

EFFECT OF USING DIFFERENTIATED INSTRUCTION STRATEGIES FOR HISTORY INSTRUCTION ON THE DEVELOPMENT OF 8TH-LEVEL FEMALE STUDENTS' POSITIVE THINKING SKILLS

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Introduction

Currently, the world is witnessing an acceleration in the volume and type of knowledge, with changes in all fields, including educational instruction, which needs to evolve continuously to keep pace with such challenges and future development requirements. Therefore, the educators interest in the teacher and developing and diversifying of his teaching methods to consider differences between learners in abilities, tendencies, attitudes and readiness to achieve effective learning for all.

Differentiated instruction is a modern strategy that is in demand by educators. It is considered a priority for improving the educational process, as confirmed by the results of previous studies conducted in different environments at different educational levels to determine the effectiveness of not only using differentiated instruction strategies to achieve certain educational process outcomes but also identify differences among learners in terms of needs, previous knowledge, intelligence, and preferred learning styles (Al-Jaafari and Al-Buhairi, 2021; Najdi and Al-Ghamdi, 2020; Al-Tamimi and Al-Ghamdi, 2020).

Al-Banna et al. (2021) define differentiated instruction strategy as “a set of various methods, means and activities used by teacher within instruction process to meet all students’ different needs by dealing with each level in an appropriate manner, to achieve equal learning opportunities and improve educational level for all students” (Al-Banna et al., 2021: 459).

Abdul-Rahman (2021) and Al-Harthy (2021) contend that differentiated instruction is based on constructivist theory and intelligence studies conducted by educational and

psychological scientists. It also relies on several assumptions, the most significant of which is that students differ from each other in terms of previous experiences, abilities, inclinations, characteristics, talents, trends, and learning methods. Teachers are unable to reach all learners' required learning level through a single instruction method, as there is none that suits all learners; differentiated instruction, however, provides an appropriate learning environment for everyone.

Further, Al-Harthy (2021) reveals that differentiated instruction contains a set of areas and elements that constitute instruction to help educators understand the differences between learners with differing abilities, tendencies, trends, and learning styles. Differentiated instruction can be achieved through objectives, content, processes, products, learning environment, assessment methods and tools, and the use of technology, methods, outputs, classroom tasks, and homework. Both Abdul-Rahman et al. (2021) and Smeeton (2020) noted that justifications for using differentiated instruction include the nature of students—who do not follow a single learning method, due to the various differences that affect their learning ability; human cognitive theories and learning methods, which confirmed the findings of studies conducted on brain functioning and learning methods; and achieving educational process objectives. Instruction diversification is required to shift the educational process focus on to learners. It also raises learners' achievement and motivation levels while contributing to overcoming educational problems such as classroom density, lack of capabilities, and classroom decorum.

Al-Harthy (2021), Al-Banna (2021), and Al-Othman (2021) indicate that differentiated instruction takes many forms, including instruction according to the multiple intelligences theory, which dates back to the American psychologist Howard Gardner in the early 1980s and emphasizes lesson provision according to students' preferences and diverse intelligences including linguistic, verbal, mathematical, logical, visual-spatial, musical, physical, dynamic, interpersonal, personal implicit, and natural intelligences. In addition, instruction was imparted according to different learners' styles: auditory, visual, kinesthetic, and sensory. This approach reflects an interest in educating students in a manner similar to their own style. Cooperative learning is a form of differentiated instruction that takes into consideration task organization and distribution according to students' mental interests and favorite representations.

Further, teachers must differentiate the product by providing learners with multiple and varied tasks, giving them freedom of choice in accordance with their abilities, interests, and learning styles, while differentiating the learning environment by implementing various methods according to different instruction strategies in the classroom (Aldossari, 2018).

Many studies have dealt with differentiated instruction. Smets (2017) conducted a study at Brussels University in Belgium, which aimed to identify an evidence-based method through which differentiated instruction could be implemented by presenting a checklist for high-quality differentiated instruction. Marolly (2018) aimed to analyze the differentiated instruction effect on learners in a virtual English-language learning environment and the support for each learner's capabilities according to his or her intelligence, readiness, and learning style. This study sample consisted of 29 tenth-grade students and confirmed the effectiveness of differentiated instruction in a virtual environment, its positive effect on student learning, and increased motivation. Al-

Tamimi and Al-Ghamdi(2020) aimed to determine the effectiveness of a training program based on differentiated instruction in the development of planning, implementation, and evaluation skills by language teachers in primary grades. This study sample consisted of 25 female teachers and its tools consisted of an achievement test and a note card. It also confirmed the positive effect of the program based on differentiated instruction in developing the instruction skills of its sample. Najdi and Al-Ghamdi(2020) aimed to reveal the effectiveness of a training program based on differentiated instruction in developing elementary science teachers' differentiated instruction skills. This study sample consisted of 25 skills, and its tool consisted of testing differentiated learning skills. It concluded that the training program was effective in developing teachers' differentiated instruction skills. Al-Othman (2021) aimed to measure the effectiveness of using a differentiated instruction strategy to help first-grade students acquire and maintain historical thinking skills in the social studies and citizenship subject. This study sample consisted of 54 students, whose historical thinking skills were measured through a test. The study revealed statistically significant differences between experimental and control groups in the scaling of the historical thinking skills test in favor of the experimental group, which received differentiated instruction.

Differentiated instruction strategies have been linked to the development of thinking skills taking into consideration learners' patterns and thinking methods, including positive thinking identified by Dargahi(2015: 12) as "a type of thinking providing the individual with the ability to manage crises and adopt positive as well as optimistic feelings through positive coping skills and strategies, personal control of negative feelings and thoughts resulting from facing life pressures, and development of positive thoughts that support happiness and satisfaction with life."

Lutfi (2020) and Al-Seyouf et al. (2020) refer to strategies used in positive thinking, including self-talk—an individual's ability to direct self-dialogue in a positive direction to appear in the form of certain behaviors—and an imagination strategy that adds the largest number of emotions to an image while imagining it several times, as thoughts are formed through feelings and thinking and affect our behaviors. Further, modelling strategy assists in acquiring new positive behaviors and reducing some of the existing behaviors of the individual.

Lutfi (2020) also indicates that the most significant theories to explain positive thinking are optimism and pessimism. Optimists and pessimists have different perceptions about achieving objectives; while optimists believe that their behavior will lead to positive results, pessimists believe that they will often fail. Furthermore, the hope and initiative theory focuses on self-esteem and considers hope as a source of human strength. Moreover, achieving one's objectives requires perseverance and diligence. All of these factors lead to positive thinking.

Numerous studies have confirmed that positive thinking prevents many frustrating negative thoughts and feelings from having adverse effects on one's mental health and ability to cope with stress and anxiety, which deepens the sense and enjoyment of quality of life, happiness, self-esteem, and psychological harmony (Eagleson et al., 2016; Matel-Anderson and Bekhet, 2019; Lutfi, 2020).

Many previous studies have examined positive thinking, including Al-Seyouf et al.'s (2020) study, which aimed to identify positive thinking strategies among diploma students of the Faculty of Educational Sciences at Jordan University. The study sample consisted of 109 students, who were asked to answer a questionnaire comprising 49 items. The findings revealed that the estimates of diploma students for positive thinking strategies were average in all study fields. Lutfi (2020) similarly aimed to identify the effectiveness of a program based on experiential learning in developing female students' instruction implementation skills and positive thinking at the Faculty of Home Economics. This study sample consisted of 33 students, who were administered a test of instruction skills that was rated on a positive thinking scale. Saleh (2020) aimed to identify the effect of using group discussion methods and developing positive thinking among university youth. The study sample consisted of 12 students, and the positive thinking scale was employed. It determined the effectiveness of a professional intervention program developed by researchers to increase students' positive thinking, particularly problem-solving skills and the formation of social relationships with others.

Despite the significance of developing positive thinking, two researchers in the university instruction field noticed that students' positive thinking skills were poor; to confirm this, they conducted a survey to identify the level of positive thinking skills of a sample consisting of 20 students. The results indicated that students' positive thinking skills were indeed poor, highlighting the need for modern strategies in instruction history that contribute effectively to overcoming the difficulties related to instruction in the field and the importance of training students to be taught positive thinking skills so as to enable them to gradually employ their mental abilities and achieve mastery over their skills. Such strategies include differentiated instruction.

Research Problem

The research problem is represented in the answer to the questions: What is the effect of using differentiated instruction strategies in the "Women in Science" unit on the development of 8th-grade students' positive thinking skills in the History Department?

Sub-questions

The three sub-questions to the main question are as follows:

1. What is the proposed schematic conception of the "Women in Science" unit content according to differentiated instruction?
2. What is the proposed schematic conception of the instruction guide for the "Women in Science" unit according to differentiated instruction?
3. What is the effect of using differentiated instruction strategies in the "Women in Science" unit on the development of 8th-grade students' positive thinking skills in the History Department?

Research Significance

The research significance can be summarized as follows:

1. Provision of a list of positive thinking skills to be acquired by learners, which may benefit curriculum planners by including such skills in various educational curricula.
2. Provision of a test of positive thinking skills, which may benefit researchers in preparing similar tools for other academic stages.
3. Provision of a teacher guide to identify instruction steps according to differentiated instruction strategies.
4. Activation of learners' role and consideration of their needs and inclination to keep pace with changes to the local and global community, in response to many research recommendations.
5. Provision of an honest and consistent tool in the form of a Positive Thinking Skills Scale.

Research Hypotheses

The hypothesis is as follows: There is no statistically significant difference between the average scores of experimental group students in the pre- and post-implementation stages of the Positive Thinking Skills Scale.

Research Limitations

The limitations of this research can be described in terms of the human, time, spatial and objective limits. With regard to the human limits, the research was conducted only on 8th-grade female students of the History Department at Princess Nourabint Abdul-Rahman University. With regard to the time limits, the research was conducted only during the first semester of the 2021 academic year. Regarding spatial limits, the research was only implemented in the Faculty of History at Princess Nourabint Abdul-Rahman University. Regarding the objective limits, the research was limited to identifying the effects of differentiated instruction strategies (brainstorming, problem solving, storytelling, role playing, think-pair-participation, puzzles) in ("Women in Science" unit) instruction intended to develop 8th-grade students' positive thinking skills (self-concept, positive feelings, positive expectations toward the future).

Basic Research Terms

Differentiated Instruction Strategies

Differentiated instruction strategies are defined as a set of instruction strategies intended to instruct a group of learners belonging to the same academic level and differing in preparations and interests to meet their needs and develop their positive thinking skills.

Positive Thinking Skills

Positive thinking skills are defined as mental processes and trends practiced by a female student in her practical and professional life, directed toward not only positive interpretations of phenomena and relationships but also dealing with others in different situations so that she overcomes the problems hindering her success. Such skills can be measured by the scale developed for the current research.

Research Methodology

The research methodology included two approaches. The descriptive approach was used to prepare a theoretical framework for building research materials and tools; analyzing and interpreting results, and presenting recommendations and proposals. An experimental approach was used to identify the effect of differentiated instruction strategies in the “Women in Science” unit on the development of students’ positive thinking skills. This research employed a single-set semi-experimental design as well as pre- and post-implementation stages of the research tool.

Research Community and Sample

The research community consisted of students of the History Department in the Faculty of Arts at Princess Nourabint Abdul-Rahman University. The study sample consisted of 25 8th-grade students of the History Department.

Research Materials

The research materials for this study included the following:

- A list of positive thinking skills suitable for the study sample (prepared by both researchers)
- A redrafted “Women in Science” unit according to the steps of differentiated instruction strategies.
- Teacher guide explaining the instruction steps according to differentiated instruction strategies (prepared by both researchers).
- Various worksheets and activities according to differentiated instruction strategies (prepared by both researchers).
- A Positive Thinking Skills Scale (prepared by both researchers)

Research Tool

The research tool was the Positive Thinking Skills Scale to assess 8th-grade students’ positive thinking skills in the “Women in Science” unit at the History Department of the Faculty of Arts, Princess Nourabint Abdul-Rahman University. This scale consisted of 36 items across three main dimensions of self-concept, positive feelings and happiness, and positive expectations toward the future, with each dimension containing 12 items. While drafting the scale, expressions that were appropriate to the educational level of the students and vocabulary that reflected the nature of each skill to be assessed were taken into consideration.

Scale Validity

Arbitrators' Veracity

The scale's initial form was presented to a group of arbitrators specialized in curriculum and social studies instruction methods, as well as in measurement and evaluation fields, to ensure the accuracy and clarity of its vocabulary and to determine whether any additions or removals were required to improve the scale quality. In accordance with their opinions, amendments were made to the scale, before adopting its final form.

Internal Consistency Scale Validity

Internal consistency validity means "homogeneity of individual performance in paragraphs, i.e., participation in all test paragraphs in measurement of individuals' specific characteristics" (Abu-Libdeh, 1982: 72), which can be expressed through the paragraph's relationship to the total score. Therefore, both researchers applied the Positive Thinking Skills Scale to a survey sample consisting of 15 female students. After collecting the students' responses and entering the data on a statistical analysis software (SPSS), the Pearson's correlation coefficients were extracted for the scale's items in order to ensure internal consistency, which expresses the correlation between each item score and its dimension's total score. Table 1 shows the Pearson's correlation coefficient to measure the validity of the Positive Thinking Skills Scale for internal consistency.

Table 1. Pearson's correlation coefficient to measure the Positive Thinking Skills Scale's validity (internal consistency)

Question	Correlation coefficient	Question	Correlation coefficient	Question	Correlation coefficient	Question	Correlation coefficient
First Dimension: Self-concept							
1	0.849**	2	0.714**	3	0.791**	4	0.854**
5	0.901**	6	0.821**	7	0.759**	8	0.668**
9	0.804**	10	0.707**	11	0.776**	12	0.871**
Second Dimension: Positive feelings (happiness)							
1	0.546**	2	0.624**	3	0.655**	4	0.774**
5	0.867**	6	0.887**	7	0.921**	8	0.897**
9	0.786**	10	0.910**	11	0.675**	12	0.876**
Third Dimension: Positive expectations toward future							
1	0.662**	2	0.734**	3	0.891**	4	0.894**

5	0.749**	6	0.914**	7	0.675**	8	0.811**
9	0.829**	10	0.774**	11	0.751**	12	0.884**

** Correlation is significant at the 0.01 level (2-tailed)..

Table (1) illustrate that the values of the Pearson correlation coefficient for all items of the positive thinking scale and the total score of the dimension to which a items belongs are statistically significant at the level of significance (0.01), this confirms that all items of the scale have achieved the validity in measuring what it was prepared for.

Scale Stability

Scale stability coefficients were calculated using two methods.

First Method

This method uses the Kuder–Richardson Formula 20 (KR-20), the most common formula used in tests and scales, with scores of 1 and 0 being assigned for correct and incorrect answers, respectively. The results revealed that the scale’s overall stability coefficient reached 0.919, a high value indicating the homogeneity and stability of the scale items.

Second Method

This method used the Cronbach’s alpha stability coefficient extracted through SPSS; its value was 0.930, which was equivalent to the KR-20 stability value, indicating an appropriate degree of the scale’s stability and homogeneity. Table 2 indicates the scale’s stability coefficient using the KR-20 and Cronbach’s alpha.

Table 2. The stability coefficient of the Positive Thinking Skills Scale according to the KR-20 formula and Cronbach’s alpha

N	(KR-20)	Cronbach's alpha
15	0.919	0.930

Research Findings

First Question’s Findings

The first research question asks: What is the proposed schematic conception of the “Women in Science” unit content according to differentiated instruction?

The curriculum deals with examples of women during modern history, who rose to fame either from leadership positions or because of their contributions to developing their communities’ or benefiting humanity in general. The curriculum is divided into units, including an introduction to the development of women’s history studies, sources of information on women’s biographies, Saudi women role models in modern history, international women role models, and pioneering women role models in the science field. Upon examining the entire curriculum, the “Women in

Science” unit was chosen, as it includes many issues that women still face, such as challenges in academic specialization fields, achieving practical excellence, and assuming roles in new positions that were not previously available. The unit also includes inspirational success stories of women in the science field that will motivate other women and change the stereotypical image of women in society. In addition, the unit focuses on several pioneering female figures in the fields of medicine, nursing, and science.

Upon reviewing the results of previous studies related to differentiated instruction, identifying the nature of the module’s content, and female students’ cognitive and age characteristics, both researchers re-organized and linked the unit to the reality of women and science in KSA, drafted its general objective (providing students with knowledge about the role of women in science), and developed an account of the challenges faced by women in this field by introducing examples of modern female scientists who shaped human history. In addition, they applied this knowledge to women’s reality in the field of science in KSA. The unit was divided into four lessons:

1. Introduction to women in science and their historical development.
2. Leading female role models in medicine and nursing fields: Florence Nightingale, Mary Putnam Jacobi, and Helen B. Taussig.
3. Leading female role models in the science field: Marie Curie, Ellen Richards, and Anna Wessels Williams.
4. Women and sciences in KSA: women’s educational development in KSA, opportunities and challenges, Saudi women scientists, and women’s future in science in KSA.

Second Question’s Findings

The second research question asks: What is the proposed schematic conception of the instruction guide for the “Women in Science” unit according to differentiated instruction?

A schematic instruction guide and description of procedures to be followed by a teacher were prepared according to differentiated instruction. This guide contained:

1. An introduction explaining the significance of differentiated instruction, its objectives, its achievement strategies, and evaluation and improvement methods.
2. The unit’s general objectives.
3. Each lesson’s procedural objectives.
4. The time plan of the lessons, with an allocation of 100 minutes for each lesson.
5. Strategies to be used in instruction, namely:
 - Instruction according to learners’ patterns
 - Collaborative groups
 - Instruction according to multiple intelligences
6. Instruction means and accompanying activities that meet learners’ needs, namely:
 - Presentations

- Geo maps
 - Mind mapping
 - Timelines
 - Video clips
 - Photographs of characters and places
 - Statistics and charts
 - Historical texts
 - Press releases
 - Games
 - Storytelling
7. Assessment methods, including:
- Preparation of a mind map for each figure
 - Preparation of the unit's final mind map
 - Writing an article about a national female figure in the science field
 - Discussion
 - Working papers
 - Group E-portfolio
 - Short electronic tests
 - Electronic voting
 - Electronic questionnaire
 - Groups assessments
8. Learning resources, including references and enrichment links.

The guide was designed to meet the objectives of the unit and lessons through various activities, methods, and tools, each of which responds to the specific nature of female students. The student's guide was prepared on the blackboard, which included a description of the objectives of the unit and each lesson, as well as instructions and a description of the assessment strategies. Various other files (text, audio, visual), enrichment links, general instructions, directives, and expectations were also uploaded.

Third Question's Findings

The third research question asks: What is the effect of using differentiated instruction strategies in the "Women in Science" unit on the development of 8th-grade students' positive thinking skills in the History Department?

To answer this question, the null hypothesis was drafted, which states, "There is no statistically significant difference between the average scores of experimental group students in the pre and post-implementation stages of the Positive Thinking Skills Scale."

To validate this hypothesis and verify the existence of differences in average scores of experimental group students in the pre- and post-implementation stages of the Positive Thinking Skills Scale, the researchers used the paired sample t-test, as illustrated by the following tables:

Positive Thinking as a Whole

Table 3. Significance of differences between the average scores of the pre- and post-implementation stages of the experimental group on the Positive Thinking Skills Scale (as a whole)

Dimension	Implementation	Overall number	Average score	Standard Deviation	T value	Significance	Effect volume
Positive thinking as a whole	Pre-	25	1.81	0.184	26.047	0.000	0.827
	Post-	25	3.58	0.225		Significant	Great

Table 3 reveals that the experimental group students' average score in the post-implementation stage (3.58) was greater than in the pre-implementation stage (1.81), indicating differences. To verify the significance of these differences, the researchers compared the calculated (T) value of 26.047, which was greater than the tabular (T) value at the significance level of 0.05 and freedom degree of 24, amounting to 2.064, which confirms the statistical significance of these differences. Accordingly, the alternative hypothesis—"There is a statistically significant difference between the average scores of students in the experimental group in the pre- and post-implementation stages of the Positive Thinking Skills Scale"—is accepted.

To confirm the effect of using the differentiated instruction strategy in the "Women in Science" unit on the development of 8th-grade students' overall positive thinking in the History Department, the effect volume was calculated according to Cohen's equation and was found to be 0.827. Therefore, this effect is significant, according to Cohen's criterion.

The effect of using differentiated instruction strategies in the "Women in Science" unit instruction on the development of 8th-grade students' positive thinking in the History Department is detailed below:

First Dimension: Self-Concept

Table 4. Significance of differences between the average scores of pre- and post-implementation stages of the experimental group on the Positive Thinking Skills Scale (self-concept)

Dimension	Implementation	Overall number	Average score	Standard deviation	T value	Significance	Effect volume
Self-	Pre-	25	1.85	0.254	17.035	0.000	0.813

concept	Post-	25	3.50	0.359		Significant	Great
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Table 4 reveals that the average score of experimental group students in the post-implementation stage (3.50) was greater than that in the pre-implementation stage (1.85), indicating differences. To verify the significance of such differences, the researchers compared the calculated (T) value (17.035), which is greater than the tabular (T) value at the significance level of 0.05 and freedom degree of 24, amounting to 2.064, which confirms the statistical significance of these differences. Accordingly, the alternative hypothesis—“There is a statistically significant difference between the average scores of students in the experimental group in the pre- and post-implementation stages of the Positive Thinking Skills Scale (self-concept),” is accepted.

To confirm the use of differentiated instruction strategies in the “Women in Science” unit on the development of 8th-grade students’ positive thinking (self-concept) in the History Department, effect volume was calculated according to Cohen’s equation; its value was 0.813. Therefore, this effect was significant, according to Cohen’s criterion.

Second Dimension: Positive Feelings (Happiness)

Table 5. Significance of differences between the average scores of pre- and post- implementation stages of the experimental group on the Positive Thinking Skills Scale (self-concept)

Dimension	Implementation	Overall number	Average score	Standard deviation	T value	Significance	Effect volume
Positive feelings (happiness)	Pre	25	1.66	0.214	17.543	0.000	0.82
	Post	25	3.63	0.495		Significant	Great

Table 5 reveals that the average score of experimental group students in the post-implementation stage (3.63) was greater than in the pre- implementation stage (1.66), indicating differences. To verify the significance of such differences, the researchers compared the calculated (T) value (17.543), which is greater than the tabular (T) value at a significance level of 0.05 and a freedom degree of 24, amounting to 2.064, which confirms the statistical significance of these differences. Accordingly, the alternative hypothesis—“There is a statistically significant difference between the average scores of experimental group students in the pre- and post-implementation stages of the Positive Thinking Skills Scale (positive feelings: happiness)”—is accepted.

To confirm the use of differentiated instruction strategies in the “Women in Science” unit on the development of positive thinking among 8th-grade students (positive feelings: “happiness”) in the History Department, the effect volume was calculated according to Cohen’s equation; its value was 0.82. Therefore, this effect was significant, according to Cohen’s criterion.

Third Dimension: Positive Expectations toward the Future

Table 6. Significance of differences between average scores of pre- and post-implementation stages of the experimental group in the Positive Thinking Skills Scale (positive expectations toward the future)

Dimension	Implementation	Overall number	Average score	Standard deviation	T value	Significance	Effect volume
Positive Expectations towards Future	Pre-	25	1.92	0.322	14.693	0.000	0.804
	Post-	25	3.61	0.354		Significant	Great

Table 6 reveals that the average score of experimental group students in the post-implementation stage (3.61), is greater than in the pre-implementation stage (1.92), indicating differences. To verify the significance of such differences, the researchers compared the calculated (T) value, 14.693, which was greater than tabular (T) value at a significance level of 0.05 and freedom degree of 24, amounting to 2.064, which confirms the statistical significance of these differences. Accordingly, the alternative hypothesis—“There is a statistically significant difference between the mean scores of the experimental group students in the pre and post applications of the positive thinking scale (positive expectations toward the future)” —is accepted in favor of the post-implementation stage.

To confirm the use of differentiated instruction strategies in the “Women in Science” unit on the development of 8th-grade students’ positive thinking (positive expectations for the future) in the History Department, effect volume was calculated according to Cohen’s equation; its value was 0.804. Therefore, this effect was significant, according to Cohen’s criterion.

The researchers attribute these results to the positive role of female students, considered the basis of differentiated instruction strategies that increase students’ self-confidence, particularly while increasing their ability to develop their self-knowledge, whether through self- or cooperative/group learning. Students have a positive influence on themselves as well as their peers, which increases as a result of the focus of differentiated instruction—in this study—on their interests and tendencies. In light of this, a targeted educational unit was designed so that students engage in educational activities that enhance their joy of learning and increase their positive feelings.

The researchers intended to create an appropriate environment for learning by dividing students into small homogeneous groups in terms of their tendencies, learning styles, and intelligence levels, which contributed to the utilization of students’ energies and capabilities in organizing ideas, developing knowledge, exchanging experiences, and linking previous knowledge and experiences with current ones to foster positive feelings toward learning and a

learning environment that supports their interests, tendencies, and educational patterns. Thus, students acquire a positive self-concept and future perspective.

Activities and tasks identified in the light of differentiated instruction strategies have caused students to respect their own abilities and ideas—as well as their physical, social, and mental characteristics—as they solve and implement the required tasks on time according to performance requirements, without complaining. Students can solve their problems and foster self-support and self-motivation to continue the learning process, thereby increasing their confidence to achieve their educational aspirations, showcasing their ability to form a positive self-concept.

Differentiated instruction promotes the division of female students into homogeneous small groups in tendencies, learning style and close in intelligence level. It is based on cooperative group learning in an atmosphere of familiarity, harmony and love among the female students, with a focus on the positive cooperative role of female students within each group, which increases the positive interaction that leads to self-positive thinking and creating self-positive feelings, particularly when acceptance of others, participating in teamwork, addressing challenges and problems within the group, and performing tasks effectively. Accordingly, students enjoying with and feel happy and fun, and feeling wanted by others, forming a positive image of her from others, so the student always tries to act wisely and show understanding with her colleagues in the group, sharing responsibilities and successes among the group members.

Successes achieved by students within a flexible group—and increased cooperation, coordination, and integration in problem-solving abilities—have enhanced students' optimism about the future and ability to achieve their objectives and aspirations. By learning from their previous experiences and difficulties faced by other students, they were able to solve and overcome several challenges. Further, collaborative teamwork and advanced planning can help in achieving hopes and aspirations, preventing resignation to failure.

These study results are consistent with findings on the effectiveness of differentiated instruction strategies in developing various educational variables based on the results of the Al-Harthiyand Al-Aklabi (2021) study that emphasized differentiated instruction strategy effectiveness in the instruction jurisprudence curriculum to develop the mental habits of 3rd-grade preparatory students. The Al-Jaafari and Al-Buhairi (2021) study confirmed the effectiveness of the proposed strategy based on differentiated instruction in Hadith instruction in developing 3rd-grade preparatory students' achievements and life skills; Al-Banna, Bahout, and Lina' (2021) study confirmed the effectiveness of using a differentiated instruction approach in developing primary school students' problem-solving skills in mathematics; Abdul-Rahman's (2021) study confirmed the effectiveness of using differentiated instruction strategy in mathematics instruction in developing secondary school students' mathematical problem-solving skills. However, this study differs from others in terms of its dependent variable (positive

thinking), whose development was measured based on the effectiveness of using the differentiated instruction strategy.

In addition, this study's results are consistent with results of Suwaid et al. (2020), which confirmed the positive effect of using a differentiated instruction strategy in developing positive thinking skills among preparatory-grade female students. They are also consistent with the results of Ibrahim et al. (2019), who confirmed the effectiveness of combining constructivist strategies, which follow the same principles of differentiated instruction in social studies to develop preparatory school students' positive thinking and self-esteem. However, this study differs from others in its application, as it was conducted at the university stage. Moreover, the educational environment differs from that of previous studies.

Research Recommendations

The research recommendations can be summarized as follows:

1. Encouraging academic staff to be creative and innovative in their instruction method, adopt differentiated instruction strategies, and design various educational activities and tasks, taking into consideration students' various characteristics, learning patterns, and multiple intelligences, thereby contributing to increasing their motivation and academic achievement and developing different thinking skills, including positive thinking.
2. Using differentiated instruction strategies in the history curriculum at all educational levels and stages.
3. Holding seminars and training courses in faculties for female students and academic staff to clarify the significance of practicing positive thinking and its relationship to increasing achievement, motivation, and maintaining optimal mental health.

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