

The Effect of Mental Perseverance Strategy for Teaching Arabic Language for Developing Reading Comprehension and Divergent Thinking Skills among First-Year Literary Secondary School Students

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Abstract

The current paper examines the impact of employing a mental perseverance strategy in teaching Arabic language, with a focus on enhancing reading comprehension and fostering divergent thinking skills in first-year literary secondary students. The sample included 77 students from Aqaba Governorate, divided into two groups: an experimental group exposed to the mental perseverance strategy and a control group that received traditional instruction. The first group, a total of (37) students, was chosen as a control group taught in the usual way, and the second group, a total of (40) students, was chosen as an experimental group taught using mental perseverance. To determine the effect of the mental perseverance strategy, it was conducted. Preparing two tests, the first a test in reading comprehension skills and the second a test in divergent thinking skills. The validity and reliability of the two tests were verified. The strategy was applied to the study sample for a period of four weeks, two classes per week. The study concluded that using the mental perseverance strategy had a clear impact on improving the skills of reading comprehension and divergent thinking. The observed difference was statistically significant, with the results favoring the experimental group.

Keywords: Arabic teachers, reading comprehension, divergent thinking skills, secondary students

1. Introduction

In this modern era, Arabic language has become very important. This is because language is the vessel of the nation's knowledge and identity, the carrier of its sciences and knowledge, and the determinant of the features of its civilization in all religious, social, economic, and political aspects. It has become necessary to restore the activity and elegance of this language in a way that suits the requirements of the times and to find solutions to the problems facing society in order to deal optimally with them. The Arabic language is the one that elevated the nation in its bright ages, gave it a high status among nations, and spread intellectual and religious awareness, which became a reference for the rest of the nations in all their affairs because of its unique characteristics, as it is an incubator for the Book of God Almighty and the language of the people of paradise. It is the most eloquent in its ability to comprehend all meanings and all scientific and cognitive issues.

Reading comprehension is one of the cognitive mental processes that leads to understanding the meanings of sentences and paragraphs, distinguishing words, identifying personality traits, identifying the relationship between causes and results, and realizing the values related to texts (Abu Al-Dabaa, 2007). Reading comprehension is also of great importance in mastering the language arts, which are listening, speaking, reading, and writing, as well as creating an aware, and creative reader who is able to evaluate and make judgments (Fadlallah, 2001).

The purpose of reading comprehension is to understand and comprehend the content of the text read or heard, and comprehension skills overlap with each other because understanding depends on complex mental processes, which require high mental skills and the ability to choose and deduce ideas, and this is only achieved by the reader's interaction with the text (Ashour and Al-Hawamdeh, 2009). Hence, understanding improves the learner's language,

provides him with rich and diverse ideas, enables him to master useful information, gives him the skills of objective constructive criticism, and accustoms him to expressing opinions, issuing judgments and decisions on the text read, and acquiring new ways to confront problems and solve them creatively (Fadlallah, 2001).

Understanding the reading material depends on three basic components: understanding the word, sentence, and paragraph. Understanding vocabulary means analyzing it, interpreting it, and deducing meanings from it, in addition to what the reader has realized from his previous knowledge and experience. As for understanding a sentence, it requires learning about the rules of grammar and parsing in order to reach an understanding of what is meant, determining the relationship of the sentences to each other, and then understanding the entire text (Lafi, 2013). Reading comprehension serves as the fundamental objective of the reading process. It begins with the cognitive framework established by the learner, where information is structured using lexically consistent data, formed through grammatically accurate sentences that ultimately produce coherent texts covering a range of factual and theoretical knowledge, which in turn form texts and topics that include various facts and knowledge (Abdulbari, 2010). Understanding is also the basis and essence of reading. There is no reading without understanding, and the nature of contemporary times requires a reader with a good understanding who is able to keep pace with modernity and contemporaneity. However, multiple studies have indicated that there is a clear weakness in reading comprehension at different stages of education (Al-Aawar, 2014).

Reading comprehension is one of the complex processes of thinking. It comes from the reader's interaction with the text to extract meanings, which requires sources of information with a reciprocal relationship. Here, the thinking process is considered one of the most important skills that work to find the best solutions and results in all sciences, especially educational sciences, which push people to find effective and new ways and methods to overcome obstacles and problems. Additionally, one of the most significant aspects of the mental and cognitive structure that other cognitive processes affect and influence is thinking (Shehata and Al-Najjar, 2003). "The learner's success is not only in memorizing information but rather in how he learns and acquires sound and correct mental habits that push him to think about the problems he faces in a correct manner. This is achieved when he uses thinking skills. Teaching to think is extremely important, as all thinking opportunities for learners must be activated. In order to keep pace with the requirements and needs of the modern era" (Al-Muhammadi, 2019, p. 22). Thinking is also a series of mental activities performed by the brain as a result of its exposure to a stimulus through one of the five senses. Therefore, the concept of thinking is abstract because all the resulting activities are intangible, and what can be observed in reality is the product of thinking (Salama, 2011).

According to Obaid (2016), there are many types of thinking, including: visual, deductive, critical, contemplative, creative, systemic, and divergent thinking. Abdel Hamid (2011) stated that divergent thinking is the individual's ability to produce multiple answers to a problem, confirm the quantity and quality of the answers, and search for connections. A new way to think in a flexible way to solve these problems. It includes flexible thinking skills, original thinking, and sensitivity to problems. The mechanism used by the brain to invest its energies to acquire and comprehend knowledge is for learners to use the left side of the brain in the learning and teaching process and neglect the right side of the brain. Divergent thinking connects the left and right hemispheres of the brain to give better results in the learning and teaching processes (Alwan, 2012). Hence the importance of divergent thinking by using methods that stimulate the brain, designing educational curricula that are appropriate to the nature of the learners' use of any side of the brain, developing creative thinking skills and investing their energies in managing the learning and teaching process, and finding solutions to problems through exploration and expansion, because this type of thinking is characterized by openness and freedom and begins with thinking about complex issues through multiple skills, such as synthesis, composing, recognizing relationships, reclassifying, and finding and developing new visions (Al-Hudaibi, 2012).

Since divergent thinking represents the basis for the process of creativity and innovation in the learners' unrestricted practice, studying the aspects and possibilities of educational situations gives the student the freedom to think through his experiences in producing a large amount of ideas, which helps him to form connections between neurons that develop his hypothetical and reverse thinking and works to develop his ability to analyze aspects of an issue and to develop his network analysis skill (Al-Muhaimid, 2017). To develop comprehension and divergent thinking skills, different teaching strategies can be followed, including the mental perseverance strategy. Habits of the mind are among the most important behaviors that are used to practice the thinking process, which in turn produces more intelligent and effective products and actions. By using the individual's thinking process with his inclinations toward the habits of the mind, it leads to his response to a problem with unclear solutions, and from here, the learner is able to manage mental processes and work to organize and arrange them. (Costa & Kallie, 2004).

Habits of the mind have a sequential, evolutionary nature that leads the learner to positive outcomes that include inclinations, trends, and values, which help him reach different preferential patterns. Because the learner, by nature and instinct, is selective in his behaviors and mental actions in accordance with his inclinations, trends, and values (Trad, 2012). An individual's intelligence is not sufficient, regardless of his level, unless he behaves in a manner that possesses mental habits that guide him in his professional, academic, and social lives. Therefore, habits of mind have become one of the most important variables related to academic performance at different stages of learning, and this is what studies have confirmed in the importance of teaching and evaluating these habits, discussing them with learners, and encouraging them to adhere to them. To become their subject and an important part of their mental structure (Qatami, 2007). This is what Costa and Kallie (2003) confirmed: habits of mind are human nature in dealing with problems in an intelligent manner in the event that answers and solutions are not available within the limits of the cognitive structure when facing ambiguous situations.

Habits of the mind are the intelligent behavior that works to develop an individual's thinking from the stage of transferring and preserving knowledge to the stage of building and producing it, and as a result, it works to give him a set of behaviors that are related to developing his thinking to solve problems and how to deal with data to develop his ability to communicate and interact with society (Abdul Razzaq, 2012). Habits of the mind are also among the mental strategies that are based on organizing the mind's work properly, helping the individual control his behavior, and contributing to his ability to employ information. Thus, he is able to direct these mental processes properly, which leads to the mind's ability to confront problems and work to solve them, so that these habits become the dominant feature of behavior (Qatami and Amour, 2005).

Actual performance often becomes a habit if it goes through various performance processes represented by its ability to determine cognitive and emotional goals and is based on transforming the performance products into procedural cognitive skills, identifying mental skills, creating links between their performance aspects, and repeating them until they become automatic processes (Qatami and Amour, 2005). The habits of the mind encompass various cognitive skills such as mental resilience, impulse control, empathetic listening, adaptable thinking, metacognition, accuracy-oriented approach, problem formulation and questioning, application of prior knowledge to novel scenarios, precise and effective thinking and communication, sensory data collection, and creative visualization and innovation. Expressing astonishment and inquiring, embracing calculated chances, discovering amusement, and participating in thought-provoking discussions (Costa & Kallie, 2004).

It regulates mental perseverance and directs learning effectively and efficiently. It gives learners new experiences, links ideas to their previous experiences, increases academic achievement, and develops positive values such as increasing learning motivation, self-confidence, the ability to make decisions, and developing speaking skills. Mental perseverance also emphasizes the connection of thinking and its practice with the daily tasks in the learner's life, to work on developing his concepts and cognitive structures. This perseverance has become responsible for perseverance, follow-up, and not retreating by continuing to use multiple attempts and alternatives away from failure, lethargy, and laziness. Here, the learner resorts to the mind to push him forward to more activity and work to find solutions, using modern strategies that search for novelty and development. This habit accepts possibilities and alternatives, so that if a strategy fails, a new strategy is moved to reach the solution of the problem and make the decision to achieve success (Zaitoun, 2012; Rayani, 2011). The strategy of mental perseverance takes its place at the forefront of habits of mind because it addresses most educational and academic situations, finding solutions to their problems with mastery and persistence in an intelligent, effective, and purposeful way, and working to use and choose alternatives when the learner encounters obstacles and barriers that stand between him and solving the problem (Costa & Kallie, 2003). This is what Qatami (2005) confirmed: mental perseverance is the learner's ability to follow up on his tasks using the appropriate strategy to reach positive solutions in organized, purposeful ways, with some sayings such as: "Let me, I will work to keep trying, don't show me how to work, and so on". The importance of mental perseverance is evident in renewing and predicting future goals because it is more closely related to internal goals than to external goals, so it works to achieve success, complete work, and master it better. Since mental perseverance pushes the individual to cling to the task despite its difficulty, it motivates him to move forward to complete this task successfully without thinking about its difficulty or its consequences (Al-Shubaili and Al-Wataban, 2016).

Many studies and research in psychology have focused on mental perseverance, due to its great value in contemporary society and also to its value in achieving an individual's goals, despite his success or failure. This is because it is linked to multiple variables, such as the connection between the need for achievement and perseverance with leadership in all areas of management and organizing thinking to reach sound positive results by choosing the most appropriate educational situations, working to develop mental skills, and possessing new experiences

(Al-Otaibi, 2013; Al-Rusaa, 2017).

1.1 Problem of the Study

The central issue of this study arises from the noticeable deficiency in students' ability to comprehend reading materials across different academic levels. Furthermore, there is a significant gap in their divergent thinking capabilities, as evidenced by their responses to comprehension-based assessments and limited participation in discussions surrounding intellectual topics. This was observed in the answers of students in the secondary stage to examination questions related to comprehension, and their weakness in thinking is evident from what is observed in their participation in discussions that take place about various intellectual phenomena.

1.2 Questions of the Study

This study seeks to address the following two inquiries:

- 1) Are there statistically significant differences, at a significance level of 0.05, in the average scores of students in the experimental and control groups in terms of reading comprehension skills, as a result of employing the mental perseverance strategy compared to traditional teaching methods?
- 2) Are there statistically significant differences, at a significance level of 0.05, in the average scores of divergent thinking skills between students in the experimental group (taught using the mental perseverance strategy) and those in the control group (taught using conventional methods)? The importance of studying

1.3 The Importance of the Study Stems from the Following

- Benefiting Arabic language teachers on how to teach the Arabic language using the mental perseverance strategy.
- Benefiting the authors of Arabic language curricula from the results of the study.
- Benefiting researchers and those interested in conducting studies related to reading comprehension and divergent thinking skills.

1.4 Objectives of the Study

The study sought to examine the impact of the mental perseverance strategy in teaching the Arabic language on enhancing reading comprehension and fostering divergent thinking skills among students at Aqaba Secondary School for Boys.

1.5 The Limits of the Study

The study was confined to the following parameters:

Human Constraints: A sample of students from Aqaba Secondary School for Boys during the 2022/2023 academic year.

Geographical Limits: Aqaba Secondary School for Boys, under the jurisdiction of the Aqaba Education Directorate.

Duration: The research was conducted during the second semester of the 2022/2023 school year.

Scope: This study investigates the influence of mental endurance on the development of reading comprehension and divergent thinking skills among first-year literary secondary school students learning the Arabic language. The results of the study are reliant on the validity and reliability of the two instruments employed.

1.6 Procedural Definitions

The subsequent concepts are defined in an operational manner: • **Cognitive Resilience Approach:** The cognitive techniques employed to instruct literary secondary school students in the Arabic language during their first year, following the prescribed steps of the aforementioned approach. Reading comprehension skills refer to a collection of abilities that students in the first year of literary secondary school should have and excel in. These skills are evaluated by a reading comprehension test specifically designed for this research. • **Divergent thinking skill:** a collection of abilities that should be present in first-year secondary school pupils, evaluated using the divergent thinking exam created specifically for this study.

1.7 Previous Studies

Previous studies that dealt with habits of mind or mental perseverance that dealt with reading comprehension and divergent thinking were presented in order from oldest to most recent. Ibrahim (2014) conducted a study to assess the efficacy of a programme that utilised divergent thinking strategies to cultivate creative reading comprehension skills and certain productive thinking practices among first-year secondary school students. The quasi-experimental methodology was implemented by the researcher. The research sample was divided into two groups, with 30 students

in each group, and consisted of 60 first-year secondary school students (control and experimental). The objective of the study tool was to develop a list of mental habits that are suitable for the first year of secondary education, a list of creative reading comprehension skills, a creative reading comprehension test, and a habit scale. A mind that is productive. The study's findings demonstrated the efficacy of the divergent thinking-based programme in the development of creative reading comprehension skills and certain productive thinking practices among first-year secondary school students. The study emphasized the importance of enhancing the Arabic language curriculum at the secondary level to cultivate the creative abilities of students, given the nature of linguistic creativity.

The experimental method was utilized in the study conducted by Al-Tamimi and Jamil (2015) to assess the impact of the Barman model on enhancing reading comprehension among fourth-grade literary students. The sample comprised 50 female students, divided into two groups of 25: a control group with 25 students and an experimental group with 25 students. A reading comprehension test was used as the primary study instrument. The findings revealed that the experimental group significantly outperformed the control group in the reading comprehension test.

Similarly, the objective of Al-Hawamdeh and Al-Bulaihad's (2016) study was to evaluate the effectiveness of the guided reading strategy in improving the reading comprehension skills of sixth-grade primary school students. The study involved 844 students, split into a control group of 43 students and an experimental group of 41 students. A 30-item reading comprehension test was administered. The results showed statistically significant improvements in the performance of the experimental group, which used the guided reading strategy, when compared to the control group. The study highlighted the importance of encouraging Arabic language teachers to adopt guided reading strategies in their teaching.

Issa's (2017) study aimed to examine the effects of divergent thinking strategies on the development of reading comprehension skills in fourth- and sixth-grade female students of the Arabic language. The experimental design included 711 fourth-grade students divided into an experimental group (37) and a control group (34). The study employed a reading comprehension test and a teacher's guide designed to develop reading comprehension through divergent thinking strategies. The results demonstrated statistically significant differences in the experimental group's post-test reading comprehension scores across various levels (literal, deductive, critical, and creative) when compared to the control group. While divergent thinking strategies positively impacted the development of reading comprehension skills at the literal, deductive, and creative levels, they had no significant effect on critical comprehension.

The objective of the Kobari (2018) study was to determine the efficacy of employing maps as a game to teach reading comprehension as it relates to students' academic performance and their attitudes towards the subject. The study cohort was comprised of 72 eleventh-grade female students, who were randomly assigned to two equal groups: a control group that utilised the method and an experimental group that was not. Maps were employed as a pastime in the study of the regular group and the experimental group. In order to evaluate the students' attitudes, a questionnaire and a pre- and post-test were administered. The experimental group's results were favourable, and the efficacy of using maps as a game in teaching reading comprehension was demonstrated. A study conducted by Hamdi et al. (2019) sought to determine the impact of the Power of Thinking strategy on the development of divergent thinking among second-year intermediate students in the field of Arab-Islamic history. The quasi-experimental approach was implemented by the researcher, who randomly selected 70 students and divided them into two groups: an experimental group of 35 students and a control group of 35 students. The study sample was administered an intelligence exam and a multiple-choice test that were designed to foster divergent thinking. The questions were pertaining to Arab-Islamic history. The results demonstrated the efficacy of the power of thinking strategy in the development of divergent thinking skills for the field of Arab-Islamic history. The study underscored the importance of employing a strategy to leverage the force of thought in the instruction of Arab-Islamic history.

2. Methodology

The present study adopted a quasi-experimental methodology to investigate the impact of the mental perseverance strategy on the development of divergent thinking and reading comprehension skills among first-year literary secondary school students. The researcher conducted an extensive review of relevant literature and previous studies. The study sample, which included both control and experimental groups, was subjected to pre- and post-tests to assess their divergent thinking and reading comprehension skills. Arithmetic means and standard deviations were calculated. The experimental group achieved the highest arithmetic mean of 18.73, and a one-way analysis of variance (ANCOVA) was performed. The ANCOVA results indicated a statistically significant difference, favoring the experimental group that employed the mental perseverance strategy.

2.1 Tool of the Study

To address the two research questions, two tests were developed: one to assess reading comprehension skills and the other to evaluate divergent thinking abilities. Each test consisted of twelve paragraphs, corresponding to lessons from the subject of literary issues taught during the second semester of the first year of literary secondary school.

The first test: Reading Comprehension Skills Test: This test was designed to assess reading comprehension, covering skills such as literal comprehension, inferential comprehension, and critical comprehension. The test was administered to both the control and experimental groups before and after the intervention.

The second test: Divergent Thinking Skills Test: This test, aimed at evaluating divergent thinking, included twelve specific skills and was administered to both the control and experimental groups, before and after the experiment.

2.2 Population of the Study

The study population consisted of students in the first year of literary secondary school in Aqaba secondary schools for boys.

2.3 Sample of the Study

Aqaba Secondary School for Boys was selected as the sample for this study using a purposive sampling method. The sample consisted of two equal groups of first-year literary secondary school students during the second semester of the 2022/2023 academic year: a control group with 40 students and an experimental group with 37 students.

2.4 Validity of the Test

The validity of the test was established by presenting it to a panel of experts, including university professors, secondary school supervisors, and teachers from the Ministry of Education, whose feedback and recommendations were duly considered.

2.5 Test Stability

Both assessments were administered to a sample of 15 students who were not part of the study sample. The correlation coefficient achieved a value of 0.84, indicating a satisfactory level of reliability.

3. Study Results and Discussion

This section presents the results of the study, which aimed to assess the impact of utilizing the mental perseverance strategy on reading comprehension skills and divergent thinking skills in Jordan. The study findings are structured around the two primary research questions.

The first question: Are there statistically significant differences, at the significance level of ($\alpha=0.05$), between the average scores of students in the experimental group and those in the control group in terms of reading comprehension skills, as influenced by the teaching method (mental perseverance strategy vs. traditional method)?

Table 1 provides the arithmetic means and standard deviations calculated from the pre- and post-reading comprehension test performance of both groups to address this question.

Table 1. Arithmetic Means and Standard Deviations of the Performance of the Two Study Groups on the Pre- and Post-Reading Comprehension Skills Test

Group	Number	Pre		Post	
		Mean	Standard deviation	Mean	Standard deviation
Experimental	37	13.24	1.32	18.73	1.41
Controlled	40	12.83	1.91	16.63	0.98
Total	77	13.03	1.65	17.64	1.60

Table (1) indicates that the two study groups exhibit a discernible disparity in their post-test reading comprehension skills. The experimental group achieved the highest arithmetic mean (18.73), whereas the control group achieved the lowest arithmetic mean (16.63). Table (2) illustrates the application of the associated one-way analysis of variance (ANCOVA) test to confirm the statistical significance of the difference between the two-arithmetic means.

Table 2. One-way Analysis of Variance (ANCOVA) for the Difference between the Performance of the Two Study Groups on the Post-Reading Comprehension Skills Test

Source of variance	Sum of squares	Degrees of freedom	Mean squares	F value	Significance level	ETA square
Pre-reading comprehension	20.529	1	20.529	17.235	0.000	0.189
Group	73.555	1	73.555	61.753	0.000	0.455
Error	88.143	74	1.191			
Total	193.818	76				

Table (2) indicates that the post-reading comprehension skills test results of the two study groups exhibit a statistically significant difference, as indicated by the calculated P value of (61.753) and a significance level of (0.000). The adjusted arithmetic averages and standard errors for the performance of the two study groups on the post-reading comprehension skills test were extracted to ascertain the statistical significance of the difference. This information is presented in Table 3.

Table 3. Adjusted Arithmetic Means and Standard Errors for the Performance of the Two Study Groups On the Post-Reading Comprehension Skills Test

Group	Adjusted arithmetic averages	Standard errors
Experimental	18.66	0.18
Controlled	16.69	0.17

It is noted from Table (3) that the difference was in favor of the experimental group that studied with the mental perseverance strategy, because its adjusted arithmetic mean was the highest, reaching (18.66), while the adjusted arithmetic mean of the experimental group was the lowest, reaching (16.69). This result means that there is an effect of using the mental perseveration strategy on reading comprehension skills, and this is confirmed by the eta-squared value of (0.455), which expresses the size of the effect caused by using the mental perseveration strategy on reading comprehension skills, which amounts to (45.5%) of the variance. The result is in reading comprehension skills, and the remaining percentage (54.5%) is due to factors not investigated in the current study.

The superiority of the mental persistence strategy over the usual method may be due to several reasons, including:

-The mental perseverance that was activated in teaching the experimental group served to stimulate the students' work. In the activities that were used in teaching skills that stimulated the student's thought, they are activities that directly address the mind, some of which stimulate the imagination, and some of which give the information movement that is connected to the student's feelings, stirring feelings in him, and urging him to continue thinking and not stop at a specific point.

-Mental perseverance is one of the most important habits of the mind. Rather, it is the first habit upon which all other habits are based. Based on this, this habit achieved the recognition of the feelings of others, that is, the students' knowledge of each other's feelings, and as a result, a kind of mental familiarity and mental-emotional closeness occurred between the students, which led to understanding the ideas that were discussed in the reading texts.

-The students' interaction with the perseverance strategy came from the premise that it was a new strategy for them. It came to break the routine of the usual method used in teaching reading texts, whether prose or poetry, and this led, as a result, to understanding and comprehending these texts.

-Individuals in general and students in particular tend towards everything that is new, especially if this innovation is in teaching methods and strategies.

The second question: Are there statistically significant differences, at the significance level of ($\alpha=0.05$), between the average scores of students in the experimental group and those in the control group in terms of divergent thinking skills, as influenced by the teaching method (mental perseverance strategy vs. traditional method)?

The arithmetic means and standard deviations of the two groups' performance in the pre- and post-tests of divergent thinking skills were computed to address this question. The results are presented in Table 4.

Table 4. Arithmetic Means and Standard Deviations of the Performance of the Two Study Groups on the Pre- and Post-Test of Divergent Thinking Skills

Group	Number	Pre		Post	
		Mean	Standard deviation	Mean	Standard deviation
Experimental	37	12.57	1.92	16.84	1.56
Controlled	40	12.20	1.80	15.83	1.20
Total	77	12.38	1.86	16.31	1.46

The post-test of divergent thinking skills demonstrated an apparent disparity between the two study groups, as the experimental group achieved the highest arithmetic average of (16.84) and the control group the lowest at (15.83). As illustrated in Table 4, the associated one-way analysis of variance (ANCOVA) test was conducted to confirm the statistical significance of the difference between the two-arithmetic means, as illustrated in Table (5).

Table 5. One-Way Analysis of Variance (ANCOVA) for the Difference between the Performance of the Two Study Groups on The Divergent Thinking Skills Test

Source of variance	Sum of squares	Degrees of freedom	Mean squares	F value	Significance level	ETA square
Pre-divergent thinking	35.373	1	35.373	24.366	0.000	0.248
Group	14.641	1	14.641	10.085	0.002	0.120
Error	107.429	74	1.452			
Total	162.519	76				

The post-divergent thinking skills examination results in a statistically significant difference between the two study groups, as illustrated in Table (5). In order to ascertain the statistical significance of the difference between the two study groups on the post-divergent thinking skills test, the adjusted arithmetic means and standard errors were extracted, as indicated in Table (6), based on the calculated P value of (10.085) with a significance level of (0.002).

Table 6. Adjusted Arithmetic Means and Standard Errors for the Performance of the Two Study Groups on the Post-Test of Divergent Thinking Skills

Group	Adjusted arithmetic averages	Standard errors
Experimental	16.77	0.20
Controlled	15.89	0.19

It is noted from Table (6) that the difference was in favor of the experimental group that used the mental perseverance strategy because its adjusted arithmetic mean was the highest, reaching (16.77), while the adjusted arithmetic mean of the experimental group was the lowest, reaching (15.89). This result means that there is an effect of using the mental perseverance strategy on divergent thinking skills, and this is confirmed by the eta-squared value of (0.120), which expresses the size of the effect caused by using the mental perseverance strategy on divergent thinking skills, which amounts to (12%) of the variance. The result is divergent thinking skills, and the remaining percentage (88%) is due to factors not investigated in the current study.

To discuss this superiority, it can be said that the strategy of mental perseverance is one of the most influential strategies in thinking. The persistent mind is usually an active mind with which all thinking processes are activated, including divergent thinking. On the one hand, perseverance does not start except after contemplating the educational situation and implementing the thought in different directions, and this in itself develops divergent thinking.

This may be due to the fact that the habits of the mind become a mental habit after a series of intellectual processes, the most important of which are the processes of branching thoughts, meaning that every practice cannot occur except after the thought is branched to take the form of branching habits in turn. The persevering student's thinking means divergent thinking, because perseverance harnesses the individual's thinking, not in one direction, but in different directions.

4. Conclusion

This study examined the mental perseverance strategy for teaching the Arabic language in relation to the development of divergent thinking and reading comprehension skills among first-year literary secondary school students. The quasi-experimental approach was employed, which included the calculation of arithmetic means and standard deviations, followed by a one-way analysis of variance (ANCOVA). The study population comprised students from Aqaba Secondary Schools for Boys, who were in their first year of literary secondary school. A purposive sampling method was used to select Aqaba Secondary School for Boys as the study sample. The sample included two equal groups of students: a control group with 40 students and an experimental group with 37 students, during the second semester of the 2022-2023 academic year. The researcher developed a reading comprehension skills test, assessing critical, inferential, and literal comprehension. A divergent thinking skills test was also administered to both control and experimental groups, with pre- and post-tests. The thinking skills test encompassed twelve skills, and both tests were verified for validity and reliability. The study concluded that the mental perseverance strategy significantly enhanced divergent thinking and reading comprehension skills. The experimental group displayed statistically significant improvements. Based on the findings, the study provided several recommendations.

5. Recommendations

In light of the results, the following can be recommended:

- 1- Training teachers on how to teach using strategies for habits of mind in general and mental perseverance in particular.
- 2- The Arabic language teacher's guide includes some modern strategies in teaching, including the mental perseverance strategy.
- 3- Conducting other studies on other branches of the Arabic language using the mental perseverance strategy.

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