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# The effectiveness of a technical skills development program in motivating Saudi women to start small projects

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## A R T I C L E   I N F O

## A B S T R A C T

The purpose of this study is to examine how effective a program is in improving technical skills, particularly in graphic design, for Saudi women who are interested in starting small businesses. An observation card was utilized and given to a group of Saudi women involved in small ventures. The research found the average performance of women engaged in emerging small and medium-sized businesses in Saudi Arabia, both before and after using the observation card that focuses on technical and graphic design skills, aimed at encouraging Saudi women to initiate small businesses. Additionally, it highlighted a statistically significant relationship, with a significance level of ($\alpha \leq 0.05$), between the performance scores of these women on the observation card and their individual skill levels. The study suggests increasing support for small business sectors and recognizes graphic design companies as potential small businesses worthy of assistance.

## 1. Introduction

The Saudi Vision 2030 emphasizes the crucial role of Saudi women in the nation's future, advocating for the enhancement of their talents and the utilization of their capabilities and providing them with opportunities to shape their futures and contribute to societal and economic development (Bafarasat and Oliveira, 2021). It sets forth objectives like reducing unemployment and enhancing the contributions of small and medium enterprises to the GDP. Within this framework, the tenth development plan of Vision 2030 includes a goal focused on women's empowerment, aiming to increase their participation in various developmental arenas. This goal calls for the increased involvement of civil society organizations in promoting women's participation in development, the establishment of women's cooperatives, enhanced representation of women in specialized committees, councils (both locally and internationally), the development of support services to enable women to perform their economic and social roles effectively, and the expansion of women's participation in the economy. Additionally, it seeks to create more job opportunities across different sectors to accommodate the growing number of women in the workforce, ensuring they live decently.

From the researcher's perspective, the empowerment of Saudi women depends on two primary factors: the support and resources provided by the state and the personal skills that women themselves develop particularly leadership and technical skills. Among these, technical skills, especially in small enterprises, are highlighted for their significance. Graphic design, for instance, plays a crucial role in boosting sales and marketing efforts. Designers, often referred to as communication designers, are integral to advertising, promotions, public relations, marketing, and animation. They also make significant contributions to print media, creating signage, posters, and other forms of visual communication to support business objectives (Topal, 2019; FAC, 2019). To sum up, the current research aims to evaluate the effectiveness of a training program in providing Saudi women with technical skills related to graphic design in order to increase their motivation to work in the field of small projects. The importance of this study is summed up in the expected contribution to achieving the Kingdom's Vision 2030 through the quest to empower Saudi women from a technical and skill point of view, which is one of the key ingredients that contribute to dealing with one of the major

challenges and difficulties facing the establishment and management of small projects, according to Abdullateef et al. (2023).

Many previous studies agreed on the importance of small projects due to their impact on increasing growth and achieving development. These projects attracted great attention in the Kingdom of Saudi Arabia due to their potential as a new tool for obtaining new revenues other than oil revenues (Abdullateef et al., 2023; Latha and Murthy, 2009). Despite the efforts exerted by numerous countries to increase income for individuals and families with low incomes through the establishment of small projects and to reduce the dependence on government jobs—this is what the Kingdom of Saudi Arabia has included within the National Transformation Program—there are still many problems facing the establishment of small projects, especially the leading ones. In order to reveal the aforementioned challenges, many studies have sought to identify them in a way that contributes to the development of final solutions. Among these studies is the study by Islam (2009), which identified the problem of lacking both previous experiences and adequate training, as well as the study by Farida and Setiawan (2022), which revealed the problem of lacking the presence of a clear competitive advantage that contributes to the entry of the small enterprise into the field of competition.

The research by Black and Spitz-Oener (2010) highlighted the crucial role of technical skills in enhancing the variety of services and techniques, which helps small businesses grow, increases their financial success, and fosters innovation in their products. They conducted a detailed study to examine the presence of technical skills among women who are engaged in or interested in starting small businesses in Saudi Arabia. Their research discovered that a key skill needed by these women is the ability to create designs for marketing their businesses. It was noted that design work was predominantly done by men and that hiring for design services could be expensive. Therefore, it became evident that women entrepreneurs could benefit greatly from learning graphic design. This skill not only presents an opportunity but also a challenge. Mastering graphic design could serve as a means for these women to start their own small businesses, thereby empowering them.

This finding is supported by Maier and Nair-Reichert (2008), who stressed the importance of integrating technical and computer skills. They pointed out how these skills are essential for connecting small businesses with the broader community. As a result, the direction of the current research is towards the adoption of a training program to provide Saudi women with the graphic design skills they need to manage and operate their small businesses.

The problem of the current research crystallized in answering its main question: How effective is a program for developing technical skills for graphic design in motivating Saudi women to set up small projects? Sub-questions emerge from the main question as follows:

1. Is there a statistically significant difference at the level of significance ($\alpha \leq 0.05$) between the average scores of women working in new small and medium enterprises in the Kingdom in the two applications, before and after the performance note card related to technical skills, to motivate Saudi women to establish small projects (as a whole) and for each of their skills?
2. Is there a statistically significant correlation at the level of significance ($\alpha \leq 0.05$) between the scores of women working in new small and medium enterprises in the Kingdom on the performance note card related to technical skills to motivate Saudi women to set up small projects (as a whole) and their scores on each of their skills?

## 2. Literature review

### 2.1. The importance and characteristics of technical skills

Acquiring and developing skills are important because they give the individual the ability to perform work easily and raise their level of proficiency to perform different jobs (Bandura, 2012). Skillful behavior or skill, in a more accurate sense, has the main characteristics that distinguish it, which are as follows:

1. Response chains: skillful performance includes a series of motor-type responses that include muscular activities, such as movements (fingers, hands, arms, legs, feet, and movements of speech organs). Each movement is considered a link between a stimulus and a response.
2. Sensory-motor synergy: skillful behavior is also characterized by synergy between sense organs (e.g., the eye and the ear) and the movement organs (e.g., the hand and the foot).

Thus, skillful behavior is the organization of chains of stimuli and responses into larger patterns (Han and Yin, 2016). When we talk about artistic ability, it means combining art with skill to create a new connection between these two areas. According to Fischer (2010), art and skill are closely linked. This is because creating visual or sculptural art involves learning how to use tools or machines. These forms of art also gain from being able to shape materials. However, art is more than a mere skill. While skill refers to the ability to perform tasks well, art goes beyond this practical aspect. Art adds beauty and meaning to these tasks (Fischer, 2010). Technical skills involve coordinated movements and actions to complete a specific task. This requires coordination of vision, hand movement, and thought. Our senses, like hearing and seeing, help coordinate our movements. These senses also help us become aware of how we organize and interpret information. This awareness leads to a high level of skill and

mastery, achieved through practice with materials and tools using proper techniques, resulting in consistent and quality work.

## 2.2. Graphic design skills techniques

Graphic design is defined as the production of a simple and uncomplicated creative work that can deliver information or a message to the eye in a wonderful, beautiful, and convincing manner without the need for language except for a small size (Walker, 2017). In general, the term graphic design refers to a number of technical and professional disciplines and fields that focus on visual communication and its presentation as follows:

1. Visual arts, including a different set of drawing, printing, sculpture, installation, and two- and three-dimensional techniques using a range of media.
2. Fashion and textile design, from creating and designing innovative ideas to bearing fruit in the wardrobe.
3. Photography, digital illustration, film editing, film, and television production.
4. Graphic design, including advertising, web design, traditional and digital design, print design, branding, identity, marketing, promotions, and packaging.

## 2.3. Elements of graphic design

Graphic designs include different groups of the following elements (Evans and Thomas, 2012):

1. Fonts of all kinds: straight, curved, wavy, thick, or thin as fonts allow designers to present the space or content on the Internet media and can also be used to direct the viewer or make other elements follow a strategic path to get the viewer.
2. Shapes: they provide a variety of ways to creatively fill the spaces on the Internet media, support the texts, and achieve a balance between the design and its elements to give structure and clarity, add value to the texts, and help them appear.
3. Color: it is a key component of any medium of the Internet; it can be used alone as a background, or it can be applied to other elements, such as lines and shapes, in addition to creating a blending within the artwork.
4. Texture: the design can appear tangible, smooth, or polished, giving a feeling of the touch surface through its visual appearance, adding a sense of depth, and enhancing it through the selection of visual material and the Internet from its pages and sections.

## 2.4. Principles of graphic design

Good graphic design has a number of principles, including:

1. Design unit: it depends on the link between the whole and the part, the part by the part, and the organization by placing the units and parts in an organized format to serve these means in general.
2. The visual center: it is the area that attracts attention first in the composition; this area is more important in comparison to the other elements.
3. Balance: it is how the design elements are distributed throughout the means of the Internet in terms of design to give a sense of visual equality in form, value, color, and so forth. It can be symmetrical or balanced equally or unequally, and the design elements can be used to create a balance in installation.
4. Harmony: it is the extent of appropriateness achieved from the interdependence of the design elements with each other within the design unit of the means of the Internet. It combines the composition with similar units in a pattern and balance that ignites the receiver with the integrated damage.
5. Contrast: it offers some change in value and the creation of a visual difference in the composition, as it shows the difference between the shapes. It can be utilized as a background to bring the elements to and from the front (Evans and Thomas, 2012).
6. Rhythm: it is a movement in which some elements are repeated regularly and gives a clear indication of how the eye moves between the elements in order to compose a harmonious and appropriate rhythm.

## 2.5. Graphic design tools

Graphic design tools have evolved and varied according to the nature and complexity of design, and they are divided into two main types (Walker, 2017):

1. Drawing boards are a traditional tool for drawing ideas that can be developed using other tools and techniques. Computers, by means of technology, have created new opportunities for the realization of creative vision. Specialized software can help add illustrations and enhance images and text.
2. Contemporary graphic designers must develop themselves so that they can absorb this development and use the tools and elements that help them produce graphic design in a good way. These tools help them create designs that are innovative in terms of form, functional in terms of content, and economical in terms of cost (Engholm, 2002).

## 2.6. Previous studies

Pant and Baroudi (2008) aimed in their study to provide a review of the importance of human skills in the success of project management and the apparent lack of focus on this in university education. This is the view of many prominent authors regarding the necessary human or "soft"

skills in project management. By conducting a review on the efficiency of project management literature and university education in preparing potential project managers in the field of human skills, the results revealed the need to achieve a balance between soft and hard skills in project management education in universities. It was concluded that teachers in this discipline must realize the importance of integrating aspects of greater human skills into their educational programs.

Ali et al. (2023) identified the effectiveness of a program presented through the subject of housing furnishing and beautification for the development of small projects by identifying the level of female students' awareness of small projects skills before implementing the program and measuring the difference in the level of awareness of small projects standards and social and economic level variables. The study utilized the descriptive analytical method and the experimental method and included a sample of 110 university students. The program was applied to the experimental sample. The results indicated differences between the sample members in the use of housing furnishing and beautification for the development of projects. There was a direct correlation between the axes of the awareness questionnaire about the skills of employing housing furnishing and beautification for the development of small projects. There were also statistically significant differences between the average number of degrees of the experimental research sample members before and after the application of the program in favor of the post-application.

Aldhorman (2022) aimed in his study to measure the effectiveness of a proposed program for developing graphic design skills for female students at Taif University by focusing on how to prepare a proposed educational program based on making use of the technical characteristics and advantages to develop graphic artistic performance among the female students. The fourth is in the College of Designs and Home Economics, Department of Electronic Drawing, at Taif University. The research method is based on descriptive, analytical, and experimental methods. The research found the effectiveness of the proposed program in developing design skills for students.

Enriquez (2020) compared the applications of graphic design and tended to shed light on two of the most famous graphic design applications, namely, Adobe Illustrator and Corel Draw. He also tended to reveal the similarities and differences between the two applications by comparing their work. The results of the study revealed that there are similarities in a number of tools, even if their names are different, which makes it easy to use either of them or move from using one application to the other.

Heideman et al. (2017) studied the effectiveness of an educational program that aims to develop the knowledge and skills of drawing Pattern Magic using multimedia through the development of educational courses used in teaching and implementing flat model drawing in line with scientific progress. The results demonstrated the effectiveness of the educational program using multimedia in raising the level of female students in the cognitive and skill tests in the clothing and textile department. The research also emphasized the importance of media and multimedia and their role in the educational process, which is consistent with a set of previous studies that dealt with multimedia.

Madian (2018) revealed the effectiveness of a proposed program to teach the basics of models for the implementation of printed women's clothing using digital technologies, by investing the capabilities of the Photoshop program in the work of models of women's clothing. The research adopted the descriptive approach and the experimental approach and yielded several results, including a proposed electronic program prepared to teach the foundations of models using Photoshop to make printed designs. The program has succeeded in terms of building a progressive presentation, meaning that there is effective use of the program, confirming the necessity of using multimedia within educational institutions and in self-education.

Tsortanidou et al. (2019) utilized computer technologies to develop innovative design skills for preparatory-stage students and conducted an experimental study to employ computer technologies in developing innovative design skills for middle school students. The research used the descriptive approach and the semi-experimental approach and reached a set of results, the most important of which was the effectiveness of an experimental study to employ computer techniques in developing innovative design skills for preparatory stage students in favor of the experimental group in each of the innovative thinking skills (fluency, originality, flexibility, and details).

## 3. Methodology

### 3.1. The study population

The study population is determined by all working and non-working Saudi women in the field of small and medium enterprises.

### 3.2. The sample

The study sample was a deliberate sample of Saudi women working or not working in the field of small projects. One hundred eight working women were included. The characteristics of the study sample were determined by the researchers in the light of the exploratory study as follows: increasing their level of leadership skills, having a low level of technical skills, the ability to use a computer, having the desire to acquire graphic design skills, during the period from 1/8/2021 to 31/10/2021, and being within the borders of the Kingdom of Saudi Arabia.

## 3.3. The research tools

The study tools represented in the performance note card were related to technical skills to motivate Saudi women to set up small projects. The card included 65 phrases, divided into the following axes: graphic design elements (7) phrases, basics of graphic design (10) phrases, graphic design methods (2) phrases, basic skills for graphic design (6) phrases, general skills of graphic design (24) phrases, and Photoshop skills (16) phrases, in addition to the training program for developing technical skills to motivate Saudi women to set up small projects.

## 3.4. Validity

The tools' reliability was established through construct validity, which assesses the consistency of the measures within the tool itself. This was done by calculating the Pearson correlation coefficient between the scores of each statement and its corresponding category. A positive correlation was found, significant at the 0.01 level, confirming that the tools are valid for measuring what they are intended to measure.

## 3.5. Reliability

The tools' reliability was determined using the Cronbach's Alpha method. This method yielded a Cronbach's alpha coefficient of 0.882 for the observation card focused on technical skills aimed at encouraging Saudi women to start small businesses. This value is considered high and acceptable, indicating that the tools are consistent and reliable for their intended use.

## 3.6. Tool correction

A five-level Likert scale was utilized so that the answer was complete (three marks), partial (two marks), or low (one degree), and the total score of the questionnaire was 195.

A) The General Objective of the Training Program:

- Introducing trainees to the concept and nature of technical skills, especially graphic design skills.
- Enabling the trainees to use the main tools of the program (Photoshop).

B) The Techniques Used in the Training Program:

- The researchers followed the experimental approach, which is defined as a deliberate and controlled change of the specific conditions of an event, noting and explaining the changes that occur in the event itself, in which the external variables affecting the dependent variable are adjusted (Shikalepo, 2021).

- The One Group Method, which is carried out on one group of individuals, was followed, making it easy to use, as this design does not require reorganization and distribution. The procedural steps for this method are summarized as follows (Han and Yin, 2016).

A pre-test is conducted on the group before the independent variable is entered into the experiment.

- The independent variable is utilized as determined and controlled by the researcher, with the aim of bringing about certain changes in the dependent variable that can be observed and measured.
- A post-test is conducted to measure the effect of the independent variable on the dependent variable.
- The difference between the pre-measurement and post-measurement is calculated.

C) List of Targeted Skills: The technical skills targeted by the program are exposed to two main axes as follows:

- The first is the skill of graphic design in general, and it includes the elements of graphic design, foundations of graphic design, design methods, basic skills of graphic design, and general skills of graphic design.
- The second is the technical skills related to the work environment of Photoshop, including downloading the program, using layers, using the moving element tool, adding effects to layers, using the eraser, adding texts, dealing with colors, drawing shapes, using the shear tool, and saving the final work.

## 4. Results and discussion

### 4.1. The difference between pre- and post-measurement of the graphic design skill of female workers in small projects

It is obvious from Table 1 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of the skill of graphic design elements in favor of the post-application.

### 4.2. The difference between pre- and post-measurement in applying the basics of graphic design to female workers in small projects

It is obvious from Table 2 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of the skill of basics of graphic design in favor of the post-application.

## 4.3. The difference between pre- and post-measurement of graphic design methods for female workers in small projects

It is obvious from Table 3 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of the skill of graphic design methods in favor of the post-application.

## 4.4. The difference between pre- and post-measurement in the basic skills of graphic design for female workers in small projects

It is obvious from Table 4 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of the basic skills for graphic design in favor of the post-application.

It is obvious from Table 4 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the

pre- and post-applications, of the basic skills for graphic design in favor of the post-application.

## 4.5. The difference between pre- and post-measurement of general skills in graphic design for female workers in small projects

It is obvious from Table 5 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of the general skills of graphic design in favor of the post-application.

## 4.6. The difference between pre- and post-measurement in all graphic design skills of female workers in small projects

It is obvious from Table 6 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of technical skills associated with graphic design (as a whole) in favor of the post-application.

**Table 1:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of the skill of graphic design elements

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 8.71 | 1.40 | 107 | 66.863 | .000 | 1.436 |
| After | 19.84 | 0.92 | | | | |

**Table 2:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of the skill of basics of graphic design

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 12.46 | 1.46 | 107 | 86.457 | .000 | 1.472 |
| After | 28.75 | 1.25 | | | | |

**Table 3:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of the skill of graphic design methods

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 2.89 | 0.62 | 107 | 35.112 | .000 | 1.320 |
| After | 5.59 | 0.63 | | | | |

**Table 4:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of the basic skills for graphic design

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 7.88 | 0.64 | 107 | 40.342 | .000 | 1.141 |
| After | 15.27 | 1.67 | | | | |

**Table 5:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of the general skills of graphic design

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 28.58 | 1.46 | 107 | 68.086 | .000 | 1.267 |
| After | 62.90 | 5.19 | | | | |

**Table 6:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of technical skills associated with graphic design (as a whole)

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 60.53 | 2.61 | 107 | 117.449 | .000 | 1.319 |
| After | 132.35 | 5.55 | | | | |

## 4.7. The difference between pre- and post-measurement in Photoshop skills of female workers in small projects

It is obvious from Table 7 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of Photoshop skills in favor of the post-application.

**Table 7:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of Photoshop skills

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 19.37 | 1.72 | 107 | 78.928 | .000 | 1.200 |
| After | 40.89 | 2.38 | | | | |

## 4.8. The difference between pre- and post-measurement in technical skills to motivate female workers in small projects

It is obvious from Table 8 that there is a statistically significant difference between the mean scores of women working in new small and medium enterprises in the Kingdom in both applications, the pre- and post-applications, of technical skills to motivate Saudi women to set up small projects (as a whole) in favor of the post-application.

## 4.9. The relationship between technical skills to motivate Saudi women to establish small projects and their grades in graphic design skills

The results of Table 9 indicate that there is a significant positive correlation at the level of 0.01 between the scores of women working in new small and medium enterprises in the Kingdom on the performance note card related to technical skills to motivate Saudi women to set up small projects (as a whole) and their scores on each of the skills. Researchers can accept the second hypothesis of the research, stating that "there is a statistically significant correlation at the level of significance ($\alpha \leq 0.05$) between the scores of women working in new small and medium enterprises in the Kingdom on the performance note card related to technical

skills to motivate Saudi women to establish small projects (as a whole) and their scores on each of the skills."

## 5. Conclusion and recommendations

### 5.1. Conclusion

The current study mainly aimed to reveal the effectiveness of the training program directed to the study sample of working and non-working women in small projects in the Kingdom. In order to motivate them to engage in small projects, and through the pre- and post-measurement and analysis of the results of the study, the following were found:

- The program had clear and tangible effectiveness in developing the technical skills of women from the study sample, as they acquired many of the technical skills needed to set up small projects, whether at the overall level of skills combined or for each skill separately.
- The reality of women working in small projects was related to the degree of technical skills of each of them. This was shown by analyzing the relationship between the degrees of women working in new small and medium enterprises in the Kingdom on the performance note card related to technical skills.

**Table 8:** The difference between the pre- and post-averages of the scores of women working in new small and medium enterprises in the Kingdom in the pre- and post-applications of technical skills to motivate Saudi women to set up small projects (as a whole)

| Application | Mean | Std. deviation | df | T | Sig | Blake ratio |
|---|---|---|---|---|---|---|
| Before | 79.90 | 3.24 | 107 | 142.128 | .000 | 1.290 |
| After | 173.24 | 6.07 | | | | |

**Table 9:** The correlation between the scores of women working in new small and medium enterprises in the Kingdom on the performance note card related to technical skills to motivate Saudi women to set up small projects (as a whole) and their scores on each of the skills

| Skills | Graphic design elements | Basics of graphic design | Graphic design methods | Basic skills in graphic design | General skills in graphic design | Photoshop skills | Technical skills (as a whole) |
|---|---|---|---|---|---|---|---|
| Graphic design elements | - | | | | | | |
| Basics of graphic design | .404* | - | | | | | |
| Graphic design methods | .283** | .857* | - | | | | |
| Basic skills in graphic design | .248** | .122** | .285** | - | | | |
| General skills in graphic design | .311** | .185** | .487** | .672** | - | | |
| Photoshop skills | .224* | .139** | .273* | .313* | .560** | - | |
| Technical skills (as a whole | .199** | .163* | .282* | .362** | .589** | .637* | - |

*Significant at level 0.05; **Significant at level 0.01

The study found a statistically significant difference, with a significance level of $\alpha \leq 0.05$, between the average scores of women working in new small and medium-sized enterprises in Saudi Arabia on evaluations related to technical skills

before and after using a performance assessment tool designed to encourage Saudi women to start small businesses. Specifically, the improvements were seen in the realm of application skills. This improvement can be attributed to the effectiveness

of a proposed training program that encompasses various methods aimed at equipping participants with graphic design skills. These skills include developing confidence, seeking advice, engaging in verbal and written communication, collaborating with others, and accepting constructive feedback on their work. Additionally, the program raises awareness about handling the elements of graphic design, understanding its fundamentals, learning design methods, and acquiring essential general skills. As a result, participants reach a certain level of proficiency in graphic design, which they can utilize in marketing or designing for small businesses. The results of the current research agree with those of a study by Aldhorman (2022) in terms of the program's success in developing graphic artistic performance skills. They also agree with the results of a study by Enriquez (2020), which revealed that there are similarities in several tools, even if their names are different, which makes it easy to use any of them or move from one application to another. Moreover, the study by Heideman et al. (2017) demonstrated the effectiveness of the educational program using multimedia in raising the level of female students in the cognitive and skill tests in the clothing and textile department. The research also emphasized the importance of multimedia and its role in the educational process, which is consistent with a set of previous studies that dealt with multimedia. Furthermore, the study by Madian (2018) revealed the effectiveness of a proposed program to teach the basics of models for the implementation of women's printed clothing using digital technologies by investing the capabilities of the Photoshop program in the work of models of women's clothing. In addition, the study by Tsortanidou et al. (2019) emphasized that the effectiveness of an experimental study to employ techniques and computer technologies in developing innovative design skills for middle school students was in favor of the experimental group in each of the creative thinking skills (fluency, originality, flexibility, and details).

There is a statistically significant correlation at the level of significance ($\alpha \leq 0.05$) between the scores of women working in new small and medium enterprises in the Kingdom on the performance note card related to technical skills to motivate Saudi women to set up small projects (as a whole) and their scores on each of the skills.

The results are in general agreement with the findings of the study by Tsortanidou et al. (2019) on the effectiveness of using computer technologies in developing innovative design skills by taking advantage of the capabilities provided by the Adobe Photoshop program, which also enhanced the innovative thinking skills of the study sample members. The study by Pant and Baroudi (2008) referred to the importance of human skills, especially technical ones, in the development of the thought of managing small, medium, and large projects alike.

## 5.2. Recommendations

We recommend preparing training programs to enable women to use graphic designs in designing artistic works and to increase their capabilities in the management and marketing of small projects. We also recommend focusing on training programs that develop the skills of entrepreneurship for small projects; expanding support for the fields of small projects; considering design companies, especially graphic design, to be one of the small projects that deserve support; and supporting women's entry into the field of graphic design and not limiting this job to men.

## Compliance with ethical standards

## Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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