

# THE EFFECTIVENESS OF AN EDUCATIONAL PROGRAM BASED ON THE THEORY OF COGNITIVE FLEXIBILITY IN DEVELOPING THE VALUES OF POLITICAL PARTICIPATION AMONG FOURTH GRADE STUDENTS

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## Abstract

The current research aims to reveal (the effectiveness of an educational program based on the theory of cognitive flexibility in developing the values of political participation among the students of the fourth literary grade). 56) students, where the number of students in the experimental group reached (28) students in Al-Qabas Secondary School for Girls, and they were taught in the educational program based on the theory of cognitive flexibility, and the number of students in the control group reached (28) students in Al-Kharjah Secondary School for Girls, and they were taught in the usual way. The researchers prepared the necessary tool for the research, as the researchers prepared a measure of the values of political participation consisting of (42) items, and after completing the experiment, the data were collected and treated statistically by means of the statistical bag (SPSS), and the results showed that there were statistically significant differences at the level (0.5). And in favor of the experimental group that studied the educational program in the scale of political participation.

**Keywords:** educational programme, cognitive flexibility theory, political participation

The first chapter introduces the research

First: the research problem: -

That there are trends at the educational levels and all scientific and human disciplines of interest in national values among students and how to develop them for them, and from this standpoint, national values have become one of the goals of teaching any scientific subject, especially sociology, because of the principles and charters that it carries within it that enhance the learner's political participation, and therefore The researchers believe that if the student possesses national values, it may make her positive in her acquisition of the concepts of sociology, and she has tendencies towards the subject and the acquisition of values, and giving this subject its civilizational role in the advancement of the nation.

Based on the foregoing, the researcher decided to experiment with an educational program based on the theory of cognitive flexibility in teaching sociology, so that it might enable students to develop political participation. Therefore, the problem of the current research is determined by answering the following question:

What is the effectiveness of an educational program based on the theory of cognitive flexibility in developing the values of political participation among the students of the fourth literary grade?

Second: the importance of research

Education is finding the means to transfer experiences, knowledge, or civilization in a society, and man has sought since the beginning of creation to innovate and develop these means. He did not teach him, then education is the first step prior to education, and both of them began with the thinking person since the beginning of creation, and attempts have continued to this day, so the role of



education is important in bringing about changes in human behavior, developing his personality and directing him towards serving his society, as it is a process of comprehensive change in the behavior of the individual Socially, intellectually, emotionally, and performatively. (Al-Obaidi, 2004: 6-7).

The construction of any educational program must meet the needs of the learners and teachers of this important subject on educational bases, and the needs of the learners must be determined by specialists who have experience in the field in which the program is to be built; A program based on human experiences is more representative of the learners' needs, and better able to satisfy their realistic desires. (Hamdan, 1988: 18), and the educational program helps learners achieve educational goals according to their abilities, needs, and interests, and according to a set of instructions that should be followed step by step in order to allow the learner the opportunity to progress towards achieving the goals, and to ensure at the end of the program that the learner has learn or not. (Zayer et al., 2014: 37-38).

Therefore, cognitive flexibility is one of the important modern topics in this field, as it represents increasing options, allowing students to see other points of view, changing their way of thinking from time to time, and moving from normal and usual thinking to realizing things in a different and varied way. (Saada, 2001: 19).

The modern trend represented by flexible learning is of great importance as it has become more focused on the learner's needs and desires, and more complex, deep and comprehensive as it focuses on the content of flexibility. On this basis, the concept of flexibility here is not necessarily linked to what modern education patterns have defined such as open education and distance education. Virtual education, and even the school and the university can benefit from it, as well, by providing what meets the desires and needs of students by bringing about changes in the structure, content, organization and management of the educational process according to those needs. (Abboud and Mazhar, 2009: 26).

Citizenship is one of the values that have been and still are the focus of attention for most philosophers, scholars and educators of all ages, because they notice a lack of knowledge among young people and youth about the responsibilities of citizenship and their alienation. On the Arab level, young people face many problems, and there is no doubt that these problems lead in turn to The low practice of the values of political participation in this group towards their homelands. (Ismail, 2014: 534).

The preparatory stage is one of the educational stages that has its own specificity in terms of the age of the learners and the characteristics of their growth in it, and it calls for colors of guidance and preparation. general. (Ibrahim, 2005: 91).

Likewise, the preparatory stage, with its location in the educational ladder, represents the stage of forming the learner's personality, as he needs the ability to think correctly, innovate, as well as broad-mindedness and self-reliance, in order to supplement university education with them, so that they specialize in various sciences, and this stage prepares the learner professionally and culturally, It helps them choose a profession that is appropriate to their scientific potential. (Al-Arif, 1993: 219).

Third: Research objective:

The current research aims to identify: The effectiveness of an educational program based on the theory of cognitive flexibility in developing the values of political participation among fourth grade students.

Fourth: Research Hypotheses:

To achieve the objectives of the research, the researchers put the following zero hypothesis:

- 1- The first zero hypothesis, which states that there is no statistically significant difference at the level (0.05) between the mean scores of the students of the experimental group who study their students according to the educational program based on the theory of cognitive flexibility, and the average scores of the students of the control group who study their students in the traditional program in a scale Dimensional political participation values.



2- The second zero hypothesis, which states that: There is no statistically significant difference at the level (0.05) between the averages of the pre and post tests for the scores of the experimental group, the scores of the students of the experimental group who study their students according to the educational program based on the theory of cognitive flexibility in the measure of political participation.

#### Fifth: Research limits

This research is determined by:

- 1- The human limit: students of the fourth literary grade in schools affiliated to the General Directorate of Education in Salah al-Din Governorate.
- 2- The spatial limit: the day schools (preparatory and secondary) for girls in the Salah al-Din Education Directorate, the Science Education Department.
- 3- The time limit: the academic year (2022-2023).
- 4- Knowledge limitation: the first five chapters of the subject of sociology to be taught to female students in the fourth literary grade (sociology, its concept, objectives and fields - theory and method in sociology - the relationship of sociology with other sciences - social institutions - social problems).

#### Sixth: Define terms

- 1- Effectiveness: "The extent of the effect that the experimental treatment can have as an independent variable on one of the dependent variables, and this effect is determined statistically by means of an ETA square" (Shehata et al., 2003: 230).
- 2- Educational Program: An educational plan developed for an individual learner, an educational class, an educational institution, or a number of educational institutions that takes one or a few days to implement, a semester, an entire academic year, or more, where such plan includes A set of steps, procedures, lessons and activities that learners must receive and learn inside or outside the classroom, in a specific period of time. (Youssef, 2009: 13).
- 3- The theory of cognitive flexibility: the ability to produce new ideas that usually differ from expected ideas and change in a taxonomic manner during the process of forming ideas. (Al-Surour, 1998: 24).
- 4- Political participation: a set of ethics, customs, and behaviors that the individual imbibes through interaction with attitudes and experiences, and has an impact on his thoughts and beliefs and is determined by his behavior to build a correct vision about the rights and duties that are included in his belonging and loyalty to this country (Al-Ghamdi, 2010: 27)
- 5- Theoretical definition of political participation: a set of values that reflect the student's affiliation to his country, awareness of political, environmental, health, economic, and human rights matters, openness to other cultures, the need to resort to the law, belief in national unity, tolerance with others, moral values, and the commitment to rights and duties that arise from this interaction. In various aspects of economic, political, social, legal and cultural life, and what this implies in terms of the values of loyalty, political participation, martyrdom and sacrifice, and translating this into behavioral attitudes and performance skills leading to the formation of a good citizen.

## THE SECOND CHAPTER COVERS THEORETICAL ASPECTS AND PREVIOUS STUDIES

First: theoretical aspects:

The first axis: the educational program: -

Components of the educational program: - The program is a systematic educational method based on empirical foundations aimed at developing a system in presenting information and concepts while providing appropriate activities to ensure the success of the program. (Majdi, 2009: 196). As the program is a plan and procedures that include different practices, activities and methods that work to achieve the set goals. The program consists of a set of components as follows: (setting goals,



organizing methods, content justifications, method components, evaluation procedures. (Shehata et al., 2003: 169)

The second axis: the theory of cognitive flexibility: -

Educational applications of cognitive flexibility:

- 1- . The teacher should educate the student to use advanced and modern means and to stay away from old traditional ideas.
- 2- Through the cultural sessions, it is possible to develop students' cognitive flexibility by explaining how to use flexible thinking methods, confront any problem, and work to develop more than one alternative solution for it.
- 3- Encouraging students to perform difficult tasks instead of easy ones, and how to get out of them safely.
- 4- Enriching the curriculum with the most important methods that help students generate alternatives and make the appropriate decision from them (Waheed, 29: 2017).

The third axis is political participation: -

The foundations of citizenship: The foundations of citizenship are represented in the following:

- 1- Participation in government where all individuals belonging to the nation enjoy the right to vote and run for all positions and possess the necessary information for that, and this is inconsistent with the rule of the individual or the minority.
- 2- Equality for all citizens before the law and the judiciary, and non-discrimination on the grounds of race, sex, religion or money.
- 3- Peaceful transfer of power in accordance with free, fair and transparent elections and under judicial supervision. There is no sovereignty for an individual or a few, and the people are the source of authority.
- 4- Not to combine the three executive, legislative and judicial powers in one hand or institution.
- 5- Guaranteeing public rights and freedoms constitutionally, legally, judicially and socially by developing the ability of public opinion and civil society organizations to defend public freedoms and human rights.
- 6- Domination of the provisions of the law and equality before it. (Bin Dahman, 2007: 32).

Second: previous studies

- 1- Study: (Mohyi, 2019) It was conducted in Iraq and aimed to identify the effectiveness of a proposed program based on cognitive flexibility in providing classroom teaching skills to students of Arabic language departments in colleges of education. The research sample consisted of (36) students, and the study used a tool. The questionnaire included (67) The item of the observer form in the seven teaching skills (planning, preparing, explaining, class questions, reinforcement, diversification of stimuli, and closing), according to (five-point Likert scale), and the study used statistical methods, including the Mann-Whitney test equation for two independent samples, and the Pearson correlation coefficient And the Wilcoxon test for two interrelated samples, and the study concluded that there is a statistically significant difference in favor of the experimental group students in acquiring classroom teaching skills, as well as in the post-test, as well as between the post-test and the post-deferred test.
- 2- A study (Abu Sneineh, 2019): which was conducted in Jordan and aimed at identifying the effect of using oral history on the achievement of sixth grade female students in national education and the development of their national values. The achievement test and the measure of political participation (60) students. The results of the study concluded that the experimental groups outperformed the control group in the achievement test as well as in the national values scale.

The third chapter discusses the research methodology and procedures

First: the descriptive approach:

In order to achieve the goal of the first research, the researchers looked at a number of educational literature and previous studies that included building educational programs based on educational



theories. Modern education, including the theory of cognitive flexibility, and it can be employed in teaching and teaching educational sciences, including sociology, and understanding its topics. Thus, the process of building the educational program according to the theory of cognitive flexibility went through the following steps:

There are a number of starting points that must be taken into account when choosing program content, namely:

- The possibility of addressing the weakness of students in the subject of sociology by proposing educational programs to address the weakness of acquisition in the concepts of subject matter of sociology. □\
- The importance of the values of political participation in the lives of individuals, because man is a social being that grows through contact with the surrounding environment, affects and is affected by it. □

Determining strategies, methods and teaching methods: The researchers identified teaching strategies and methods that will be adopted during the application of the program, and they were chosen in a way that suits the content of the sociology subject and the age stage of the research sample. They are strategies and methods based on the theory of cognitive flexibility. There are many strategies and models that have been proposed to employ the theory of cognitive flexibility. In teaching, which is closely related to the technological innovations of cognitive flexibility strategies, which generally focus on making the student the focus of the teaching process, adapting his behavior and adapting developments during the teaching process through the practice of many diverse educational activities, including: the Eisenkraft survey model, the brainstorming strategy, and the programmed approach strategy. to solve problems.

B- Educational activities: The researchers prepared a number of educational activities for each subject of the educational program, according to the educational situation, as follows:

Introductory activities: These are the learning practices that students are assigned to before starting the lesson.

Constructive activities:

- They are the learning practices performed by each of the students and the teacher during the performance of the training on political participation, and these activities were many and varied in each lesson of the educational program.
- Closing activities: confirming the achievement of the planned behavioral goals for the lesson, and the extent to which learners understand facts and concepts.
- The educational method: The researchers seek to clarify the educational situation by employing a number of educational means in implementing the educational program.

Second - Implementation Phase: This phase includes some of the following procedures: Experimental design. The students of the two research groups are equal. Determine the research community and its sample. Controlling extraneous variables: It includes procedures for controlling variables that affect the experiment. And the implementation of education and application of the educational program on the selected sample (the experimental group) according to the teaching plans based on the theory of cognitive flexibility prepared for this purpose, as well as the implementation of the teaching plans prepared according to the standard method (for the control group). And the preparation of the research tool: (, scale of political participation).

Third: the evaluation stage: the evaluation component accompanies the program elements since they begin their journey, leading to the achievement of their goals, and evaluation can be viewed as the educational means by which the extent of success in achieving the goals of the entire educational process is revealed, and from the evaluation both the teacher and his students judge whether The objectives of the lesson were achieved or not (Muhammad and Majeed, 1991: 285), and based on the



foregoing, the researchers adopted two types of evaluation in the educational program, which were the (structural) evaluation, and the final (final) evaluation, as follows:

- **Formative Evaluation:** It is a systematic and organized evaluation process that takes place during teaching with the aim of helping the teacher and the student to improve the learning process and knowing the progress of the students
- This type is done through (oral questions on the lesson or through individual and collective worksheets), and mutual exploratory dialogue, between the school and its students.
- **Closing (final) evaluation:** The two researchers adopted this type of evaluation in identifying the effectiveness of the program in developing the values of political participation after the completion of its implementation, and that was by applying the two post-tests to know the effectiveness of the program in it.
- A final evaluation at the end of each lesson on the basis of: applied questions.
- A final evaluation at the end of the educational process in the manner of: a measure of the values of political participation in the scientific subject, and it will be applied after the experiment to measure the effectiveness of the educational program.

**Fourth: Feedback:** Every system has a goal, and this affects its inputs, operations, and outputs. The extent to which the goal is achieved can be judged by the outputs. If the outputs are acceptable and compatible with the goal of the system, the system is effective, and if the opposite is true, then the system suffers from some kind of defect. Therefore, the system's operations or inputs must receive a feedback process that enables it to organize efforts and directives to achieve appropriate outputs.

**Teacher's guide:** To ensure a high degree of proficiency, the researchers prepared a teacher's guide. To serve as a mentor and guide for him in implementing the lessons of the educational program. The guide included: an introductory introduction, the aim of the guide, and a brief presentation of its components

**Student's Book:** In order to complete the requirements for building the educational program, the two researchers prepared a student's book including an introduction and a guide for using the book. The book included educational material, as well as the behavioral objectives for each lesson, activities related to each lesson, and then enrichment activities.

**Program Validation:** The two researchers were keen to confirm the validity of the educational program (validate it), by presenting it in a procedural, constructive manner to a group of arbitrators, specialists in educational and psychological science curricula and teaching methods, to express their opinions and proposals, and the points of view agreed on the validity of the program, except for some Observations and suggestions were made, and in the light of those amendments, the program is ready for implementation.

**First: Experimental Design:**

Experimental design means planning the conditions and factors surrounding the phenomenon we are studying in a specific way and observing what happens. (Dawood and Abdel-Rahman, 1990: 250-251).

The process of selecting the experimental design is a very important step for scientific research, as it is the plan that the researcher develops to proceed on its basis, control the variables affecting it, and conduct the appropriate analysis to test the research hypotheses comprehensively (Odeh and Fathi, 1992: 129).

To achieve the objectives of the research, the researchers chose one of the experimental designs with partial control and appropriate for the research procedures, as shown in Figure (1).

the group	Pre-test for me	the independent variable	dependent variable	Post-test
Experimental	Political participation	educational programs	measure of political	measure of political
control		the usual way		





**Figure (1) The experimental design of the partial control research**

Second: the research community: the community means the vocabulary of the phenomenon that the researcher studies, it is all the individuals, people, or things that are the subject of the research problem, and the community may be individuals or educational or scientific activities (Al-Jabri, 2011: 245), and the research community consists of female students The literary fourth in secondary and preparatory day schools for girls in Salah al-Din Governorate, Al-Alam district for the academic year (2022-2023), so the two researchers visited the General Directorate of Education in Salah al-Din Governorate (Statistics and Planning Division), to determine the site in which it is being tested, and obtained the names of the schools, the number of which is ( 6) Schools, according to the statistics carried out by the Educational Planning Department in the General Directorate of Education, Salahuddin Governorate, Al-Alam District.

Third: the research sample: the sample is defined as: “a small part of the community that is being tested in particular to represent the community correctly, and through the sample you know the characteristics of the community that you study and analyze and the researcher uses it in order to know the different characteristics of the community” (Al-Bayati, 2008: 183) The two researchers selected the research sample randomly from the schools of the General Directorate of Education of Salah al-Din, Department of Science Education, so they chose two schools (Al-Qabas Secondary School for Girls and Al-Kharjah High School for Girls). Al-Karjah for Girls) to be the control group, and the total number of students in the two groups was (56) students, with (28) students for the experimental group studying using the proposed educational program, and (28) students for the control group studying in the usual way.

Fourth: The equivalence of the two research groups: The two researchers, before starting the experiment, were keen to ensure that the two research groups were statistically equal in some variables that could affect the safety of the experimental design of the research and its results.

Chronological age calculated in months: The researchers calculated the ages of the female students in each group in months up to 10/18/2022, and when calculating the average age of the female students and the standard deviation, and using the t-test for two independent samples, it appeared that the differences were not statistically significant, as the calculated t-value reached (0.90), which is less From the tabular t-value of (2.00) at a degree of freedom (54), and this means that there are no statistically significant differences at the level of significance (0.05), and thus the two groups are statistically equivalent in chronological age, and Table (1) shows this:

**Table (1) The arithmetic mean, standard deviation, and the calculated and tabular t-value for the two research groups in the time-age variable**

the group	Sample volume	standard deviation	SMA	t values		degrees of freedom	Significance at level (0,05)
				calculated	Tabular		
<b>Experimenta l</b>	28	4,22	185,25	2,00	0,90	54	<b>Not statistically significant</b>
<b>control</b>	28	4,97	184,14				

**Last year's rate:** The two researchers obtained the average of the female students in the Arabic language subject for the third intermediate grade for the academic year (2021-2022) from the school's



records, as the arithmetic mean of the experimental group was (74.18) degrees, with a standard deviation of (10.34), while The arithmetic mean of the control group was (75.25) degrees, with a standard deviation of (10.92), and to identify the significance of the difference between the two means, the researchers used the t-test for two independent samples to find out the significance of the statistical differences at the level of significance (0.05), if it was The tabular t-value is equal to (2.00) greater than the calculated t-value (0.38) with a degree of freedom (49), and this indicates that the experimental and control groups are statistically equivalent in the average of last year for the third intermediate grade, and Table (2) explains this.

**Table (2) The arithmetic mean, standard deviation, and t-value of the two research groups in the average of the last year for the fourth literary grade**

the group	Sample volume	standard deviation	SMA	t values		degrees of freedom	Significance at level (0,05)
				calculated	Tabular		
<b>Experimental</b>	28	10,34	74,18	0,38	2,00	54	<b>Not statistically significant</b>
<b>control</b>	28	10,92	75,25				

#### **FIFTH: ADJUSTING SOME EXTRANEIOUS VARIABLES:**

Adjusting extraneous variables is one of the important procedures in the experimental research, to provide an acceptable degree of validity in the research results by attributing the effect of the dependent variable to the independent variable and not to extraneous factors (Abdul Rahman and Adnan, 2007: 478), and the researchers are keen on the internal integrity of the research. The following variables have been set:

1. Selection of the sample: In order to eliminate the effect of individual differences between the female students of the experimental and control research groups, the researchers chose the two research groups randomly and using the lottery method, as well as the equivalence procedure between the two groups.
2. Gender: This variable was set because the research sample consisted of females only.
3. Maturity: This factor did not have any effect on the results of the experiment due to the short duration of the experiment, as it extended from Monday 10/18/2022 to Thursday 12/1/2023, so if growth occurs, it is equal for the two groups (experimental and control).
4. Experimental extinction: Experimental extinction means the effect resulting from leaving a number of students (the research sample), or their interruption during the experiment, which affects the results. (Abdul-Rahman and Adnan, 2007: 479), and the research did not deal with these cases, whether they were leakage, interruption, or abandonment, with the exception of individual absences that the two research groups were exposed to, with a very small percentage and not repeated.
5. The effect of the experimental procedures: In order to verify the safety of the experiment from any effects that may result from the experimental procedures, the researchers tried as much as possible to limit them, namely:

A- Research confidentiality: The two researchers were keen on the confidentiality of the research, in agreement with the school administration, not to inform the students of the nature and purpose of the research, so that their activity or their dealings with the experiment would not change, which might affect the safety of the experiment and its results.





B- The teacher: The teacher is one of the variables that may affect to some extent the results of the experiment, so the two researchers are the same as the two groups (the control and the experimental).

C- Distribution of classes: The researchers controlled this variable through the symmetrical distribution of lessons after agreement with the administration of the two schools, and the schedule for lessons has been set.

D- Duration of the experiment: The duration of the experiment was unified and equal for the students of the two research groups, and it is part of the first semester, as it began on Monday 10/18/2022 and ended on Thursday 12/1/2023.

G- The classroom environment: The research was applied in two schools, as the two research groups were chosen from two schools that have the same conditions in terms of the classroom environment.

D- Determining the study subject: The two researchers relied on the textbook prescribed for the academic year (2022-2023) in determining the scientific subject, as the two research groups studied this subject throughout the duration of the experiment, and thus this variable was controlled.

Sixth: Research requirements:

To achieve the objectives of the research, the two researchers prepared the following tools for its study: (constructing an educational program, measuring political participation, teaching plans).

a. The pre-test for political participation: Its aim is to find out the previous experiences and skills possessed by the students to determine the previous requirements for the students, to determine the starting point, and to conduct equivalence between the two groups (experimental and control).

B. Post-test: It was applied to the two groups (experimental and control) for the purpose of making a comparison between the performance of the two groups and included a measure of political participation. In addition, the researchers prepared a number of sequential (formative) tests. At the end of each lesson of the program a test is conducted, as well as at the end of each educational unit. A comprehensive test is conducted for the educational unit, and the aim of these sequential tests is to find out the students' mastery of the subject, and to identify their level of learning.

Seventh: The research tool, which is the scale of political participation: The scale of the values of political participation in its final form consists of (42) items, and three alternatives are placed in front of each paragraph, and each subject is asked to choose one of these alternatives, which are (always, sometimes, rarely).

Statistical means: The researchers used the appropriate statistical means in the current research, using the spss statistical program.

1. The first zero hypothesis, which states that: There is no statistically significant difference at the level (0.05) between the mean scores of the students of the experimental group who study their students according to the educational program based on the theory of cognitive flexibility and the average scores of the students of the control group who study their students in the traditional program in The dimension measure of political participation values, and to verify the validity of the hypothesis, the researchers used the t-test for two independent samples (t-test) to find out the degree of differences between the two groups. The researchers used the t-test for two independent samples to know the degree of differences between the two groups. Tabularity (2.00) at the level of significance (0.05), and the degree of freedom (54), and this means that there are statistically significant differences in favor of the experimental group that studied in the educational program in the measure of political participation values, and thus the second null hypothesis is rejected and its alternative is accepted.



**Table (3) The arithmetic mean, standard deviation, the two T-values (calculated and tabular), the degree of freedom, and the statistical significance of the scores of female students of the two research groups in the political participation scale**

the group	Sample volume	standard deviation	SMA	t values		degrees of freedom	Significance at level (0,05)
				calculated	Tabular		
<b>Experimental</b>	28	1,49	17,82	4.72	2,00	54	<b>Statistically significant</b>
<b>control</b>	28	1,27	16,07				

1- The second zero hypothesis, which states that: There is no statistically significant difference at the level (0.05) between the averages of the pre and post tests for the scores of the experimental group, the scores of the students of the experimental group who study their students according to the educational program based on the theory of cognitive flexibility in the measure of political participation. To validate this hypothesis, the researchers used the t-test for two related samples, as the calculated t-value was (13.66), which is higher than the tabular t-value of (2.04) at the level of significance (0.05) and degree of freedom (27), Table (4). Explain that. This means the superiority of the experimental group who study sociology in the post-test of developing the values of political participation over their performance in the pre-test of the measure of the values of political participation, and thus the null hypothesis is rejected.

**Table (4) The arithmetic mean, standard deviation, the two T values (calculated and tabular), the degree of freedom, and the statistical significance of the scores of the experimental group students in the pre and post scale of the political participation scale.**

the sample	Sample volume	standard deviation	SMA	average arithmetic of the differences	standard deviation	t values		degrees of freedom	Significance at level (0,05)
						calculated	Tabular		
<b>Tribal</b>	28	1,60	14,54	1.27	3.29	13,66	2,04	27	<b>Statistically significant</b>
<b>after me</b>		1,49	17,82						

#### Second: interpretation of the results

The researchers explain this superiority to several reasons and factors, as proven by the results of this research. In this program, the so-called cognitive blockade, when the students were provided with non-specific knowledge and information about the intended tasks in order to inculcate national values among the students. And stimulating the senses of the students, which leads to the consolidation and deepening of information for them so that they can conduct it practically and thus develop their national values.

#### Third: Conclusions:



After presenting and interpreting the results, the researchers conclude the following:

1. The program, which was based on the theory of cognitive flexibility, proved its effectiveness in developing national values among the female students of the research sample. Therefore, flexibility stimulated the students' abilities to transfer ideas, exchange opinions, knowledge and understanding, and consolidate information in their minds and bring it close to their minds.
2. The existence of a relationship between the theory of flexibility and national values. Training on raising forms of thinking, asking opinions and questions, analyzing them, and prompting them for discussion requires a dialogue process, as the dialogue contributes to the production of critical thought and the innovative mind, which helps the student in learning and understanding what is presented to her, and thus forming in the student the spirit of cooperation and spirit nationalism through dialogue.

Fourth: Recommendations:

Based on the aforementioned review of the results and conclusions of this study, the following scientific educational recommendations can be made:

- 1- Diversity in the use of modern strategies in teaching by teachers, especially the strategies emanating from the theory of cognitive flexibility.
- 2- Training teachers of educational sociology from the responsible authority to practice educational programs, and train them to discover, refine, and develop the abilities of students by adopting modern approaches concerned with teaching thinking.

Fifth: Proposals:

In completion of this study, the researchers suggest conducting educational studies and research, including:

- 1- The effectiveness of an educational program based on the theory of cognitive flexibility in the collection of psychology for fifth grade female students and the development of their social interaction.
- 2- The effectiveness of an educational program based on the theory of cognitive flexibility in other educational stages and in all subjects.

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