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# THE EFFECTIVENESS OF THE CAUSE AND EFFECT STRATEGY IN THE ACADEMIC ACHIEVEMENT OF FIFTH-GRADE SECONDARY SCHOOL FEMALE STUDENTS IN THE SUBJECT OF QURAN AND ISLAMIC EDUCATION

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## Abstract

The current study aims to explore the effectiveness of the cause and impact strategy in the academic achievement of fifth-grade secondary school female students in the subject of Quran and Islamic Education. The significance of this research lies in the extent to which the cause and effect strategy enhances the teaching of Quran and Islamic Education for fifth-grade secondary students. The study seeks to assess the impact of this strategy on improving students' deep understanding of religious concepts and legal rulings, as well as their ability to apply them in practical life. The research problem requires attention to innovative teaching strategies that contribute to enhancing students' understanding and improving their academic achievement. Among these strategies is the cause and effect strategy, which is based on linking events and texts with their causes and effects, thus simplifying the information and facilitating comprehension.

The researcher has reached the following conclusions and recommendations:

1. The cause and effect strategy enhances students' understanding of the content of the Quran and Islamic Education by connecting events with causes and effects, leading to a deeper understanding of religious concepts and texts.
2. Implementing the cause and effect strategy improves students' critical and analytical thinking skills, as it encourages them to analyze relationships between events, causes, and their impact on outcomes, thus promoting a more sophisticated understanding and analysis of religious texts.
3. It is recommended to conduct a similar study at other educational levels in the subject of Quran and Islamic Education.
4. It is essential to utilize educational models in teaching Quran and Islamic Education, particularly the cause and effect strategy, which has proven effective in the current study.

**Keywords:** Cause and Effect Strategy, Academic Achievement, Fifth-Grade Secondary School Female Students, Quran, Islamic Education.

## **Introduction**

### **Research problem**

The educational process is considered one of the most important factors that contribute to building the student's personality and developing his skills and knowledge. With the development of curricula and the increase in educational challenges, it has become necessary to search for new and effective educational strategies to improve the level of academic achievement of students. In the subject of the Holy Quran and Islamic education, many students face difficulty in understanding and absorbing the basic concepts and practical applications of Quranic texts and Islamic rulings. These difficulties may lead to a decline in the level of academic achievement and a decrease in motivation to learn.

This educational problem requires attention and research into innovative teaching strategies that contribute to enhancing students' understanding and improving their academic achievement. Among these strategies is the cause and effect strategy, which relies on linking events and texts to their causes and results, which contributes to simplifying information and facilitating its comprehension.

From this standpoint, the importance of research into the effectiveness of using the cause and effect strategy in teaching the Holy Quran and Islamic education to fifth-grade female students emerges. This study aims to evaluate the impact of this strategy on improving the level of deep understanding of religious concepts and legal rulings, as well as enhancing the ability to apply it in practical life.

The research problem is manifested in the lack of deep understanding of the Quranic texts and Islamic rulings among female students, which negatively affects their academic achievement. These difficulties require searching for educational strategies that contribute to improving the level of academic achievement and increasing female students' understanding of the subject. Therefore, this study aims to evaluate the effectiveness of the cause and effect strategy in improving female students' achievement in the subject of the Holy Quran and Islamic education.

Based on the above, the research problem can be formulated as follows: How effective is the use of the cause and effect strategy in improving the achievement of fifth-grade preparatory school girls in the Holy Quran and Islamic education?

This study seeks to answer this question by reviewing and analyzing the impact of using the cause and effect strategy on female students' achievement, and providing recommendations based on the extracted results to improve the educational process in the subject of the Holy Quran and Islamic education.

### **Importance of Research**

The study of the effectiveness of the cause and effect strategy in improving the achievement of fifth-grade female students in the Holy Quran and Islamic education is of great importance, due to its potential impact on the quality of education and enhancing academic achievement. Also Improving the deep understanding of religious concepts is one of the main objectives of this research. Students face challenges in comprehending Quranic texts and Islamic rulings due to their complexity and interconnectedness. By using the cause and effect strategy, these concepts can be simplified by clarifying the relationships between causes and effects, which

enhances students' understanding and contributes to achieving a deeper understanding of the material. Where Enhancing academic achievement is a significant benefit of this research. Improving students' understanding of religious concepts through the cause-and-effect strategy may lead to improved grades and better academic outcomes. This is not limited to academic achievement alone, but extends to enhancing students' ability to apply the concepts in their daily lives, which enhances the quality of learning.

Developing innovative teaching strategies is an important goal of the research. The research findings may provide new insights into how to improve teaching methods and provide more effective and engaging learning approaches. This could help teachers design lessons that meet the needs of students and contribute to better outcomes.

Where Keeping pace with educational developments is essential in the educational system. By introducing modern and effective teaching methods, research can contribute to improving the educational curriculum and keeping pace with the best international practices in teaching religious subjects, which enhances the effectiveness of the educational system and its ability to achieve its goals and Meeting the needs of female students is a primary goal of the research. Understanding the needs of female students and providing educational strategies that meet these needs contributes to enhancing their skills and achieving better results in the Holy Quran and Islamic Education, by enhancing their analytical and critical thinking skills., and stands out Contributing to improving the quality of education is an important dimension of this research. By improving academic achievement and increasing students' understanding, the research can contribute to enhancing the quality of education in the Holy Quran and Islamic education, which will positively reflect on the educational level in general and enhance the ability of the educational system to achieve its goals.

Based on the above, it is clear that research into the effectiveness of the cause and effect strategy is of great importance in improving learning outcomes and increasing the effectiveness of the educational process, which contributes to improving the quality of education in the subject of the Holy Qur'an and Islamic education.

### **Research Objective**

The aim of the current research is to identify The effectiveness of the cause and effect strategy in the achievement of fifth-grade female students in the Holy Quran and Islamic education

### **Research Hypothesis**

There is no statistically significant difference at the significance level (0.05) between the mean scores of T The Bat The experimental group My lovehand Message According to (strategy cause and effect) and average grades Students Control group a For those who They study According to the usual method of testing Studying the Holy Quran and Islamic education.

### **Research Limits**

Objective limits: The effectiveness of the cause and effect strategy in the achievement of fifth-grade female students in the Holy Quran and Islamic education.

Time limits: The research was conducted in the academic year 2024-2025 AD.

Spatial boundaries: Iraq-Baghdad.

## **Define terms**

### **Cause and Effect Strategy**

It is an educational technique used to link events or phenomena to their causes and effects. This strategy aims to enhance students' understanding of the causal relationships between different factors, which helps them interpret events and predict their outcomes based on cause and effect analysis. This strategy is used to deepen students' understanding and stimulate analytical and critical thinking. (Atiya),2009, p. 65)

Cause and effect strategy is known as a cognitive tool that helps individuals develop logical thinking and problem-solving skills. By focusing on the relationship between causes and effects, this strategy enables individuals to analyze specific situations and understand how different factors influence each other, which enhances their ability to make decisions based on accurate analysis.(Atwa and others),2010, p. 165)

It is a systematic method used in research and study to analyze how variables influence each other. In this context, the cause (or independent factors) and the effect (or dependent factors) are identified, and then an analysis is conducted to see how the cause and effect are related. This strategy is essential for understanding the relationships between variables in academic and research studies.(Al-Yasiri),2007, p. 76)

It is a teaching approach used to help students understand how events or phenomena are related to each other. By teaching students how to trace causes and effects, this strategy enhances critical thinking and problem-solving skills, which contributes to improving their ability to understand complex information and apply it in different contexts..

(Al-Kasbani,2010p.156)

### **Holy Quran and Islamic Education**

It is an integrated system of life that aims to strengthen faith in God and create harmonious behavior and the Islamic faith that is included in the Islamic education material (Al-Saadoun, 2012, p. 1109)

It is the development of all personal, emotional, intellectual and social aspects and the organization of its behavior from the principles and teachings of Islam, for the purpose of achieving the goals of Islam in various fields (Sbitan and Hassan, 2010, p. 20)

### **Operational definition**

These are the topics of the book that is required to be taught to fifth-grade middle school students, which contains specific topics in the first course that were confirmed by the Ministry of Education for the academic year 2023-2024, which sought to establish Islamic values and principles in the minds of female students.

## **Chapter Two: Theoretical Framework and Previous Studies**

### **First: Theoretical framework**

#### **cause and effect strategy**

Cause and effect strategy is an analytical methodology used to understand the relationship between different events or phenomena by determining how a particular cause affects a particular outcome. This strategy is an effective tool in many academic, educational, and

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psychological fields, as it contributes to promoting a deep understanding of causal relationships and stimulating critical and analytical thinking.(Metwally, 2019, p. 183)

The cause and effect strategy is used to help students analyze how causes relate to outcomes in different contexts. It teaches students how to trace the relationship between influencing factors (causes) and the changes that occur as a result of these factors (effects). This includes understanding how changes in a particular cause can lead to specific effects, thus developing the ability to interpret events and predict future outcomes based on logical analysis (Kawafha, 2004, p. 54).

### **Cause and effect strategy objectives**

The cause and effect strategy aims to achieve a set of educational and teaching objectives that enhance students' understanding and help them develop analytical and critical thinking skills. The objectives of this strategy can be summarized in the following points: (Al-Kaabi, 2000, p. 109)

1. The strategy aims to help students understand how causes relate to outcomes. By identifying different causes and their effects on outcomes, students are able to see how certain factors can lead to specific outcomes, enhancing their ability to explain events clearly..
2. The cause and effect strategy encourages students to use critical thinking to analyze information. By focusing on how causes influence outcomes, students are able to evaluate information more accurately and make decisions based on logical analysis..
3. By understanding the relationship between causes and effects, students can apply this knowledge to solve complex problems. The strategy enhances the ability to identify problems, analyze potential causes, and come up with effective solutions based on causal understanding..
4. The strategy helps students learn how to predict future outcomes based on an analysis of current causes. By understanding how causes affect outcomes, students are able to predict how certain changes might lead to different outcomes..
5. The cause and effect strategy helps students to apply academic concepts in a variety of contexts. By understanding how causes and effects are related, students can use this knowledge in a variety of academic subjects and real-life situations..
6. The strategy encourages students to actively engage with the educational content. By analyzing cause-and-effect relationships, students interact more effectively with the course material, increasing their level of engagement and involvement in the learning process..
7. The cause and effect strategy helps improve students' communication skills by encouraging them to express how causes and outcomes are linked clearly and effectively. This helps develop their ability to present and analyse information in an organised and persuasive manner.. (Qatami, 2000, p. 83)

### **The role of the teacher in the cause and effect strategy**

The cause and effect strategy requires an active and effective role from the teacher to ensure maximum benefit from it in the educational process. The teacher's role in this strategy includes several main aspects(Al-Qatami, 2010, p. 42)

1. The teacher's role begins by explaining the concept of cause and effect strategy to students. He or she should explain how cause and effect are related and how to use this strategy to



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analyze information and events. The teacher can use practical examples to illustrate the relationship between causes and effects and enhance students' understanding of the concept.

2. The teacher designs learning activities based on the cause and effect strategy. This involves preparing exercises and learning tasks that help students practice analyzing causes and effects in different contexts. These activities may include case studies, research projects, or applied exercises.
3. The teacher plays an important role in guiding students as they use the strategy. The teacher should provide necessary guidance, ask guiding questions, and encourage students to think critically and analytically. The teacher can help students identify possible causes and expected outcomes through class discussions and individual guidance.
4. The teacher assesses students' understanding of the cause-and-effect strategy through ongoing assessments. This includes giving short tests, projects, or reports that evaluate students' ability to analyze and apply causal relationships effectively. Based on these assessments, the teacher can provide constructive feedback to improve students' performance.
5. The teacher should encourage students to use critical thinking when analyzing causes and effects. The teacher can ask analytical questions that encourage students to think about how different causes affect outcomes and how possible conditions can be changed.
6. The teacher provides support to students who are having difficulty understanding or applying the cause and effect strategy. This includes providing additional explanations, teaching resources, and individual or group support sessions to help students make the required progress.(Qarni, 2013, p. 457)

### **The role of the learner in the cause and effect strategy**

In the cause and effect strategy, the learner plays an active and central role in achieving the goals of this strategy. The learner's role requires active interaction with the content and enhancing analytical and critical thinking skills. The learner's role can be summarized in the following points:(Ghanem, 2002, p. 79)

1. The learner must identify and analyze the relationship between causes and effects in a variety of contexts. This includes understanding how a particular cause affects a particular outcome, and recognizing causal links between different events or factors. This requires an active role in examining information and applying logical analysis..
2. The learner is encouraged to use critical thinking to evaluate information and analyze causal relationships. This includes asking analytical questions about how causes influence outcomes, and providing a logical explanation for the relationships between different factors. The learner should be able to determine the validity and consistency of causal links.
3. The learner applies the concept of cause and effect in a variety of contexts, such as solving academic problems and real-life situations. This requires an active role in using causal analysis to understand problems and provide effective solutions based on an understanding of how different factors influence outcomes.(Al-Shammari, 2011, p. 167)
4. The learner participates in learning activities designed to use the cause-and-effect strategy. This includes working on practical exercises, case studies, or research projects that require

cause-and-effect analysis. Through active participation, the learner enhances his or her understanding and develops his or her skills in analyzing information..

5. The learner collaborates with classmates to exchange ideas and analyze information collectively. This includes participating in class discussions, working in groups, and exchanging ideas about how to connect causes and effects. These activities can help improve understanding and enhance communication skills..
6. The learner evaluates his/her performance and understanding of the cause and effect strategy. This includes reviewing the results of the analysis, identifying areas of strength and weakness, and providing ideas for improving performance. Through self-assessment, the learner can enhance his/her skills and develop more effective learning strategies.(Ghanem, 2002, p.88)

### **Cause and effect strategy assumptions**

The cause and effect strategy is based on a set of basic assumptions that support its effectiveness in analysis and learning. These assumptions include the following:(Alyan, 2008, p. 56)

1. The strategy assumes that there is a clear and direct relationship between causes and effects. In other words, it assumes that every effect has a specific cause that can be identified and analyzed. Understanding this relationship is essential to implementing the strategy effectively.
2. The strategy assumes that causes directly influence outcomes. That is, changes in the cause can lead to significant changes in the outcome. These assumptions support the idea that causal analysis can provide insights into how outcomes are influenced.
3. The strategy assumes learners' ability to analyze information logically to determine causes and effects. This requires critical and analytical thinking skills that help explain causal links and understand how different factors are related. (Salam, 2021, p. 79)
4. The strategy assumes that there is sufficient and appropriate data to analyze causes and effects. This requires accurate and comprehensive information about both causes and effects to apply the analysis effectively and obtain reliable results.
5. The strategy assumes that causes and effects interact continuously, and that changes in causes can lead to changes in outcomes in the short or long term. This assumption is based on the idea that influencing factors do not operate in isolation but rather influence and are influenced by each other.
6. The strategy assumes that understanding the relationship between causes and effects allows prediction of future outcomes based on an analysis of current causes. In other words, the learner or researcher can predict how outcomes will change if the causes are changed.
7. The strategy assumes that causal analysis can be replicated and validated across multiple experiments or observations. That is, relationships between causes and effects can be replicated and validated across different experiments or multiple data. (Abdul Qader 2018, p. 87)

### **Characteristics of cause and effect strategy**

The cause-and-effect strategy has a number of characteristics that make it an effective tool for analyzing information and understanding relationships between factors. These characteristics include:(Abbas, 2020, p. 76)

1. The strategy is based on the logical analysis of the relationships between causes and effects. This requires an understanding of how causes affect outcomes in a logical and systematic way, which enhances the ability to interpret information in a logical and thoughtful manner..
2. The strategy can include using visual tools such as mind maps or charts to illustrate the relationship between causes and effects. This visual illustration helps make causal connections easier to understand and makes information more clear and easy to absorb..
3. The strategy assumes that there is a dynamic interaction between causes and effects. That is, changes in one cause can lead to changes in the outcome in multiple and complex ways, requiring careful analysis to determine how changes in different factors affect each other..
4. The cause-and-effect strategy can be applied across a variety of fields and disciplines. Whether in the natural sciences, social sciences, or educational fields, this strategy can be used to analyze how different factors influence each other.(Saada, 2008, p. 235)
5. The strategy provides the ability to predict outcomes based on an analysis of existing causes. By understanding how causes influence outcomes, it is possible to predict how changes will occur if the influencing factors are modified..
6. The strategy allows for verification and replication of cause-and-effect analysis. Multiple experiments can be conducted or additional data collected to validate and confirm causal relationships through repeated observations and experiments..
7. The strategy focuses on accurately identifying causes and effects. These characteristics include understanding the factors that contribute to a particular outcome and how they affect the final result, which helps in organizing and analyzing information systematically. (Al-Saifi, 2009, p. 27)

### **Second: Previous studies**

According to the researcher's knowledge, there are not many studies that have addressed the cause and effect strategy except for the study (Zahraa, 2023).

#### **Zahraa Shaker Hamoud, 2023, The effect of the cause and effect strategy on the achievement of chemistry and the tendency towards self-learning among first-year middle school students**

The aim of the research is to identify the effect of the cause and effect strategy on the achievement of chemistry and the tendency towards self-learning among first-year middle school students. In order to verify the research objectives, the following two null hypotheses were formulated.

There is no statistically significant difference at a significance level of (0.05) between the average scores of the experimental group students who study according to the (cause and effect) strategy and the average scores of the control group students who study according to the usual method in the achievement test for the chemistry subject.



There is no statistically significant difference at a significance level of (0.05) between the average scores of the experimental group students who study according to the (cause and effect) strategy and the average scores of the control group students who study according to the usual method in the scale of attitude towards self-learning.

The researcher relied on choosing the experimental design with partial control in conducting the experiment, and the research sample amounted to ((60 students from the first intermediate grade, as the students were distributed into two groups, experimental and control, and equivalence was made between the two groups in some variables that may affect the research results by participating with the independent variable in the dependent variables, which are: (chronological age calculated in months, intelligence test, previous achievement in chemistry, previous information, scale of attitude towards self-learning), as for the research tools, the achievement test was prepared, which includes (40) multiple-choice items, and the scale of attitude towards self-learning, the scale (Aywas, (2002) was adopted, which consisted of (32) items with three alternatives, and the psychometric properties of the achievement test and the scale were verified after presenting it to a number of arbitrators, and the data were analyzed using the statistical bag(SPSS) The statistical results showed that the experimental group outperformed the control group in the achievement test of chemistry and the scale of attitude towards self-learning.

In light of the results and conclusions reached by the research, some of the following recommendations can be presented

1. Involving teachers in training courses on modern teaching methods, including the cause and effect strategy, which allows for the development of students' role in effective and positive participation during learning.
2. Encouraging chemistry teachers to adopt the (cause and effect) strategy in teaching chemistry at the intermediate, secondary and preparatory levels to prove its effectiveness in teaching the subject.
3. It is preferable to adopt the (cause and effect) strategy in teaching chemistry because it considers students a fundamental axis in the success of the educational process by achieving the goals of active learning and improving the level of their attitude towards self-learning..
4. Issuing booklets, folders and a teacher's guide on the most important modern teaching strategies and methods.

### **Wafaa Younis Mahmoud, 2019, Teaching Chemistry Using the Numbered Heads Together Strategy and Its Effect on the Achievement of Second-Year Intermediate Students and Developing Their Reflective Thinking**

The research aims to know the effect of using the numbered heads strategy together on the achievement of second-year middle school students in chemistry and developing their reflective thinking. To achieve the research objective, two null hypotheses were formulated, and to verify them, the research sample was selected from second-year middle school students for the academic year (2017-2018), with a total of (66) students. This sample was divided into two groups, one of which represents the experimental group and the other represents the control group, with (34, 32) students, respectively. The equivalence process was carried out

between the students of the two research groups. To achieve the research objectives, two tools were used, the first is an achievement test in chemistry consisting of (30) objective test paragraphs. The test was characterized by validity and reliability, as its reliability coefficient reached (0.81). The difficulty coefficient, discriminatory power, and effectiveness of alternatives for its paragraphs were also extracted, and they were all within the acceptable range. The second tool is the reflective thinking test, which consists of (20) objective paragraphs to measure reflective thinking skills (reflection and observation, detecting fallacies, reaching conclusions, providing convincing explanations, and proposing solutions). It was characterized by validity and reliability, as the reliability coefficient reached (0.83), and the discrimination coefficient was also extracted, and all of them were within the acceptable range. The results indicated the presence of a statistically significant difference at a significance level of (0.05) between the average scores of the students of the experimental and control groups in achieving the chemistry subject, and between the average scores of developing reflective thinking, in favor of the experimental group.

**Hassan Ali Abdul Jawad, 2015, The Impact of the Numbered Heads Strategy (NHT) in the achievement of literature and texts among fifth-grade middle school students**

The current research aims to identify the effect of the numbered heads strategy (NHT) in the achievement of literature and texts among fifth-grade middle school students. To achieve this, the researcher chose a sample of (48) students from the fifth-grade literature students who were chosen - intentionally - from the research community for the academic year (2013-2014). The choice fell on Tripoli and Dubai Secondary Schools for Boys due to the cooperation of the administration of the two secondary schools and their Arabic language teachers in implementing the experiment. To achieve the research objective, the researcher formulated the following null hypothesis: (There is no statistically significant difference between the average scores of students in the experimental group who study literature and texts using the numbered heads strategy, and the average scores of students in the control group who study literature and texts using the traditional method). The researcher statistically balanced the two experimental groups (research sample) in light of the approved experimental design (equivalent groups). Two equivalent groups were prepared in a number of variables (chronological age, Arabic language grade for the first semester, parents' educational level). Then, using the simple random method, the researcher distributed them to the research groups, with an experimental group that studied using the numbered heads strategy (NHT) and consisted of (23) students, and a control group using the usual method and consisted of (25) students. In order to achieve the research objective, the researcher prepared an objective multiple-choice test consisting of (30) paragraphs, the validity of which was extracted by presenting it to a group of experts and arbitrators. Its validity, reliability, difficulty factor, and discrimination power were confirmed. After the researcher prepared the research groups, teaching plans, and research tool, he implemented his research experiment on (3/4/2014).

**Chapter Three: Research Procedures**

**First: Experimental design:**

The experimental design is of great importance in research and studies because of its effective role in what it suggests to the researcher of observations that he must make and the method that he must follow, in addition to its suggestion of appropriate statistical tools and the method of analyzing the material that he collects, and the results expected to be obtained from the analysis (Al-Zubaie and Muhammad, 1981, p. 128). The researcher relied on the design of the non-random control group with a pre- and post-test, and Figure (1) shows that.

**Figure (1) Experimental design adopted in the research**

Test	Dependent variable	independent variable	Test	The group
After me	Achievement in the subject of the Holy Quran and Islamic education	strategycause and effect	tribal	empiricism
		_____		The officer

**Second: The research community and its sample**

**1- Research community:**

A scientific methodological term that refers to what the results of the study can be generalized to, whether it is a group of individuals, books, or school buildings, according to the subject area of the research problem. To choose a sample representative of the research community, the original community must first be identified.

The community of this research may be composed of: Fifth grade students In schools Secondary and preparatory Daytime in Baghdad Karkh First Education.

**Research sample:**

The researcher intentionally chose the Baghdad Karkh 1 Education Directorate to select the research sample from it.

**Third: Equivalence between the experimental and control groups:**

Although the researcher followed the random assignment in choosing the two research groups, the researcher was keen, before starting to apply the experiment, to ensure that the two research groups (experimental - control) were equal in the number of variables that previous sources and studies indicated that she believed might affect the results of the experiment through their interference with the independent variable, which negatively affects the dependent variable. She obtained The researcher obtained information on some variables (educational achievement of fathers and mothers and chronological age of the child). The Bat (From two sources: cards Students School with the help of management The school, and from the students themselves through an information form distributed by the researcher to them. The following is an explanation of the equivalences in the following variables:

1. Chronological age in months.
2. Parents' academic achievement.

3. Mothers' academic achievement.
4. Pre-test For achievement grades in the Holy Quran and Islamic education

#### **Fourth: Controlling extraneous variables:**

Educational literature has shown that the main goal of this process is to control a number of non-experimental variables in experimental studies, especially educational and psychological ones, to limit the impact of these variables, the effect of which may interfere with the effect of the independent variable on the dependent variable. The researcher tries to isolate their effects from the dependent variable, because the dependent variable is subject to the influence of several factors other than the independent factor. (Daoud, 1990, p. 259) These variables are:

##### **1- Associated incidents:**

What is likely to occur of accidents and incidents during the course of the experiment, as they have an effect on the dependent variables in addition to the effect resulting from the experimental variable (Al-Zubaidi and Muhammad, 1981, p. 95), and the experiment was not accompanied by any notable incidents that affect the course of the experiment.

##### **2- Experimental Extinction**

This means that the experiment was exposed to cases of transfer or interruption of attendance for some of the female students subject to the experiment, which would result in an impact on the research results (Al-Zubaidi and Muhammad, 1981, p. 98). This experiment was not exposed to cases of leaving, interruption, or transfer for students in the two groups, except for some individual cases of absence, which is a natural case that is almost equal in the two research groups.

##### **3- Sampling Technique**

The researcher resorted to the method of intentional selection in determining the two research samples in an attempt to limit the effect of the variable in showing those differences or not, in the research results, in addition to conducting statistical equivalence between the two groups in a number of variables whose interaction with the independent variable could have an effect on the dependent variable, in addition to the homogeneity of the students of the two research groups in the social and cultural aspects to a large extent thanks to their belonging to the same environment.

##### **4- Maturity and related processes**

Maturation and all the biological growth processes that the individuals in my two research groups might have been exposed to had no effect on the implementation and progress of the experiment.

##### **5- Statistical Regression:**

It is the tendency of extreme scores to move towards the middle of the distribution, and this affects the stability of the test; that is, we notice that the examinees obtain very high or very

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low scores upon the first application of the test, and then their scores decline towards the middle upon the second application of the test. (Al-Azzawi, 2007, p. 70).

#### **6- Measuring tool:**

The researcher made an effort to use standardized tools to measure the variables. She prepared a tool to measure Academic achievement in the Holy Quran and Islamic education It consisted of two tests, the first for pre- and post-measurement.

#### **Fifth: The impact of experimental procedures:**

##### **1- Research confidentiality:**

The researcher was keen on the confidentiality of the research in agreement with the school administration by not informing the students about the nature of the research and its objective in order to control all changes that might occur in the students' activity or their interaction with the experiment, which might affect the safety of the experiment and its results.

##### **2- Duration of the trial.**

##### **3- Study material:**

The study material was the same for both research groups, and consisted of a number of topics from the book. The Holy Quran and Islamic education.

**4- Distribution of shares:** This factor could be controlled by equal distribution of lessons between the two research groups.

**5- School building:** The school building is Baghdad Intermediate School for Girls. It was integrated in technical and scientific aspects and suitable for implementing the experimental procedures.

#### **Sixth: Experiment requirements:**

##### **I. General objectives: General Goals**

Planning any specific educational program requires defining a list of all the general objectives and behavioral objectives that the program seeks to achieve. General objectives are defined as the major, long-term, more comprehensive, and more difficult objectives, compared to specific objectives that cover the three aspects of learning: the cognitive (mental) aspect, the affective (emotional) aspect, and the skill (psychomotor) aspect. They are in the form of statements with no specific time period, and are described as strategic objectives linked to a general plan or a comprehensive educational philosophy for teaching, and are considered the basis upon which the judgments of the process of evaluating learners' learning are built. (Abu Al-Ezz Salama et al., 2009, pp. 63-64)

##### **II. Behavioral objectives: Behavioral Goals**

The behavioral objective clarifies the outcome or result that we seek to achieve from the learner at the end of a lesson or a set of lessons. The more clearly and precisely the behavioral objective is stated, i.e. in a sound manner, the more it will undoubtedly describe the nature of the outcome or change in behavior that will occur in the learner.

(Jaber et al., 2005, p. 317).



**1- Determine the cognitive content:**

The cognitive content expresses the information and knowledge contained in the scientific material, and it is the main tool for achieving the educational goals of any educational institution. It is provided to learners to help them achieve comprehensive growth. Therefore, it was necessary to organize and coordinate the cognitive content experiences in a way that achieves the desired goals of the proposed program (Al-Hila, 1999, p. 127).

**2- Determine teaching methods, strategies and techniques:**

Teaching strategies, methods and techniques are an important element of the proposed program, one of the main pillars of the success of the educational process, and a basis for achieving educational goals. Therefore, it is very difficult to separate the goals of the proposed program and its educational content from the methods and techniques used in teaching. (Madkour, 1998, p. 228)

**Activities: Activities**

Activities are one of the most important aspects that enrich and nourish the curriculum. Through them, the teacher is able to invest the learners' potential and latent talents in a correct and directed manner, while at the same time the learner finds in them an outlet for his mental, emotional, and skill-based skills. (Younis et al., 2004, pp. 129-131).

It prepares the way for the learner to build the educational material in his mind, acquire diverse experiences, and develop skills in the cognitive, emotional, and skill fields. (Al-Tamimi, 2009, pp. 187-188).

Towards achieving the desired goals, activities are everything that the learner participates in inside and outside educational institutions of work that requires mental, manual, or practical skills that return to him with more experiences that support his learning of various topics, and the activities are divided into classroom activities, non-classroom activities, and activities and exercises in the program that interspersed the educational topics, as the researcher enriched the cognitive content that was chosen with different activities appropriate to achieve the goals of the strategy followed.

**5- Teaching aids:**

It is known as a set of educational materials that are chosen, developed, or described by the educator to convey educational content, or access it, so that it transfers the learner from the reality of abstract experience to the reality of tangible experience, and helps in effective learning with less effort and cheaper cost in an exciting atmosphere and a desire for better learning. (Al-Hila, 1999, p. 222).

**6- Evaluation methods:**

After completing all the previous processes of planning, setting goals, choosing educational content, determining strategies, educational-learning experiences, and educational means that help him achieve the goals, the teacher must determine the method or methods through which all the work he and his students have done will be evaluated. Evaluation is one of the most prominent pillars of planning and implementing the educational program, and in an effort to

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ensure the percentage of achievement of the desired educational program goals, evaluation must be continuous, comprehensive, and diverse, and thus it falls into types according to the intended purpose.

1- **Preliminary (Tentative) Evaluation:**It is the assessment through which the amount of information that students possess can be identified before starting the research, in order for the teacher to ensure the scientific background of the learners. This assessment usually occurs at the beginning of the school year.

(Aziz and Maryam, 2015, p. 66)

2- **Formative (continuous) assessment:**This evaluation is conducted during the educational process with feedback to improve teaching and learning as well as to know the level of progress made by learners.

(Omar et al., 2010, p. 24).

C- **Summative (final) evaluation:** It is the evaluation process that shows the degree to which learners have achieved the main learning outcomes of the course.

#### **Seventh: Research tools:Search tools)**

The nature of this research requires the availability of two tools, one to measure creative writing skills, and the other to measure silent reading adequacy. The following is a statement of the procedures for preparing this tool:

1- a testAcademic achievementPre-post:

2- Formulating test paragraphs:

- **Honesty**Validity is one of the important psychometric properties that must be present in the test (tool). The researcher extracted two types of validity:

1- **apparent honesty:**It is that the appearance of the tool measures the content for which it was built, or that the tool is characterized by validity if its title and appearance indicate the purpose for which it was designed to measure.

(Abdul Majeed, 1999, p. 21)

2- **Content Authenticity:**It means the extent to which the scale items match the content, substance, or objective of the test; that is, the extent to which the test items represent the behavior sample that represents the behavior to be measured.

(Abdul Majeed, 1999, p. 22).

#### **Eighth: Implementation of the experiment**

1-Pre-experimental stage

2- The stage of applying the experiment:

**Ninth: Statistical methods:** The researcher relied on the statistical analysis program .spss For the humanities and social sciences in analyzing the results of its research.

**Chapter Four: Presentation and Interpretation of Results**

**First: Display the results**

After the researcher completed the research experiment according to the steps she indicated in the previous chapter, she analyzed the results she reached to know “the effectiveness of the cause and effect strategy in the achievement of fifth-grade female students in the Holy Quran and Islamic education subject” in addition to knowing the significance of the statistical differences between them, and then verifying the hypothesis. Yes Research and find out whether the research results support these hypotheses or not.

**In order to verify the null hypothesis that states that:**

There is no statistically significant difference at the significance level (0.05) between the average scores of the experimental group students who study according to the (cause and effect strategy) and the average scores of the control group students who study according to the usual method in the achievement test of the Holy Quran and Islamic education.

After correcting the students’ answer sheets, the arithmetic mean and variance were calculated for the two groups, as shown in: Table (2) where the average score was Students Experimental group (63.1) with a standard deviation of (4.33) While the average score of the control group students was (51,2) with a standard deviation of (3,67), and by using the t-test for two independent samples, it became clear that the difference between them was statistically significant at the significance level (0.05), as the calculated t-value was (7.21) and it is greater than the tabular T-value (2) and b Degree of freedom (58), and thus the first null hypothesis is rejected, meaning that:

There is a statistically significant difference at the significance level (0.05) between the average scores of the experimental group students who study according to the (cause and effect strategy) and the average scores of the control group students who study according to the usual method in the achievement test of the Holy Quran and Islamic education. In favor of the experimental group.

**Table (3) Significance of the difference between the average scores of the achievement test for students in the two groups (experimental and control)**

Significance level 0.05	T-value		degree of freedom	Standard deviation	Arithmetic mean	Sample	The group
	Tabular	Calculated					
statistically significant	2	7.21	58	4,33	63.1	30	empiricism
				3,67	51,2	30	The officer

**Second: Interpretation of the results**

Cause and effect strategy helps Students In understanding religious texts by linking events and the causes that led to these events. In the subject of the Holy Quran and Islamic education, this strategy can be used to analyze Quranic stories and Islamic history, which THelp Students To understand the lessons and morals drawn from these texts. For

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example, the student can study the reason for the revelation of some verses and how this affected their interpretation and understanding.

By using the cause and effect strategy, the student can develop critical and analytical thinking skills. This strategy enhances the students' ability to analyze the relationships between events and causes, which contributes to deepening their understanding of the concepts and principles of Islam. This strategy can be applied in studying Islamic historical events and analyzing how these events affected Islamic society and its development.

**Third: Conclusions** Based on the above, the researcher can summarize the results she has reached as follows:

- 1- The cause and effect strategy enhances students' understanding of the content of the Holy Quran and Islamic education material by linking events, causes and results, which helps in a deeper understanding of religious concepts and texts.
- 2- Applying the cause and effect strategy enhances students' critical and analytical thinking skills, as it encourages them to analyze the relationships between events and causes and their impact on outcomes, which enhances the ability to understand and analyze religious texts in more complex ways.
- 3- The cause and effect strategy is an effective tool for improving students' achievement in the Holy Quran and Islamic Education subjects by enhancing deep understanding, developing critical thinking skills, increasing interaction and participation, improving assessment, and supporting active learning and practical application.

**Fourth: Recommendations:** The necessity of using educational models in teaching and learning the subject The Holy Quran and Islamic Education Especially the strategy cause and effect Which has been proven effective through this current research.

**Fifth: Proposals:** The researcher proposes to complete her study by conducting the following studies:

- 1- Conducting a study similar to this study on other academic stages in Holy Quran and Islamic Education
- 2- Conducting a study similar to this study with other variables not covered in this study, such as (cognitive beliefs, logical thinking, cognitive exploration).

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