The Effect of Simulation Activities on Improving Speaking Skill Among Fourth Basic Grade Female Students in Jordan

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Abstract:
The current study aimed to investigate the impact of simulation activities on improving speaking skills among fourth-grade female students in Jordan. To achieve the study's objective, an experimental approach was followed, utilizing a quasi-experimental design. The study included (78) fourth-grade female students from a school affiliated with the Directorate of Education in Al-Ramtha District, selected purposively and divided into two groups; (39) students in experimental group who were taught using simulation activities, and (39) students in control group who were taught using conventional method. The study results revealed a statistically significant impact of simulation activities on enhancing speaking skills, both collectively and individually, in favor of the experimental group. Based on the study findings, the researchers recommend the incorporation of simulation activities in teaching speaking skills.

Keywords: Simulation activities, speaking skills, fourth-grade female students.

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Background and Significance of the study

Language is one of the most important means that human has produced and developed throughout the ages. It is the primary means for an individual to express his needs and requirements. It is the tool of thought and the link of human communication between individuals in various societies throughout history. Every nation seeks to preserve, advance, distinguish, and continue it in order to pass it on to its children, generation after generation.

The language consists of integrated skills that are divided into two levels: the receptive level, which includes the skills of listening and reading, and the productive level, which includes the skills of speaking and writing (Al-Hallaq, 2010). Language skills represent the basis of learning and teaching at the different educational stages. Modern education has emphasized the importance of students mastering the linguistic skills that help them use the language in various life situations, and this can only be achieved by mastering all linguistic skills (Hebal, 2014).

The skill of speaking has a prominent place among the skills of the Arabic language, because it is the language of the thinking mind, the speaking mind, the vast imagination, the active soul, and the force capable of innovation and creativity; and it is the tool for understanding others, in addition to contemporary life, which requires oral communication to exchange opinions and satisfy individual or group interests. The spread of modern means of communication requires focusing on the oral aspect and making good use of it (Khater and Raslan, 2010). The skill of speaking is an important means of communicating with others, and it is one of the skills most used in the educational process. It is a human activity carried out by young and old, the educated and the uneducated, which provides the person with the greatest opportunity to deal with life and interact with the group (Al-Bjah, 2005).

Speaking skill is defined as “the ability to verbally express human feelings, social, economic, and cultural situations in a functional or creative way with correct pronunciation and good delivery” (Madkour,
Al-Harsh (2020, 71) believed that it is “a linguistic art that enables the individual to interact with social life in terms of expressing his feelings, trends, and inclinations, and exchanging opinions and ideas with others.” Tam and Tatham (1995) defined it as “the living form of language that reflects the individual’s ability to employ his linguistic experiences in producing a new, special language, accompanied by a number of physical gestures, and vocal intonation. Flores (1999, 117) defined it as “interactive processes of meaning construction that facilitate speech production and information processing. Its form and meaning depend on the context, participants’ experiences, and the physical environment.”

The process of speaking occurs within successive stages: first, the stage of arousal, which requires the presence of a stimulus that urges the speaker to produce speech. The arousal is internal on the individual’s own initiative, or external upon the request of others, or events that require it. Second, the stage of thinking and generating ideas related to the topic, and then the stage of formulating these generated ideas in terms of their connection to the topic, their arrangement, their sequence, and choosing the appropriate verbal forms for them, in preparation for reaching the fourth and final stage, which is the stage of producing speech, pronunciation and translating mental symbols into spoken symbols, transmitting them to the listener, and sharing them with others (Madkour, 2007).

Speaking skill is based on four important aspects, including the intellectual aspect, which organizes and arranges ideas and supports them with evidence and proofs to support them; the linguistic aspect, through which appropriate words and vocabulary are chosen and sentences are linked in a way that is appropriate to the topic; and the vocal aspect, which represents the general appearance of the speech such as pronunciation of letters from their correct exits, correct utterances, and body language, which attracts the attention of listeners through the use of gestures and physical movements, and moving the gaze towards them (Al-Hawamdeh and Al-Saadi, 2015; Hafez, 2005).

From the above, the researchers believe that speaking skill is one of the linguistic skills that includes the individual’s ability to produce
meaningful spoken linguistic material related to specific issues and topics through which he can express the feelings and sensations that are on his mind with others, in eloquent language, in a correct linguistic context, and in an interesting style according to standards of sound oral expression, which play an important role in the individual’s expression of his needs, feelings, and thoughts in a sound language, which help him develop intellectual and mental skills, employ linguistic expertise in different life situations, and make the individual a social human being able to communicate with different groups of society.

Despite the interest of educators and researchers in the skill of speaking and its importance, students suffer from a clear weakness in mastering these skills at all educational levels. Some of them suffer from a scarcity of linguistic and intellectual resources, and are unable to construct their ideas and link them together (Khalaf Allah, 2005). If students speak, they show signs of deficiency and weakness, and they may stop speaking suddenly without finishing the topic he is talking about, or he may use colloquial language in his speech (Ashour and Al-Hawamdeh, 2009).

Al-Saliti (2008) believed that students suffer from a lack of linguistic repertoire, weakness in mastering language rules, weakness in pronouncing letters from their correct origins, lack of self-confidence, shyness, hesitation while speaking, and apparent weakness in using pitches of voice and physical movements. Koran (2015) pointed out that many students suffer from anxiety and prefer silence to speech, whether in the classroom or outside it, due to psychological or social reasons, pointing to the great role of the teacher in training students to speak and interact within the classroom, providing them with the opportunity to express their opinions during the class session, using strategies and activities that enhance their linguistic fluency, such as role-playing activities and group work.

Teaching speaking is essential at all educational levels because it enables the learner to express his needs, feelings, and thoughts in a sound language, and helps him use the linguistic experiences he has learned in coherent, meaningful sentences (Madkour, 2010).
One of the strategies that helps in developing speaking skills is the simulation strategy, the importance of which is clear in training students on group work, developing discussion and debate skills, building arguments, speaking in the proper classical language, developing dialogue skills, and adding liveliness and joy to the classroom educational activity (Abu Bakr, 2012). Simulation activities emerged in Bandura's social learning theory. He conducted a study on learning through simulation; the results showed that learning occurs through the individual's interaction with the surrounding environment, and that the individual's behavior is shaped by imitating others, and thus learning occurs through watching others and the presence of role models (Al-Zayat, 1996; Hanna, 1990).

Hanna et al. (1998) defined simulation as an educational strategy in which real situations are simulated. That is, learners and teachers perform educational and teaching positions that make them a theory oriented scientifically and realistically.

Estitiyiah and Sarhan (2007, 305) defined simulation as: “a method or educational technique that the teacher usually uses to bring students closer to the real world, which is difficult to provide to learners due to financial cost or human resources.” Al-Hamdani (2007) pointed out that simulation is an explanation of a real situation or an abstract simplification, and through it participants play active roles. It is an important strategy to acquiring social, communicative skills in addition to developing the mental aspect. Simulation Activities are based on learning by simulation. Simulation is a model of a real situation or an abstract simplification, and through it, participants play active roles that help in presenting ideas and information, and instilling values in an interesting way that students accept, as it provides them with opportunities for real participation in learning, stimulating them to learn, displaying the problem as it is actually, and giving them the opportunity to solve problems skillfully and competently (Al-Laqani and Al-Jamal, 1996; Salamh, 2002).

From the above, the researchers conclude that simulation is an imitation of a real situation, behavior, or system, through modeling that simulates reality. Simulation is used to solve problems, overcome spatial
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and temporal obstacles, and gives results similar to reality. The researchers add that the simulation strategy enhances the learner’s role in the educational process, by involving him in managing his learning, whether individually or collectively. The role of the teacher turns into a guide and mentor in the process, leading the learner to the intended goal.

The importance of simulation has emerged remarkably recently among educators and those interested in studies, especially those working in the field of education. This interest is due to the need for tools that help in achieving the goals of the educational process, training, and acquiring various practical skills. The difficulty of providing these tools is because of time, place, or implementation. Therefore, the importance of simulation has emerged as a new method to fill the need in this field and to reach what educators aspire to in achieving their desired educational goals (Tawfiq, 2003).

Simulation is characterized by several characteristics, including: its enthusiastic nature, its long-term impact on the educational process, and reducing the pattern of interaction confined between the teacher and the student in the classroom to include interaction among the students themselves. Thus, the teacher turns from controlling the educational process to directing and monitoring the learning process, while the students become active participants responsible for their own learning (Harmar, 2007).

Simulation takes different forms depending on the educational situation and its nature, including: direct learning through role models such as a father, peer, or teacher, and indirect learning that is obtained through unintentional simulation, in which the student reproduces reality without realizing it; that is, without will or intention, symbolic learning is through verbal modeling of a behavior, and the representation of real roles and situations in a realistic way that works to bring it closer to the minds of the learners through simulation and imitation, within procedures and steps that are easy for the learner to understand (Melhem, 2003; Klish, 2000).

Simulation has a set of requirements that the teacher should pay attention to while using it as an educational strategy, including:
identifying the target characters and analyzing their performance, knowing the educational needs and objectives for implementing the simulation, knowing the original simulation that will be rehearsed, the foundations of the available work environment, and preparing an appropriate environment to achieve the goal to implement the simulation (Shehatah, 2003).

It is clear from the above that the simulation strategy has a relationship with improving speaking skill. This is due to the interactive, participatory environment it provides, and real and realistic situations that help students use their linguistic repertoire and employ it within linguistic contexts. This is what prompted researchers to conduct studies that reveal the effect of simulation activities in improving the four linguistic skills of students, especially the speaking skill. Madsa (2012) conducted a study that aimed at revealing the effect of the simulation strategy on improving English speaking skill. To achieve the objectives of the study, a qualitative approach was used using the observation card and a questionnaire, applied to (20) university students in Thailand. The results of the study showed that learning improved students' speaking skills using the simulation strategy.

The study by Hardinty et al. (2013) aimed to reveal the effect of the simulation strategy in improving speaking skill. The study sample consisted of (15) Indonesian students from the eleventh grade. To achieve the objectives of the study, a qualitative approach was followed using direct observation, questionnaire, student writings, interviews, and document collection. The results of the study showed that using the simulation strategy improved students' speaking skills.

Utama (2013) conducted a study aimed at revealing the effect of using the simulation strategy on developing the speaking skill of university students in Indonesia. To achieve the objectives of the study, the quasi-experimental approach was followed: the control group studied using the conventional way and the experimental group, used the simulation strategy. The results of the study showed that the average scores of the experimental group were higher than the control group. That is, using the simulation strategy improved the speaking skill of the experimental group students.
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The study of Fatwa and Rosnani (2017) in Malaysia aimed to reveal the effectiveness of the simulation and role-playing strategy in developing the English speaking skill of middle school students. To achieve the objectives of the study, the quantitative and qualitative approaches were used, as well as a questionnaire, and an observation card. The results of the study showed that the simulation and role-playing strategy led to a positive change in students’ behavior and helped improve their language fluency.

Hamad & Alnuzaili’s study (2022) aimed to reveal the effect of the simulation strategy on developing the speaking skill of learners of English as a foreign language in the Kingdom of Saudi Arabia. The study sample consisted of (50) students who were divided into two groups (25) students in the control group who studied using the traditional method and (25) students who studied using the simulation strategy. To achieve the objectives of the study, a situational speaking test was used. The results of the study showed that the experimental group outperformed the control group in the speaking test.

It is clear that previous studies revealed that the simulation strategy improved students’ speaking skills in various environments (Thailand, Indonesia, Malaysia, and the Kingdom of Saudi Arabia). The current study has benefited from these studies in its theoretical framework, construction of its tool, and discussion of its results. The current study coincides with these studies in the goal it sought, which is to reveal the effect of simulation activities in improving speaking skills, but it is the first study that used simulation activities (the young teacher, the young journalist, and the young doctor) within the researchers’ knowledge.

Based on the above, and to address the weakness in students’ speaking skills, the extent of teachers’ interest in it, and what is done in the teaching process and actual application does not rise to the level of its extreme importance, researchers believe that teachers bear part of the responsibility for students’ weakness because of the method they follow. They usually follow the lecturing method, which results in passivity in receiving information (Shehatah, 2008).
Problem of the Study and its Main Question

Speaking skill receives great attention in social networking situations. Through it, the individual influences the hearts of listeners and exchanges views, opinions, and ideas with them. Speaking skill represents the practical aspect of language learning. It is one of the linguistic skills that depends on the speaker’s experiences and culture in producing meaning and communicating it to the listener (Soman, 2006; Al-Naqah and Taimah, 2003). One of the researchers noticed, through his attendance at some of the teachers’ classes, a clear weakness in the speaking skills of the second year students, despite the interest of the Ministry of Education in the Hashemite Kingdom of Jordan in this skill, especially in the developed curricula. However, it does not receive the care and attention that suits its importance within the framework of the functionality of the language. Rather, teachers neglect its class and make it an opportunity to teach other skills and branches of the language. The researchers also noticed that the teachers’ focus on short, closed-ended questions that do not allow students to speak and dialogue. And in addition to what was shown by the study (Al-Rabab’ah and Al-Habashneh, 2015; Maqablah and Battah, 2015; Al-Adhamat, 2018), of the students’ noticeable weakness in speaking skills, and the lack of modern strategies to develop these skills among students. This weakness may be attributed to several reasons related to the teacher and teaching strategies. Accordingly, there is an urgent need to develop teaching strategies and search for methods that can contribute to addressing this weakness. Specifically, the study attempted to answer the following main question: “Are there statistically significant differences between the average scores of the study subjects in the speaking skills test due to the teaching method (simulation activities or the conventional way)?”.

Objectives of the Study

The current study aimed to reveal the effect of simulation activities in improving the speaking skill among fourth-grade female students.

The Significance of the Study

The significance of this study comes from both a theoretical and practical perspective. From a theoretical standpoint, it highlights the effect of using simulation activities in improving the speaking skill
among fourth-grade female students, and provides applied educational material for teachers that may help them address students’ weakness in the speaking skill. It presents a list of speaking skills supported by relevant indicators. From a practical perspective, it contributes to developing teachers’ awareness of the importance of the simulation strategy, in addition to benefiting all curriculum writers, teachers, supervisors, and researchers from the results that the study has reached. This study motivates researchers in the continuous search for new and modern strategies that contribute to the development and advancement of teaching the Arabic language in all its branches. This study is a new qualitative addition and opens the way for teachers, parents and researchers to contribute to playing a pivotal role in changing the reality of speaking, and for researchers and scholars to conduct further research and studies in the field of language teaching and learning, and in the field of preparing curricula and textbooks by including speaking skills in the content of textbooks, training teachers and supervisors and developing their skills.

Terminological and Procedural Definitions

The study included the following terms and procedural definitions:

- **Simulation activities**: They are a simplification or abstraction of realistic, life or practical situations, as participants play roles that lead to their interaction with others, or with some elements of the environment being represented; Accordingly, simulation is a means of training in communication, movement, artistic and social skills based on the principle of completely embodying reality, such as involuntarily repeating a frequently practiced movement of another person, or involuntarily arousing feelings appropriate to a familiar experience of another person (Al-Khafaf, 2015). It is defined procedurally as a group of activities in which students simulate real situations in an organized manner, aiming at developing the speaking skills of fourth-grade female students; it is represented in the activities of (the young teacher, the young journalist, and the young doctor).

- **Speaking skill**: “The ability to verbally express human feelings and social, political, economic and cultural positions in a functional or
creative way, with correct pronunciation and good diction” (Madkour, 2010, 15). Procedurally, it means the set of skills that fourth-grade female students should master, which enable them to speak clearly and use appropriate vocabulary to talk about the idea clearly. They are represented in (the intellectual aspect, the linguistic aspect, the vocal aspect, and body language). They are represented by the score obtained by the fourth-grade female student in the situational speaking test that was prepared specifically for this purpose, and has the necessary psychometric properties.

- Fourth grade female students: They are female students who study in the fourth grade in the Hashemite Kingdom of Jordan, and their ages range between 10-12 years.

Limitations of the Study

The study was limited to the following limits and determinants:

- Topic limits: The study was limited to simulation activities: which are a set of teaching procedures practiced by the teacher in the reading lesson in order to develop the speaking skill, namely: the young teacher, the young journalist, and the young doctor.

- Human and spatial limits: The study was limited to fourth-grade female students in one of the schools affiliated with the Directorate of Education of Al-Ramtha District.

- Time limits: This study was conducted in the first semester of the 2023/2024 academic year.

The results of the study are determined by its tool, and by its validity and reliability.

Methods and Procedures

The Subjects of the study

The study subjects consisted of (78) fourth-grade female students from Aisha Bint Abi Bakr Basic School, affiliated with the Directorate of Education of Al-Ramtha District, and they were chosen purposefully due to the cooperation of the school administration with the researcher, the facilitation of his task, and the availability of the necessary laboratories for the female students, in the first semester of the Academic year (2023/2024). The study subjects were divided into two groups: (39) female students in the control group who were taught using the
conventional method, and (39) female students in the experimental group taught using the simulation activities.

**Tools of the Study (Speaking Test)**

To achieve the objectives of the study, the researchers prepared a situational test to measure speaking skill, and the researchers followed the following procedures in preparing it:

- **(Sources of Constructing the Test):** In preparing the test, the researchers relied on the theoretical framework and previous relevant studies (Al-Bajah, 2005; Shehatah, 2008; Al-Shanti, 2003; Madkour, 2010; Al-Jubouri, 2018; Al-Ajmi, 2008; Abu Odeh, 2020; Abd Al-Hadi, 2016), and reviewing the developed Arabic language book for the fourth grade approved in the Hashemite Kingdom of Jordan for the academic year (2023/2024), and reviewing the general framework of the Arabic language curricula (Al-Bashir et al., 2022).

- **(The First Draft of the Test):** Based on the previous step, the researchers came up with three areas in the light of which the students’ performance can be evaluated, which are stories and anecdotes, situations from daily life, description. The list of skills for evaluating the students’ performance in the speaking skill, consisted of (21) skills. It included four main aspects: the intellectual aspect, the linguistic aspect, the vocal aspect, and body language, and each aspect includes a set of skills and behavioral indicators that refer to the skill.

- **(Validity of the Test Content):** To verify the validity of the test content, the three proposed areas and the list of speaking skills were presented to (12) arbitrators from faculty members specialized in Arabic language curricula and its instruction methods, Arabic language specialists, and educational supervisors aiming at choosing the most appropriate field from the three fields and getting to know their opinions on the suitability of these fields, and expressing their opinion and giving their suggestions regarding the test in terms of: the clarity of the test items, its linguistic integrity, its instructions, and the test’s inclusion of all skills and behavioral indicators, or adding, modifying or deleting anything that doesn’t fit the areas.
The recommendations of the arbitrators were taken into consideration. They unanimously agreed to choose the topic of description as the topic designated for the speaking test from among the three topics. This is to ensure that the students speak successfully and that they do not get distracted by more than one topic. They modified the linguistic wording to suit the level of the students and integrating them together.

- **(The Final Version of the Test):** The final test was in the field of description, in which the student was asked to describe a short film after watching it. It was about the history of a traditional crafts in Jordan. The final list of speaking skills concluded with (20) skills, divided into four aspects (intellectual, linguistic, vocal, and body language). Here are the skills and sub-indicators that measure each of these aspects:

- **The intellectual aspect,** which consists of the following behavioral indicators:
  - Covers all events and scenes contained.
  - Take into account the chronological and logical sequence of events and scenes.
  - Describes events and scenes accurately.
  - Commit to scenes and events and do not deviate from them.
  - Communicate scenes and events clearly to listeners.

- **The linguistic aspect,** which consists of the following indicators:
  - Use appropriate vocabulary to describe.
  - Use correct sentences in their correct linguistic structure.
  - Express the scene in proper language.
  - Employ appropriate linking words between scenes and events.
  - She uses eloquent language in her speech.

- **The vocal aspect,** which consists of the following indicators:
  - The letters are pronounced correctly.
  - She speaks in a clear and audible voice.
  - Change in voice tone depending on the situation.
  - Speak at an appropriate speed depending on the event.
  - The last word in the sentence rests on the pause.

- **Body Language,** which consists of the following behavioral indicators:
☐ Change in facial gestures depending on the situation.
☐ Use physical movements while speaking.
☐ She cares about the listeners when she speaks.
☐ The listeners' gaze moves in all directions.
☐ Reads the reactions of her listeners.

- **(Test Application):** The speaking test was applied to the study subjects, according to a set of procedures, which included: the researcher sitting with the teacher who helped him in applying the study, showing her the observation card prepared to monitor the students’ performance during the test, agreeing on the observation mechanism, assessing the students’ performance on the graded scale of the speaking card, and preparing a special room to take the speaking test to ensure that the test proceeds according to the procedures prepared in advance, to provide a calm environment for the speaker, to test each student individually for a specific period of time, and to monitor the mark due to each student in light of her performance in the test individually, by placing the marks on the note card consisting of a five-point scale from (1-5).

- **(Reliability of the Test):** To verify the reliability of the test, the observation card was applied with the help of a cooperating observer who holds a bachelor’s degree in the Arabic language, was introduced to the purpose of the card, and trained on how to use it on four fourth-grade female students outside the sample. The teacher and cooperating observer observed each student throughout an entire class session from beginning to end. It was taken into account that the two observers began recording the data on the observation card at the same time, and that they finished recording at the same time, and then the grades obtained by each student from the two observations were recorded. To verify the reliability of the observation card, I calculated the degree of agreement between the observers (observation reliability), and it was found that the observers’ reliability coefficient for the intellectual aspect was (0.81), for the linguistic aspect (0.84), for the vocal aspect (0.85), for the body language (0.94), and (0.91) for the overall scale. These values are acceptable for the current study.
Study Variables

The study addressed the following variables:
- **Independent variable**: teaching method, which has two levels (simulation activities, the conventional method).
- **Dependent variable**: speaking skill among fourth grade female students.

The Homogeneity Between the Control and the Experimental Group

The homogeneity of the two study groups (experimental and control) in pre-test performance in speaking skills individually and as a whole was tested, using a t-test for independent samples, and Table (1) shows this.

Table (1): Results of the t-test to reveal the homogeneity between the two study groups in pre-performance in speaking skills

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Group</th>
<th>Mean</th>
<th>standard deviation</th>
<th>t-test</th>
<th>df</th>
<th>statistical significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>The intellectual aspect</td>
<td>Experimental</td>
<td>13.59</td>
<td>3.02</td>
<td>-.192</td>
<td>76</td>
<td>.848</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13.72</td>
<td>2.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The linguistic aspect</td>
<td>Experimental</td>
<td>13.85</td>
<td>2.92</td>
<td>1.724</td>
<td>76</td>
<td>.089</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13.72</td>
<td>2.86</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The vocal aspect</td>
<td>Experimental</td>
<td>13.72</td>
<td>2.74</td>
<td>.898</td>
<td>76</td>
<td>.372</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>13.15</td>
<td>2.81</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body language</td>
<td>Experimental</td>
<td>11.85</td>
<td>2.23</td>
<td>1.435</td>
<td>76</td>
<td>.156</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>11.05</td>
<td>2.65</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>Experimental</td>
<td>53.00</td>
<td>10.22</td>
<td>1.055</td>
<td>76</td>
<td>.295</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>50.64</td>
<td>9.51</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table (1) shows that there is no statistically significant difference between the average performance of the two study groups in speaking skills individually and collectively. This indicates that the two groups were statistically equal before the process.

Statistical Processing (SPSS)

- To test the statistical significance of the effect of simulation activities on speaking skills collectively, one-way ANCOVA was used.
- To test the statistical significance of the effect of simulation activities on speaking skills individually, a one-way multivariate analysis of variance (One-Way MANCOVA) was used, using the Hotelling’s Trace test.
Results and Discussion

To answer this question: “Are there statistically significant differences between the average scores of the study subjects in the speaking skills test due to the teaching method (simulation activities, or conventional way)?”, the means and standard deviations of the study subjects’ performance in speaking skills were calculated collectively, according to the teaching method variable (simulation activities, the conventional method), and Table (2) shows this:

Table (2): Means and standard deviations of the study subjects performance in speaking skills collectively according to the teaching method variable

<table>
<thead>
<tr>
<th>Group</th>
<th>Number</th>
<th>Pre-test Means*</th>
<th>Standard deviation</th>
<th>Post-test Means*</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>39</td>
<td>53.00</td>
<td>10.22</td>
<td>75.92</td>
<td>11.88</td>
</tr>
<tr>
<td>Control</td>
<td>39</td>
<td>50.64</td>
<td>9.51</td>
<td>57.41</td>
<td>14.61</td>
</tr>
<tr>
<td>Total</td>
<td>78</td>
<td>51.82</td>
<td>9.88</td>
<td>66.67</td>
<td>16.18</td>
</tr>
</tbody>
</table>

*Maximum score (100)

Table (2) shows that there is an apparent difference between the averages of the post-performance of the experimental and control groups in speaking skills collectively, in favor of the experimental group, as the Means average of the post-performance of the experimental group was (75.92), while the Means average of the post-performance of the control group was (57.41). To test the statistical significance of the apparent difference in the study subjects post-post performance in speaking skills collectively after controlling the effect of pre-performance according to the teaching method, a one-way ANCOVA was conducted, and Table (3) shows this:

Table (3): One-way ANCOVA of the statistical significance test for differences in the post-test performance of the study subjects in speaking skills as a whole after controlling the effect of pre-performance according to the teaching method.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean of squares</th>
<th>F value</th>
<th>Statistical significance</th>
<th>Eta square (effect size)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-</td>
<td>5306.858</td>
<td>1</td>
<td>5306.858</td>
<td>48.732</td>
<td>.000</td>
<td>.394</td>
</tr>
</tbody>
</table>
Table (3) shows that there is a statistically significant difference between the average performance of the two study groups in speaking skills collectively, in favor of the experimental group, and the Eta-square value (0.829) indicates that the teaching method explains (82.9%) of the variance in performance in speaking skills as a whole. To compare the average performance of the experimental and control group in speaking skills as a whole, according to the adjusted Means, the two standard deviations, and the two standard errors according to the teaching method before and after controlling pre-differences, Table (4) shows this:

**Table (4): The means, standard deviations, and standard errors for the experimental and control groups in speaking skills as a whole before and after controlling pre-differences**

<table>
<thead>
<tr>
<th>Group</th>
<th>Pre-Modification</th>
<th>Post-Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Experimental</td>
<td>75.92</td>
<td>11.88</td>
</tr>
<tr>
<td>Control</td>
<td>57.41</td>
<td>14.61</td>
</tr>
</tbody>
</table>

Table (4) shows that there is a difference between the performance of the experimental and control groups in speaking skills as a whole, in favor of the experimental group. According to the results of the one-way ANCOVA in Table (3), the simulation activities had a statistically significant effect in improving the performance of the experimental group subjects in speaking skills as a whole. The means and standard deviations of the study subjects pre- and post-test performance in the four speaking skills (individually) were calculated according to the teaching method variable, and Table (5) shows this.
Table (5): The Means and standard deviations of the study subjects’ pre- and post-performance in the four speaking skills (individually) according to the teaching method

<table>
<thead>
<tr>
<th>Speaking Skills</th>
<th>Maximum score</th>
<th>Group</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Means</td>
<td>Standard deviation</td>
</tr>
<tr>
<td>Aspect</td>
<td></td>
<td>Control</td>
<td>13.72</td>
<td>2.86</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>13.65</td>
<td>2.93</td>
</tr>
<tr>
<td>Linguistic</td>
<td>25</td>
<td>Experimental</td>
<td>13.85</td>
<td>2.92</td>
</tr>
<tr>
<td>Aspect</td>
<td></td>
<td>Control</td>
<td>12.72</td>
<td>2.86</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>13.28</td>
<td>2.93</td>
</tr>
<tr>
<td>Vocal</td>
<td>25</td>
<td>Experimental</td>
<td>13.72</td>
<td>2.74</td>
</tr>
<tr>
<td>Aspect</td>
<td></td>
<td>Control</td>
<td>13.15</td>
<td>2.81</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>13.44</td>
<td>2.77</td>
</tr>
<tr>
<td>Body language</td>
<td>25</td>
<td>Experimental</td>
<td>11.85</td>
<td>2.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control</td>
<td>11.05</td>
<td>2.65</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>11.45</td>
<td>2.46</td>
</tr>
</tbody>
</table>

Looking at Table (5), it is evident that there are apparent differences between the means of the post-test performance of the experimental and control groups in the four speaking skills, according to the teaching method variable, in favor of the experimental group. The average performance of the experimental group subjects was (19.13) in the intellectual aspect skill, (19.23) in the linguistic aspect skill, (19.23) in the phonetic aspect skill, and (18.33) in the body language, while the average performance of the control group subjects was (15.15) in the skill of the intellectual aspect, (14.72) in the skill of the linguistic aspect, (14.92) in the skill of the vocal aspect, and (12.62) in the body language. To test the statistical significance of the apparent differences in the post-test performance of study individuals after controlling the effect of pre-performance on the four speaking skills, according to the teaching method variable, a one-way multivariate analysis of variance (One-Way MANCOVA) was conducted using the Hotelling’s Trace test and Table (6) shows this:
Table (6): Hotelling’s Trace test of the effect of teaching method on speaking skills

<table>
<thead>
<tr>
<th>Variable</th>
<th>Value</th>
<th>F value</th>
<th>df</th>
<th>Error degree of freedom</th>
<th>Statistical significance</th>
<th>Eta Squared (effect size)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Method</td>
<td>.849</td>
<td>14.645</td>
<td>4.000</td>
<td>69.000</td>
<td>.000</td>
<td>.459</td>
</tr>
</tbody>
</table>

Table (6) that shows that there is a statistically significant effect of the teaching method variable on the four speaking skills, according to the teaching method variable. The Eta square value (0.459) indicates that the teaching method variable explains (45.9%) of the variance in performance in the four speaking skills. To determine the statistical significance of the study subjects post-test performance in the four speaking skills, according to the teaching method variable, after controlling the effect of pre-performance, a one-way (Tests of between-subjects effects) was conducted, and Table (7) shows this:

Table (7): One-way ANCOVA to test the statistical significance of the differences in the post-test performance of study subjects in the four speaking skills (individually) after controlling the effect of pre-performance.

<table>
<thead>
<tr>
<th>Source of variance</th>
<th>Speaking skill</th>
<th>Total of squares</th>
<th>Degree of freedom</th>
<th>Means of squares</th>
<th>F value</th>
<th>Statistical significance</th>
<th>Eta Squared</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-performance</td>
<td>Intellectual aspect</td>
<td>54.423</td>
<td>1</td>
<td>54.423</td>
<td>6.086</td>
<td>.016</td>
<td>.078</td>
</tr>
<tr>
<td></td>
<td>Linguistic aspect</td>
<td>30.505</td>
<td>1</td>
<td>30.505</td>
<td>3.554</td>
<td>.063</td>
<td>.047</td>
</tr>
<tr>
<td></td>
<td>Vocal aspect</td>
<td>20.561</td>
<td>1</td>
<td>20.561</td>
<td>2.417</td>
<td>.124</td>
<td>.032</td>
</tr>
<tr>
<td></td>
<td>Body language</td>
<td>60.960</td>
<td>1</td>
<td>60.960</td>
<td>8.645</td>
<td>.004</td>
<td>.107</td>
</tr>
<tr>
<td>Strategy</td>
<td>Intellectual aspect</td>
<td>247.897</td>
<td>1</td>
<td>247.897</td>
<td>27.721</td>
<td>.000</td>
<td>.278</td>
</tr>
<tr>
<td></td>
<td>Linguistic aspect</td>
<td>211.476</td>
<td>1</td>
<td>211.476</td>
<td>24.640</td>
<td>.000</td>
<td>.255</td>
</tr>
<tr>
<td></td>
<td>Vocal aspect</td>
<td>234.732</td>
<td>1</td>
<td>234.732</td>
<td>27.590</td>
<td>.000</td>
<td>.277</td>
</tr>
<tr>
<td></td>
<td>Body language</td>
<td>423.275</td>
<td>1</td>
<td>423.275</td>
<td>60.029</td>
<td>.000</td>
<td>.455</td>
</tr>
<tr>
<td>Error</td>
<td>Intellectual aspect</td>
<td>54.423</td>
<td>72</td>
<td>8.943</td>
<td>.</td>
<td>.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Linguistic aspect</td>
<td>30.505</td>
<td>72</td>
<td>8.583</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vocal aspect</td>
<td>20.561</td>
<td>72</td>
<td>8.508</td>
<td>.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Body language</td>
<td>60.960</td>
<td>72</td>
<td>7.051</td>
<td>.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Seeing Table (7) above, it is clear that there are statistically significant differences between the means of the experimental and control group’s performance in the four speaking skills (individually) in
favor of the experimental group. The Eta square values (0.278, 0.255, 0.277, 0.455) indicate that the teaching method explains the percentage 27.8%, 25.5%, 27.7%, 45.5%, of the variation in performance in intellectual, linguistic, vocal, and body language, respectively. The size of the effect of simulation activities was largest in the body language aspect, followed by the linguistic aspect, the intellectual aspect, and finally the vocal aspect.

To compare the average performance of the experimental and control group in the four speaking skills, the adjusted means, standard deviations, and standard errors were calculated according to the teaching method before and after controlling pre-test differences, and Table (8) shows this:

**Table (8): The modified means, standard deviations, and standard errors for the experimental and control groups in the four speaking skills individually before and after modifying the pre-differences**

<table>
<thead>
<tr>
<th>Speaking Skills</th>
<th>Group</th>
<th>Pre-modification</th>
<th>Post-modification</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Means Standard deviation</td>
<td>Means Standard Error</td>
</tr>
<tr>
<td>Intellectual Aspect</td>
<td>Experimental</td>
<td>19.13 3.19</td>
<td>19.04 .495</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>15.15 4.25</td>
<td>15.24 .495</td>
</tr>
<tr>
<td>Linguistic Aspect</td>
<td>Experimental</td>
<td>19.23 3.15</td>
<td>18.73 .484</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>14.72 4.27</td>
<td>15.22 .484</td>
</tr>
<tr>
<td>Vocal Aspect</td>
<td>Experimental</td>
<td>19.23 3.15</td>
<td>18.92 .482</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>14.92 3.87</td>
<td>15.23 .482</td>
</tr>
<tr>
<td>Body language</td>
<td>Experimental</td>
<td>18.33 2.89</td>
<td>17.95 .439</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>12.62 3.47</td>
<td>13.00 .439</td>
</tr>
</tbody>
</table>

It is noted from Table (8) that there are differences between the performance of the experimental and control groups in the four speaking skills individually, in favor of the experimental group which indicates that simulation activities have a statistically significant effect on improving the performance of the experimental group in the four speaking skills individually.
The results indicated the positive impact and effectiveness of simulation activities in improving the speaking skill as a whole, and individually for the experimental group: For the speaking skill as a whole, these results are due to the following:

- The effectiveness of the simulation activities strategy, which is characterized by active interaction, flexible learning, and peer learning through groups, which helped create an effective and profoundly impactful environment, and this reflected positively on speaking skills.
- The strategy of simulation activities made the students exchange linguistic experiences among themselves, because imitating the actions and behavior of others makes it a source of learning, offers great potential in individual and group learning, allows self-learning, and establishes in them the concept of self-evaluation (Melhem, 2003).
- Communicative competence among students while they learn and participate in classroom activities; Learning through it takes place within a social context, ensures the participation of all team members in the educational process, reduces their anxiety, increases students’ understanding, improves their language skills, and gives them experience in managing conversations with life situations (Klich, 2000).
- It encourages students to represent situations by simulating certain models, provides them with practical experience to practice their communication skills, provides them with opportunities to practice speaking skills, and stimulates in them the desire to express themselves (Harmar, 2007).
- Adding to the atmosphere of pleasure, and alleviating the feeling of boredom and routine, which encourages them to show their personality inside the classroom (Al-Hamdani, 2002).

The positive results of the speaking skill (individually) can be attributed to:

- The superiority of the experimental group’s female students in intellectual skills is due to the fact that the simulation activities worked to organize the experimental group’s ideas. Speaking skills
require sequence and clarity of ideas, and using them in different speaking situations.

- The students’ superiority in the linguistic aspect is attributed to simulation activities, which used language in natural, real, and realistic situations that express the students’ lives. This led to an increase in linguistic practices among subjects of the experimental group.

- The superiority of the female students in the vocal aspect is attributed to simulation activities, which contributed to improving the correct pronunciation among the female students of the experimental group, due to the abundance of speaking practice, the teacher’s use of eloquent language, and her words being free of defects in correct pronunciation during training.

- The improvement of the female students in body language is due to the fact that the simulation activities contributed to activating the participation among the female students as a result of their use of the simulation activities that depend on body movements and focus on facial gestures by diversifying them to express emotions with different educational situations.

This result is consistent with the results of studies by (Madsa, 2012; Hardinty et al., 2013; Utama, 2013; Fatwa & Rosnani, 2017; Hamad & Alnuzaili, 2022), the results of which showed the effectiveness of simulation activities in improving speaking skill.

**Recommendations**

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

- Directing the attention of those responsible for writing and teaching language curricula to the importance of speaking skills, and giving attention to the intellectual, vocal, linguistic, and body language aspects in their training.

- Calling for training Arabic language teachers and qualifying them to employ simulation activities in teaching speaking skills.

- Conducting research and studies on the impact of simulation activities on improving speaking skills at different academic levels.
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**Foreign Resources**


