

# **THE LEVEL OF ARTISTIC IMAGINATION AMONG ART EDUCATION DEPARTMENT STUDENTS AND ITS RELATIONSHIP WITH THEIR ACADEMIC ACHIEVEMENT**

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## **Abstract:**

This study aims to investigate the level of artistic imagination among students of the Department of Art Education at the College of Basic Education, and to determine its correlative relationship with their academic achievement. To achieve the study objectives, the researcher employed the descriptive-analytical approach, specifically adopting the correlational design. The research population consisted of art education students in colleges of basic education. The fourth-stage students were purposively selected as the study sample, totaling (65) male and female students (13 males and 52 females).

To accomplish the research objective, the researcher constructed an artistic imagination scale consisting of (29) items, encompassing three primary dimensions of artistic imagination: (Primary Imagination, Perceived Imagination, and Transformative Imagination). The face validity of the scale was verified by presenting it to a panel of experts in art education and art teaching methodologies, adopting an 80% agreement rate as the criterion for item acceptance. All items met this threshold, confirming the scale's face validity. Construct validity, discriminating power, and reliability were established by administering the scale to a pilot sample of (100) male and female students.

Subsequently, the research tool was applied to the main study sample. The responses from the (65) completed questionnaires were scored, tabulated, and statistically analyzed using the Statistical Package for the Social Sciences (SPSS).

The results revealed that the study sample possessed a level of artistic imagination higher than the theoretical mean of the scale. Furthermore, gender had no significant effect on the level of artistic imagination between male and female students. The findings also demonstrated that

artistic imagination among the sample members has a strong, positive correlation with their academic achievement.

In light of these findings, the researcher drew several conclusions and recommendations, notably: the positive, direct correlation between artistic imagination and academic achievement confirms that imagination is not a marginal or supplementary variable; rather, it constitutes the underlying cognitive and affective infrastructure, and the overarching umbrella under which all specialized skills fall. Consequently, the student with a higher imaginative capacity achieves greater academic success, as they possess the cognitive tools necessary to translate theoretical facts and concepts into innovative practical products and teaching practices.

**Keywords:** Artistic Imagination, Art Education, Academic Achievement.

### **Introduction:**

Artistic imagination is considered the core of the creative process and aesthetic appreciation, and it's a trait that sets art teachers apart as generators of creativity and guides for innovation. It acts as the bridge between a mental idea and a tangible creation. Despite its importance, the actual reality of teaching art subjects in art education departments shows that pure cognitive knowledge dominates and is treated as the sole goal of the educational process. This has led to a teaching approach that relies on memorizing abstract facts without understanding their interpretive meanings or artistic dimensions.

Students in the Art Education department face a lot of difficulty in understanding what a work of art is and analyzing its technical methods, especially in courses that combine theoretical and practical teaching, as they require a high ability to read the relationships between elements and aesthetic properties.

Through the researcher's fourteen years of experience in university teaching, she noticed that the vocabulary for art education courses is presented as temporary information that ends once the exams are over, with an obvious neglect of developing artistic imagination skills. This was confirmed by the pilot survey results, which showed a noticeable weakness among students in this area. Limiting the student's connection with the subject to just the informational side without activating the powers of imagination necessarily led to artistic and academic output that lacks depth. This raises a fundamental question about the relationship between a student's artistic imagination skills and their actual academic achievement. From here, the urgent need arose to conduct a detailed survey study aimed at uncovering the level of artistic imagination among these students. This investigative procedure represents a real indicator of the effectiveness of the professional preparation program they are undergoing; if the program is capable of developing the necessary skills for the art education teacher on the cognitive, emotional, and skill levels, as well as in thinking patterns and artistic imagination, then it achieves its goal of preparing a creative, artistic teacher. However, if the impact is limited to temporary cognitive achievement that ends with the exams, then it calls for a reconsideration of the preparation mechanisms. Accordingly, the current research problem emerges in answering the following questions:

- What is the level of artistic imagination among students in the Art Education department?
- Does the level of artistic imagination differ among students based on gender (male, female)?
- Is there a correlation between the level of artistic imagination and academic achievement among students?
- And what type is this correlation?

### **The Importance of the Research**

The fundamental shift we are witnessing in today's era, along with the rapid technological advances, poses a big challenge for students in the Department of Art Education, as they are future educators preparing to face the changes of the future. Traditional knowledge alone may not be enough to keep up unless it is paired with 'artistic imagination,' the trait considered the main driver of creativity in all fields. Imagination is what gives the future teacher the ability to shape fresh visual visions and ensures that their artistic identity does not get lost amid modern technologies, but rather that these technologies are used as tools to serve their rich imagination.

Richardson (1994) points out that mentally imagining motor performance activates the same neural pathways as actual performance, which reduces the likelihood of mistakes, and that artistic imagination is not a secondary skill, but rather a driver of skillful performance and thinking.

Imagination in art education is not just "daydreaming," but rather the ability to envision the artwork in all its three dimensions in your mind before touching the material. Here, imagination acts as a mental draft that lets the student experiment with deleting, adding, and modifying things mentally, which saves physical effort and reduces technical mistakes. A lower level of imagination will necessarily lead to weaker skill performance and, consequently, lower achievement in the practical aspect. (Richardson, 1994)

Imagination is the ability to anticipate the outcomes of an artwork under different conditions (like changing the lighting, the material, or even moving the work into a digital environment), and this allows students to keep up with technological changes. A good imaginer isn't tied to just one tool; they have the flexibility to transfer their imagination from the physical artwork to digital art programs. (Smith & Anderson, 2023) Meanwhile, (Mayfield, 2020) argues that digital art doesn't eliminate imagination but actually demands it even more, because the absence of physical constraints in digital programs requires a 'disciplined and philosophical' imagination to guide the technology toward aesthetic meaning. (Smith & Anderson, 2023) (Mayfield, 2020)

The researcher believes that it doesn't stop there; it goes further. Imagination is seen as a tool to decode a piece of art. Students don't just see an artwork or a statue in front of their eyes—they imagine the philosophy and the message behind the lines and spaces. Imagination turns students' eyes from seeing just the surface to visualizing the depth and the relationships contained in the artwork, which helps them break down the idea, understand it, and grasp its meanings. This, in turn, gives students a greater ability to express their ideas and write their analytical opinions in a critical language that shows a deep understanding of what's going on around them, which reflects positively on their academic performance.

**Accordingly, the importance of the current research lies in the following points :**

**First: Theoretical Importance**

- The current research emphasizes establishing a theoretical foundation that links mental abilities and educational outcomes, considering them as an integrated system in which creativity cannot be separated from knowledge in the academic preparation programs for art education teachers.
- The current research provides a modern theoretical framework for artistic imagination, viewing it as the other side of thinking, in line with the modern trend of integrating mental processes into art education curricula.
- The current research focuses on artistic imagination as a distinguishing feature of the art education teacher and in our era full of technological changes and amid the transformation and development of art tools.
- It highlights the theoretical grounding of the function of artistic imagination and its shift from merely a mental image to an interpretive tool that helps learners understand complex artworks.

**Second: Practical Importance**

- It helps decision-makers and curriculum experts in art education departments evaluate the effectiveness of current academic and professional preparation programs in developing specialized skills (artistic imagination) among future teachers.
- It provides faculty members in art education departments with realistic results that encourage adopting developmental programs and instructional design focused on guided artistic imagination as alternatives to traditional teaching methods.
- It directs students' attention to an important aspect of their personality related to imagination as a distinctive trait and essential professional competence, ensuring academic excellence and the ability to face technical and aesthetic challenges when they enter the teaching profession.
- It opens new horizons for researchers to conduct studies based on a database and statistical results regarding the level of artistic imagination, which can be used to design enrichment or experimental programs aimed at enhancing students' skills in other artistic areas.

**Research Objectives:**

This study aims to:

1. Examine the level of artistic imagination among students in the Art Education Department.
2. Investigate the strength and type of the correlation between artistic imagination and academic achievement among students in the Art Education Department.

**Research Hypotheses:**

To achieve the research objective, the researcher formulated two null hypotheses as follows:

- 1 .There is no statistically significant difference at the 0.05 significance level between the average scores of the research sample on the artistic imagination test and the hypothetical mean.
- 2 .There is no statistically significant difference at the 0.05 significance level between the average scores of the research sample on the artistic imagination test according to gender (male, female).

3. There is no statistically significant correlation at the 0.05 significance level between artistic imagination and academic achievement.

### **Research Boundaries:**

The current research is defined by the following boundaries:

1. Spatial boundary: Departments of Art Education in the Colleges of Basic Education at the University of Misan and Al-Mustansiriya University.
2. Human boundary: Fourth-year students in the Department of Art Education / College of Education / University of Misan.
3. Time boundary: The first semester of the academic year (2025-2026).

### **Defining Terms**

Artistic Imagination: Defined by both

1. (Amin & Abdel Azim, 2018) as: 'A mental activity aimed at building new relationships between previously experienced visual elements and arranging them in innovative formats that reflect the learner's ability to predict the final form of the artistic product. It is a distinguishing feature that separates traditional mechanical performance from skilled creative performance'.
2. (Al-Atoum, 2019) as 'The ability to mentally rotate shapes and visualize them in three dimensions. It is a visual thinking process that precedes and accompanies artistic work, playing an intermediary role in turning abstract ideas into tangible forms, and is closely linked to the level of visual intelligence and academic achievement.'

The researcher defines artistic imagination operationally as: a system of visual mental processes that includes three dimensions (primary imagination, perceptual imagination, transformative imagination) practiced by students in the Department of Art Education. It is reflected in the ability to recall images, understand their meanings, and reshape them with flexible creativity. It is measured operationally by the total score a student gets on the artistic imagination test, which includes the following three dimensions:

## **Chapter Two**

### **Theoretical Background and Previous Studies**

#### **First: The Concept of Imagination**

Imagination is considered one of the higher mental processes that enable an individual to reshape previous perceptions by generating mental images or new ideas that go beyond the limits of direct reality. Imagination is not limited to recalling perceptions as they are; it goes further to reconstruct them in an innovative way, relying on skilled thinking characterized by flexibility and verifiability. Imagination is seen as a cognitive-emotional system in which mental processes, feelings, and sensations intertwine, making it a central tool in creative expression, deep understanding, and interacting with diverse learning situations. Through it, learners can build new concepts, generate multiple alternatives, and analyze relationships between concepts, contributing effectively to the development of reflective and creative thinking.

Imagination is seen as a complex cognitive process that relies on the accumulation of experiences and mental skills, which are used to achieve specific cognitive and creative goals. Its main function is to build mental representations, depending on information from the surrounding environment that the brain processes to form the raw material of thought. Memory is also considered a key source that feeds imagination with past images and experiences, which are then reorganized in new contexts. By having various mental and practical skills, a person can use imagination as an effective tool for developing creative thinking, solving problems, and constructing mental models with an innovative nature (Doro et al., 2005, pp. 410–411).

In the context of contemporary education, artistic imagination stands out as a key tool for developing students' abilities. Modern psychological studies indicate that nurturing imaginative skills helps enhance understanding, develop skills, support memory, and increase the ability to adapt to the outside world. Therefore, investing in imagination within the educational process is considered an effective way to foster creative thinking and build creative potential in learners.

Imagination is considered a permanent mental ability that produces images and reconfigures reality, while imagining is a momentary act or partial practice within that ability, meaning it is a manifestation of imagination (Al-Sawwaf, 2021, p. 1). That is, it is the production of images. Although imagining ultimately leads to creating new mental images derived from previous experiences, it remains closely linked to sensation and memory. From this perspective, the researcher sees that imagination in artistic creation in general, and directing in particular, is not just a technical tool, but its essence and a basic condition for creating an artistic experience that goes beyond the limits of reality toward broader symbolic and aesthetic spaces. When an individual engages in the process of imagining, they do not evoke images randomly; instead, they practice selection, arrangement, transformation, and interpretation until they arrive at a new image that carries a personal and distinctive character. It occupies a large part of mental activity from the early stages of development, as it contributes to shaping and developing thinking (Habib, 2000, p. 26).

The researcher concludes that imagination is a fundamental pillar that cannot be separated from the thinking process. In the artistic field, imaginative vision is closely linked to the mental activity that the learner engages in during their educational experiences. A learner who can activate their imagination has the ability to create symbols and images that carry originality and new interpretations. Since thinking, at its core, relies on active imagination that reshapes situations into innovative mental images, it is considered a complex mental activity that leads to a deeper understanding of reality. Through it, the learner can capture surrounding symbols and reinterpret them through mental mechanisms, producing mental formations that reflect distinctive artistic visions. Therefore, it's clear that imagination is not just a supportive tool; it is the main driver of mental processes and the mediator that transforms sensory perception into symbolic and aesthetic expression.

In this context, Liang and his colleagues (Liang, Chen, & Huang, 2012), who are all researchers in educational technology and personalized learning, added that they presented an important cognitive model in the study of artistic imagination. They explained that imagination is not just a

random mental ability, but rather a special cognitive structure, and it is used in designing interactive learning environments. Imagination in humans occurs through three dimensions:

- **Initial Imagination or Reproductive Imagination:** This refers to the ability to discover new and original ideas that are unfamiliar. It indicates the capacity to generate new and authentic ideas, relying on recalling mental images from past experiences. It reflects open-mindedness and creative boldness and is used to reconstruct situations or ideas that the individual has previously encountered.
- **Perceptual Imagination:** Understanding the essence of a phenomenon through sensing, intuition, and forming mental images, which helps in building meaningful mental pictures. It involves the mental perception of the essence of a phenomenon by utilizing senses, personal intuition, and the ability to shape ideas, through forming reality into a meaningful and aesthetic representation. It also concerns using the senses and emotions to create impactful artistic images.
- **Transformative Imagination:** This is the ability to reproduce concepts and knowledge in new contexts, enhancing symbolic thinking and educational innovation. It is the ability to crystallize abstract ideas and reproduce familiar concepts and knowledge in diverse and innovative contexts (Liang, 2012, p.1046).

The researcher sees this classification as one of the few models that link artistic and educational imagination, as it can be used in designing assessment tools, analyzing students' creative outputs, or building interactive learning environments that take into account individual differences in imagination styles according to specific dimensions. It's not just a free mental activity—it starts with recalling experience, then grasping its essence, and then transforming it into new contexts. This sequence makes imagination a tool for active learning, as well as artistic and cognitive creativity, and for designing interactive learning environments.

## **Second: Previous Studies**

The researcher mentioned several studies and research, some of which align with her variables and others with the methodology used, to serve as a reference for highlighting points of agreement and disagreement in the results, including:

### **1 .Study (Al-Atoum, 2019)**

The study aimed to explore the nature of the relationship between visual imagination ability and practicing skillful thinking. The study was conducted on a sample of 240 male and female students. The researcher used two measures: the Visual Imagination Scale and the Skillful Thinking Skills Scale. The results showed a strong positive correlation between the two variables, indicating that students with higher imagination abilities were more competent in making technical decisions and solving visual problems. The study also pointed out that there were no differences attributed to gender, confirming that imagination is a mental skill linked to academic training. (Al-Atoum, 2019: 210-235).

## **2 .Study (Hassan, 2022)**

The study titled 'Semiotic Analysis of Sculptural Works as an Approach to Developing Creative Imagination in Art Education Students' aimed to explore the analytical aspect as a tool for developing mental abilities. The research relied on the descriptive-analytical method and the experimental method. The proposed educational program included training students to break down semiotic symbols in contemporary sculptures. The results showed that students' understanding of the relationships behind form (signifier and signified) directly contributes to enriching their artistic imagination when creating their own works. The study confirmed that imagination stems from a 'visual database' built through continuous critique and analysis. (Hassan, 2022: 15-42).

## **3 .Study (Smith & Anderson, 2023)**

This study focused on virtual reality as a boost for artistic imagination in sculpture education. It looked at how using VR Sculpting programs affects learners' levels of imagination. The study used a comparative descriptive approach. The results showed that digital technology provided an 'unlimited' space for imagination, allowing students to envision sculptural forms that defy gravity, something not possible in traditional sculpture. The study indicated that this type of digital imagination develops mental flexibility in students and makes them more ready for future professional changes. (Smith & Anderson, 2023, p:112-129).

## **Chapter Three**

### **Research Methodology and Procedures**

This chapter includes a description of the research population and sample, as well as the measurement tools used. It also includes a description of the procedures followed in the research and how its statistical data were processed.

### **First: Research Method**

The researcher relied on the descriptive method and chose relational studies because it is more suitable for the nature of her research. Many studies have adopted it, and it is one of the recognized scientific research methods in educational and psychological sciences. These include correlational studies to discover the relationship between two or more variables in terms of the type of correlation (positive or negative) and the strength of the correlation (from the minimum limit (zero) to the maximum limit -1 or +1). (Ouda & Milkawi, 1992:116).

**Secondly:** The research community consists of the students of the Department of Art Education in the College of Basic Education at the University of Misan for the academic year (2025-2026), totaling (290) students, with (90) male students and (200) female students distributed across four levels as shown in Table (1).



**Table (1) Research population distributed by gender and academic level**

| s | Academic stage | Male | Female | Total |
|---|----------------|------|--------|-------|
| 1 | First          | 14   | 37     | 51    |
| 2 | Second         | 18   | 65     | 83    |
| 3 | Third          | 45   | 46     | 91    |
| 4 | Fourth         | 13   | 52     | 65    |
|   | Total          | 90   | 200    | 290   |

**Third: Research Sample:** The research sample is defined as the part of the population on which the study is conducted, chosen by the researcher according to specific rules that represent the population (Aziz and Anwar, 1990, p. 67). The researcher deliberately selected the research sample, consisting of fourth-year students in the Department of Art Education, numbering 65 students in total, with 52 female students and 13 male students, representing 22% of the research population.

#### **Fourth: Research Tools:**

**1. Artistic Imagination Scale:** One of the research requirements was to prepare a tool to measure the variable of artistic imagination. The researcher reviewed previous studies and research related to measuring artistic imagination and chose the scale developed by Liang and others (2012) because it fits the nature of her research and the Iraqi environment. It was used as a tool to collect data and information to measure the level of artistic imagination among fourth-year students in the Department of Art Education at the College of Basic Education / University of Misan. The scale consists of 29 items distributed across three dimensions (primary imagination, perceptual imagination, transformational imagination) according to a five-point Likert scale. The weights for the positive items were as follows: Always applies (5), Sometimes applies (4), Rarely applies (3), Does not apply (2), Never applies (1). Therefore, the highest score a student can get is 145, and the lowest is 29.

**2. Achievement Test:** The researcher used the students' average grades in the seventh (final) course exams during the first semester of the 2025-2026 academic year as an indicator of the academic achievement of the research sample individuals. The average is calculated using the weighted mean for the courses required for fourth-year students in the Department of Art Education during the first course, with their achievement averages ranging between 61 and 83 for the research sample individuals.

#### **Fifth: Tool validity to verify the validity of the scale.**

The researcher presented the scale in its initial form along with the list of dimensions to a group of experts and judges in the field of teaching methods and psychology. The researcher adopted an 80% agreement rate as a criterion for accepting the test items, and all the test items reached this percentage. Therefore, the test is considered valid for what it was designed to measure and is ready to be applied to the research sample.

**Sixth: Tool Reliability:** Reliability is defined as the degree of consistency or homogeneity between the results of two measurements in assessing a trait or behavior (Al-Nabhani, 2004:229). To calculate the test reliability, the researcher used the Cronbach's alpha equation, which measures the internal consistency of the scale's items. The reliability coefficient reached 0.80, which is high and considered good for the purposes of this study.

**Seventh: Applying the research tool:** On 12/11/2026, the researcher applied the research tool used to measure artistic imagination and corrected all the responses of the participants, who numbered 65, according to a correction key based on a five-point Likert scale. The scale is as follows: 'Always applies' (5 points), 'Sometimes applies' (4 points), 'Rarely applies' (3 points), 'Does not apply' (2 points), and 'Never applies' (1 point). Thus, the highest score a student can get is 145, and the lowest is 29.

### **Eighth: Statistical Methods**

The research data were processed using the Statistical Package for the Social Sciences (SPSS) program, which included the following statistical methods:

- One-sample t-test
- Independent two-sample t-test
- Pearson correlation coefficient
- Mean
- Standard deviation

## **Chapter Four**

### **Presentation and Interpretation of Results**

**First:** Presentation and interpretation of results. The research results will be presented and interpreted according to the sequence of the research objectives and hypotheses as follows:

1. To check the validity of the first hypothesis, which states that: there is no statistically significant difference at the 0.05 significance level between the average scores of the research sample on the artistic imagination test and the hypothetical mean. The researcher calculated the arithmetic mean of the scores of the research sample, which amounted to (126.127) with a standard deviation of (7.241). After using the one-sample t-test, the calculated t-value was (4.946), which is higher than the table value (2.000) and is statistically significant at the 0.05 level and with 63 degrees of freedom, indicating that the college students (research sample) have a higher level of environmental awareness than the hypothetical mean, as shown in Table (2).

**Table(2) The mean, standard deviation, and calculated and tabular t-values for the scores of the research sample individuals on the artistic imagination scale**

| Dimensions of imagination  | No. | arithmetic mean | standard deviation | hypothetical mean | Degree of free | The value of T |              | Level of significance 0.05 |
|----------------------------|-----|-----------------|--------------------|-------------------|----------------|----------------|--------------|----------------------------|
|                            |     |                 |                    |                   |                | Calculated     | The schedule |                            |
| Initial imagination        | 65  | 33.786          | 8.344              | 27                | 64             | 6.455          | 2.000        | statistical significance   |
| Perceived imagination      | 65  | 39.665          | 9.650              | 27                | 64             | 10.427         | 2.000        | statistical significance   |
| Transformative imagination | 65  | 31.545          | 6.220              | 27                | 64             | 5.799          | 2.000        | statistical significance   |
| Total artistic imagination | 65  | 126.127         | 7.241              | 81                | 64             | 49.465         | 2.000        | statistical significance   |

The researcher attributes this positive and statistically significant result in favor of the research sample on the Artistic Imagination scale as a whole, and in all its sub-dimensions, to the cumulative effect of the specialized academic and professional training undergone by fourth-year students in the Department of Art Education over four school years, which distinguished the students in the dimensions of artistic imagination as follows:

**1 .Initial and Perceptive Imagination:** The specialized academic courses (both theoretical and practical) that students took in areas like drawing, sculpture, design, art history, and aesthetics helped sharpen their visual and aesthetic sensitivity. These courses moved them from simple sensory reception to a deeper artistic understanding of the elements and formal relationships in their surrounding environment.

**2. Transformative Imagination:** This is the higher level of artistic imagination, where students excelled thanks to continuous practice and hands-on experience. It allowed them to recombine mental images, transform forms, and come up with new, unfamiliar visual and expressive solutions.

Moreover, students reaching the fourth stage represents the stage of full professional and educational maturity. They are not just receivers of technical knowledge; they are practitioners preparing to stand in the elementary and middle schools in Iraq to perform their professional and educational roles as art teachers. This awareness of future professional responsibility, along with direct engagement with teaching methods and practical education (application), naturally drives them to stimulate their creative energies and develop their artistic imagination, as it represents the main tool, they will rely on to simplify artistic concepts and foster creative thinking in their future students.

Building on that, the result shows that the knowledge and skill development of fourth-year students has achieved its goals in shaping an artistic-educational personality capable of

imagination, innovation, and expression with a refined human and aesthetic sensibility that aligns with the mission of art education.

**3. To check the validity of the second hypothesis**, which states that there is no statistically significant difference at the 0.05 significance level between the average scores of the research sample on the technical imagination test according to gender (male, female), the researcher calculated the average scores of the female students in the research sample, which was 126.9302 with a standard deviation of 6.759, while the average scores of the male students in the research sample was 124.400 with a standard deviation of 8.094. Using the t-test for two independent unequal samples, the calculated t-value was 1.298. When compared with the table value (2.000) at a 0.05 significance level and the corresponding degrees of freedom, it was found to be smaller than the table value. Therefore, the null hypothesis is accepted, and there is no significant difference in the technical imagination test between male and female students, as shown in Table (3).

**Table (3) The calculated and tabulated T-values for the scores of the research sample on the artistic imagination scale according to gender (males, females)**

| Sample          | No. | arithmetic mean | standard deviation | Degree of free | The value of T |              | Level of significance 0.05  |
|-----------------|-----|-----------------|--------------------|----------------|----------------|--------------|-----------------------------|
|                 |     |                 |                    |                | Calculated     | The schedule |                             |
| Male Students   | 13  | 124.400         | 8.094              | 63             | 1.298          | 2.000        | No statistical significance |
| Female Students | 52  | 126.9302        | 6.759              |                |                |              |                             |

The research results showed that there were no statistically significant differences in the level of artistic imagination (and its three dimensions) attributed to gender (male, female students). The researcher explains this result based on the following scientific and educational points:

**1. Equal experiences and a unified academic environment:** Fourth-year students (both males and females) have gone through the same academic and professional program in the Department of Art Education throughout their four years, receiving the same cognitive stimuli, visual experiences, and practical training in art workshops. This environmental and educational equality directly helped in refining artistic imagination skills and their dimensions (primary, perceptual, and transformative) at similar levels, which eliminated any individual differences that might be attributed to gender outside of the academic context.

**2. Similarity in cognitive and emotional maturity:** The absence of differences is also due to students (of both genders) reaching an advanced stage of balanced intellectual and emotional maturity at this age (end of university studies). At this stage, higher mental processes are fully developed, such as abstraction, visual synthesis, and the ability to break down shapes and aesthetically reconstruct them (transformational imagination). These are general human mental processes that don't vary much by gender but are more related to the level of mental maturity and continuous training.

**3. The uniqueness of the art specialization and shared motivation:** Students (both male and female) who enroll in art education show a common artistic talent, natural inclination, and similar aesthetic sensitivity from the start. As a result, the natural psychological differences between genders don't affect their aesthetic perceptions, since visual artistic thinking is a universal language and a means of expression that develops through practice, taste, and exposure to cultural art sources both on and off campus. This is available to both genders equally and with the same opportunities.

Based on that, the researcher concluded that artistic imagination is a cognitive and skill-based trait that can be acquired and developed through practice and systematic academic preparation. It is not linked to any specific biological or psychological characteristics related to gender. Art and beauty speak to human emotions in a general sense, which makes aesthetic and imaginative responses cross over gender differences among the participants in the study, who were fourth-year students.

**4.** To verify the third hypothesis, which states that there is no statistically significant correlation at the 0.05 significance level between artistic imagination and academic achievement, the researcher calculated the mean scores of the research sample, which amounted to 136.541 with a standard deviation of 11.43, and calculated the mean of their academic achievement, which was 71.331 with a standard deviation of 11.650. After using Pearson's correlation coefficient formula to find the correlation value, the correlation coefficient was 0.36. When compared to the tabular value of 0.24 at 62 degrees of freedom and a significance level of 0.05, it was found to be statistically significant, indicating a positive and meaningful relationship between the level of artistic imagination and students' academic achievement, as shown in Table 4.

**Table (4) The value of the calculated and tabulated Pearson correlation coefficient between the scores of the research sample individuals on the artistic imagination scale and academic achievement**

| Variables                  | No. | arithmetic mean | standard deviation | Degree of free | The value of T |              | Level of significance 0.05 |
|----------------------------|-----|-----------------|--------------------|----------------|----------------|--------------|----------------------------|
|                            |     |                 |                    |                | Calculated     | The schedule |                            |
| Initial Imagination        | 65  | 33.786          | 8.344              | 64             | 0.317          | 0.24         | statistical significance   |
| Perceived Imagination      | 65  | 39.665          | 9.650              |                | 0.410          | 0.24         | statistical significance   |
| Transformative Imagination | 65  | 31.545          | 6.220              |                | 0.339          | 0.24         | statistical significance   |
| Total Artistic Imagination | 65  | 126.127         | 7.241              |                | 0.368          | 0.24         | statistical significance   |
| Academic Achievement       | 65  | 71.331          | 9.650              |                |                |              |                            |

The research results showed the existence of a statistically significant positive correlation between artistic imagination (in its three dimensions) and the academic achievement of fourth-year students. The researcher attributes this result to the following reasons:

**1. Artistic imagination provides an organized framework for specialized cognitive and practical skills.** At this stage, artistic imagination is not just an isolated mental activity; rather, it is a true indicator of specialized competence and academic skill among fourth-year students. High academic achievement in art education departments is not limited to mere knowledge memorization, but requires higher-level skills in application, analysis, and creativity. Here, artistic imagination functions as the comprehensive framework and umbrella under which all artistic and educational skills fall; the higher-achieving student is better able to employ imagination (initial, perceptive, and transformative) to translate dry theoretical concepts into creative visual solutions in their practical projects, as well as in planning and designing art lessons.

**2. Dimensions of artistic imagination as drivers for academic achievement:** Each dimension of artistic imagination directly contributes to boosting students' academic performance. Initial and perceptual imagination gives students depth in appreciating and analyzing theoretical courses (like aesthetics, art criticism, and art history), which positively reflects on their knowledge gains. Transformative imagination, on the other hand, is the main tool for success in practical and applied courses (like drawing, sculpture, design, and practical education); it allows students to break down knowledge and reassemble it to produce innovative artistic and educational solutions, which is at the heart of high academic assessment in these subjects.

**3. Functional attachment to the future professional role:** Fourth-year students are about to graduate and are getting ready to take their places in primary and middle schools in Iraq. This awareness of the professional role and educational responsibility requires high performance competence. The positive relationship here shows that students who have a strong ability for artistic imagination are more passionate, better at understanding their academic material, and more prepared to transfer these experiences to young learners efficiently and teach them in innovative ways. This means that a high level of artistic imagination serves as both a motivator and an enabler for outstanding academic achievement and professional readiness.

Based on the above, the researcher concludes that the positive correlation between the two variables confirms that artistic imagination is not just an additional talent, but rather the underlying cognitive and emotional structure that supports academic achievement and professional excellence for art education students.

## **Secondly: Conclusions**

In light of the research results, several conclusions were reached, including the following:

1. Fourth-year students in the Department of Art Education (the research sample) have an artistic imagination level in its three dimensions (primary, perceptual, transformative) higher than the hypothetical average of the scale; this confirms that artistic imagination is a trait that can be trained and developed systematically over time, and not just a fixed innate talent.
2. The fact that the level of artistic imagination among the research sample is not affected by gender (male, female) suggests that shared cognitive and emotional maturity, motivation toward

the field, and equal educational opportunities have melted away the traditional psychological or biological differences between genders when it comes to the universal language of art and visual expression.

3. The positive and direct correlation between artistic imagination and academic achievement confirms that imagination is not a marginal or supplementary variable; rather, it is the underlying cognitive and emotional structure and the governing framework that encompasses all specialized skills. A student with greater imaginative ability tends to achieve more academically, as they possess the mental tools to translate facts and theoretical concepts into innovative outputs and practical applications.

4. It can be concluded that the academic achievement of art education students goes beyond just memorizing knowledge; it truly reflects their practical ability to turn aesthetic theories and concepts into tangible artistic outputs and successful teaching practices, with artistic imagination in its three dimensions being the main psychological and educational driver of this process.

### **Third: Recommendations**

In light of the research findings, the researcher recommends the following:

1. Including practical applications and mental activities in the curricula of art education departments that directly aim to stimulate higher levels of artistic imagination (especially transformational imagination). It is advised to move away from traditional rote learning and visual imitation methods in art workshops toward modern teaching methods and strategies (such as problem-based learning, inquiry-based learning, and visual thinking), as they are the main driver of students' imaginative abilities.

2. Reconsidering the tools used to assess students in specialized subjects (both theoretical and practical) so that evaluations are not limited to dry achievement tests. They should also include assessments of mental and aesthetic processes such as imagination and innovation, as well as the student's ability to transform abstract ideas into tangible visual and expressive solutions, in line with the positive correlational relationship discovered in this research.

3. Increasing the focus on training students (practitioners) on how to use artistic imagination as a teaching tool in the classroom, and passing these experiences to pupils, which helps develop their professional maturity and readiness for actual work after graduation .

4. Encouraging the committees responsible for developing school curricula in the Ministry of Education to adapt the current art education curricula to emphasize stimulating aesthetic imagination, perceptive observation, and visual transformation in school children, in a way that complements the skills that newly graduated art teachers have been trained in.

5. Organize ongoing training courses and regular workshops for art teachers and instructors still working in Iraqi schools, aiming to refresh their artistic imagination skills and show them how to integrate these skills into their lessons, making use of the academic expertise in education colleges to provide this knowledge and skill support.

#### **Fourth: Suggestions**

In continuation of the current research and to develop it further, the researcher suggests conducting the following studies:

- 1 .Investigating the correlation between artistic imagination among education college students and other variables such as: (digital visual culture, the desire to specialize, and creative thinking).
- 2 .Developing an educational program based on contemporary aesthetic awareness and its impact on enhancing artistic imagination among students of art education departments.
- 3 .The effect of an instructional design based on visual thinking strategies on developing artistic imagination and performance achievement among students of basic education colleges.
- 4 .The impact of teaching methods used by art education instructors, based on creative imagination, on acquiring aesthetic concepts and developing artistic taste among university students.
5. The effect of using digital art applications and generative artificial intelligence in enhancing levels of artistic imagination among students of art education departments.

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