

## **Benefiting from the Creation of Notan Art Designs in Training and Improving the Artistic Sense of Blind Women**

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### **Abstract :**

The response of human societies to disability and their tendencies towards the disabled has been varied and varied in successive historical stages. The blind are a group of people who have lost their sense of sight, but God has given them insight. They see with their hearts, read their feelings and speak with their minds. Moments with tenderness. Whereas the Notan Art has been an integral part of Japanese art, which has appeared in the work of many Japanese artists for many centuries, as it is based on the idea that the elements of darkness and light are equally important and need each other to exist where you cannot have negative space without positive space, vice versa.

**The research was conducted with** the aim of presenting innovative design proposals for the art of note and applying it to Islamic motifs while presenting it with modern artistic visions to improve the artistic sense of the blind, by training the blind blind category on clothing designs for the art of the notes with different materials and techniques in thickness and texture that were specially created for them, using rough touches To express darkness and dark color, and soft touches to express light and light colors, with a variety of colors that are suitable for non-blind people as well, by applying them to innovative clothing designs to improve their artistic sense by training them to recognize the touches of materials and technologies and know their names and also recognize the art of the notes and touches and their meaning In terms of shade and light, and identifying the opinions of specialists in the proposed research designs, and also identifying the degree to which the target group of blind women accepts the research designs carried out.

**The research followed the descriptive**, analytical, and applied approach, for its suitability for this research and for achieving its objectives.

**The research consisted of** two questionnaires (the first was to find out the opinions of specialists in the proposed designs, and the second was to find out the opinions of the blind consumers group on the implemented designs and the extent of their benefit from training on these designs). It also included a statistical analysis to measure several aspects of the proposed and implemented designs.

**The research found that** it is possible to produce designs for the blind women that fit this handicap and make them feel the color in their own way through touch, and to improve the artistic sense of the blind by training in the art of notes and various touches and techniques.

### **Key Words:**

Training , The Art of Notan, Artistic sense ,Blinds.

## Introduction:

Blind people face multiple obstacles to achieve their goals in life, and they use various systems of adaptation to solve these problems, including innovation, revolution, and rebellion. Positive change in behavior among the blind occurs and will continue due to their fight in order to obtain equal treatment with the sighted, and the use of methods has helped. There are many studies that have focused on the impact of disability on the personality of the disabled person, such as (Ikhlas Muhammad - 2016), which came up with several recommendations for official and governmental organizations and those in charge of psychological and social services for members of society, represented in the importance of coordination between all the relevant authorities aiming to provide integrated care for the hearing-impaired and the visually impaired, another study (Muhammad Al-Sayed-2007), which called for an attempt to find out the truth about some of the characteristics and personal characteristics of the blind that are related to his visual impairment.

Since the greatest impact of visual impairment is to reduce the individual's experiences, the most important role that educational and training programs provided to visually impaired people should play is to help them obtain the largest possible amount of information and perception by using the non-visual senses (especially auditory and tactile) and by sharing many experiences. Depending on the remaining visual abilities, the visually impaired should be encouraged to employ their remaining vision. (Mona El Hadidy-186-2000) Several studies have also focused on the work of many important and indicative programs for the visually impaired, such as (Muhammad Tawfiq-2019), which aimed to design a website available for use by the blind and visually impaired and to adhere to standards for access to web content, and the study (Fahd bin Saad, Saeed bin Muhammad-2016) ) Which focused on studying the learning difficulties of the blind, and emphasized (Iman Lotfy -2010-263) the need to provide an audio and audio library inside the university that includes many academic courses and multiple knowledge to satisfy the educational and psychological needs of the blind university student, with the need to transform the concept of the blind and those with special needs To those with special abilities that are free from barriers and obstacles, also the study of (Hanan Asaad -2014) focused on the visually impaired and examined the negative aspects of them so that the necessary counseling programs for such aspects could be made, the study of (AkramFathy - 2017) which concluded the validity of the Technology Acceptance Model (TAM) To investigate the effectiveness of support technology based on adaptive mobile learning applications to enable people with visual impairment to learn. (Awad Muhammad -2016-117) stressed the importance of working through the media on Public societal awareness, drawing the attention of people with disabilities to the importance of working to empower people with disabilities, and building their social and psychological capabilities, and so on. (Maryam Qadari-2016-a) stated that the visually impaired group has, throughout history, contributed greatly to enriching the scientific arena, especially the literary and linguistic ones, through their learning and providing them with what suits them in terms of methods, methods and educational strategies.

The study (Ikhlas Muhammad-2016) came to shed light on the impact of disability on the personality of the disabled person through his view of himself and the society's view of him. Some opinions confirmed that the disability may push its owner to work well, which is considered compensation for his sense of deficiency or deficiency, and the result is a creative work that may be matched or more than normal peers. The study (Ocean Bouzid, Boujlida

Hassan - 2011) mentioned the types of activities that are suitable for the blind, which must be practiced in order to develop physical fitness and mobility in particular, and to work on developing their capabilities and capabilities by developing other senses to take care of the general health of the blind. And the art of Al-Notan is one of the ancient and ancient original arts, as this art depends in its origin on the element of light and darkness, as the two elements are placed next to each other in order to work on the design of the shape, and the study (Rehab Rajab-2011-2) sought the possibility of Employing the principle of color contrast in fashion design to achieve distinct aesthetic values, and the two notes actually originated in the seventh century AD in Japan and China, and has been used throughout the ages and centuries, and was gradient in colors (<https://www.almrsal.com/post/785935> ) The study (Sarah Abdel-Hamid and others - 2018) came to use the art of notes to add a different aesthetic touch to clothes, and add new forms of women's clothing that serve Egyptian women and present them with new ideas that fit the continuous fashion changes, in an attempt to spread the different cultures of peoples. Based on the above, the researchers saw that the art of the note can be used as an original and ancient art to create innovative clothing designs for the blind category, and to apply it to Islamic decorations and by using a different method to implement the art of the note with the use of different materials in thickness and texture where rough textures were used to express darkness, dark color and soft touches To express light and light colors, with a variety of colors, which are suitable for the blind and non-blind as well, in order to improve their artistic sense by training them to recognize the touches of materials and techniques and to know their names and also to recognize the art of the notes and their touches and their meaning in terms of shade and light, to highlight the artistic and aesthetic capabilities of the art of the notes, Emphasizing the extent of interest in one of the special groups, interest in them is at the heart of making the future of society, which is useful in breaking the barrier of psychological isolation for the blind who puts himself in it, and it also helps him increase his confidence and self-reliance as a result of his merging with his peers, which develops their psychological tendencies and their mental and physical abilities.

### **Research Problem:**

- 1- What is the possibility of benefiting from the art of Notan by providing it with modern visions to make innovative design proposals suitable for the blind category to improve their artistic sense?
- 2- Are the materials used in highlighting the aesthetic and plastic artistic potentials of the art of notes in order to provide designs suitable for the blind category to improve their artistic sense?
- 3- What are the opinions of specialists on the proposed research designs?
- 4- To what degree does the target group of blind women accept the research designs implemented?
- 5- What is the effect of training on the art of Notan on improving the artistic sense of blind women?

### **Research Aim:**

- 1- Showing the aesthetic and plastic capabilities of Notan Art to present designs suitable for the blind category to improve their artistic sense.

- 2- Creating new plastic formulas in the implementation of Notan Art, using different materials in thickness and texture to denote the shadow and the light in Notan Art to suit the category of blind women.
- 3- Knowing the opinions of specialists in the proposed research designs.
- 4- Identifying the degree of acceptance of the research designs carried out by the target group of blind women.
- 5- Training the visually impaired group on Notan Art to improve their artistic sense.

### **Research Importance:**

- 1- Provides the visually impaired with some methods that help alleviate the pressures facing them, while getting rid of feelings of isolation and work on their integration into society.
- 2- Attempting to improve the services provided to blind women, which would develop their capabilities and allow them to accommodate them in institutions, which would affect the improvement of their level.
- 3- Opening new horizons for fashion designers and mannequins by using the art of notes to produce products that suit people with special needs.
- 4- Helping those in the garment industry to produce what is commensurate with the needs of consumers with special needs.

### **Research Hypotheses:**

- 1- There are statistically significant differences between the responses of the specialists in the designs implemented in terms of achieving the quality of the decorative design and the structural design.
- 2- Innovative design proposals for Notan Art can be submitted with modern artistic visions suitable for training for the blind category to improve their artistic sense.
- 3- There are statistically significant differences between consumers' responses in the designs implemented in terms of achieving the educational aspect of the blind women and the functional aspect.
- 4- Training in the Notan Art can be used to improve the artistic sense of blind women.

### **Research Limits:**

- 1- Time limits: the academic year 2019-2020 AD.
- 2- Human borders: The current study sample consisted of 15 blind female students from the Blind Center affiliated to the College of Islamic and Arabic Studies for Girls, Al-Azhar University, Kafr El-Sheikh.
- 3- Spatial boundaries: the Blind Center affiliated to the College of Islamic and Arab Studies for Women, Al-Azhar University, Kafr El-Sheikh. Research Methodology: The descriptive, analytical and applied approach was used, in order to suit this research and achieve the objectives.

### **Research Sample:**

The research sample included the following:

- 1- Specialists: their number is (11) and they are the gentlemen of the faculty of the Faculty of Home Economics, Al-Azhar University and the corresponding faculties, to get acquainted with their views on the proposed designs.

2- Consumers: a group of (15) blind female students from the Blind Center affiliated to the College of Islamic and Arab Studies for Girls, Al-Azhar University, Kafr El-Sheikh.

Search Tools:

- **Auxiliary Tools:**

- Books and scientific dissertations for use in the theoretical side of the research.
- Implementation tools used in the practical aspect of the research.

- **Basic Tools:**

- Questionnaire to find out the opinions of specialists on the proposed designs.
- A questionnaire to find out the opinions of blind consumers regarding the designs implemented.
- Statistical analysis to arrive at the results.

## Research Terms:

**The Art of Notan:** The term Notan is a Japanese word meaning "dark" and "light" and it refers to the amount of reflected light - or the mass of tones resulting from different color values with the harmony resulting from dark and light areas, whether colored or not, and whether applied It is in buildings or pictures or in nature and others. Arthur Dow-2014-7) Artistic sense: the impression made by our senses to everything beautiful in terms of form, color, organization, and according to the aesthetic value of the stimuli. (Shams Abdel-Azim-2010-18)

**Training:** It is an activity to transfer knowledge to a group or groups of individuals believed to be useful to them or is to transfer knowledge and develop skills, as it is a process aimed at transferring behavioral patterns, skills and habits necessary in order to raise the level of efficiency in performance and increase productivity. (Essam Haider-2020- 2)

**Blinds:** Visual Impairment is a weakness in the sense of sight that limits a person's ability to use it effectively, which negatively affects his performance and growth, and visual impairment is a weakness in any of the five visual functions, namely: central vision, bilateral vision, visual adjustment, and peripheral vision And color vision (Jamal Mohamed, Mona Sobhy-1969-2009).

**As for the blind person** is the one who has lost his vision completely or who can perceive light only, and therefore he must rely on other senses to learn, and this person learns to read and write through Braille, so the legally blind often have something of the ability to see, or what is called residual vision ( Residal vision), and as for the visually impaired, they are, legally speaking, people whose visual acuity ranges from 20/70 to 20/200 in the strongest eye after correction, and from an educational point of view, visual impairment is the inability to perform various functions without resorting to assistive optical devices Working on enlarging the written material (Jamal Muhammad, Mona Sobhi -2009-167).

### the theoretical side:

- **The art of the notan:** Notan is the idea that the elements of dark and light are equally important and need each other to exist, and that you cannot have negative space without positive space, and vice versa. Figure No. (1)



Figure No (1) a model for the art of Notan  
(<https://www.almrsal.com/post/786452>)

The symbol yin and yang illustrate the idea of note, an idea that has been an integral part of Japanese art for many centuries. In the work of many famous Japanese artists we find examples of interesting compositions using the idea of notan, and this includes painters like Kano Sansetsu, who have created an image across many The big screens, called Old Plum, show this in the dark hues of the earth and the disturbing tree, as they balance the negative space (or light areas) around them, and Sansetsu also puts dark and light elements to create a fun, harmonious composition. Figure No.



Figure No(2) Ancient Plum, written by Kano Sansetsu  
(<https://study.com/academy/lesson/japanese-notan-artists-history-designs.html>)

In another example from the early nineteenth century, Japanese artist TakakoIjai painted a picture of a tiger from bamboo, in which the curved, dark and light elements are balanced as they complement each other. Figure No. (3)



Figure (3) Portrait of tiger in bamboo by TakakuAigai  
(<https://study.com/academy/lesson/japanese-notan-artists-history-designs.html>)

In addition, Japanese calligraphy, or the art of fine writing, echoes the idea of notan, and Japanese calligraphy was often done in monochromatic ink wash and brushstrokes, resulting in an emphasis on darkness and light. (Arthur Dow-2014-94) The two notes originated in the seventh century AD in Japan, China and Morse for many centuries, and was used to refer to the hue of the color value. NOTAN is a Japanese word that consists of two parts: no, meaning dull, and tan meaning depth, intensity, and darkness, meaning the interaction of light and darkness. Artist Arthur Wesley Dow was interested in the arts of the Far East and studied in Paris the history of art and the pictorial structure in creating paintings for these arts, especially the so-called NOTAN design, especially at the beginning of the twentieth century, where the two notes were transformed into a formative educational system in the West by Arthur Wesley Dow (<https://drawpaintacademy.com/notan>)

**Uses of the art of notan:** The art of Notan is usually used in many mysterious situations and also in situations of tension, as it uses the upper light, through which photography and also the

evil characters are used, as for the low light it means the light of crime, which is the light that suggests fear and also tension, which is It is caused by the presence of shadows on the walls, as it is used in many other times to express deception and also to express confusion. The blue color in the art of the notes suggests lightness and also the imaginative atmosphere, and the purple color in the art of the notes denotes the world of dreams or the expression of sadness and other emotions, and the brown color is also the conservative color in this type of art, as for the color of death it is Black Color. (Dorr Bothwell and Mayfield-1991-9)

#### How to make Notan designs:

- Get a black square piece of paper.
- Fold the paper in half.
- Draw identical drawings on both halves.
- Finish off the design using scissors.
- Glue the hollow drawings on the outside of the square from two opposite sides. Figure (6) (The Comprehensive Arab Encyclopedia <https://www.mosoah.com/career-and-education>)



Figure (6) how to make the design of the notan

(The Comprehensive Arab Encyclopedia <https://www.mosoah.com/career-and-education>)

The most popular notation design techniques:

-Paper



cutting style

Graphic style

-Printing on cloth



Figure (7) months design methods the notan

(The Comprehensive Arab Encyclopedia <https://www.mosoah.com/career-and-education>)

In addition, these designs can be applied to various types of materials.

#### Attributes of the art of Notan:

- Simplicity, elegance, accuracy.
- Use only two colors, with their shades from dark to light. Only employ two elements: shapes and lines. (Dorr Bothwell and Mayfield-1991-9)

### • Visual disability :

There are many words in the Arabic language used to define a person who has lost his sight, such as the blind, the blind, the blind, the blind, and the infirm. (Ihab Al-Beblawy-2001-7), And the legal definition of visual impairment: A legally blind person - from the doctors' point of view - is that person whose visual acuity does not exceed 6/60 meters (200/20 feet) in the best of the eyes, or even with the use of eyeglasses. We find that caring for the visually impaired has become a tangible reality in terms of research that deals with them, and in terms of the services that must be available to them in various fields and fields with high quality, in the hope that they will lead a fruitful life. (Hazem Muhammad-2011-7)

**Visual impairment classification:** The visually impaired are classified into two main categories:

**The first:** the category of the blind (Blind) and applies to this category the legal and educational definition of visual impairment, and this category is called (Braille Readers): they are those who use their fingers to read.

**Second:** The partially sighted group, and this group can read using a magnifying device or eyeglasses, and the visual acuity of this category ranges from 70/20 to 200/20 feet in the stronger eye even with the use of medical glasses, and this category is called (magnifying speech readers) Large- Type Readers) who use their eyes to read while enlarging the words (TayseerMufleh, Omar Fawaz - 84 2010) And the visually impaired cannot acquire the different patterns of behavior that the sight acquires through visual imitation, because of his separation from the environment, and this is why he cannot behave the required behavior in social situations. His fear that he is an observer makes him anxious and tense in different situations. (Najda Muhammad, Najla Ibrahim- 2015-11) We find that the blind and the sighted are similar more than they differ, so the difference between them is that the blind face the conditions of daily life in somewhat different ways and methods, as a result of losing sight, and that the sighted or blind needs the help of others, but the traditional assumption is that the blind needs exaggerated help And extra protection. (Mona Sobhy - 2014 - 75)

**The practical aspect:** the art of the notan is one of the brilliant Japanese arts that depend on the harmony between the effect of shadow and light, through the formation of designs by employing shapes and spaces in a charming balanced pattern that combines the simplicity of the design and the depth of the effect, and two may not differ in the importance of the role played by the sense of sight, The visual impairment makes the person forced to rely on the two senses of hearing and touch, and this is what the two researchers relied on in this study in an attempt to improve the artistic sense of the blind, by training the category of the blind women on designs for the art of the two notes with different materials in thickness and texture, where coarse touches were used to express darkness and dark color And soft touches to express light and light colors, with a variety of colors, as they are suitable for the blind and non-blind as well, and to improve their artistic sense by training them to recognize the touches of materials and techniques and know their names, as well as the art of the notes and the touches and their meaning in terms of shade and light, by proposing a number (30 A design was presented to a group of (11) specialists, then (13) of the proposed designs were implemented based on the opinions of specialists, then the design was presented The implementers of the consumer died, who is the target group of (15) blind women, in order to find out the extent of their acceptance of the implemented research designs and to improve their artistic sense, by conducting a group



of sessions based on the senses of touch and hearing and according to the practical procedures, the two researchers presented the practical side steps, which are:

- Table No.(1): The proposed designs and their description.
- Table No. (2): General description of designs. - statistical analysis.
- Table No. (7): the models that have been implemented.
- Table No. (8): steps to implement a model.
- Sessions organized for visually impaired students (those of high determination) at the College of Islamic Studies, Kafr El Sheikh University.


The following is a detailed presentation of the practical side steps:

**Table No. (1) the proposed designs and their description**

Design No. (1)	Design No. (2)	Design No. (3)
  <p><a href="https://www.123rf.com/photo_3394949_set-of-floral-elements.html">https://www.123rf.com/photo_3394949_set-of-floral-elements.html</a></p> <p><b>Material:</b> Crepe (green).  <b>Technics:</b> Stitch Embroidery (White) - Chain Stitch Embroidery (Pink).  <b>Method of implementation:</b> Albatron.</p>	  <p><a href="https://www.pinterest.com/lbirkis/">https://www.pinterest.com/lbirkis/</a></p> <p><b>Material:</b> crepe (white - black).  <b>Technics:</b> Embroidery with ribbon and fine textures (white) - appliqué with coarse-touch tape (black). <b>Method of implementation:</b> Albatron.</p>	  <p><a href="https://www.pinterest.com/ibnat_abu_nukat">https://www.pinterest.com/ibnat_abu_nukat</a></p> <p><b>Materials:</b> Satin (gray-orange).  <b>Technics:</b> flat stitch embroidery (light gray), holographic seed stitch embroidery (dark gray).  <b>Method of implementation:</b> formation on the mannequin.</p>

<p><b>Design No. (4)</b></p>   <p><a href="https://images.app.goo.gl/5fDbKrX4vB7skUkZ6">https://images.app.goo.gl/5fDbKrX4vB7skUkZ6</a></p> <p><b>Material:</b> crepe cloth (white - black). <b>Technics:</b> plain stitch embroidery (white), appliqué in coarse-touch cloth (black). <b>Method of implementation:</b> Albatron.</p>	<p><b>Design No. (5)</b></p>   <p><a href="https://www.pinterest.com/pi/377528381264907142n/">https://www.pinterest.com/pi/377528381264907142n/</a></p> <p><b>Materials:</b> The upper (blues) is of ribbed lycra fabric (yellow), and the lower part (the pants) is of polyester lycra fabric (black). <b>Technics:</b> Compound branch stitching (white) and Compound branch stitching (dark green) bead embroidery. <b>Method of implementation:</b> Albatron.</p>	<p><b>DesignNo. (6)</b></p>   <p>(Mohiuddin Talo-2015-123)</p> <p><b>Material:</b> Cotton (white - black). <b>Technics:</b> chain stitch embroidery (white), coarse-textured scotch tape (black). <b>Method of implementation:</b> formation on the mannequin.</p>
<p><b>Design No. (7)</b></p>   <p><a href="https://www.123rf.com/photo_3394949_set-of-floral-elements.html">https://www.123rf.com/photo_3394949_set-of-floral-elements.html</a></p>	<p><b>Design No. (8)</b></p>   <p>(Eva Wilson -1999-75) <b>Materials:</b> Cotton (White) - Polyester Crepe</p>	<p><b>Design No. (9)</b></p>   <p><a href="https://url?sa=i&amp;source=images&amp;cd=&amp;ved">https://url?sa=i&amp;source=images&amp;cd=&amp;ved</a></p>

<p><b>Materials:</b> The blouse is linen (black) - gabardine (dark mauve). <b>Technics:</b> Appliqué in soft leather (white) - and thick grained rough-the-touch leather material (purple). <b>Method of implementation:</b> Albatron.</p>	<p>(Black). <b>Techniques:</b> Fine-touch and Burberry (white) forming - Coarse-textured (black) Scotch tape. <b>Method of implementation:</b> Albatron.</p>	<p>2=ahUKEwjTioC55o3nAhVx7eAKHSJIC2EQjhx6BAgBEAI&amp;url <b>Materials:</b> The upper cut and the sleeves are leather (navy) - the lower cut and the collar is Gogh (brown). <b>Technics:</b> laser cutting and discharging so that half of the decorative unit is emptied and the other is cut <b>Method of implementation:</b> Albatron.</p>
<p><b>Design No. (10)</b></p>  <p>(Eva Wilson- 1999-32) <b>Material:</b> Cotton (white - black). <b>Technics:</b> Applique in Soft Touch Leather (White) - Applique in Soft Texture (Black). <b>Method of implementation:</b> Albatron.</p>	<p><b>Design No. (11)</b></p>  <p><a href="https://rmze.cc">https://rmze.cc</a> <b>Raw materials:</b> Chamois (brick and oil). <b>Technics:</b> Appliqué in grainy rough leather material (white) - Appliqué in soft suede (black). <b>Method of implementation:</b> Albatron.</p>	<p><b>Design No. (12)</b></p>  <p>(Mohiuddin Talo-2015-123) <b>Materials:</b> Cotton (white - black - dark yellow). <b>Technics:</b> Molding using lint-coated wire strands (bright white) - lacy yarn (black). <b>Method of implementation:</b> formation on the mannequin.</p>

<p><b>Design No. (13)</b></p>   <p>(Mohiuddin Talo-2015-123) Materials: Crepe cape (light brown) - gabardine trousers (black). Techniques: laser cut for decorative units, use of soft-touch leather (white) - and coarse gabardine (dark blue). Method of implementation: Albatron.</p>	<p><b>Design No. (14)</b></p>   <p>(Eva Wilson- 1999-34) Materials: Suede (olive - beige). Technics: mosaic beadwork (gold). Coarse thread and brie (in shades of beige and brown). Method of implementation: Albatron.</p>	<p><b>Design No. (15)</b></p>   <p>(Zaki Muhammad Hassan-2014-37) Materials: Crepe Cardigan (Violet), sleeves, shoulder cross cut, Blouse Cotton (Light Gray), and Linen Pants (Dark Gray). Techniques: laser engraving, placing a white skin down on one side of the decoration - and laser burning on the other side. Method of implementation: formation on the mannequin.</p>
<p><b>Design No. (16)</b></p>   <p>(Eva Wilson 1999-45) Materials: Blouse, Cotton Lycra (White - Black) - Pants Gabardine (Black). Technics: Beaded Embroidery (White) - Tape and Coarse Texture (Black). Method of implementation: Albatron.</p>	<p><b>Design No. (17)</b></p>   <p><a href="https://www.emaze.com.com">https:// www.emaze.com.com</a> Material: Lycra wool. Technics: fine weaving with fine threads (gray - turquoise) - the pure fabric - coarse-touch threads (black - turquoise). Method of execution: pattern and pattern on the mannequin.</p>	<p><b>Design No. (18)</b></p>   <p><a href="https://www.pinterest.com/pin/610167449509833060">https://www.pinterest.com/pin/610167449509833060</a> / Material: soft and rough leather (white-black). Techniques: laser cut and mirrored materials. Method of implementation: Albatron.</p>

<p><b>Design No. (19)</b></p>  <p><a href="https://ziadwael2007/Islamic">https://ziadwael2007/Islamic</a> Materials: Wool (light brown) - Alkola and the belt is leather (dark blue). The techniques: laser engraving and placing soft-touch (white) leather and wool (dark blue) below the drilling area. Method of implementation: formation on the mannequin.</p>	<p><b>Design No. (20)</b></p>  <p>(Mohiuddin Talo-2015-123) Material: crepe (white - black). Technics: Folate (white) -Laser engraving and Roselin application (black). Method of execution: pattern and pattern on the mannequin.</p>	<p><b>Design No. (21)</b></p>  <p>(Eva Wilson- 1999-54) Materials: Suede (Gray and Burgundy). Techniques: molding using Cress strips. Smooth texture (white) - Scotch strips coarse texture (black). Method of implementation: formation on the mannequin.</p>
<p><b>Design No. (22)</b></p>  <p><a href="https://www.pinterest.com/pin/824158800530939129/?lp=true">https://www.pinterest.com/pin/824158800530939129/?lp=true</a> Material: slobet gabardine (white - black) - chemise cotton (white - black). Technics: Folate (white) -</p>	<p><b>Design No. (23)</b></p>  <p>(Muhyiddin Talo - 2015 - 133) Materials: Crepe Blouse (Dark Gray) - Crepe Pants (Dark Indigo Blue). Technics: leather applique (light gray) - machine embroidery</p>	<p><b>Design No. (24)</b></p>  <p>(Zaki Muhammad Hassan-2014-37) Materials: Plum (black and white). Technics: Shaping with Soft Touch Beads (white) - thick, coarse cordon strips (black). Method of implementation: Albatron.</p>



Application with black coarse gabardine. Method of implementation: Albatron.	(black). Method of implementation: Albatron.	
<p>Design No. (25)</p>  <p><a href="https://www.vectorstock.com/royalty-free-vector/arabesque-collection-for-design-vector-1043304">https://www.vectorstock.com/royalty-free-vector/arabesque-collection-for-design-vector-1043304</a></p> <p>Materials: The dress is gabardine (purple) - the rosaline blazer (green). Technics: Pile Stitch Embroidery Soft Touch (White) - Compound Branch Stitch Embroidery Coarse Texture (Violet). Method of implementation: Albatron.</p>	<p>Design No. (26)</p>  <p>(Kamil Al-Pope - 1988-191) Materials: Corsage (knitwear) - pants (cotton). Technics: shaping with fine leather (white) and coarse scotch strips black</p>	<p>Design No. (27)</p>  <p>(Muhyiddin Talo-2015-135) Materials: The dress is tamuda satin (purple) - the sleeve is chiffon (purple). Techniques: Shaping with beaded strips. Fine texture (white) - Exponent threads (black). Method of implementation: formation on the mannequin.</p>







<p>Design No. (28)</p>   <p>(Eva Wilson -1999-54) Material: crepe cloth (white - black). Techniques: molding using Cress strips. Smooth texture (white) - Coarse texture strips (black). Method of implementation: Albatron.</p>	<p>Design No. (29)</p>   <p>(Eva Wilson -1999-49) Materials: The blouse is gabardine (gray - brick) - the pocket is crepe fabric (black). Technics: lacy tape molding (white) - plastic zipper strips (black). Method of implementation: Albatron.</p>	<p>Design No. (30)</p>   <p>(MohiuddinTalo -151-2015) Materials: Alta Moda Top (Dark Purple) -Gabardine Trousers (Black). Technics: Simple Stitch Embroidery Soft Touch (White) - Compound Branch Stitch Embroidery (Black). Execution method: Blouse, Shaping on the mannequin, and the trousers.</p>
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Table No. (2) General description of designs:

Model	Women's clothing suitable for the blind and non-blind
Age group	18 - 30 years old
Decorations	Motifs from Islamic art
Art used to enrich the sensual side of the blind and the aesthetic side of the clothing	The art of the note depends on the contrast of colors and the contrast of the touches (according to the techniques used)

### Search tools:

1. A questionnaire about the possibility of presenting innovative design proposals for the art of Al-Nautan with modern artistic visions suitable for training for the blind category to improve their artistic sense (for specialists).
2. A questionnaire about the possibility of benefiting from the diversification of the art of note designs to improve the artistic sense of the blind (for consumers).

### First: Validation of the questionnaire:

**1-The veracity of the arbitrators:** The two questionnaires were presented in its initial form to the arbitrators, numbering (11), in order to express their opinions on the following: the suitability of the questionnaire axes to measure what was set for it, the extent of the clarity of the linguistic wording and the integrity of the expression, the comprehensiveness of the axes of

the questionnaire, the extent to which the statements belong to the axes or not The possibility of amending, formulating, deleting or adding new phrases to make the questionnaire more capable of achieving the purpose for which it was developed. The arbitrators expressed their opinions and comments, and in light of the arbitrators' agreement, the two researchers retained the statements that obtained an agreement percentage (80% or more) from the number of arbitrators. The necessary amendments were made in light of the opinions of the arbitrators. The questionnaire of specialists became final after the modifications of the masters were made. Consists of (11) phrases distributed on two axes (Appendix (1) form for evaluating the proposed designs for specialists), and the consumer questionnaire became final after making adjustments to the referees. It consists of (8) words distributed on two axes (Appendix (2) form for evaluating the designs implemented For the blind).

### **Second: Stability of the Questionnaire:**

First: Questionnaire of specialists: The two researchers calculated the reliability of the questionnaire with the Cronbach's alpha coefficient, and this was done on a sample consisting of (13 referees from specialized professors) and the results were as follows:

**1. With regard to the Cronbach alpha coefficient:** It is clear from Table (3) that the stability coefficients for each axis of the questionnaire ranged between **(0.807: 0.917)**, and the value of the alpha coefficient for the whole questionnaire was **(0.897)**. All of these parameters indicate that the questionnaire has a high degree of reliability to measure the quality of the current research designs due to their proximity to the correct one, and this indicates the validity of the scale for application.

**Table (3) the values of the coefficient of stability for each of the Espian axes as a whole**

The axes	the number of phrases	Cronbach alpha coefficient
Decorative design	5	0.807
Architectural design	6	0.917
The questionnaire as a whole	11	0.897

**Second: Consumer Questionnaire:** The reliability of the questionnaire was calculated by the Cronbach alpha coefficient, and the results were as follows:

**1- Cronbach's alpha coefficient:** It is clear from Table (4) that the reliability coefficients for each axis of the questionnaire ranged between **(0.818: 0.880)**, and the value of the alpha coefficient for the questionnaire as a whole was **(0.863)**.

All of these parameters indicate that the questionnaire has a high degree of reliability to measure the quality of current research designs due to their proximity to the correct one, and this indicates the validity of the scale for application.



Table (4) the values of the reliability coefficient for the whole questionnaire

The axes	the number of phrases	Cronbach alpha coefficient
The extent to which the educational aspect of the blind is achieved	4	0.818
The extent to which the functional aspect is achieved	4	0.880
The questionnaire as a whole	8	0.863

**Statistical parameters used in data analysis:**

Data were analyzed and statistical transactions were performed using spss program to extract the results. The following are some of the statistical methods used:

**1. Cronbach's alpha coefficient.**

**2. Weighted average and weighted percentage average:** The weighted weight of the answers for each of the statements is as follows: (1 - 1.67 (not appropriate), 1.68 - 2.35 (to some extent), 2.36 - 3 (appropriate)).

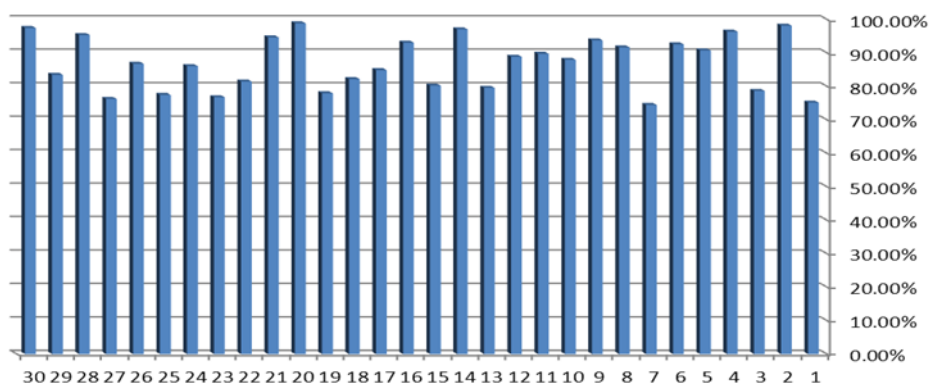
**3. Standard deviation.****4. One - Way ANOVA test.**

This part includes the results of the applied study in order to find out how to benefit from the art of Notan in providing designs for training blind women and improving their artistic sense

**First: Concerning the opinions of specialists:** The proposed designs were presented to a group of specialists, numbering 11 arbitrators, to express their opinions on the proposed designs through the questionnaire form (Appendix (3) names of the arbitrators).

**Table (5) shows the weighted average, the weighted percentage average, the standard deviation, and the arrangement of designs and their estimation according to the responses of the specialists for all axes**

Designs	Total weights	Weighted average	standard deviation	Percentile weighted average (Quality factor)	Arrangement of designs	Design level	Designs	Total weights	Weighted average	standard deviation	Weighted percentage level (quality factor)	Arrangement of designs	Design level
1	322	2.25	0.73	%75.1	29	To some extent	16	399	2.79	0.63	%93	9	appropriate
2	421	2.94	0.87	%98.1	2	appropriate	17	364	2.55	0.71	%84.8	18	appropriate
3	337	2.36	0.76	%78.6	24	appropriate	18	352	2.46	0.76	%82.1	20	appropriate
4	413	2.89	0.93	%96.3	5	appropriate	19	334	2.34	0.63	%77.9	25	To some extent
5	389	2.72	0.95	%90.7	12	appropriate	20	424	2.97	0.77	%98.8	1	appropriate
6	397	2.78	0.78	%92.5	10	appropriate	21	406	2.84	0.60	%94.6	7	appropriate
7	319	2.23	0.66	%74.4	30	To some extent	22	349	2.44	0.90	%81.4	21	appropriate
8	393	2.75	0.83	%91.6	11	appropriate	23	329	2.30	0.75	%76.7	27	To some extent
9	402	2.81	0.49	%93.7	8	appropriate	24	369	2.58	0.77	%86	17	appropriate
10	377	2.64	0.41	%87.9	15	appropriate	25	332	2.32	0.78	%77.4	26	To some extent
11	385	2.69	0.77	%89.7	13	appropriate	26	372	2.60	0.77	%86.7	16	appropriate
12	381	2.66	0.63	%88.8	14	appropriate	27	327	2.29	0.69	%76.2	28	To some extent
13	341	2.38	0.60	%79.5	23	appropriate	28	409	2.86	0.66	%95.3	6	appropriate
14	416	2.91	0.82	%97	4	appropriate	29	358	2.50	0.66	%83.4	19	appropriate
15	344	2.41	0.66	%80.2	22	appropriate	30	418	2.92	0.80	%97.4	3	appropriate



**Figure No. (8) shows the percentage weighted average of the proposed designs in relation to the opinions of specialists**

**Table (5) and Figure (8) illustrate:** Specialists' responses about the suitability of the proposed designs. It was found that (24) designs obtained an appropriate level with averages ranging between (2.36: 2.97) and the number (6) designs obtained a degree of fit to some extent with averages ranging between (2.23, 2.34), and it was They are ranked as follows Design No. 20 ranked first with a percentage (98.8%), followed by Design No. 2 ranked second with a percentage (98.1%), followed by Design No. 30 ranked third with a percentage (97.4%), followed by Design No. 14 ranked The fourth with a percentage (97%), followed by design No.

4 ranked fifth with a percentage (96.3%), followed by design No. 28 ranked sixth with a percentage (95.3%), followed by design No. 21 ranked seventh with a rate (94.6%), followed by Design No. 9 ranked eighth with a percentage (93.7%), followed by Design No. 16 ranked ninth (93%), followed by Design No. 6 ranked tenth with a percentage (92.5%), followed by Design No. 8 ranked eleventh (91.6%), followed by design No. 5 ranked twelfth with a rate (90.7%), followed by design No. 11 ranked thirteenth with a rate (89.7%). Concerning design No. 12 ranked fourteenth with a rate (88.8%), followed by design No. 10 ranked fifteenth (87.9%), followed by design No. 26 ranked sixteenth with a rate (86.7%), followed by design No. 24 obtained On the seventeenth rank by (86%), followed by design No. 17 ranked eighteenth with a percentage (84.8%), followed by design No. 29 ranked nineteenth with a percentage (83.4%), followed by design No. 18 ranked twenty with a percentage (83.4%). 82.1%), followed by design No. 22 ranked twenty-first with a rate (81.4%), followed by design No. 15 ranked twenty-second with a rate (80.2%), followed by design No. 13 ranked twenty-third with a rate (79.5%), followed by design No. Design No. 3 ranked twenty-fourth with a percentage (78.6%), followed by design No. 19 ranked twenty-fifth with a rate (77.9%), followed by design No. 25 ranked twenty-sixth with a rate (77.4%), followed by design No. 23 obtained The twenty-seventh rank, by (76.7%), followed by Design No. 27, ranked the twenty-eighth by (76.2%), followed by Design No. 1, ranked It is ranked 29th, with a percentage of (75.1%), followed by Design No. 7, ranked in the 30th and last ranking by (74.4%).




**Table (6) Analysis of variance to study the significant differences between the responses of the specialists to the proposed designs for each axis of the questionnaire and the questionnaire as a whole**

Questionnaire axes	The source of the contrast	Degrees of freedom	Sum of squares	Average of squares	F	Indication level
Decorative design	Between designs	29	512.536	17.674	88.180	Function at(0.01)
	Inside designs	360	72.154	0.200		
	Total	389	584.690			
Architectural design	Between designs	29	795.077	27.416	164.499	Function at(0.01)
	Inside designs	360	60.00	0.167		
	Total	389	855.077			
The questionnaire as a whole	Between designs	29	2538.844	87.546	162.328	Function at(0.01)
	Inside designs	360	194.154	0.539		
	Total	389	2723.997			


**Table (6) shows:**

- There are statistically significant differences at a significant level (0.01) between the responses of the specialists to the proposed designs in the first axis (the extent of achieving the quality of the decorative design), where the value of (P) 88.180 and the level of significance is less than the level of significance (0.01), which indicates the existence of Differences between designs in the extent to which the quality of the decorative design is achieved.
- There are statistically significant differences at the level of significance (0.01) between the responses of the specialists to the proposed designs in the second axis (the extent of achieving the quality of the structural design), where the value of (P) is 164.499 and the level of significance is less than the level of significance (0.01), which indicates the existence of Differences between designs in the extent to which the quality of the structural design is achieved.
- There are statistically significant differences at the level of significance (0.01) between the responses of the specialists on the proposed designs, where the value of (P) is 162.328 and the level of significance is less than the level of significance (0.01), which indicates the existence of differences between the designs in the questionnaire as a whole.

**Table No. (7) the designs that have been implemented**

<b>Design No. (20) and its first order, With an acceptance rate of 98.8%</b> 	<b>Design No. (2) and its second ranking, with an acceptance rate of 98.1</b> 	<b>Design No. (30) and its third ranking, with an acceptance rate of 97.4%</b> 
<b>Design No. (14) and its fourth order, With an acceptance rate of 97%</b>	<b>Design No. (4) and its fifth ranking, with an acceptance rate of 96.3%</b>	<b>Design No. (4) and its sixth ranking, with an acceptance rate of 95.3%</b>

		
<p><b>Design No. (21) and its seventh order, With an acceptance rate of 94.6%</b></p> 	<p><b>Design No. 9 and its eighth rank, with an acceptance rate of 93.7%</b></p> 	<p><b>Design No. (16) and its ninth rank, with an acceptance rate of 93%</b></p> 
<p><b>Design No. (6) and its tenth rank, With an acceptance rate of 92.5%</b></p> 	<p><b>Design No. (8) and arranging it The eleventh, with an acceptance rate of 91.6%.</b></p> 	<p><b>Design No. (5) and its twelfth ranking, with an acceptance rate of 90.7%</b></p> 

<p><b>Design No. (11) and its thirteenth order, With an acceptance rate of 89.7%</b></p> 		
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**Table No. (8): Steps to implement a design**

- 1- The design material is chosen in two different colors, whether white and black, which represents the traditional art of the note or two contrasting colors, light and dark, and this is taken into account during the design of the model from the beginning.
- 2- The design is formed on the mannequin or the pattern is made for it, or it is possible to combine the two methods, both according to what the design requires.



- **Putting motifs on the pattern**

- The decoration is depicted in different sizes and placed on the pattern in the case of using the pattern of the pattern, or the corona is lifted from the mannequin, then the pattern is made and papered for it and all the marks are transferred to it and then the decoration is placed on it in the appropriate place on the corsage in the case of using the formation on the mannequin in order to find the best size Suitable for pattern size.

- **Paste the Vaseline on the back of the decorations**

- Put Vaseline on the back of the place on which the decoration will be placed.
- The embossing units are cut with carbon on the fabric
- The decorations are executed in two contrasting colors and with contrasting techniques, so that the color of the decoration is light and soft to the touch on the dark material and vice versa.
- Executing decorations using techniques of contrasting colors in contrast to the colors of the material with a difference in texture.
- Weaving the parts of the model and reaching the final shape..



## Second: Concerning Consumer Opinions:

A group of sessions were organized for high-determination and visually impaired students at the Faculty of Islamic Studies, Kafr El-Sheikh University. The number of these lectures was 4 lectures for 15 students.

Session title	Session number
Identify different materials through touch, and know their names such as chamois, tulle, cotton, and others.	First
Knowing the different techniques to show the motifs through the difference in thickness and texture, such as embroidering with different stitches and printing with vulcanization, forming with ribbons and beads of different textures, shapes and sizes, and others.	the second
Learn about different arts in general and Nautan art in particular.	The third
Evaluating the implemented designs and expressing their opinions by answering the axes and items of the questionnaire..	The fourth



Table (9) shows the weighted average, the weighted percentage average, the standard deviation, and the arrangement of designs and their estimation according to the responses of consumers for all axes

Designs	Total weights	Weighted average	standard deviation	Percentile weighted average (Quality factor)	Arrangement of designs	Design level
1	341	2.84	0.88	%94.7	the fourth	appropriate
2	355	2.96	0.72	%98.6	the first	appropriate
3	338	2.82	0.64	%93.9	The fifth	appropriate
4	344	2.87	0.80	%95.6	the third	appropriate
5	332	2.77	0.52	%92.2	The sixth	appropriate
6	329	2.74	0.80	%91.4	Seventh	appropriate
7	321	2.68	0.74	%89.2	Ninth	appropriate
8	312	2.60	0.77	%86.7	eleventh	appropriate
9	351	2.93	0.83	%97.5	The second	appropriate
10	298	2.48	0.83	%82.8	Thirteenth	appropriate
11	326	2.72	0.70	%90.6	The eighth	appropriate
12	315	2.63	0.85	%87.5	The tenth	appropriate
13	303	2.53	0.56	%84.2	twelveth	appropriate

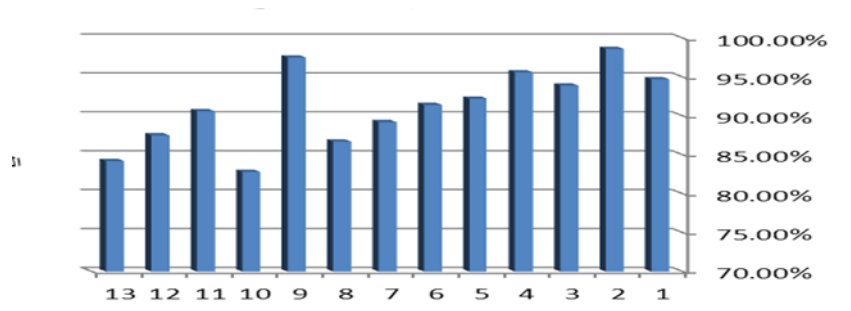


Figure (9) shows the weighted average of the implemented designs in relation to the opinions of consumers

**Table (9) and Figure (9) illustrate:** Consumers' responses about the suitability of the implemented designs. It was found that all the implemented designs obtained an adequate level with averages ranging between (2.48: 2.96) and their number (13) designs. Implemented design No. 9 was ranked second by (97.5%), followed by design implemented No. 4 ranked third with (95.6%), followed by design implemented No. 1 ranked fourth with (94.7%), followed by design implemented No. 3 obtained In the fifth order by (93.9%), followed by the design implemented No. 5 ranked sixth with a rate of (92.2%), followed by the design implemented No. 6 ranked seventh with a percentage (91.4%), followed by the design implemented No. 11 ranked eighth by (91.4%) 90.6%), followed by the implemented design No. 7 ranked ninth with



a rate (89.2%), followed by the design implemented No. 12 ranked tenth with a rate (87.5%), followed by the design implemented No. 8 ranked eleventh with a rate (86.7%), It is followed by the design implemented No. 13 ranked twelfth with a rate (84.2%), followed by the design implemented No. 10 obtained p To the thirteenth and last place, by (82.8%). **It has been observed** that the preference of designs for consumers depends entirely on the amount of difference in thickness and texture between the materials used to implement the techniques of Nautilus in a single design, so the more techniques used between them, the greater the contrast in thickness and texture, the more it is classified as more appropriate.

This is confirmed by the study (NajwaShukry and NajwaHegazy - 1995) that knowing the tangible needs of blind women and how they choose their clothes may have an effective impact on increasing the blind girl's self-confidence and embracing life and increasing her adaptation and social compatibility better.

**Table (10) Analysis of variance to study the significant differences between consumers' responses to the designs implemented for the questionnaire as a whole**

Questionnaire axes	The source of the contrast	Degrees of freedom	Sum of squares	Average of squares	F	Indication	Indication level
The extent to which the educational aspect of the blind is achieved	Between designs	12	88.513	7.376	34.015	0.000	Function (0.01)
	Inside designs	182	39.467	0.217			
	Total	194	127.979				
The extent to which the functional aspect is achieved	Between designs	12	49.887	4.157	26.031	0.000	Function (0.01)
	Inside designs	182	29.067	0.160			
	Total	194	78.954				
The questionnaire as a whole	Between designs	12	253.528	21.127	37.600	0.000	Function (0.01)
	Inside designs	182	102.267	0.562			
	Total	194	355.795				

**Table (10) shows:**

- There are statistically significant differences at a significant level (0.01) between the responses of consumers to the designs implemented in the first axis (the extent to which the educational aspect of the blind is achieved), where the value of (P) is 34.015 and the level of significance is less than the level of significance (0.01), which indicates the existence of Differences between designs in the extent to which the educational aspect of the blind is achieved.
- There are statistically significant differences at the level of significance (0.01) between the responses of consumers to the designs implemented in the second axis (the extent to which the functional aspect is achieved), where the value of (P) is 26.031 and the level of significance is less than the level of significance (0.01), which indicates the existence of differences Among the designs in the extent to which the functional aspect is achieved.

- There are statistically significant differences at the level of significance (0.01) between the responses of consumers to the designs implemented, where the value of (P) is 37,600 and the level of significance is less than the level of significance (0.01), which indicates that there are differences between the designs implemented in the whole questionnaire.

### **Interpretation of the results related to testing the validity of the study hypotheses:**

**1. Results related to the first hypothesis and its performance:** "There are statistically significant differences between the responses of the specialists in the designs implemented in terms of achieving the quality of the decorative design and the structural design."

#### **The results showed the following:**

- There are statistically significant differences at a significant level (0.01) between the responses of the specialists to the proposed designs in the extent to which the quality of the decorative design is achieved, where the value of (P) 88.180 and the level of significance is less than the level of significance (0.01), and the value of (P) is 164.499 in the range Achieving the quality of the structural design and the level of significance is less than the level of significance (0.01), which indicates the existence of differences between the designs in the extent of achieving the quality of the decorative and structural design.

**2. The results related to the second assumption of the study and its effect:** "Innovative design proposals can be submitted for the art of notes with modern artistic visions suitable for training for the blind category to improve their artistic sense."

#### **The results showed the following:**

- It is possible to benefit from the diversification of the art of notan designs to improve the artistic sense of the blind, and it has been shown that (24) designs obtained an appropriate level with averages ranging between (2.36: 2.97), and their arrangement was respectively as follows: Proposed design No. (20, 2, 30, 14, 4, 28, 21, 9, 16, 6, 8, 5, 11, 12, 10, 26, 24, 17, 29, 18, 22, 15, 13, 3), and (6) designs They obtained a fairly appropriate score with averages ranging between (2.23, 2.34), and their ranking was as follows: the proposed design number (19, 25, 23, 27, 1, 7).

- There are statistically significant differences at the level of significance (0.01) between the responses of the specialists on the proposed designs, where the value of (P) is 162.328 and the level of significance is less than the level of significance (0.01), which indicates the existence of differences between the designs in the questionnaire as a whole.

**3. Results related to the hypothesis of the third study and its effect:** "There are statistically significant differences between consumers' responses in the designs implemented in terms of achieving the (educational) aspect and the functional aspect."

#### **The results showed the following:**

- There are statistically significant differences at a significant level (0.01) between the responses of consumers to the designs implemented in the extent to which the educational aspect of the blind is achieved, where the value of (P) 34,015 and the level of significance is less than the level of significance (0.01), and the value of (P) 26,031 in the range The achievement of the functional aspect and the level of significance is less than the level of significance (0.01), which indicates that there are differences between designs in the extent to which the (educational) aspect is achieved.

**4. Results related to the hypothesis of the fourth study and its effect:** "Training in the art of notan can be used to improve the artistic sense of the blind."

**The results showed the following:**

- It is possible to benefit from the diversification of the art of notan designs to improve the artistic sense of the blind women, and it has been shown that all the designs implemented obtained an appropriate level with averages ranging between (2.48: 2.96) and their number (13) designs, and their arrangement was respectively as follows: Design Implemented No. 2, 9, 4, 1, 3, 5, 6, 11, 7, 12, 8, 13, 10).
- There are statistically significant differences at the level of significance (0.01) between the responses of consumers to the designs implemented, where the value of (P) is 37,600 and the level of significance is less than the level of significance (0.01), which indicates that there are differences between the designs implemented in the whole questionnaire. The results of the research hypotheses are consistent with the study (NajwaShoukry and NajwaHegazy - 2009), which was among the most important results of which were to develop proposals to help blind girls as well as their accompanying ones to choose and choose clothes appropriate to their condition and preferences, and the study (SaharAbd Al-Majeed - 2017), which emphasized the need to pay attention to taste For the blind, the necessity of the presence of braille designs for the blind in the markets, and the interest in teaching and training the blind to distinguish the colors of clothing (Thanaa Mustafa, Samira Saad-2019), the most important result of which was the effectiveness of training on the art of knitting, where the students were given knowledge and skills and the implementation of his clothing products from the exhaust of fabrics. Emphasizes the effectiveness of training.

### **Conclusion:**

- 1- The research showed the richness of the art of Notan and the possibility of applying it with a different thought to show the many aesthetic and plastic possibilities of this art.
- 2- It is possible to benefit from the diversification of the art of Al-notan designs, whether by using different materials of thickness, texture and techniques, to improve the artistic sense of the blind.

### **Recommendations:**

- Paying attention to ancient, authentic and ancient arts, and trying to benefit from them in a way that is appropriate for the modern era. Consideration must be given to studying the design purpose when using an art and how to employ it and apply it.
- The necessity of linking scientific research and making use of research results to benefit people with special needs.
- Encouraging specialists to offer various training program products to help the blind acquire many skills that qualify them psychologically and socially, by relying on the non-visual senses.
- Supporting blind care institutions with programs to strengthen and integrate blind women with society.

**Appendix (1) Form for evaluating the proposed designs (for specialists)**

the hub	m	ferries	Design No. ( )		
			Appropriate	Fairly appropriate	inappropriate
Decorative design	1	Fits the decorative unit with the execution in the technique of Nautin.			
	2	Fits the shape of the decorative unit with the lines of the apparel design.			
	3	Fit the decorative unit space with the wear design space.			
	4	The decorative unit can be implemented in more than one technique.			
	5	Decorating techniques correspond to the category of blinds.			
Architectural design	1	The design achieves unity between the basic elements (line - color - area - shape).			
	2	The design achieves unity between the principles of design (proportionality - balance - unity - echo).			
	3	The use of the art of notes helped make the design successful for its intended purpose.			
	4	The design achieves a kind of innovation, distinction and originality.			
	5	The design is in fashion.			
	6	The design is suitable to be produced in the local market.			

**Appendix (2) Form for the Evaluation of Executed Designs (for Blind Women)**

Evaluation items	Design No. ( )		
	Appropriate	Fairly appropriate	inappropriate
<b>First: The extent to which the educational aspect of the blind is achieved in terms of:</b> 1- Feeling the shape of the decorative unit . 2- Its sense of the difference in texture between the materials .used to implement the decorative unit. 3- Her sense of the units' integration (art of notes) . 4- Her sense of the different techniques used.			
<b>Second: The extent of achieving the functional aspect in terms of:</b> 1- Innovation in blindness clothing. 2- Suitable for fashion and general taste. 3- Suitable for women from 18 to 35 years old 4- It can be worn for non-blind people.			

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