

# USING AN INSTRUCTIONAL PROGRAM OF TEST TAKING STRATEGIES TO IMPROVE SECONDARY SCHOOL STUDENTS' EFL ACHEIVEMENT AND REDUCE THEIR TEST ANXIETY LEVEL

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## Abstract:

*This study examined the effectiveness of using an instructional program of test taking strategies to improve secondary students' EFL achievement and reduce their test anxiety level. The study adopted the quasi experimental design. The sample consisted of 160 1st year secondary stage students. The participants were divided into two groups, one control group and the experiential group. The two groups received pre- and post-administration of the study instruments. To fulfill the purpose of the research study, the researcher adopted two instruments; a pre/post EFL achievement test to measure EFL achievement and a pre/post test anxiety scale (TAS) to measure test taking anxiety level. The results of the study indicated that the proposed instructional program was effective in improving secondary students' EFL achievement and reducing their test anxiety level. This can be assured by the following points: (a) the experimental group outperformed the control group in the post administration of the EFL achievement test and the test anxiety scale, (b) the experimental group students' mean score in the post administration of the study instruments were much better than their mean scores in the pre administration of the instruments. It is recommended that teachers of EFL should be alert to the importance of test-anxiety, which may affect students' EFL achievement test scores, and be aware of developing their students' skills during EFL testing.*

**Key Words:** Test-taking strategies – test-taking anxiety – EFL achievement

## Introduction:

Anxiety is a serious factor affects foreign language classroom performance. According to Gardner, Tremblay, and Masgoret (1997), language anxiety is negatively related to achievement in the second language and is associated with “deficits in listening comprehension, impaired vocabulary learning, reduced word production, low scores on standardized tests, low grades in language courses or a combination of these factors”. Test taking is usually accompanied with a level of anxiety. These anxiety levels could affect students' achievements. Test taking strategies can vary from school to school. Districts can adopt a formal test preparation curriculum or simply chose to offer test-taking tips. The later approach has proven to be more beneficial because strategies can be generalized across disciplines. Regardless of the strategy, test preparation should be “an integral part of instruction, not something that takes time from instruction” (Kilian, 1992, p. 15).

Subsequently, Sullivan (2002) studied the effect of high levels of test anxiety on attention and memory skills. The study concluded that test anxiety had a negative influence on performance scores for high test-anxious individuals over low test-anxious individuals. Likewise, Xianping (2003) addressed the issue of language learning anxiety and its effect on the oral performance of students in classroom. It was concluded that there was an adverse relationship between language anxiety and individuals' oral performance.

Prego and Levio (2007) discussed the interdependence between test-anxiety and students' written performance in an attempt to examine the correlation of learners' beliefs to generate an enlightening account. The study sample consisted of 140 students enrolled for English One at ESI. Most of them had studied English as a compulsory subject at high school. The instruments used to gather information were interviews, questionnaires and documentary evidence.

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The results showed that there was a negative correlation between test-anxiety and students' written performance, thus laying bare the debilitating role that test-anxiety might play in learners' written performance. Student's test anxiety could be reduced by using strategies or skills of test taking effectively (Dooden & Abdelmabood, 2005). For example, a study conducted by Caraway (1987) focused on identifying the effective test-taking strategies through a test-taking seminar. In this study which a doped 30 nurses divided into an experimental group and a control one. Those participants of the experimental group had lower anxiety and significantly higher test scores after implementation of the program. Results of the study showed that the earlier explanation of test taking strategies, the better students could implement such strategies and practice them effectively. Additionally, more strategies have been studied by Coombe and Al-Hamly (2002) to reduce anxiety and help students achieve better in EFL. These strategies are such as having enough relaxation and enough sleep the day before the exam and keeping calm during the test and ask for clarification during exams if students don't understand questions.

Hancock (2001) investigated the effects of students' test anxiety and teacher's evaluation practices on students' achievement and motivation at post the secondary level. The researcher found statistically significant results which revealed that all students, especially students with high anxiety level, performed poorly and were less motivated to learn. Thus he concluded that that when students who are particularly test-anxious are exposed to a highly evaluative assessment environment in their educational institution, they perform poorly and are less motivated to perform (Hancock, 2001).

Khalid and Hasan (2009) conducted a study on a purposively selected sample of 187 undergraduate students to explore the relationship between test anxiety and academic achievement and found that students with academic achievement have low test anxiety scores and vice versa. Chapell, Blanding, Takahashi, Silverstein, Newman, Gubi, and McCann (2005) conducted a research study to explore the relationship between test anxiety and academic performance. They collected data from a large sample of graduate and undergraduate students and found a significant and negative relationship between test anxiety and academic achievement.

#### **1.1. Learning strategies and test-taking strategies:**

There are two major types of strategies: direct strategies and indirect ones. Direct strategies are those that directly involve the target language. All direct strategies require mental processing of the language. There are three groups of direct strategies: memory strategies, cognitive strategies, and compensation strategies. Memory strategies are those used for storage of information, cognitive strategies are the mental strategies learners use to make sense of their learning, and compensation strategies help learners to overcome knowledge gaps to continue the communication.

Indirect strategies provide indirect support for language learning through focusing, planning, evaluating, seeking opportunities, controlling anxiety, increasing cooperation and empathy and other means. There are three groups of indirect strategies: metacognitive strategies, affective strategies, and social strategies. Metacognitive strategies help learners to regulate their learning. Affective strategies are concerned with the learner's emotional requirements such as confidence, while social strategies lead to

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increased interaction with the target language.

As for the test-taking strategies, studies have come to a number of test taking strategies; some of these strategies are used before the test and others used during the test and the third group used after the test. Some of these strategies implemented in this study are: Guess it till you get it, Make use of the clue words in the text and What type of question is being asked - compare and contrast, analyze.

## **2. Related studies:**

### **2.1. Studies related to anxiety**

Anxiety is a major topic discussed in the educational realms. "In our day-to-day existence we experience anxiety, Whether or not we recognize it as anxiety. Anxiety can motivate us into action. "(Atchison & Dirette, 2007: 114). Rachuman (2004) has defined anxiety as the passive feelings resulted from fear or panic. Fear and panic are close in meaning with each other's as they share combination of tension and dissatisfying predictions.

Anxiety is a general feeling of vague fear, apprehension and tension without realizing to source of fear. The symptoms of anxiety include the inability of focus, insomnia, and sleep cut. Anxiety elevate the action of the sympathetic nervous system, Which results in sweating, heart palpitations, cooler body parts, dry mouth and throat, muscle tension, chills and numbness, uprisings and convulsions, muscle fatigue, inability to relax, and fear and expectations of evil .

A person who suffers from anxiety may experience different symptoms of the various incentives that have caused him/her internal or external defect of the bodily function. Physiologic symptoms include increased heart beats and elevated blood pressure, and cognitive symptoms include the nervousness and lack of self-confidence; the inability to concentrate; forgetfulness and confusion (Whitley,

1997) as cited by Atchison & Direrrt (2007: 114).

In (2011) Zeidner defines anxiety as "a complex multidimensional construction, embodying a series of interrelated cognitive, affective, somatic, and behavioral reactions "(P.26) Zeidner goes on by classifying the ways by which anxiety may be experienced. The first is cognitive reaction in which anxiety demonstrated as some disturbance of thinking. Anxious student may often worry about his/her problems, thus focusing his/her attention inward. The second is affection in which anxiety demonstrated as some negative emotion. Being anxious, a student may express anxiety as an emotion or mood. The third is somatic in which anxiety demonstrated as some form of bodily reactions. Being anxious, a student may suffer from physical symptoms, such as racing heart and sweaty palms. The fourth is behavioral in which anxiety demonstrated as some behavioral reactions and manners, both verbal and nonverbal, in the attempt to escape danger. (P.26-27)

The pervious papers showed that anxiety controls almost every aspect of L2/FL learning and consequently this study is very important to conquer the most important area of the learning process which is anxiety of EFL test-taking. EFL achievement can be negatively affected by test-taking anxiety other affective variables can be affected by anxiety as confidence and self-esteem (Mak & White, 1997), attitudes toward errors and mistakes ( Mak & White,1997 ), classroom behavior (Hilleson, 1996 ; Jackson,2002) attitude and motivation ( Oxford,1995 ) , and personality ( Ehramn & Oxford, 1995 ).

### **2.2. Studies related to Foreign language anxiety factors:**

#### **2.2.1. Teachers:**

Teachers have a major effect on students test anxiety in different ways. For example, when a teacher criticizes a student harshly in front of the whole class that may create

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an anxious environment, where anxiety results from the fear of negative evaluation, as mentioned earlier (Al-Sibai.2005).

Likewise, Aydin (2008) states that EFL learners have the panic of negative evaluation, which could be described as a strong source of language learning anxiety. In other words, the teacher who criticizes students harshly will likely promote test anxiety in students. Glashaw (2003) states that what successful teachers need is to improve their ways of teaching to succeed in the learning process. For instance, they can "help students overcome test anxiety, be aware of students' different levels of test anxiety as they relate to different subject areas, and use a variety of techniques to help them overcome their test anxiety". They can also "use different motivational strategies for girls and boys". As a matter of fact, a good teacher should not neglect his/her student's feelings. (pp: 18 - 29)

A professional teacher addresses the gender issue in the classroom. This can increase student success and confidence. When a teacher takes into consideration students' gender, s/he may be able to know their interests and needs, which will stimulate their attention and make the classroom atmosphere fun and interesting. Consequently, a successful teacher is the one who can "reduce the emotional distances between (him/her) and (his/her) students" as teaching some students have different circumstances. Teacher should be near to students and able to understand them in order to absorb and realize their inner feelings by using the appropriate teaching methods that take into account the students' individual differences.

#### **2.2.2. Students:**

Student is the center of interest and attention in the educational process; through him or her, teachers can determine the level of education and its requirements, and objectives, depending on the

capabilities and needs of the student. Moreover, individual differences of learners forecast different anxiety-based reactions. That is, learners may react to test taking differently based on their cognitive and meta-cognitive of their knowledge and performance like that of foreign language. As indicated by Cizek (2006), Mealy and Host (1992) students could be categorized into three types. The first category is the true perceiver; this student accurately realizes that he/she is not adequately prepared for the upcoming test and does not have adequate test-preparation skills. Therefore, the student's anxiety is justifiable for him/her. The second category is the unfocused; this student may have mastered the content of an upcoming test and may possess adequate test-taking skills.

However, the student is easily distracted during the test; as a result, he or she is enabling to access knowledge or apply skills and performs poorly. The third category is the misapprehended; this student inaccurately believes that he/she possesses adequate knowledge and test-taking skills. When confronted with poor test performance, the conflicting information causes worry, confusion, and anxiety. In a study that discussed how test anxiety affects attention and memory skills, Sullivan (2002), concluded that test anxiety is a serious factor having a negative impact on student's performance.

In another study by Mojammami (2006), results showed a statistical significance with negative correlation between the achievement motivation and test anxiety. It is concluded that there is an emotional and cognitive impact on student's achievement and performance.

#### **2.2.3. The classroom**

Because most testing takes place in the classroom, a classroom is a logical first avenue to consider as a context for intervention. We suggest that teachers, principals, and other educators work to

establish nonthreatening school and classroom environments in which the goal is more evidently learning rather than testing. The assessment of culture in classroom is a special part of the overall classroom atmosphere and is particularly important in addressing test anxiety. A valid assessment environment is based on characteristics, objectives, and results of testing which are clearly and openly presented and discussed with students.

On one hand, a number of studies observed the serious effect of test anxiety on students' EFL achievement. Zollar and Ben-Chain (1990) regarded that test and examination pressure is thought to prevent some individuals from reaching their academic power in EFL achievement. According to (Zollar & Ben-Chain, 1990) students regard tests as a burden that increase their anxiety. students also considered the test system as uncertain and unfair way to assess their true levels and achievements. Having the concept that tests are an obstacle towards getting high marks; students felt limited and had a bad performance during EFL tests. This increased their level of test anxiety (Hill & Wigfield, 1984).

On the other hand, three studies showed that the use of test-taking strategies can help students alleviate test anxiety and improve EFL achievement. According to (Idol- Maestas, 1986), test taking by wise students can be seen as one's capacity of using test characteristics and formats and/or test-taking strategies to raise final test scores. Cohen (2006) illustrated that using test-taking strategies could compensate for lack of language proficiency. To increase wisdom; test-taking strategies can be implemented. These strategies can vary from teacher to teacher, school to school.

In some states, previous tests are given to students as practice to "see how well the students have mastered individual skills" (Kilian, 1992, p. 14). Use of parallel and

previous forms is deemed appropriate because "it increases a student's knowledge of the whole domain, not just the particular items on a particular test" (Kilian, 1992). It is important to note, however, that one must assume that the set of previous tests or a set of parallel tests broadly samples from the curriculum contains varied item formats, and each new version of the test is constructed with the knowledge that students and teachers have access to previous forms (Kilian, 1992, p. 14).

### 3. Pilot studies:

The researcher has conducted two pilot studies in order to trace EFL test performance of the female students of Belkas secondary school and its correlation with test taking anxiety level.

#### 3.1. Pilot Study 1:

In order to provide evidence for the problem of the study the researcher conducted a pilot study to determine students' test taking anxiety level and its relationship with EFL test performance. An English language Achievement test (ELAT) based on the students' prescribed book "Hello 6" was administered. (Appendix 1)

**Table (1)** Students' Mean Score on the ELAT

Skills	Scores	Mean	St. deviation	Ratio %
Speaking	6	4.6	1.3	76.6
Grammar	7	4.3	1.7	61.9
Reading	8	5.0	1.6	62.9
Vocabulary	9	3.9	2.0	43.5
Total	30	17.9	5.0	59.7

The results in table (1) above showed that students' test score is not high especially in vocabulary and grammar.

#### 3.2. Pilot Study 2:

In order to identify the language test anxiety level of EFL secondary school students the test anxiety scale was administered to 40 1st year female students from Belqas city. Results

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indicated that students' test anxiety level is high.

**Table (2): Anxiety Scale: see (Appendix 2)**

The results in table (2) indicate that 1st year secondary female students suffer from high level of anxiety (mean score 84.375 %)

**4. Statement of the problem:**

Based on the results of pilot studies, the review of literature and related studies, the problem of this study is that secondary school students suffer from high level of test anxiety which could affect their EFL achievement negatively. This study presented an instructional program based on test-taking strategies to help EFL students achieve better and alleviate their test-taking anxiety level.

**5. Questions of the study:**

- The main question of this study is:  
How far does test taking strategy use affect students' level of test-taking anxiety and their EFL achievement?
- For research purposes this main question can be subdivided to the following questions:
  1. What is the effect of students' anxiety levels on EFL achievement test?
  2. What is the impact of an instructional program of test taking strategy on:
    - a. Reducing students' level of anxiety (male and female)
    - b. Improving students' scores in EFL achievement test (male and female)
  3. How can anxiety be reduced during EFL test-taking?
  4. Is there a difference between male and female students in:
    - a. EFL achievement?
    - b. Test-taking anxiety level?

**6. Hypothesis of the study:**

In order to answer the study questions, the following hypotheses were formed:

1. There is no statistically significant difference between the mean score of the experimental and the control groups in the pre administration of the EFL achievement test and the test anxiety scale.
  2. There is a statistically significant difference between the mean score of the experimental and control groups in the post administration of the EFL achievement test in favor of the experimental group.
  3. There is a statistically significant difference between the mean score of the experimental group students' score in the pre and the post administration of the EFL achievement test in favor of the post administration.
  4. There is no statistically significant difference between the mean score of male and female students of the experimental group in the pre administration of the EFL achievement test and the test anxiety scale.
  5. There is a statistically significant difference between the mean score of male and female students in the post administration of the EFL achievement test (ELAT) and the test anxiety scale (TAS) due to the implementation of the program of test taking strategies (TTSs).
- 7. Delimitations of the study:**
1. The study is delimited to a random sample of EFL secondary school students in two of schools at Belqas City. The subjects were drawn from the first year students of the two secondary schools. The four homogenous classes were selected to take part in the study. Each class consisted of 40 boys or girls according to the school involved. Thus, the total number of the students who participated in the study were 160 students (N= 160).
  2. A number of test-taking strategies that improve students' EFL achievement and reduce their anxiety level.

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## 8. Instruments of the study:

The study uses the following instruments:

- A pre-post EFL achievement test (ELAT) developed by the researcher for EFL male and female students in the two Schools.
- A pre-post Test Anxiety Scale (TAS) adopted from Sarason's study (1984) which consisted of 37 statements and was translated into Arabic.

## 9. The design of the study

To investigate the effectiveness of using test-taking strategies to reduce test anxiety level and improve EFL achievement, the quasi-experimental design was adopted. Four homogenous classes participated in the study as the experimental and control group. The pre-post EFL achievement test (ELAT) and the test anxiety scale (TAS) were administered to both groups. The program of test-taking strategies was implemented to the experimental group for four weeks whereas the control group received regular teaching method following the prescribed Teacher's guide procedures.

## 10. Definition of terms

### 1. Anxiety:

The root meaning of the word anxiety is 'to vex or trouble'; in either the absence or presence of psychological stress; anxiety can create feelings of fear, worry, and uneasiness and dread (Buras, and Holt, 2007). Additionally, Atchison, and Dinette (2007) mentioned that "Anxiety is defined as "apprehension of danger, and dread accompanied by restlessness, tension to a clearly identifiable stimulus."

In this study, anxiety is defined as a general feeling of vague fear, apprehension and tension without realizing the source of fear. The symptoms of anxiety include the inability to focus, insomnia, and sleep cut. Anxiety elevate the action of the sympathetic nervous system, (SNS) which results in

sweating, heart palpitations, cooler body parts, dry mouth and throat, muscle tension, chills and numbness, uprisings and convulsions, muscle fatigue, inability to relax, and fear and expectations of evil.

### 2. Test Anxiety:

Test anxiety can be defined as a type of performance anxiety stemming from a fear a failure. Those students who suffer from test anxiety always make a burden owner themselves that they can't bear and worry about their performance. They have a fear of negative evaluation which includes apprehension about others evaluations, avoidance of evaluative situations, and expectation that others would evaluate oneself negatively "Horowitz L.2002"

### 3. Test taking strategies:

Test taking strategies are steps, actions, techniques that students use in order to achieve higher score in EFL achievement test. Test-taking strategies or skills can be used effectively to reduce students' level of test-taking anxiety (Dooden & Abdelmabood, 2005).

In this study, test-taking strategies can be defined as tips that provide students with various testing aspects such as time limit, format, terminology, deductive reasoning, and answer selection. These tips can include teaching content domain, using variety of assessment approaches and formats, teaching time management skills, fostering student motivation in order to reduce test anxiety.

Some of test taking strategies are used during the test; for example, a) Take a few deep breaths and to relax tense muscles. This process will help you to stay relaxed and to make more energy available for remembering, thinking, and writing. B) Read the test directions carefully. C) Ask questions if you don't understand or need clarification. D) Do a quick "mind dump" of the content you don't want to forget.

### 11. Results of the study:

Results are presented in terms of the hypotheses of the study:

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**11.1. Testing the first hypothesis:**

The first hypothesis stated that:

There is no statistically significant difference between the mean score of the experimental and the control group in the

**Table (1)** below shows mean and standard deviation in the pre-application of the test taking strategies to reduce anxiety.

pre-administration of EFL achievement test and the test anxiety scale.

In order to verify this hypothesis the t-test for independent samples was used.

**Table (1):** Mean and SD for the Experimental and Control group in the pre-administration of the EFL achievement test (ELAT)

VARIABLES	The group	N.of cases	Means	S.D	df	T.Value	Sig.
Language function	Control	80	2.49	0.886	158	-0.436	0.663 Not Sig.
	Experimental	80	2.55	0.926			
Grammar and structure	Control	80	6.05	1.272	158	-0.473	0.637 Not Sig.
	Experimental	80	6.15	1.397			
Reading composition	Control	80	2.98	0.871	158	-0.528	0.599 Not Sig.
	Experimental	80	3.05	0.926			
Guided composition	Control	80	2.65	0.797	158	-0.568	0.571 Not Sig.
	Experimental	80	2.73	0.871			
Total score	Control	80	14.16	1.852	158	-1.029	0.305 Not Sig.
	Experimental	80	14.48	1.987			

In order to determine the significance of differences between the mean score of the two groups, the t-test for independent measures was used. It is evident from table (1) that mean and standard deviation for the two groups were very close. Table (1) illustrates the homogeneity of the two groups before using the test taking strategies.

Table (2) verifies the similarity of the experimental and the control groups' score on (TAS).

**Table 2:** t-test of the pre – test comparing the control and the experimental groups of Total score of Test Anxiety Scale (TAS)

VARIABLES	The group	N.of cases	Means	S.D	df	T.Value	Sig.
Total Score of TAS	Control	80	99.75	6.336	158	-0.247	0.805 Not Sig.
	Experimental	80	100.00	6.475			

This table shows that there is no statistically significant difference between the mean score of the experimental group and the control group in the total score of the test anxiety scale; the value of t-test is

(-0.247). These findings clarify that the two groups are similar before implementation the program of TTSs. Consequently, there is homogeneity between the two groups in the pre

administration of the TAS.

**11.2. Testing the second hypothesis:**

The second hypothesis stated that:

There is a statistically significant difference between the mean score of the experimental and control groups in the post administration of the EFL achievement test in favor of the experimental group.

To validate hypothesis #2 the researcher used the t-test for independent samples. See table (3) and (4).

Table (3) reports the significant difference between the mean score of the control and the experimental groups in the post administration of EFL achievement test

**Table (3):** t-test of the post-test comparing the control and the experimental groups concerning the total score and the score of sub-components of the EFL achievement test:

VARIABLES	The group	N.of cases	Means	S.D	Df	T.Value	Sig.
Language function	Control	80	2.61	0.864	158	-9.043	0.01 Sig.
	Experimental	80	3.65	0.553			
Grammar and structure	Control	80	7.38	1.633	158	-14.480	0.01 Sig.
	Experimental	80	10.33	0.808			
Reading comprehension	Control	80	3.50	0.928	158	-7.722	0.01 Sig.
	Experimental	80	4.50	0.694			
Guided composition	Control	80	2.85	0.887	158	-16.192	0.01 Sig.
	Experimental	80	4.69	0.493			
Total score	Control	80	16.34	2.289	158	-22.361	0.01 Sig.
	Experimental	80	23.16	1.488			

Table (3) manifests that the mean of the experimental group was greater than that of the control group. Table (4) reports a significant difference between the mean score of the experimental and the control group in the post administration of the test anxiety scale (TAS)

**Table 4:** t-test of the post test of the test anxiety scale (TAS) comparing the control and the experimental groups

VARIABLES	The group	N. of cases	Means	S.D	df	T.Value	Sig.
Total score of the TAS	Control	80	72.46	10.775	158	20.047	0.01 Sig.
	Experimental	80	44.56	6.234			

This table shows that there is a statistically significant difference between the mean score of the experimental and control group on the post administration of (TAS) in favor of the experimental group (**m:** 6.2); **t:** (20.047). Consequently, these results prove the validity of the second hypothesis of the study. The comparison between the experimental and control group shows that the TTSs has

**Table 5:** t-test of the experimental group comparing the pre-test and the post-test in the total score and score of sub-components of the pre-post EFL achievement test

VARIABLES	The group	N.of cases	Means	S.D	Df	T.Value	Sig.
Language function	pre – test	80	2.5	0.9	79	-9.157	0.01 Sig.
	post – test	80	3.6	0.5			
Vocabulary and structure	pre – test	80	6.1	1.3	79	-23.857	0.01 Sig.
	post – test	80	10.3	0.8			
Reading comprehension	pre – test	80	3.0	0.9	79	-11.902	0.01 Sig.
	post – test	80	4.5	0.6			
Guided composition	pre – test	80	2.7	0.8	79	-16.188	0.01 Sig.
	post – test	80	4.6	0.4			
Total score	pre – test	80	14.4	1.9	79	-31.683	0.01 Sig.
	post – test	80	23.1	1.4			

The results in table (5) show that there is a statistically significant difference at the (0.01) between the mean score of the pre-test and post-test of the experimental group in language function, grammar and structure, reading comprehension and guided composition on the total test score in favour of the post- EFL achievement test .

In order to determine the effect size of the test taking strategies on the total score of EFL achievement test, the ( $\eta^2$ ) was used.

**$\eta^2$  provides three kinds of results:**

1. The effect size ( $\eta^2$ ) which interprets about 1% of the total variance refers to small difference
2. The effect size ( $\eta^2$ ) which interprets about 5% of the total variance refers to medium difference.
3. ( $\eta^2$ ) which interprets about 5% of the total variance refers to high difference.
  - $\eta^2$  represents the total variance in the dependent variable which can be

considerably reduced the level of test anxiety concerning the experimental group in both male and female classes.

There is a statistically significant difference at the (0.01) between the mean score of the experimental and the control group in language function, grammar and structure, reading comprehension and guided composition on the total test score in favour of the experimental group.

attributed to the independent variable. (Kiess, 1989: 486-488).

- Values of ( $\eta^2$ ) and the effect size of the treatment on the achievement

**Table 6:** Results of ( $\eta^2$ ) for the effect of the training on the EFL achievement test score of the experimental group

Achievement Skill	$\eta^2$	Effect s
Language function	0.51%	High
Vocabulary and structure	0.88%	High
Reading comprehension	0.64%	High
Guided composition	0.77%	High
Total score	0.93%	High

Table (6) shows that there is a high effect size of using the TTSs on the EFL achievement test scores of the experimental group students where the values ranged from (0.51) to (0.93). These

results point to the considerable effect that the (TTSs) have on students' EFL achievement.

### 11.3. Testing the third hypothesis:

The third hypothesis stated that:

**Table (7):** t-test of the Experimental group comparing the pre-test and the post-test in Total Score of (TAS)

VARIABLES	The group	N.of cases	Means	S.D	Df	T.Value	Sig.
Total score of TAS	pre – test	80	100.0	6.475	79	52.707	0.01 Sig.
	post – test	80	44.56	6.234			

Table (7) shows that there is a statistically significant difference at (0.01) between the mean score of the experimental and control group in the post administration of the (TAS) in favor of the experimental group; where the mean is (44.56) and the t-value is (52.707).

These results indicate the validity of the third hypothesis of the study that (TTSs) have notably reduced the level of test anxiety of the experimental group compared to the control group.

In order to determine the effect size of the TAS, the ( $\eta^2$ ) was used. The effect size of the TTSs program concerning the difference between the pre and post

**Table (8):** Comparing male and female of the experimental group in the total score and the score of sub-components in the pre EFL Achievement Test

VARIABLES	The group	N.of cases	Means	S.D	Df	T.Value	Sig.
Language function	Male	40	2.55	0.932	78	0.0	1.000 Not Sig.
	Female	40	2.55	0.932			
Vocabulary and structure	Male	40	6.15	1.406	78	0.0	1.000 Not Sig.
	Female	40	6.15	1.406			
Reading comprehension	Male	40	3.05	0.932	78	0.0	1.000 Not Sig.
	Female	40	3.05	0.932			
Guided composition	Male	40	2.73	0.877	78	0.0	1.000 Not Sig.
	Female	40	2.73	0.877			
Total score	Male	40	14.48	2.000	78	0.0	1.000 Not Sig.
	Female	40	14.48	2.000			

Results reported in table (8) show that there is no statically significant difference in the mean score between male and female 1<sup>st</sup> year secondary students in the

There is a statistically difference between the experimental and the control group in the post-administration of the (TAS) in favor of the experimental group.

conducting of TAS is very large in favor of the experimental group

### Testing the fourth hypothesis:

The fourth hypothesis stated that:

There is no statistically significant difference between the mean score of male and female students of the experimental group in the pre-administration of the EFL achievement test and the test anxiety scale.

Table (8) and (9) report the difference between male and female students of the experimental group in the total score and the score of sub-components of EFL achievement test and and total score of the test anxiety scale.

pre-administration of the pre EFL achievement test where all t-value scores are statically insignificant.

As for the test anxiety scale, table (9)

illustrates the comparison between the experimental group in the pre mean score of male and female of the administration of (TAS)

**Table (9):** T-test of the pre-administration of TAS comparing male and female of the experimental group in the total score of TAS

VARIABLES	The group	N.of cases	Mean s	S.D	df	T.Value	Sig.
Total Score of TAS	Male	40	100.00	6.516	78	0.0	1.000
	Female	40	100.00	6.516			Not Sig.

Table (9) indicates that there is no statically difference in the mean score between male and female secondary school students in the pre administration of the Test Anxiety Scale where all t-value scores are statistically insignificant.

#### 11.4. Testing the fifth hypothesis:

The fifth hypothesis states that:

There is a statistically significant

difference between male and female students of the experimental group in the post-administration of the EFL achievement test and the test anxiety scale in favor of the female students.

Table (10) shows the comparison between male and female students' score on the EFL post achievement test.

**Table 10:** comparing male and female students' score of the experimental group on the total score of the EFL post achievement test

VARIABLES	The group	N.of cases	Means	S.D	df	T.Value	Sig.
Language function	Male	40	3.58	0.636	78	-1.216	0.228
	Female	40	3.73	0.452			Not Sig.
Vocabulary and structure	Male	40	10.05	0.959	78	-3.220	0.01
	Female	40	10.60	0.496			Sig.
Reading comprehension	Male	40	4.35	0.770	78	-1.969	0.05
	Female	40	4.65	0.580			Sig.
Guided composition	Male	40	4.60	0.545	78	-1.604	0.113
	Female	40	4.78	0.423			Not Sig.
The total score of the EFL achievement test	Male	40	22.58	1.567	78	-3.824	0.01
	Female	40	23.75	1.149			Sig.

It is concluded from table (10) that there is a statistically significant difference at the (0.01) between the mean score of male and female students of the experimental group in language function, grammar and structure, reading comprehension and guided composition on the total test score

in favour of the post- EFL achievement test where t-value ranged from (1.2) to (1.6).

**Table (11)** verifies the similarity of male and female students' score of the experimental group on (TAS).

**Table (11):** T- Test of the post administration of TAS comparing male and female students of the experimental group in the total score of (TAS)

VARIABLES	The group	N.of cases	Means	S.D	df	T.Value	Sig.
Total degree of TAS	Male	40	45.10	5.909	78	0.769	0.444 Not Sig.

	Female	40	44.03	6.573			
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It is concluded from table (11) that there is no statically significant difference in the mean score between male and female secondary school students in the post administration of the Test Anxiety Scale (TAS) where all t-value is (0.679) which is statistically insignificant.

**Discussion of Results:**

Results of the study show that there is a significantly statistical difference between the experimental and the control group in favor of the experimental group in the students' score of EFL achievement test. These results can be attributed to the effect of the instructional program of (TTSs). To explain, in the beginning, the researcher has designed a program of ten test taking strategies to reduce the EFL students' level of test anxiety and enhance their EFL achievement. After implementing the program on the students, TTSs have developed the students' EFL test-taking skills and its sub-skills. Finally, the experimental group achieved a high level of performance in the post EFL achievement test and low level of test anxiety in (TAS) as shown in the previous results.

Results reported above indicated that the instructional program had a positive impact on students' EFL achievement. The program also lowered students' test anxiety. Consequently, the results of this study add up to those previous studies which concluded that EFL achievement can be negatively affected by test-taking anxiety and other affective variables can also be affected by anxiety as classroom behavior (Hilleson, 1996 ; Jackson,2002) attitude and motivation ( Oxford,1995 ) , and personality ( Ehramn & Oxford, 1995).

Hence, test taking strategies are steps or actions used to decrease the level of students' anxiety and improve EFL

achievement. Some of these strategies are implemnted during the program and they are used before the test; for example, a) before a test or exam, break study sessions into manageable time segments and meaningful units. You'll remember more if you study for short periods of time (45 minutes to 1 hour) and over a longer period of time (1-2 weeks) than if you cram all your study into a "binge" session the night before the test. b) Practice answering essay questions BEFORE the test. C) Use cognitive questions at all levels to assure learning and ability to answer essay questions. For example: How would you describe, compare/contrast, predict, classify, apply, evaluate, prioritize, etc.

**Conclusion:**

With reference to the results of this study, the following points were concluded:

1. the current study provided an evidence to the effecetiveness of using test-taking strategies to reduce EFL test-taking anxiety level. This result adds to the validity of other studies investigating similar aspects such as that of Awan, Etal (2010), Diyyab (2013), Khodadady and Khajavy (2013).
2. The present study provided evidence to the effectiveness of using test-taking strategies instruction in increasing test scores in EFL final achievement test. This result adds to the validity of other studies in EFL field such as, Al-Hamly (2002), Dooden & Abdelmabood (2005), cohen (2006).

**Recommendations of the Study:**

Based on the results and conclusions of this study, the following recommendations are suggested:

1. Ministry of Education should train EFL teachers with respect to test-taking strategies in order to help their students

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- learn how to pass an EFL achievement with a low level of test-taking anxiety; consequently, the students' test scores would be higher.
2. EFL teachers should train their students to learn and use various types of test-taking strategies (TTSs).
  3. EFL teachers and supervisors should hold workshops, symposiums and conferences to share experiences of EFL teaching and learning strategies.
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