<td>4.37</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tabulated t-value at (α≤0.05)= 2.16

Table (2) shows the values of means, standard deviations and calculated t-value between the two groups for the skills of ground movements in gymnastics in the pre measurement. By reviewing the calculated t-value, we find that it was less than the tabulated value at (α 0.05) for the skills of ground movements, which indicates that there are no statistically significant differences in these skills between the two groups in the pre measurement.

**Pilot Study:**

Before starting the procedures of the current study, the researcher conducted a pilot study on a sample that consisted of (8) students from the faculty of sports sciences at Mu'tah University and from outside its sample. The study was applied over a period of (10) days and three meetings in order to identify the obstacles that may face conducting the main study, the way of designing tests and the possibility of applying the program using the methods of (small groups and reciprocal teaching) as well as identifying the validity of the used tools, the validity of the Gymnastics hall, the organization of learners and registration ways, the required skills, the extent of applying the tests of the study sample, the clarity of the vocabulary of educational lessons and the way of finding out them without difficulty.

**The scientific coefficients of the instrument:**

**The content validity:**

The researcher prepared the technical domains and the educational steps for the skills of back roll, human wheel and front somersault based on recommendations of many specified scientific references [1,7,10,16,22,24,28,31].

As for the tests used in the study, they were determined with reference to the scientific references that addressed measurement in gymnastics (14);( 1); (16);( 32). Then, the tests were introduced to arbitrators in order to test their compatibility to measure the study skills.
The content reliability:
The reliability coefficient for the tests was calculated using test- retest for the variables of teaching methods on a pilot study that consisted of (8) students. The test was reapplied after three days. Table (3) shows the reliability value.

Table (3)
Means, standard deviations and Pearson correlation coefficient between the first and second applications for the skills of ground movements in gymnastics

<table>
<thead>
<tr>
<th>Skills</th>
<th>First application</th>
<th>Second application</th>
<th>Correlation coefficient</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Back roll</td>
<td>12.22</td>
<td>2.36</td>
<td>13.22</td>
<td>2.58</td>
</tr>
<tr>
<td>Human wheel</td>
<td>17.42</td>
<td>4.36</td>
<td>19.63</td>
<td>4.54</td>
</tr>
<tr>
<td>Front somersault</td>
<td>5.54</td>
<td>2.78</td>
<td>6.52</td>
<td>2.52</td>
</tr>
</tbody>
</table>

Tabulated t-value at ($\alpha \leq 0.05$) = 0.631

Table (3) shows the means, standard deviations and the value of Pearson correlation coefficient between the pre and post applications for the skills of gymnastics in the pilot study. By reviewing the values of correlation coefficient, we can see that they are higher than the tabulated value of (0.631) at ($\alpha \leq 0.05$), indicating that there is a high degree of reliability between the two applications.

The proposed educational program:
In order to achieve the study objectives, the researcher developed an educational program using (small groups and reciprocal teaching) to teach the skills of back roll, human wheel, and front somersault. The proposed educational program was developed in its primary image with reference to several studies and references, including (7), (24), (28), (16), and (1). The researcher also consulted those experienced and specialized in this domain which included some ground movement skills, including three specified skills (back roll, human wheel, front somersault) using the teaching methods of small groups and reciprocal teaching.

The proposed educational program was applied over a period of (8) weeks with three meetings a week and (50) minutes for each meeting distributed as follows: (8) minutes warm up, (5) minutes for educational domains, (30) minutes for applied domains, (7) minutes for the final part. Table (4) shows the temporal distribution of the proposed educational program.

Table (4)
Temporal distribution of the proposed educational program

<table>
<thead>
<tr>
<th>Number of educational units</th>
<th>Number of weeks</th>
<th>Time of educational unit in minutes</th>
<th>Time in minutes weekly</th>
<th>Total time in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>8</td>
<td>50</td>
<td>150</td>
<td>1200</td>
</tr>
</tbody>
</table>
Table (5) shows the temporal distribution of the educational unit parts.

<table>
<thead>
<tr>
<th>Parts of the unit</th>
<th>Time of daily unit in minutes</th>
<th>Educational time of unit in minutes weekly</th>
<th>Total time in minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warm up part</td>
<td>8</td>
<td>24</td>
<td>192</td>
</tr>
<tr>
<td>Educational part</td>
<td>5</td>
<td>15</td>
<td>120</td>
</tr>
<tr>
<td>Applied part</td>
<td>30</td>
<td>90</td>
<td>720</td>
</tr>
<tr>
<td>Final part</td>
<td>7</td>
<td>21</td>
<td>168</td>
</tr>
</tbody>
</table>

The study variables:

The independent variables:
1- The proposed educational program:
2- The methods of teaching physical education: the methods of small groups and reciprocal teaching.

Dependent variables:
- The basic skills: (back roll, human wheel, front somersault).

Statistical Analysis methods:
In order to answer the study questions and achieve its objectives, the statistical processing was performed using (SPSS) to the study sample, where the following statistical methods were used:
- Means, standard deviations, Pearson correlation coefficient, and t-test.

Results:
This study aimed at identifying the impact of using the two methods of small groups and reciprocal teaching on learning some ground movement skills in gymnastics. Here is a display of the results according to the sequence of the study questions:

The first hypotheses:
- There are statistically significant differences at (α≤0.05) for using the teaching method of small groups on learning some basic skills on the ground movements mat in gymnastics.
The results of t-test between the pre and post test in some ground movements skills in gymnastics using the method of small groups.

Table (6)
Means, standard deviations and calculated t-value between the first and second applications for the skills of ground movements in gymnastics among the individuals of small groups

<table>
<thead>
<tr>
<th>Skilled ability</th>
<th>Measurement</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back roll</td>
<td>Pre</td>
<td>12.44</td>
<td>6.18</td>
<td>19.41</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>29.07</td>
<td>4.51</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human wheel</td>
<td>Pre</td>
<td>15.66</td>
<td>7.65</td>
<td>4.06</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>25.07</td>
<td>6.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front somersault</td>
<td>Pre</td>
<td>6.12</td>
<td>4.77</td>
<td>4.49</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>16.27</td>
<td>10.75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tabulated t-value at (α≤0.05)= 2.14
Table (6) showed that there are statistically significant differences between the pre and post measurement for the skills of (back roll, human wheel, front somersault), indicating that the program was effective in learning and acquiring the ground movements skills in gymnastics among the individuals of the group that used the method of small groups.

**The second Hypothesis:**
- There are statistically significant differences at \((\alpha \leq 0.05)\) for using the reciprocal method on learning some basic skills on the ground movements mat in gymnastics.

<table>
<thead>
<tr>
<th>Skilled ability</th>
<th>Measurement</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back roll</td>
<td>Pre</td>
<td>10.90</td>
<td>3.75</td>
<td>7.45</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>16.20</td>
<td>4.09</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human wheel</td>
<td>Pre</td>
<td>16.46</td>
<td>6.25</td>
<td>3.92</td>
<td>0.002</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>18.20</td>
<td>5.43</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front somersault</td>
<td>Pre</td>
<td>5.66</td>
<td>4.39</td>
<td>10.27</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Post</td>
<td>9.53</td>
<td>4.96</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tabulated t-value at \((\alpha \leq 0.05)\) = 2.14

Table (7) showed that there are statistically significant differences between the pre and post measurement for the skills of (back roll, human wheel, front somersault), indicating that the program was effective in learning the ground movements skills in gymnastics among the individuals of the group that used the method of reciprocal teaching.

**The third Hypothesis:**
- There are statistically significant differences at between using the teaching method of small groups and reciprocal method on learning some ground movements skills in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

<table>
<thead>
<tr>
<th>Skill</th>
<th>Measurement</th>
<th>Mean</th>
<th>SD</th>
<th>t-value</th>
<th>Sig. level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Back roll</td>
<td>Small groups</td>
<td>29.07</td>
<td>4.511</td>
<td>8.18</td>
<td>0.001</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>16.20</td>
<td>4.092</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Human wheel</td>
<td>Small groups</td>
<td>25.07</td>
<td>6.364</td>
<td>3.18</td>
<td>0.004</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>18.20</td>
<td>5.427</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Front somersault</td>
<td>Small groups</td>
<td>16.27</td>
<td>10.754</td>
<td>2.20</td>
<td>0.036</td>
</tr>
<tr>
<td></td>
<td>Reciprocal</td>
<td>9.53</td>
<td>4.955</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tabulated t-value at \((\alpha \leq 0.05)\) = 2.16
Table (8) showed that there are statistically significant differences between the impact of using the teaching method of small groups and reciprocal method on learning the skills of (back roll, human wheel, front somersault), indicating the favorability for the individuals of the group that used small groups to those who used reciprocal teaching.

Discussion:

Discussing the first Hypothesis:

- There are statistically significant differences for using the teaching method of small groups on learning some ground movements skills in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

The results relating to the first hypothesis revealed that there are statistically significant differences between the pre and post tests in favor of the post tests with regard to the existence of a positive impact for the method of (small groups) at the level of learning some ground movement skills in gymnastics among the individuals of the study sample.

Table (6) showed that there are statistically significant differences between the pre and post measurements for the method of small groups, which indicates that there is a positive impact for the method of small groups at the level of learning some ground movement skills in gymnastics (back roll, human wheel, front somersault). This finding agreed with (30), (11), (6), (16), (2), (29), (3), (15), (19), where the results of these studies agreed that teaching methods have a positive impact on improving and developing the skilled performance among learners and has an effective role in reaching the stage of mastery. Also, the method of small groups has a statistically significant positive effect on the level of skilled performance in the various sports activities.

The researcher suggested that the distribution of roles between learners has a positive role on developing the performance level of learners and creating the spirit of competition between them, in addition to depending on self and promoting confidence among them with regard to performing all the roles. This finding agrees with Shamaileh, (2004) and Sawalmeh, (2017) which revealed that exchanging roles in performance creates the spirit of competition, persistence and motivation among learners which, in turn, leads to better results.

These results are attributed to the educational program that used (small groups). When we review the nature of this method, we can notice that many students focused on performance, particularly the educational and applied parts through which the main objective of the lesson is achieved. In this vein, teachers and learners have certain responsibilities and duties; by delegating some decisions to learners, teachers will have more time to move between learners, observe their performance, give feedback and determine the priorities of communicating with learners. Furthermore, this method allows learners to enter a new environment of learning by taking the responsibility accompanying the made decisions and the direct responsibility for the results relating to performing the motor tasks individually without being compared with colleagues, in addition to providing feedback for each learner. This method is compatible with all the levels of learners, where the teacher determines the levels that can be performed under different degrees of difficulty and the learner determines the level that matches his abilities, taking into consideration the individual differences between learners. The method provides learners
with the opportunity to repeat the skilled performance and allows them to make decisions, since the learner has the freedom to move between the three levels of the skill and this helps the learner to evaluate himself. This method also allows the teacher to provide learners with feedback while implementing the task individually which, in turn, improves the skilled performance of learners.

**Discussing the second Hypothesis:**
- There are statistically significant differences for using the method of reciprocal teaching in learning some ground movement skills in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

Table (7) showed that there are statistically significant differences between the pre and post tests for the method of reciprocal teaching, which indicates that there is a positive impact for the method of evaluating self performance on learning the skills of gymnastics (back roll, human wheel, front somersault). This finding agrees with (11),(10),(9) (10), (6),(29), where the results of these studies suggested that the reciprocal method develops the skilled performance among learners and has a statistically positive impact on the level of skilled performance in the different sports games.

These differences are attributed to the educational program that used the reciprocal teaching, where it was designed in an Integrative way; it includes important information relating to the targeted skills and the educational steps are explained in a detailed way that facilitates understanding them by learners regardless the level of those learners. The method also took into consideration the instructions given by teachers, where the program addressed all the features of teaching in terms of the method's objectives, evaluation and explanation for the roles of teachers and learners during the three stages of the lesson of physical education (planning, implementation, evaluation), the analysis and description of the method, the way of moving between steps, in addition to the worksheets that are prepared in advance by the teacher and includes certain instructions and educational steps that should be followed by the learner. This context saves more time and effort, enables students to make advantage of the experiences of each other in terms of feedback and correction as well as the guided instructions that result in a better understanding and acquisition of the targeted skills. In this method, the learner completely and directly depends on all the manifestations accompanying his performance for the stages of learning the skills as well as the evaluation provided by colleagues.

The learner obtains confirmation about his information and makes a comparison between what has already been done and what he is required to do; this context is considered as a feedback that creates an opportunity to develop performance, where the learner determines trainings and performs based on the reference card away from the teacher. Delegating tasks to learners helps them to afford responsibility and increase self-confidence which, in turn, promotes their motivation towards learning. Additionally, using the reference card stimulated performance among learners by noticing the right technical points which is considered as an immediate feedback of performance (26).

The researcher suggested that the responsibility of exchanging roles between learners helps them to afford responsibility and increase self-confidence and that promotes their learning motives and skills; therefore, more competition will be established between them.
This case resulted in statistically significant differences in results relating to the level of performing skills between the pre and post tests, indicating the effectiveness of the teaching method.

**Discussing the third Hypothesis:**
- There are statistically significant differences between the methods of (small groups and reciprocal teaching) in learning some ground movement skills in gymnastics among the students of the faculty of sports sciences at Mu'tah University.

Table (8) showed that there are statistically significant differences between the impact of the methods of small groups and reciprocal teaching in favor of the small groups, indicating the superiority of the study sample individuals that used the method of small groups over those who used reciprocal teaching. This finding agrees with (8), (12), (16), (17), (15), (19), where the results of these studies agreed upon the favorability of the methods of (small groups as compared to the other methods.

These differences could be attributed to the consideration given by the method of small groups to the individual differences and the participation of more than two students in doing the task, where each student performs the role determined by the teacher and provides support to others, in addition to the existence of a reference paper on which they depend in teaching the educational steps. This context implies the existence of competitive spirit, and making decisions by learners concerning their success or failure. It also indicates the extent of positivity of the method of small groups, since it includes several characteristics that manage the issue of individual differences between learners. In this method, roles are exchanged between learners, either as observer, registrar or performer which, in turn, increases the motor achievement, knowledge retention and skill acquisition among learners. It also provides more than one type of feedback from colleagues and teachers which, in turn, provides the learner a more obvious conceptualization about the motor performance.

The researcher suggested that the superiority of the method of small groups could be attributed to several reasons, including the selection of groups in a manner that considers individual differences, the availability of required instruments, providing feedback, encouragement and interaction between students to establish an appropriate environment for students that enhances harmony among students. Also, notices are registered and provided immediately and that urges students to recognize their mistakes and avoid them to perform skills accurately. Hence, we can see that the group is organized, where each individual performs his role; therefore, learners depend on themselves, since there is a reference to which they belong. The researcher suggested that delegating the tasks of learning to students has a positive effect on them, since they take responsibility. The researcher also suggested that the method of small groups demonstrates the previous experiences of learners, where can be employed to communicate information, especially if the learner has a previous experience as a player or a practitioner. Abo Al-Naja, (2017) suggested that the successful teaching methods can provide us with various teaching situations that consider the individual differences between learners. In this way, teachers can achieve the targeted objectives and reach a better levels of skilled performance. asserted that when the appropriate levels of the motor task are available, the learner can do it accurately and achieve success. The same finding was suggested by Ashour, (2002) who confirmed that the effective learning is based upon selecting the appropriate teaching method that considers the learners' characteristics, the
available resources and environment. Therefore, it creates harmony between activity or skill, and the time allocated for achieving it to reach a successful level of performance. They also suggested that achieving success depends on repetition, training, selecting the appropriate teaching method, correcting mistakes, and utilizing the time allocated for learning, which indicates the effectiveness of the method of small groups in learning among the study sample individuals.

**Conclusion:**

In the light of the study objectives and procedures, the researcher concluded the following:

1. The two teaching methods (small groups, reciprocal teaching) effectively contributed to learning some ground movement skills in gymnastics.
2. The method of small groups achieved a better level than reciprocal teaching in learning ground movement skills (back roll, human wheel, front somersault) among the students of the faculty of sports sciences at Mu'tah University.

**Recommendations:**

In the light of the results, the researcher recommended the following:

1. Using the methods of small groups and reciprocal teaching due to their positive effect on learning skilled performance of some gymnastics skills.
2. The necessity of addressing the impact of the educational program (small groups and reciprocal teaching) on different age groups.
3. The necessity of using other methods and comparing between them, especially concerning the skills of gymnastics, since there is a paucity in applying some methods to gymnastics skills.
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