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Research Article

Effect of the Two Infographic Styles (Interactive and Static) Based on (T.H.E.P.A.C.T) Strategy on Achievement and Reducing the Math Anxiety

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Abstract
This study aimed at identifying the effect of the difference of the two infographic styles (interactive and static) based on the (T.H.E.P.A.C.T) strategy in achievement and reducing the math anxiety of the students with math learning difficulties in the elementary stage. The study sample consisted of the students of the fifth grade who have math learning difficulties, who were distributed over three groups. One control group (9 students) who learned through the normal way; first experimental group (10 students), learned through the static infographic method based on (T.H.E.P.A.C.T) strategy; and a second experimental group (9 students), learned through the interactive infographic method based on (T.H.E.P.A.C.T) strategy. The researcher employed the semi-experimental method and prepared an achievement test and a measure for the mathematical anxiety. The validity and reliability of the measure were both verified. The results showed that the students who received learning through the static infographic method based on (T.H.E.P.A.C.T) were better achievers than both groups who received learning through the interactive infographic method based on (T.H.E.P.A.C.T) and the normal method. Moreover, those who received learning through the interactive infographic based on the static infographic method based on (T.H.E.P.A.C.T) did better than who received learning through the normal way. In addition, the results showed that both groups who received learning through the interactive and static infographic method based on (T.H.E.P.A.C.T) had less math anxiety than the students of the control group (normal method). Finally, there were no math anxiety differences between both groups who received learning through the static infographic method based on (T.H.E.P.A.C.T) and interactive infographic method based on (T.H.E.P.A.C.T.)

Keywords: Achievement; Infographic; (T.H.E.P.A.C.T); Math anxiety; Math learning difficulties.

Introduction:

Math learning difficulty as cited by Kroesbergen, Van Luit and Naglieri (2003), means inability to comprehend the mathematical concepts and perform the arithmetic processes. This may be ascribed to a disorder or distortion in the developmental function, which may occur even before birth due to injuries in the brain. Ramirez, Gunderson, Levine and Beilock, (2013) indicate that math learning problems are "indicatives of difficulties in understanding the mathematical concepts, facts, numerical inference, and carrying out the mathematical operations.

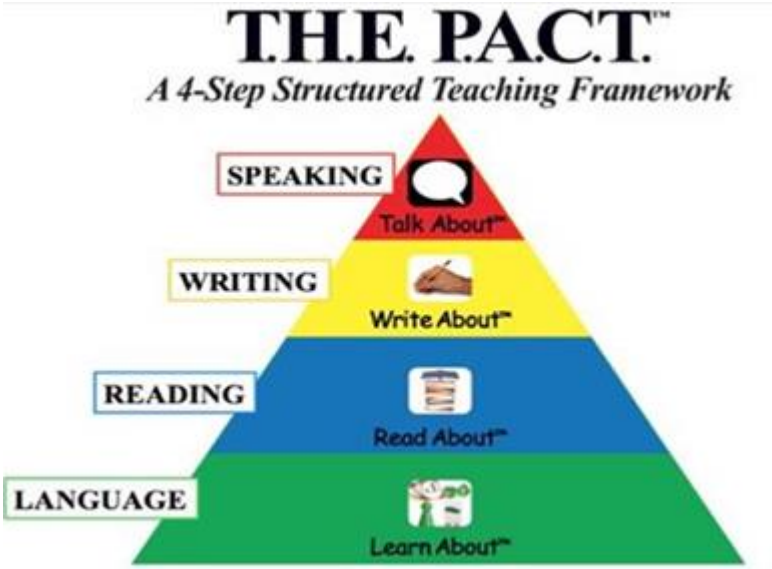
As a natural result of the math learning difficulties, the student suffers from low achieving. Anzehno-Skelton (2006) emphasizes that math-learning difficulties appear in the inability of certain students to acquire mathematical concepts or apply math skills, as well as problem solving. This entails low

achievement level with these students, which is one of the most important problems that face this category.

As a natural result of the math learning difficulties, students suffer from excitement accompanying their math learning. This excitement is called math anxiety, and represents an emotional variable raises from the student's reaction toward mathematics. It appears with some students in different types of emotions such as fear, chills, frozen limbs or increase in sweat secretion (Rubinsten & Tannock, 2010) .

Among the determinants that support learning process of the students with learning difficulties, is the use of teaching strategies that suit their characteristics. Therefore, Overton (2009) stresses on that the school should contribute in the improvement of the students' achievement who are suffering from learning difficulties and reduce their anxiety. This may be approached by providing tolerant environment condition, and compliance of its students' method with what is presented to them of educational activities. This requires the teachers to develop teaching strategies that help these students. To improve achievement and reduce anxiety of the students with math learning difficulties, which represent the problem of the current study; and pursuant to the calls of the educators to apply modern teaching strategies, and the need to teach math with understanding, this understanding was translated by the appearance of T.H.E.P.A.C.T strategy, (Technology Helps Easy and Practical Accessible Curriculum Teaching).

T.H.E.P.A.C.T teaching method is limited in four steps: (learn about, read about, write about and talk about), parallel with the basic elements of the educational standards. Teachers push their students systematically to gain progress in the subject through learning about it, reading about it, writing about it, and talking about it. Hashash (2004) indicates that T.H.E.P.A.C.T strategy depends on employing basic skills such as: wiring, oral, and reading expressions, and evaluating the ideas as integrated parts in the classroom, through the teacher's encouragement to his students and urging them to express their ideas both orally and in writing in a natural manner. It could be further expressed as the meaning through which the teacher and student share the learning, understanding and practicing processes, and students express their thoughts and solutions of the math problems in a clear and perfect manner, to a sufficient degree that enables others understand and judge it.



Al-Takhaineh (2011) asserted the existnce of a relation between the (T.H.E.P.A.C.T) teaching method and learning effectiveness. They presume that classes where (learn about, read about, write about and talk about) method effectively prevails between the teacher and the student, could realize their

objectives. This requires the teacher clarify the mathematical facts using the (T.H.E.P.A.C.T) teaching method, through teaching them in a meaningful manner, and representing it intelligently using the math language, and the different communication skills, such as writing, reading, talking, listening and representing. All these will help the student exchange thoughts with others, and positively influence in his/her understanding of the subject and activate his/her thought. In turn, this will lead to remedy his/her mistakes, and raise his/her achievement level in math (Salam, 2004) .

(T.H.E.P.A.C.T) teaching method strengthens the learner's ability to explain, build and communicated effectively; use visual and material representations that lead to improve the math ability in problem solving and mathematical thinking (Hashash, 2004). Al-Sawa'ie (2010) maintains that there are many evidences that (T.H.E.P.A.C.T) teaching method facilitates the complicated problem solving, and contributes to the transfer of the learning effect to new situations, and learn higher level concepts. Phyl (2011) agrees with these researchers in that (learn about, read about, write about and talk about) design made the students able to build understanding and develop communication. The steps of this strategy can be summarized as shown in the following table (Greeno & Hall, 1997; Pellegrino, Chudowsky & Glaser; 2001):

Learn About	**Read About**	**Write About**	**Talk About**
* Check the memory cards, vocabulary. * Make vocabulary stickers	*Main ideas and details in the book. *Check the questions and answers including in the study guidelines.	* Search and build a project. * Write a report on the project.	* Share the facts in cooperative discussions. *Provide an oral presentation in "write about" project.

With the spread of the social media networks, a means emerged to simplify the information termed "Infographic", which is the art of turning the complicated information, data and concepts into pictures and drawings that could be clearly and interestingly understood and assimilated (Haan, Kruikemeier, Lecheler, Smit & Nat, 2018; Tajseed, 2013). The significance of infographic rests in being melting among the information, data and visual learning. This process helps in delivering the information by a manner that could be understood in a quicker and easier method (Shaltout & Fatani, 2017). Graphic design is interested in arranging the texts and pictures to transmit definite and purposeful messages effectively. Various styles are used in the graphic design to initiate and collect the symbols, pictures and words to create a visual representation of the ideas (Altin , 2017; Çifçi , 2016; Marco & Medina, 2013).

In this concern, Gao and Zang (2014) conducted a study aimed it showing the relation between the infographic teaching and educational design, and how to apply infographic in designing the education. and how to blend them together. The study showed that the use of infographic and visual representations facilitated the learning process. This result was further supported by the study of Kennedy, Abichandani and Fontecchio (2014), which aimed at using the infographic as a drawing representation of the information and data analyses. The results showed that the students were able to acquire the required skills to create infographic using the basic descriptive statistics. They were able to express their ideas that depend on the data, and explain their results using the infographic.

The idea of the study surfaced in response to the assertions of the recommendations of studies (Afify, 2018; Locoro, Cabitza, Actis-Grosso & Batini, 2017; Mayer, Hegarty, Mayer & Campbell, 2005; Dindyal, 2003; Greer, 2010; Steele, 2005); namely, the importance of teaching mathematics in an atypical manner to the students with learning difficulties, and rebuilding the content to fit this category. The main aim is to identify the effect of the difference of the two infographic styles

(interactive, static) based on the (T.H.E.P.A.C.T) strategy in achievement, and reducing the math anxiety of the students with difficulties in learning mathematics in the elementary stage.

Study Problem and Questions:

The previous studies indicated that learning difficulties is a problem from which about 10-20%) of the students are suffering, which creates a problem in the academic achievement. The problem is further complicated by the multiple teaching strategies of the students with learning difficulties, and by the dispersion of the teachers in choosing a strategy that most fits their abilities and makes them approach their objectives. Still, there are many supporting technologies to deepen understanding and learning, which lack referential properties for every technique; and lack educational research works that assure suitability and success of these strategies in achieving the educational aims.

As such, the two styles of the infographic (static and interactive) were selected and compared one with the other, to elect the optimal of the two styles, to teach students with math learning difficulties; through employing the (T.H.E.P.A.C.T) strategy steps. In the light of the above, this study attempted to answer the following questions:

1) What is the effect of the two-infographic styles (interactive, static) based on (T.H.E.P.A.C.T) strategy in the achievement of the students with math learning difficulties?
2) What is the effect of the two-infographic styles (interactive, static) based on (T.H.E.P.A.C.T) strategy in reducing the math anxiety of the students with math learning difficulties?

Method and Procedures:

Study Method:

The researcher employed the semi-experimental method to unfold the effect of the independent variable, teaching method, which has three levels: normal, static infographic based on (T.H.E.P.A.C.T) strategy, and interactive infographic based on T.H.E.P.A.C.T) strategy, on the dependent variables (achievement, math anxiety.(

Study Sample:

Math learning difficulties mean a difficulty in learning or understanding the number concepts, or knowing its rules, or in the ability of calculation (Geary, 2006). The student with math learning difficulty is the student who studies in the fifth elementary grade in the public schools of Zarqa/1 Educational Area. He is further categorized by the special education department that he is suffering from math learning difficulties. The sample was randomly selected from the five graders of the elementary stage and were distributed over three groups. A control group consisting of (9) students, who received learning by the normal method; first experimental group of (10) students who received learning using the static infographic based on the T.H.E.P.A.C.T); and the second experimental group of (9) students who received learning using the interactive infographic based on the T.H.E.P.A.C.T. Four schools were randomly chosen of the schools provided with learning difficulties teachers. The sample was chosen according to the following:

1) The four chosen schools must be of those providing learning difficulties programs according to the classification of the education directorate of Zarqa/1.
2) The student must have math learning difficulties in the fifth grade. In other words, he was classified by the teachers of the difficulties in the elected schools based on the tests provided by the Ministry of Education to these schools.
3) The student should be within the (10-12) age group.

4) The student must not be suffering from sensorial disabilities, or mental retardation, through checking the comprehensive records with the students' counselor at the school.

The equivalence of the study groups was confirmed in the pre-achievement test, by calculating the One-Way Variance Analysis (ANOVA) of the study sample, which value was (0.89) and statistical significance was (0.43), indicative of the groups equivalence. Moreover, the equivalence of the study groups was confirmed in the pre-application of the math anxiety measure. The ANOVA analysis was calculated in the pre-application; F value was (0.44) and the statistical significance was (0.55), which again indicated the groups' equivalence.

Study Instruments:

1) Achievement Test:

The achievement test was coined in the three lowest cognitive levels, as per Bloom's classification, i.e. remembering, understanding and application. These levels are suitable for this category, as particulars of the achievement test include the most important concepts, generalizations and skills available in the study unit (circumference, area, and size) of the fifth elementary graders, number of the test items (n=20).

The researcher presented the test to (8) arbiters and requested them to judge the questions in terms of their validity, clarity, and suitability to the defined cognitive level. They were further requested to judge the validity of the proposed responses and degree of their suitability to the students, and suggest any amendments, if any. In the light of these suggestions, the achievement test was amended, and the questions were paraphrased accordingly, then The test was applied to an (8) students group of the sixth elementary graders, who have math learning difficulties. and the calculated Chronbach Alpha coefficient was (0.89), and the difficulty and excellence test coefficients were also calculated, they ranged between (0.80-0.23), which are all acceptable values.

2) Math anxiety Measure:

To measure the math anxiety level with fifth elementary graders who are suffering from math learning difficulties. (Sawalheh & Asfa, 2008: 343) find anxiety as "learner's feeling of tension when dealing with the figures or math problems solving, which are related to the daily or academic life." Procedurally, anxiety is defined as "a state of tension and stress, feeling of fear of failure, which the 5th elementary graders with math learning difficulties feel, while they learn the "circumference, area and size" unit, measured by the degree they obtain on the math anxiety scale, which is prepared for this purpose.

For constructing the scales, the researcher benefited some previous related studies (i.e. Hasballah, 2005; Al-Hashmi, 2007; Kraairi, 2011; and Khalil, 2013). The scale consisted of (15) items, each reflects a high degree of anxiety that the student suffers from in mathematics. It is based on measuring anxiety through three situations of anxiety related to (math learning, learning environment and math test). The scale items were designed in compliance with Likert's scale, as the student is given the chance to define his agreement degree among three responses (Yes, Sometimes, and No) with the degree given to the responses is (3-2-1) respectively. The high grade the student obtains reflects a math anxiety high degree, meanwhile, the low degree he obtained reflects a low anxiety level.

The scale was presented to (8) arbitrators to show their viewpoints about the clarity of the items and relatedness to the students' level; suitability of the items to the math anxiety measure with the students; and language accuracy. In the light of the comments the arbitrates showed, certain items were amended, and others were deleted. The final shape of the scale included (15) items.

The scale was applied to (8) fifth elementary graders, and the researcher used Pearson Correlation Coefficient to measure the correlation between every item and the overall degree. The correlation coefficients ranged between (0.48-0.77), which are statistically significant, an evident that all the scale items were valid and measure the objective they were set for, Chronbach Alpha coefficient was calculated, which amounted (0.86). The scale, in its final shape, consisted of (15) items, and followed the three-grading system (Yes, Sometimes, No). the maximum grade of the scale is (45) and the minimum is (15).

3) Infographic Preparation:

The teaching infographic was prepared through five main stages as follows:

1- Study and Analysis Stage: The learner's characteristics were analyzed: 5th elementary graders with math learning difficulties. The teaching needs were further analyzed; defining the scientific content; and allocation of the sources and references from: the student's book, teacher's guide and the official website of the pact"" http://aboutthepact.com/thepact-media /strategy.

2-Design Stage:

- Coining the educational objectives
- Defining the utilized lines: Adobe Arabic, Al Majd, GE Meen lines were used because of their diversity, modernity, clarity and complication free in letters composition .
- Defining the utilized shapes: the utilized shapes and symbols were gathered and assorted from many sites, such as: images.google.com\ freepik.com piktochart.com

3- Production Stage:

- Production of the initial model after carrying out the content analysis, highlighting the most important titles, and deletion or combination of the repeated items.
- Gathering the visual elements (icons, shapes and arrows).
- Using the graphic design programs in creating the infographic. The following two programs were used:Adobe Illustrator CC 2017, for designing the shapes and symbols and final direction of the static infographic; andAdobe Animate CC 2017 to, for designing and directing the interactive infographic.
- Conclusion of the initial pattern and revising it to ensure that the entire scientific content is visually represented.
- Making sure of (information sequence, validity of the elements used, and accuracy of the language).

4- Evaluation Stage:

-The teaching infographic was arbitrated and judged to make sure of its components and compatibility of its visual elements with the scientific content, and esnure representing all the parts of the scientific content.

- Applying the final collective evaluation, and conclusion of the development.

5- Publishing and Application:

- Field use and application of the static and interactive infographic.
- Ongoing evaluation and revision of the infographic.

6- Feedback:It is a continuous process starting with arbitrating the educational objectives and the content; evaluation of the used programs, and arbitration of the static and interactive infographic by the educational and technical specialists before application .

4) (T.H.E.P.A.C.T) Strategy:

A guide that contains introduction of the (T.H.E.P.A.C.T) strategy, and application steps in the light of the analysis of the defined unit, within the following steps:

-Step One: "Learn About": Every content was serially presented starting with the addition concept. The contents were presented to the students through a projector and the personal computers of some students. They were divided into four groups with one computer for each group, to follow up the infographic. Every concept was explained in sequence supported by the infographic; the title of the concept and its definition were presented as well as an example of it, and its math symbol that indicates the concept. Furthermore, the infographic was typed on hard paper to avoid any contact with the internet, and follow up the concept explanation, until reaching the last concept .

- Step Two: "Read About": The concepts were quickly discussed and then the students were left in their groups. The PC for one student in every group inside the classroom is to read and define every concept and access the internet and read more about every concept. This step is deeper and more concept-establishing, the student read, saw and searched for every concept, and read more about it within the forty minutes.

-Step Three: "Write About": Interactive worksheets were distributed with questions and interesting method to build the math knowledge gradually, from the simplest to the highest concepts. The papers included activities and motor games, such as coloring, drawing and lyrics, in addition to various math problems, displaying the worksheets and shapes of the students' solutions.

- Step Four: "Talk About": In this step, every pair of students are observed while proposing a math problem, or a problem from the real life. They will explain it and solve it before their colleagues, in a manner that will support the active learning. Furthermore, the learners gain more self-confident, good decision taking, and introduce various creative means and patterns.

The guide was presented to many arbiters, who showed their viewpoints, and the guide was amended according to these viewpoints.

Results:

Results of Question One: What is the effect of the two infographic styles (interactive, static) based on (T.H.E.P.A.C.T) strategy in the achievement of the students with math learning difficulties in the elementary stage? To answer this question, the researcher calculated the means (M's) and standard deviations (SD's) of the sample participants' performance on the achievement test, by group, as shown in Table.(1)

Table 1. The means and standard deviations of the sample participants' performance on the achievement test, by group

Group	No.	M	SD
Interactive Infographic based on (T.H.E.P.A.C.T)	9	15.33	1.00
Static Infographic based on (T.H.E.P.A.C.T)	10	16.70	0.95
Control	9	13.22	1.20

Table (1) indicates that there are apparent differences in the means of the first groups students' degrees, who were taught using the interactive infographic based on (T.H.E.P.A.C.T) strategy; the second group students who were taught using the static infographic based on (T.H.E.P.A.C.T) strategy; and the third (control) group students, in the achievement test. For this purpose, the researcher further used the One-Way Variance Analysis (ANOVA) as shown in Table.(2)

Table 2. ANOVA Analysis of the Degrees of the Two Experimental Groups and the Control Group Students on the Achievement Test

Variance	Total Squares	Freedom Degree	Squares Mean	F Value	Statistical Significance
Group	57.773	2	28.887	26.11	0.00
Error	27.656	25	1.106		

Table (2) shows that there is a statistically significant difference at (α=0.05) level, between the mean of the student's degrees on the achievement test, attributable to the method of teaching variable. To define the direction of this difference, the researched employed Tukey Test to identify the difference significance between these means, as shown in Table.(3)

Table 3. Results of Tukey Test of the Post-Comparisons of the Student's Degrees Mean on the Achievement Test, as per the Group

Group	Group	Difference in Means	Standard Error	Significance
Interactive Infographic	Control	2.11	0.50	0.001
Static Infographic	Interactive	1.37	0.48	0.02
	Control	3.48	0.48	0.00

Table (3) shows that students taught using the static infographic based on (T.H.E.P.A.C.T) strategy were better achievers than those taught using the interactive infographic based on (T.H.E.P.A.C.T) strategy, and those who were taught through the normal method. Moreover, students taught using the interactive infographic based on (T.H.E.P.A.C.T) achieved better than those taught using the normal method. These results may be ascribed to that reading the concepts through the infographic based on (T.H.E.P.A.C.T), which includes picture and definition of the concept, with a clarifying example, make infographic a successful math concepts learning source, as compared to presenting it in the page of the book, amidst a lot of math texts, which may disperse the student's mind away from focusing on the concept and the picture that guides to it. Infographic has the advantage of delivering a complicated idea, simply, clearly and with concentration. This makes the math concepts and remembering them in the pictures indicating to it, and those not indicating, deeper in the student's memory and even for longer periods.

These results may be interpreted based on the teaching activities that accompany infographic based on (T.H.E.P.A.C.T), in which the role of the teachers is shifted from the dominating in explaining knowledge, clarifying it through the examples and scientific presentation, as well as asking questions

to collect the information, shifted to an organizer of the active learning process. In addition, the role of the student shifted from receiving knowledge in a passive way, answering the teacher's questions, and doing the homework, to the role of active participation, and positive interaction, along with the teaching situations he is exposed to, and holding the responsibility of his learning.

Furthermore, teaching as per infographic based on (T.H.E.P.A.C.T) offers the teaching situation concrete experiences, which will make it easy for both the teacher and learner to accomplish the learning objectives. It puts the learner in a situation that includes a problem challenging his thought in a reasonable manner, and stimulates with him the motive to search for a solution to this problem. In such case, the student will use actual learning situations. Learning will be effective when its effects are transmitted, and will lead to the generalization of the experiences the learner obtains. It helps the learner apply what he had learned in new and various situations. It facilitates social interaction between the students, which will appear through participation in the teaching-learning classroom activities. It also contains exchange of ideas searching and excavating knowledge, which will lead into the existence of an active learning that takes the students away from the individual learning.

The researcher sees that, through the above, the math teacher, who uses infographic based on (T.H.E.P.A.C.T) in his teaching, can carry out teaching using the cooperative learning style to achieve the collective work, and develop cooperation spirit and communication among the students. The teacher further seeks to prepare chances for the students to approach the math concept, through an organized exploratory process, where the members of one group cooperate. They discuss among each other about the math concept, both in definition and application. This result is in line with the previous studies that tackled the effects of the interactive infographic based on (T.H.E.P.A.C. T) on the achievement of different subjects, such as the studies of (Lyn, & Kellie,2014; Krauss, 2012)

Whereas the infographic as a visual element aiming at simplifying the complications of the overlapping information, and displaying it to the students in an attractive frame of concepts, whether the static or interactive, which the student had identified in the education stages the preceded the second intermediate class; both the static and the interactive styles showed equivalence in deepening the previous of math concepts with the student.

However, the static pattern showed advantage over the interactive in deepening the new mat concepts, due to the nature of the picture infographic in displaying the concepts in an instant and complete manner, without the need for the student's interaction in moving the indicator to the required concept. This corresponds to the characteristics of this age stage, i.e. impulsivity and perception development from the sensory level to the abstract level.

Results of Question Two: What is the effect of the two infographic styles (interactive, static) based on (T.H.E.P.A.C.T) strategy in reducing the math anxiety of the students with math learning difficulties in the elementary stage? For answering this question, the means and standard deviations of the sample performance on the math anxiety measure, as per the group, were calculated, as shown in Table .(4)

Table 4. M's and SD's of the Sample Participants' Performance on the Math Anxiety Scale as per the Groups

Group	No.	M	SD
Interactive infographic based on (T.H.E.P.A.C.T)	9	24.11	1.76
Static infographic based on (T.H.E.P.A.C.T)	10	23.70	1.57
Control	9	32.67	2.45

Table (4) shows apparent differences in the means of the first experimental group students, who were taught using the interactive infographic based on (T.H.E.P.A.C.T) strategy; those who were taught using the static infographic based on (T.H.E.P.A.C.T) strategy; and the control group students, on the math anxiety scale. The One-Way Variance Analysis (ANOVA) was also used, as shown in the results of Table.(5)

Table 5. ANOVA Analysis of the Degrees of the Two Experimental Groups and the Control Group Students on the Math Anxiety Scale

Variance	Total Squares	Freedom Degree	Squares Mean	F Value	Statistical Significance
Group	470.725	2	235.363	61.95	0.00
Error	64.986	25	3.800		

Table (5) shows a statistically significant difference at (α =0.05) level, between the mean of the students' degrees on the math anxiety scale, attributable to the teaching method variable. To locate the direction of this difference, the researcher employed Scheffe test to identify the difference significant between these means, as shown in the following Table.(6)

Table 6. Results of Scheffe Test for the Post Comparisons of the Student's Degrees Mean on the Math Anxiety Scale, as per the Group

Group	Group	Means Differences	Standard Error	Significance
Interactive	Control	8.56	0.91	0.00
Static	Control	9.97	0.89	0.00

Table (6) indicates that students learned using interactive and static infographic based on (T.H.E.P.A.C.T) had less math anxiety than those learned through the normal style. However, there is no difference in the math anxiety among the students who received teaching through the interactive infographic based on (T.H.E.P.A.C.T), and those who were taught through the static infographic based on (T.H.E.P.A.C.T).

This result may be attributed to the flexibility of teaching using the interactive and static infographic based on (T.H.E.P.A.C.T); and since this method accommodates an effective group of teaching aids, instruments and educational activities in an interesting, attractive context. All these elements combine to achieve the desired objectives. Use of the interactive and static infographic based on (T.H.E.P.A.C.T) revives the teaching materials, embodies them in an enjoyable shape, to emerge from the rigidity of the written letters on the book pages (Albersam, 2014; Baglama, ,Yucesoy, Uzunboylu & Özcan, 2017). In addition, activities of the infographic bestow a climate of fun, pleasure, attention, and encouragement to the students with learning difficulties, making learning with them of a long-lasting effect. (Lee& Kim, 2016)

Chong (2012) asserted that the use of the interactive and static infographic based on (T.H.E.P.A.C.T), might overcome certain educational, social and psychological problems that face the pupils with learning difficulties. Especially, problems concerning their poor ability to focus during the teacher's explanation. It works on stimulating the attention of the pupils, because the lesson events are embodied in a touchable form, which causes the experiences provided have direct effect on the pupils with math learning difficulties.

The information the student acquires, once in perfect psychological state, where the class is free from tension, and the spirit of pleasure, movement and encouragement is spread over, would be more stable than the information gained while he is confused or afraid from punishment, the exam or dismissal as a result of ignorance in memorizing or reciting. Students will develop ability to conclude information, as if they are springing from their inside, and they own it themselves (Borkin & Bylinskii, 2013).

Recommendations :

1- Extending the use of the interactive and static infographic based on (T.H.E.P.A.C.T), to teach other mathematical subjects, as the current study proved the effectiveness of this teaching method.

2- Developing and modernizing the teaching process to keep up with the contemporary international trends, and to achieve the desired educational objectives. Paying attention to the teaching entrances, ways and strategies, which contribute to realize the learner's positiveness, and forming concepts in the various teaching situations, since the very early education stages.

3- Officials of education who are responsible for planning and development of the math modules of the public education in the Hashemite Kingdom of Jordan, should place intensive care and attention to include the infographic into the context of the cognitive content of the subjects of these modules. They should coin them in an intentional and suitable manner, which meets realizing the aspired objectives of math teaching.

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