



THE EFFECT OF TEST-TAKING STRATEGY INSTRUCTION ON SAUDI EFL STUDENTS' MULTIPLE-CHOICE READING COMPREHENSION TESTS AT THE TERTIARY LEVEL

Dr. Arafat Hamouda

(Dept. of English, College of Arabic Language & Social Studies, Qassim University, KSA.)



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ABSTRACT

Research in language testing has recently witnessed an increasing interest in exploring test-taking strategies utilized by test-takers in responding to tasks in language test. Although these strategies are extensively studied in L1 literature, they are noticeably neglected in EFL/ESL testing literature. The overall aim of this study seeks to uncover the relatively unexplored area of test-taking strategies used by Saudi EFL students when performing tasks in language tests and whether these can be successfully taught. This study has three main objectives. The first is to scrutinize the effect of test-taking strategies instruction on Saudi EFL students' multiple-choice reading comprehension test at the tertiary level. The second is to describe the test-taking strategies that the test takers report to use when responding to questions in a multiple choice reading comprehension test. The last is to examine the attitudes of Saudi EFL students towards classroom teaching and learning of test-taking strategies. To accomplish the purposes of this study, a total of sixty four Saudi participants studying at English Language and Translation Department, Qassim University, Saudi Arabia took part in the study. They were in two detached classes as experimental and control groups. The former received extra teaching in test-taking strategies for multiple-choice reading comprehension test as the treatment within the regular reading classes while the latter did not. The study was based upon a triangulated data collection approach using multiple-choice vocabulary and reading comprehension test, questionnaire and verbal report. The quantitative findings revealed that the mean score on the English vocabulary and reading comprehension test obtained from the experimental group was significantly higher than that from the control group. The qualitative findings also confirmed the quantitative findings and revealed how the participants arrived at their answers and the reasons for their choice of answers. All the questionnaires completed by the students in the experimental group indicated that they had a positive attitude towards the learning and instruction of test-taking strategies. The findings may prove useful not only for teachers who prepare students for the multiple-choice reading comprehension test but also for syllabus and materials designers.

Keywords: *Test-Taking Strategy, Multiple-Choice Reading Test, verbal report.*



INTRODUCTION

The importance of reading English for EFL learners cannot be overemphasized. It receives the special focus in second or foreign language teaching and learning. It is widely recognized that reading is one of the most important skills for ESL/ EFL learners to master. As Alsheikh (2011) stated, the mastery of reading skill could help ESL/ EFL learners achieve success in English learning. Reading has played a crucial role in overall development in language skills and even in academic success for decades (Al Fraidan, 2011). In school, reading ability is viewed as critical to academic success because students read to learn and acquire new information (Jamil, Aziz, & Razak 2010). Additionally, in the setting of English as a Foreign Language, it is often supposed that reading comprehension is the fundamental way of learning new information, and it is the most significant skill required for the students' success. Therefore, according to Radojevic (2006), "reading is essential for successfully completing all college-level courses. In other words, college students who are more proficient readers are most likely to experience more success in their courses". Reading is required in many of our daily occupational and recreational activities and is a prerequisite for success in our educational system (Kashkouli, & Barati, 2013; Amer and Ghabelju, 2013).

Due to the importance and position of reading comprehension skill in ESL/ EFL academic settings, many students do their best to achieve high scores in reading comprehension tests. Meantime, tests are the most common evaluating method in nearly all educational systems and academic institutions worldwide. In other words, tests are one of the indicators used by educators to evaluate students' performance and assess their own success in achieving their objectives in teaching (Kashkouli, Barati, & Nejad Ansari, 2015; Bicak 2013). Tests signal students' progress and yield information on the success of the program as well. Tests also motivate students to work hard in school and help them identify areas that need more work. In addition, tests themselves are important and a unique learning experience where students can develop many skills

and attitudes or values such as time management, setting priorities, planning, making decisions, and problem solving. Thus, English tests do play a significant role in these students' lives. It is a measurement device for students to determine whether they have met the standards set by the lecturers and the university. In general, tests carry the most load of the student's total grade particularly at the college level.

The significance and uses of tests have extended beyond schools as many serious decisions that affect people's lives are made entirely according to specific tests. Whether the goal is college admission, certification, detection of specific behavior, or personal selection, a decision about an individual's ability is usually made based on his or her scores in specific tests (Pour-Mohammadi & Abidin, 2011). Tests are one of the most widely used evaluation tools that provide scores and are used for assessing test-takers' language ability, decision making and screening purposes (Rezaee, 2006).

According to the undeniable role played by tests in nearly all educational systems and academic institutions worldwide, several educators and researchers attempt to investigate the factors that may affect students' performance and 'scores on language tests. For instance, Pour-Mohammadi & Jafre (2011b) in their studies attempt to investigate the way test-takers approach their exams, i.e., the strategies they use while taking a test. They report that students have generally performed poorly on their exams. They attribute their students' poor performance to many factors, one of which is the lack of using test-taking strategies when taking tests. The same finding is also reached by Dodeen et al (2014) who report that there are several cognitive and psychological factors which affect performances in tests. One important test-related factor is test-taking strategies. Similarly, Kashkouli, Barati, and Nejad Ansari (2015) and Ghafournia, and Afghari (2014) also found that the most common reason why candidates perform poorly on their exam is that the students do not have the appropriate test-taking skills they need to ensure acceptable levels of achievement. The same problem is also reported in



EFL academic Saudi setting where the researcher works. The researcher as well as some teachers who offer the same course has noticed the poor performance of Saudi EFL students in reading comprehension tests. In their discussion for such problem, educators' focus in Qassim University has always been on the teaching methods and number of hours of teaching English in class. Unfortunately, they have not taken into consideration the students' side of the story, and that is their own experience in relation to a test situation. If they are so concerned about students doing well in tests, they should think within the context of the test situation itself. The focus should be on the students themselves, as they are the ones who would be able to answer these questions:

What goes on in their minds when they are sitting for an English test? How do they manage? What strategies or tactics do they employ when they respond to questions in the test? How do they go about arriving at their answers? Do they employ multiple strategies for one question or the same kind of strategy for all the questions? What drove them to their choice of answers?

I believe the answers to these questions are crucial if teachers are to devise alternatives to enhance students' performance. Educators can facilitate students' performance on multiple choice language tests by providing students with test taking strategy instruction (Dodeen, 2008). Providing students with test taking strategy instruction can help students improve their testing performances (Radojevic, 2006; Addamegh, 2004; Kitsantas, 2002; Hong, Sas, & Sas, 2006). Amer and Ghabelju (2013) also reported that students who use test taking strategies will have an increase in their academic success. He gave a five-week training course on test-taking skills to high school students. Students who were trained on test-taking skills for five weeks or more had higher academic success. This result shows that test-taking strategies are important and necessary skills for students to master to improve their performance on tests. This mastery cannot be acquired incidentally. It can be achieved by teaching students in a systematic manner, similar to that

applied in the acquisition of any other set of skills. Mastery of these skills is important and necessary for doing well (Ghafournia, and Afghari, 2014).

Based on the above mentioned importance of instruction in test-taking, a plethora of studies have been conducted to pursue the effect of instruction in test-taking strategies on students' scores in language tests. According to the findings of a number of strategy instruction studies (Kashkouli, Barati, and Nejad Ansari, 2015; Al Fraidan, 2011; Jamil, 2009; Radojevic, 2004; Phakiti, 2008; Rezaee, 2005; Amer, 1993; Assiri, 2000), strategies can be instructed, and students can improve their strategy use and enhance their performance on reading comprehension tests. However, in their research, Cohen and Upton (2007) have proven that training and instruction of test taking strategies could bring about a noticeable improvement in test performance, and so attainment of higher scores. This refers to the practical value of providing prospective test takers with training in using test-taking strategies with the aim of helping them perform well and score high on language tests. Ghafournia, and Afghari (2014) and Zhang, Goh, and Kunnanin their study (2014) also examined the effect of test-taking strategies on students' performance on reading comprehension tests. The findings indicated that the students who received the test-taking instruction performed better as compared to their counterparts on reading comprehension tests. Finally, studies have illustrated that students can improve their performance on reading comprehension tests through strategy instruction.

It appears from the studies mentioned above that EFL/L2 students would benefit greatly from being trained in how to deploy reading and test-taking strategies appropriately on the reading comprehension test. Though the past literature showed that there is a positive relationship between test performance and skills in test-taking due to instruction, not much research has been done in this area, especially in SL/FL testing situations (Kashkouli, Barati, and Nejad Ansari, 2015; Sana' Ababneh, 2014, Zhang, Goh, and Kunnan 2014, Jamil, 2009; Hong-Nam and Leavell 2006) and the researcher is in agreement that there is much to be done to better



able understand test-taking strategies employed by students in different contexts. To date, there have been very few attempts to elucidate the impact of teaching test taking strategies on the performance of EFL learners on the vocabulary and reading comprehension tests (Ghafournia, and Afghari, 2014; Al Fraidan, 2011; Addamegh 2004). The scarcity of studies in the area of test-taking strategies was the motivating force behind the particular research, which may be of interest to those concerned with the use of strategies in the field of language testing. Due to the poor performance of the Saudi EFL learners on the vocabulary and reading comprehension tests and the scarcity of studies focusing specifically on how Saudi EFL learners behave and use TTS, this study tried to investigate whether given instruction and practices in test-taking strategies can improve Saudi EFL students' performance in multiple-choice English vocabulary and reading comprehension tests. Moreover, it attempted to explore the strategies utilized in tackling tests items. Lastly, it investigated students' attitudes towards the teaching and learning of test-taking strategies for multiple-choice English reading comprehension tests.

PURPOSES OF THE STUDY

The purpose of this study attempts to:

1. Investigate the extent to which the teaching of test-taking strategies for multiple-choice English vocabulary and reading comprehension tests affects students' test scores.
2. Probe the test-taking strategies employed by students when taking multiple choice vocabulary and reading comprehension test based on students' think-aloud protocols.
3. Explore students' attitudes towards the teaching and learning of test-taking strategies in their vocabulary and reading comprehension course.

THE RESEARCH QUESTIONS

With the intention to address the aforementioned research goals with a sample of 64 Saudi ESL learners, the current study will attempt to answer the following questions:

1. What is the effect of test-taking strategies instruction on Saudi EFL students' multiple-choice

vocabulary and reading comprehension test at the tertiary level?

2. What are the test-taking strategies that the students report to use when responding to questions in a multiple choice vocabulary and reading comprehension test?

3. What are the participants' attitudes regarding the test-taking strategy instruction in their vocabulary and reading comprehension course?

HYPOTHESIS OF THE STUDY

To have a wholesome speculation and to have systematic investigation of the first research questions, the following hypotheses are proposed. The answer of the first question is linked with testing these hypotheses:

1. There is no significant difference between means of scores obtained by the experimental and the control group in terms of their performance on the pre-test of multiple choice vocabulary and reading comprehension.

- 2- There is no significant difference between means of scores obtained by the control group in terms of their performance on the pre-post test of multiple choice vocabulary and reading comprehension.

- 3- There is no significant difference between means of scores obtained by the experimental group in terms of their performance on the pre-post test of multiple choice vocabulary and reading comprehension.

- 4- There is no significant difference between means of scores obtained by the experimental (who received instruction on test-taking strategies) and the control group (who did not receive specific training on test taking strategies) in terms of their performance on the post test of multiple choice vocabulary and reading comprehension.

SIGNIFICANCE OF THE STUDY

In response to the scholarly voices calling for more research with the aim of exploring the impact of teaching test taking strategies on the performance of EFL learners on the vocabulary and reading comprehension tests (e.g., Cohen, 2006), this study seeks to explore and determine the strategies used in test situations among students in Saudi Arabia. This exploration of the relation between the teaching of



reading and test-taking strategies and performance on multiple-choice English vocabulary and reading comprehension tests produces a number of findings and implications that contribute to the pedagogy of English language instruction in Saudi Arabia. It also makes theoretical and methodological contributions to the research fields of L2 reading, strategy use, and language testing.

Pedagogically, this study supplies Saudi students and English language teachers with rich and valuable information regarding the ways in which use of reading and test-taking strategies affect performance on multiple-choice English vocabulary and reading comprehension tests. This study also provides helpful insights into the reading and test-taking strategies that Saudi students use on multiple-choice reading comprehension tests. These findings will enable English language teachers to create a frame of reference with which to improve their students' knowledge of reading and test-taking strategies and their abilities to apply this knowledge of multiple-choice vocabulary and reading comprehension tests.

Further, this study provides rich and valuable information based on students' verbal reports on test-taking strategies to further understand what actually goes on in the minds of the test-takers and the strategies they employ in a test situation. Knowing which strategies are used in the reading test is also significant information for syllabus and materials designers. They can integrate test taking strategies in teaching curriculum. This could also be profitable for both language educators and test takers, and contribute to the field of reading strategies in general and test-taking strategies in particular.

Additionally, it is hoped that the study will result in insights about how the test takers approach and perform their exams. Such insights would enable us to propose practical implications for classroom practice, prospective test takers, and test preparation programs. Test designers may use the results of this study to develop better tests.

Finally, it is hoped that the results of the study will help teachers see how teaching and

learning of knowledge and skills in one subject area can be reinforced in another subject area.

VARIABLES OF THE STUDY

The study consisted of one independent variable: the proposed instruction based on test-taking strategies with experimental group versus the regular instruction received by the control group. The dependent consisted of the students' scores in the multiple choice vocabulary and reading comprehension test.

METHODOLOGY

This study intended to investigate the effect of direct teaching of test-taking strategies on Saudi EFL students' performance in multiple-choice vocabulary and reading comprehension tests. Moreover, their attitudes towards teaching such strategies were studied. It was a quasi-experimental design, including experimental and control groups. Both groups were administered a pre-test and a post-test, but the treatment was only administered to the experimental group. The treatment in this study was direct teaching of test-taking strategies. The data were analyzed using independent-samples t-tests.

PARTICIPANTS

Sixty four students of Qassim University majoring in English Language and Translation were recruited to participate in the particular study. The subjects were between nineteen and twenty-one years. They were all male. For the purposes of this study, it was not possible for the researcher to access and subsequently consider female university students from Saudi as in Saudi Arabia men and women are educated separately. All the subjects were native speakers of Arabic, and English was their sole foreign language. The subjects were made up of first year students attending at the English department and Translation at the College of Arabic Language and Social Studies. Each class constituted 32 students. In selecting the participants for this study, factors such as age, native language and linguistic background were not taken into account and all available students in that semester were selected. The rationale behind this decision was that students with all these various characteristics took the same University Entrance Examination. Finally,



almost the same teaching methods are used for classroom presentations, and they are all assessed by the same procedures and almost according to the same criteria. Before implementing the treatment, the participants in experimental group were briefly informed that they would be involved in this research.

TOOLS OF STUDY

The study was based upon a triangulated data collection approach using multiple-choice vocabulary and reading comprehension test, questionnaire and verbal report. To increase the validity of the results obtained, the method utilized for data collection in this research was based on triangulation.

MULTIPLE-CHOICE ENGLISH READING COMPREHENSION TESTS

An achievement vocabulary and reading comprehension test was devised exactly according to the materials that the subjects had covered during their first semester at university. This test intends to investigate the test-taking strategies employed by students when they take multiple choice reading comprehension test based on students' think-aloud protocols.

The final version of the test contained two reading comprehension subtests administered as the pre-test and post-test. Each subtest consisted of one passage followed by 10 multiple choice questions followed by 15 multiple choice vocabulary items. The first passage consists of a ~521-words, and the second consists of 336 words. Four options a, b, c, or d were available for every item.

The selected passages were reviewed by two experts in the field to confirm that the passages to be used for the verbal report purpose were suitable with the content and level of difficulty close to the general passages that most students in their fields had to read. Thus, they were served as representative passages in the field that the participant studied.

RELIABILITY OF THE TEST

In order to determine the reliability of the reading comprehension test results, Cronbach's Alpha test was conducted for the total number of

test items. The obtained Cronbach α = .732, significant at p -value < 0.05, demonstrated the relative consistency of the participants' performance on total reading comprehension test items.

VALIDITY OF THE TEST

The Validity of the test was achieved by six member jury who evaluated the multiple choice vocabulary and reading comprehension test as for:

- clarity
- Whether the items reflect the content of the point tested
- Fitness of the test to the study group

ITEM ANALYSIS

However, an item will have low discrimination if it is very easy or very difficult for most test takers, thus interpreting this statistic must be done in combination with other indicators of item performance such as item difficulty. This provides information concerning

- a) Index of discrimination:

All the items of the reading comprehension test had a positive discriminating power, except for item (10). It was refined. It had a discriminating power.

- b) Index of difficulty:

Index of difficulty of the items ranged between 90 and 30, except for one item which difficulty was 15. The three alternatives were refined. After refinement, index of difficulty of item became .35

- C) Effectiveness of distracters:

After judging the test, some distracters of the multiple choice tasks were revised or changed. All the distracters functioned effectively.

TEST TIMING

The participants in both groups were allowed 120 minutes to answer the questions in both pre-test and post-test. These comprehension questions mostly required the participants to draw inferences based on careful reading and a profound comprehension of the texts. More particularly, the participants had to infer the meaning of new words or expressions in the texts, search for particular details, and recognize the main idea for each passage. For the data collection stage, subjects completed the two sets of texts and test items under



no time constraint in order to facilitate the verbal report process.

LIKERT RATING-SCALE QUESTIONNAIRE

This study benefited from an extensive review of the literature on procedures typically used to collect strategy data, such as questionnaires. A 2-point Likert rating-scale questionnaire (Disagree to Agree) adopted from the Inventory of Vattanapath and Jaiprayoon (1999); Pour-Mohammadi and Abidin (2011) and Cohen (2006) was utilized in this study. The questionnaire consisted of 26 statements exploring the attitudes of Saudi EFL students, Qassim University, towards classroom teaching and learning of test-taking strategies. The questionnaire was reviewed by some instructors in TEFL, who provided useful feedback on the content of the questionnaire and offered some helpful hints to remove the probable ambiguities. The questionnaire was also piloted by a sample of 30 Saudi students. The reliability estimate of the questionnaire, calculated by Cronbach alpha formula, was ($\alpha = .925$), which is high and acceptable.

The questionnaire was conducted after the post-test only to the experimental group to investigate the students' attitudes towards the teaching and learning of test-taking strategies. The dedicated time to complete the questionnaire was 15 minutes.

VERBAL REPORT

Verbal report was the third tool employed in this study. The first scholar to draw attention to the feasibility of gathering evidence through verbal reports is Cohen (1984). Verbal report was also one of the most widely used tools in test-taking strategy research by many researchers in a second or foreign language (Addamegh 2004; Cohen & Upton, 2007). The main purpose for using the technique of verbal reports is to get a clearer picture of what test takers are doing and thinking while completing a multiple-choice test of vocabulary and reading comprehension, with no time constraint in order to facilitate the collection of data. In this study, each participant will report his strategies immediately after each item. Nevo (1989) and Addamegh (2004) found that it is possible to obtain immediate

feedback from respondents about their strategy use on an item-by-item basis. This finding supports the method we used to gather our data which was on an item-by-item basis. The test takers say everything that comes to their mind as they answer the questions. In our study, however, we will give the subjects the opportunity to say what is in their minds straightforwardly in the L1 or the L2 or to shift between the two languages as they like. This should help to reflect the processes more accurately and provide richer information.

RESPONDENT TRAINING IN GIVING VERBAL REPORT

Since students need to think while they are reading, they need instruction from the teacher and modeling, guided practice and reflection if reading strategy training is to be successful (Nevo 1989). So, it is highly recommended that subjects are exposed to an adequate training on verbal reporting (Cohen and Upton 2007). Therefore, the researcher aimed to provide some training for subjects to acquaint them with this instrument. As it is recommended that the training task should be on something different from the actual task to avoid any bias in the actual task (Addamegh 2004). Alfridan (2011) is in favour of training subjects so as to make the verbal reports more complete.

To model the verbal report strategy, the researcher as an instructor began by telling the participants that a reader should be thinking all the time while reading. I informed my participants that verbal report would help them to recognize how they worked with the text to make meaning in their own minds. Then I demonstrated by thinking aloud using a short article. After the demonstration, I asked my participants if they fully understood the steps of thinking out loud while reading, and let them practice until they get familiar with the technique and clearly knew what they had to do. Next, I provide the participants with practice in the chosen procedure on the task that will form the focus for the study. Finally, I give feedback on thinking aloud performance.

STRATEGIES INSTRUCTION

Strategies instruction is important because it can help readers develop a sense of conscious control over strategies that they can employ to carry out a



reading task. According to Cohen and Upton (2006), the primary goal of strategies instruction is “teaching students about strategies, teaching them how and when to use strategies, helping students identify personally effective strategies, and encouraging students to make strategic behaviors part of their learning schema”. However, the researcher gave details on how that training was conducted, and he presented a clear picture of how the subjects performed the verbal report. Therefore, the instruction must consist of both what strategies to be learned and how, when, where, and why to use the strategies. Besides, teachers should provide students with opportunities to practice so that they will employ the strategies efficiently and automatically. Cohen and Upton (2007) suggested a few steps for reading teachers to follow in order to achieve effective reading and test-taking strategies instruction:

1. Describe the strategy. Students obtain an understanding of the strategy and its purpose— why it is important, when it can be used, and how to use it.
2. Model its use. The teacher models the strategy, explaining to the students how to perform it.
3. Provide ample assisted practice time. The teacher monitors, provides cues, and gives feedback. Practice results in automaticity so the student does not have to “think” about using the strategy.
4. Promote student self-monitoring and evaluation of personal strategy use. Students will likely use the strategy if they see how it works for them; it will become part of their learning schema.
5. Encourage continued use and generalization of the strategy. Students are encouraged to try the strategy in other learning situations.

The researcher as an instructor needs to remember that focused time needs to be spent teaching students how to use the strategy. The control of the strategy needs to be gradually shifted from the teacher to the students so that the students can be in control of the strategy use and can witness that strategy use can increase their performance (Addamegh2004). Therefore, a key component to effective strategy instruction is to provide students

with the necessary time and opportunities for practice required to develop the confidence and apply the strategies independently and effectively to any form of text. Educators need to provide ongoing guided practice and feedback until it is apparent that students are able to apply the strategies and skills to their own reading. When this level of proficiency is evident, educators can turn over the responsibility for strategy use to the students. This shift from dependence on the teacher to self-sufficient student use is dependent on how well the strategy has been modeled, opportunities for practice and the comfort level of the students. Educators must be very conscientious to ensure that the students have developed the skills and confidence necessary to use reading and test taking strategies effectively.

PROCEDURE

The process of collecting data for this study included six stages as follows:

1. Pre-test prior to the initiation of the study, the pre-test was administered to the participants of both groups.
2. Asking test-takers to think-aloud as they work through a series of test items. It was administered for both groups immediately when taking the pre-test.
3. Intervention

The experimental group was only given an additional training in test-taking strategies for multiple-choice vocabulary and reading comprehension tests as supplementary teaching to the regular English reading courses. The test-taking strategies which were employed in this study had mostly been adopted from Vattanapath and Jaipayoon (1999) and modified for the present study on the basis of the weaknesses of Saudi EFL university students. Two strategies were practiced in each session. This lasted for 12 sessions, once a week. Each session lasted only 20 minutes, making a total of almost 4 hours. In order to enable the participants to be familiar and internalize the test-taking strategies, the researcher clarified and modelled how each strategy could be used in the processes of completing reading comprehension questions. As for the control group, the same time was devoted to sample tests of reading



comprehension without any instruction of test-taking strategies.

4. Post-test. After completing all the test-taking strategies instruction, the same test used as a post-test was readministered to both groups to evaluate their progress in taking multiple-choice English reading comprehension tests.

5. While completing the test, test-takers were requested to comment and verbalize many item flaws as well as strategies they used to answer with no time constraint in order to facilitate the collection of verbal report data.

6. Likert Rating-scale Questionnaire. In addition, a questionnaire was administered to the experimental group only at the end of the course to find out their attitudes towards the test-taking strategy training.

STATISTICAL DEVICES

A. The KR-21 formula was used to confirm the reliability of the test constructed by the researcher.

B. The arithmetic mean was used to provide the average scores for the control and the experimental groups.

C. The T-test was used to determine whether there was any significant different between the achievement of the control group and that of the experimental group.

RESULTS AND DISCUSSION

The primary analyses consisted of reviewing the students' performance on the vocabulary and reading comprehension tests administered prior to the onset of the treatment and following its completion. Secondary analyses consisted of examining students' attitudes towards classroom teaching and learning of test-taking strategies. The secondary analysis also consisted of analyzing the students' verbal report regarding how to arrive at their answer. This study combined qualitative and quantitative analyses and interpreted the results based on the integration of data analysis. This present study started with a quantitative data collection and analysis.

RESEARCH QUESTION 1 discussed the effect of test-taking strategies instruction on Saudi EFL students' multiple-choice reading comprehension

test at the tertiary level. This section reports the results of the quantitative analysis.

1. The results of the multiple-choice English reading and vocabulary comprehension test obtained by both the control and the experimental groups are shown below.

COMPARISON OF THE MULTIPLE-CHOICE PRE-TEST SCORES BETWEEN THE TWO GROUPS

Before the treatment, a pre-test on the participants' multiple-choice reading performance was administered. The multiple-choice reading pre-test is composed of two reading comprehension passages. Each passage is followed by 10 MC questions followed by 15 MC vocabulary items. Each correct answer was given a score of 1; therefore, the total score of the whole test would be 50. After the data collection procedure was completed, the pre-test scores of both groups were analysed by applying an independent sample T-test to determine whether there was any significant difference between the control group and the experimental group in terms of their performance on pre-test at the beginning of the study. As shown in table 1, the Experimental Group gained a mean score of 26.78, and the Control Group, 26.50. The results of the pre-test obtained by both the control and the experimental groups before the treatment phase indicated that there was not a significant difference between the mean scores of the two groups in pre-test ($t = .338$). The mean scores of the two groups in pre-test indicated that they had the same level of performance in test taking strategies at the beginning of the experiment. The result thus met the requirement that both groups in the study were homogeneous in their performance on the pre-test before implementing the treatment.

Table 1: A Comparison of the Pre-Test Mean Scores of the Control and Experimental Groups

Group	Mean (X)	S.D.	T-Test
Control	26.50	3.09	.388
Experimental	26.78	3.55	

The data in table 1 indicates that the results of the independent samples T-test is in consistent with the first null hypothesis stating that there is no



significant difference between the experimental group and the control group in terms of their performance on the multiple-choice vocabulary and reading comprehension pre-tests. It should also be taken into account that the scores of the students of both groups were fairly low and this may be due to the fact that neither the experimental group nor the control group was exposed to any systematic training in test taking strategies before conducting the experiment.

COMPARISON OF THE MEAN OF THE MULTIPLE-CHOICE READING PRE-TEST AND POST-TEST WITHIN THE GROUP

The data in table 2 indicates that there is a significant difference between the mean scores of the pre-test (26.78) and the post-test of the experimental group (37.72). Scores of the experimental group in the post test were greatly higher than those in the pre-test. This considerable improvement shown by the subjects of the experimental group is due to the effect of the exposure to the test-taking strategy instruction, which included presentation and practice on test-taking strategies. This indicates that the participants in the experimental group indeed benefited from the test-taking strategy instruction. This implies that the students in the experimental group improved their reading comprehension significantly after they were taught with regular lessons and the test-taking strategies.

The present study also gives us more evidence for the notion that test-taking strategies instruction has an effect on multiple-choice vocabulary and reading tests. This finding obtained from table 2 disagrees with the second hypothesis and assures that there is significant difference (15.32) between the pre-test and the post test of the experimental group in test-taking strategies.

The students' level of performance in test-taking strategies witnessed a considerable improvement. These remarkably high gains shown by the students of the experimental group in the pre and post test are due to the effect of the systematic training the students had in test-taking strategies. This finding is similar to that of Jamil, Aziz, & Razak,

2010; Fraidan, 2011; Jamil, 2009; Radojevic, 2009; Phakiti, 2008; Cohen, 2006; Rezaee, 2005; Assiri, 2000 who stated that training improves the attainments of the students in test-taking strategies.

On the other hand, table 2 also reveals that there is no significant difference between means of the scores of the control group on the pre-test, post-test basis. This assures that there is no improvement in test-taking strategies. The control group, which received regular instruction, made little progress in tackling the multiple-choice reading items. This may be due to lack of systematic training in test-taking strategies.

According to obtained results, there was support for the second hypothesis stating that there is no significant difference between means of scores obtained by the control group strategies in terms of their performance on the pre-post test of multiple choice vocabulary and reading comprehension. On the contrary, there was rejection for the third hypothesis stating that there is no significant difference between means of scores obtained by the experimental group strategies in terms of their performance on the pre-post test of multiple choice vocabulary and reading comprehension.

Table 2: Comparison of the Mean of the Cloze Pre-test and Post-test within the Group

Group	Pre-test Mean (SD)	Post-test Mean (SD)	T-Test
Control	26.50 (3.09)	26.56 (3.05)	.19
Experimental	26.78 (3.55)	37.72 (3.89)	15.32

A Comparison of the Post-Test Mean Scores of the Control and Experimental Groups

After teaching the treatment test taking strategies to the experimental group, a post-test on the participants' multiple-choice reading performance was readministered. T-test was used to analyze the difference between means of scores of the control and the experimental groups. As is shown in table (3) below, using t-test revealed that there is a



significant difference between means of the scores of the control group and those of the experimental group in this test. The experimental group got a higher mean (37.72) than that of the control group (26.56). This means that the results of the independent-samples t-test revealed that the students in the experimental group significantly outscored their counterparts in the control group. Mean scores and standard deviations for the performance of on the test of TTS for both groups showed that the experimental group students had better performance compared with their counterparts in the control group. In other words, there is a significant difference between the two groups after the post-test because the p-value is less than .05. Therefore, it can be concluded that students who received the test-taking strategies instruction in the experimental group achieved a significant improvement on the reading comprehension scores than the students in the control group who received regular instruction only.

Table3: A Comparison of the Post-Test Mean Scores of the Control and Experimental Groups

Group	Mean (X)	S.D.	T-Test
Control	26.56	3.05	12.78
Experimental	37.72	3.89	

The data in table 3 indicates that these results of the experimental and control groups in the post test differ with the fourth null hypothesis and affirm that there is significant difference (favoring the experimental group) between the means of the scores of the control group and that of experimental group who received instruction on test taking strategies. Students in the experimental group performed significantly better when taking the post-test than those in the control group. Modeling the test taking skills enabled students to apply the same thought processes to their own independent work. This form of instruction enabled students in the experimental group to improve in their abilities to comprehend and respond to text and therefore should be incorporated as an effective form of classroom teaching.

Overall, on the basis of the results of the statistical analysis, it can be concluded that the instruction of test-taking strategies was statistically significant regarding the improvement of performance. As indicated above, the test-taking strategies instruction did have a significant effect on the Saudi EFL students' reading comprehension test performance. The results of the present study are in line with the findings of other similar studies that have probed the impacts of test-taking strategies on test performance (Kashkouli, & Barati, 2013; Dodeen et al, 2014; Cohen and Upton, 2007; Nevo, 1989; Phakiti, 2008; Radojevic, 2006; Ghafournia, and Afghari, 2014; Amer and Ghabelju, 2013). They all supported that test-taking strategies instruction improved the Saudi EFL students' reading comprehension test performance. Collectively these results confirm the benefits of providing students with instruction in reading comprehension and test taking skills.

THE SECOND QUESTION

What are the test-taking strategies that EFL university level Saudi students employ when taking multiple choice vocabulary and reading comprehension test? The answer of the second research includes a description of the strategies obtained from the data based on students' think-aloud protocols and the researcher's judgment.

The description will detail the main strategies types, providing an example for each strategy type and a definition or a comment from the researcher in order to identify this strategy. In order to make it more convenient for the reader, the test stem will be provided and the correct answer, when applicable, and a wider context for the strategy in order to be clear for the reader.

THE STRATEGY OF LOOKING FOR THE MAIN IDEAS OF THE PASSAGE

Looking for the main ideas of the passage is one of the used strategies by the experimental group participants. For main idea questions, always reread the first and last sentences. Also, skim through the reading passage to see how many times each of the answer choices is discussed. Below is an example that



highlights how one of the respondents uses this strategy in item no.1

Test Item: 1- The Main Idea of the Passage Is

- A. Excessive use of technology for communication or infomania can have startling effects on the level of intelligence.
- B. Today many people use text messages to communicate with the rest of the world and this can distract these people from business or social meetings.
- C. Infomania makes people smoke more and consume drugs.
- D. Workers' attention is significantly disturbed when they are told not to respond to any message.

"I would focus my attention to the first few sentences and the last few sentences in each paragraph, since those sentences indicate the main points of the whole paragraph". (Participant 21 on item1)

Another participant selects options based on the paragraph/passage's overall meaning.

"I knew this whole passage talked about the effect of the excessive use of technology, so I selected the first option because other options were irrelevant to this issue". (Participant 32 on item1)

THE STRATEGY OF READING THE QUESTION BEFORE READING THE PASSAGE

Another important strategy was to read the questions before reading the passage. This strategy is going to be used on items that require knowledge that might be independent of the texts and passages. This is because the test taker considers the options before going through the text. Probably the test taker has a chance of getting the item right even without having to read the passage. This strategy was utilized only by the experimental group. One of the experimental group participants reported that,

"I will go through the questions first and then I take some of the points from the questions briefly. I go through the passage from the start to the ending". (Participant 20)

And in his report, another participant insisted, *"Yes, I will go through the questions first very fast. I did that for all the two passages. I will know what to look for. I read the first question and looked for clues in the related paragraph. Then I went to the next question with the same procedure". (Participant 7)*

Comment: The subject claimed that in that way, it could save time and it was faster. It could be assumed they had better exposure in terms of test taking strategy instruction, and also they decided to utilize what they had gone through. Anderson et al (1991) reports that the test-takers may read the questions and the options before reading the passage, but in our Elite test it was done that way.

READING THE PASSAGE FIRST BEFORE READING THE QUESTIONS

'Reading the passage first' is a basic strategy that encouraged participants to return to the passage and look for the answers there. It is interesting to note that the control group prefers to read the passage first before reading the questions. On the contrary, the experimental group participants prefer to start with reading the questions first.

One of the participants from the control group stated in his verbal report that, *"Before answering, I read the passage first and I can remember the part which the question asked and also I understand the sentences". (Participant 28 on item)*

Comment: This subject preferred to read the passage before answering the questions. It appeared that he chose what he thought was the best way to get to the answer that he was looking for. This also infers that the control group participants needed to understand as a whole before they could answer the questions. Nevo (1989) found a similar test-taking behavior. It also used by native speakers when tackling a reading comprehension test (Cohen, 1984).

THE STRATEGY OF USING BACKGROUND KNOWLEDGE

Use of background knowledge has been recognized as an important strategy in many studies related to comprehension processes (Cohen and



Upton 2007). This use of background knowledge was most notable with many subjects of the experimental group. In this strategy a participants made use of what they knew in training of test-taking. The experimental group participants are exposed to the technique of test-taking, whereas the control group participants don't. One participant claimed that he utilized the strategy based on how he was trained so it came naturally to him. Thus he responded to the question by using his knowledge of test taking experience. He insisted that he was taught that way. He reported, *that's normal ... I was taught that the word usually refers to the sentence before it or ... what we understand the sentence to mean. So I got the meaning from there.* (Participant 19 on item 4)

Test Item 4: According to Jeffrey Haas, everyday use of technology -----

- A. does not exhaust your brain
- B. can be more dangerous than smoking
- C. helps to focus on problem-solving tasks
- D. helps to improve your mental insights more than smoking

The participant considers prior knowledge before reading the text.

"This article talks about technology, which seems to be familiar to me. I think option 'b' is true. My choice is based on my background knowledge" (Participant 17 on item 4)

Comment: The experimental group participants seemed to benefit from their test-taking instruction and were able to utilize it in the test. It would be worth some consideration the probability of including this strategy in test-takers' preparation in taking a test. The subject here is utilizing his background knowledge of technology. Using information from the text and activating background knowledge about the topic being tested is a widely used strategy in reading tests (Vann & Abraham 1990). The selection of the answer came from activating background knowledge about technology. This is what the subject also reported in the verbal report.

GOING BACK TO THE TEXT

Going back to the text was one noticeable strategy used by the participants of the experimental group. They read the question and consider the options before going back to the passage /portion. This strategy is going to be used on items that require knowledge that might be independent of the texts and passages. This is because the test taker considers the options before going through the text. Below is an example that highlights how one of the respondents uses this strategy in item 2.

Test Item 2: In Paragraph 1, Line 3, it can be inferred that '*infomania*' is the -----.

- A. constant flood of information from cell phones, emails and text messages
- B. need of the people to contact their friends every day
- C. abuse of technology against people and animals
- D. situation when people are addicted to many kinds of drugs

*"After reading the question and the options in the passages test, I decided to refer back to the text to locate the target word '*infomania*' before considering the alternatives. I reread the related paragraph which helps to locate information if I can't answer immediately. I answered the questions sequentially, I go back to the first paragraph again to locate the word in the passage and reread the surrounding context (e.g., the sentence containing the target word or a few words before and after it".* (Participant 28 on item 2)

Comment: This procedure was adopted by many participants in the experimental group and remained constant throughout the test. The use of such strategy indicates the effect of the instruction on the way the participants approach the test items.

THE STRATEGY OF "TRYING TO MATCH THE OPTION WITH THE PASSAGE"

Matching the option with the passage is another strategy used by the experimental group participants. One of the experimental group participants reported that he reads the four options



and goes back to the passage to find a similar word to any of the four options in the passage.

Test Item 26. According to the text, children's ability to communicate is

- A. ordinary B. impressive C. innate
D. unexpected

He says, *'after reading the stem and the options, I decided to go back to look for any of them in the passage. I tried to find information that links between the paragraph and one of the options. I found that "innate" is the key word that has to do with children's ability to communicate, and it is the word that links between "innate and learning".'* (Participant 25 on item26)

Comment: This strategy is widely recommended by some educators and researchers. For example, Addamegh (2004) found that some subjects selected an alternative by matching the option with a word included in the passage. Vann & Abraham (1990) found that a Saudi EFL learner used his intuition to supply answers in a reading test.

THE REFERENT FOR THE PRONOUN

The pronoun reference item type is intended to "measure examinees' ability to identify relationships between pronouns and other anaphoric devices and their antecedents/postcedents within the passage" (Cohen and Upton, 2006). Examinees need to select the option that contains the noun or phrase that is referenced by the targeted pronoun. The experimental group subjects prefer to go back directly to the sentence that included the pronoun in question as well as the sentences that come before or after it. Below is an example of how one of the respondents uses this strategy in q.10.

10. In Paragraph 3, Line 9, the underlined pronoun "They" refers to -----

- A. messages B. subjects
C. researchers D. phone calls

To answer such question one of the participants says *"I read the sentence from the beginning. I attempted to read and reread the sentence containing the pronoun, but also made use of clues that could help me get the correct answer. I read the*

sentence before and after the sentence with the pronoun. So, I'll go back to the passage and reread the surrounding context (e.g., the sentence containing the target word or a few words before and after it. I read the sentence with pronoun. I read the whole sentence to understand the full context and pronoun references. I should read the previous sentence, too". (Participant 9 on item 10)

Another participant says, *"This question is asking what the pronoun 'they' stands for. [Locating the pronoun in the text.][Looks at options.] The options 'messages and the phone calls' are not appropriate since here the 'they' refers to persons. In the passage, Option 'B' can be correct. So, I eliminated Options 'a' and 'd'... because you need to base your choice on a previous word, and the last word. Through my first reading, I felt that the answer must be one of the two options b and c. because the verb of the pronoun is "told" which stands for persons. The word 'subjects' is repeated twice. So I guess it will be the correct option. I think the pronoun 'they' in this sentence refers to the subjects".* (Participant 8 on item10)

Comment: As reflected in the example given above, respondents relied very heavily on their understanding of the sentence and paragraph meaning to help them select which option was the referent for the pronoun in question number 10. The participants read the texts, read the questions, then located the word in the passage and reread the surrounding context (e.g., the sentence containing the target word or a few words before and after it). This procedure was adopted by all the participants in the experimental group.

Some subjects stated in the verbal report that the reason for rereading the sentence before and after the sentence with the pronoun in the test was in order to get more information or in order to confirm the answer which is another strategy. This is



also found by Pour-Mohammadi and Abidin (2012) with an Iranian subject while doing a reading test.

THE STRATEGY OF ELIMINATING UNREASONABLE OPTIONS

One of the important strategies reported by the participants is the strategy of eliminating unreasonable options. The greater the numbers of ridiculous choices you can discard, the better your odds are of choosing the correct answer. Sometimes two answers say exactly the same thing. In such a case, the correct answer is usually one of the other different pair. One participant from the experimental group explained how he uses this strategy. *"In this item (23) I use the strategy of eliminating unreasonable options.*

Test Item 23: The Mona Lisa is one of the most ----
----- paintings in the whole world. It is famous for the beautiful but mysterious smile of an unknown woman.

- A. anticipated B. exquisite
C. expected D. experienced

"I have been taught this when meeting two similar options eliminate them and the correct answer will be of the other remaining pair. Since a. and c. Mean basically the same thing, and since only one answer can be correct, then it is logical that neither could be the correct answer. So I eliminate the options 'A' and 'C'. In such a case, the correct answer is usually one of the other pair. After that I have the last two options b and d, I think option 'D' doesn't fit, I guess option 'b' is correct". (participant, 12 item 23)

Comment: Apparently, the subject examines the alternatives during the pause, as he later says that the option 'exquisite' seems to be the right choice. He expresses the reason behind this choice by saying that he eliminated two similar options, and the other alternative does not fit the meaning of the stem.

This subject said in the verbal report: I have been taught this when meeting similar words while reading.... This is an indication of the effect of test taking instruction that he received. Alfridan (2011) and Addamegh (2004) found their EFL subjects using this strategy.

SIMILAR OPTION STRATEGY

"Similar option" was another important strategy used by the students of the experimental group. In the case of "look alike options, choose of two opposite answers, but eliminate choices that mean basically the same thing and thus cancel each other out. Below is an example of how one of the respondents arrives at the correct answer.

Test item 12: Of all the language courses, French is

- A) the least difficult to learn B) the easiest to study
C) learned effortless *D) mentally challenging

One of the respondents described how he uses this strategy in his verbal report. He starts by saying, *"According to the training session that I have received, I analyze the four options, and I find, the first three options 'a,b, and c' have the same meaning. So I decided to eliminate them and I choose the fourth option d because it is different".* (Participant 17 on item 12)

Comment: The explanation of using this strategy indicates to what extent the training has great effect on the performance of the test takers in approaching the test items. In their study, Cohen & Upton (2007) found that the subjects employed this strategy in responding to a reading test.

OPPOSITE CHOICE STRATEGY

Selecting one of two opposite alternatives is another very common strategy that test writers use to create distracters to include a pair of direct opposites among the options. In such cases the best choice is between two very different or opposite choices. Below is an example of how one of the participants arrives at the answer.

Test item 25: He is so good that I am always _____ with his work.

- A. honored B. attracted C. displeased
D. pleased

The participant says, *"In this item I use the strategy of opposite choice strategy. Why, because the first two options are similar. According to the information that I acquire from the instruction, when you encounter two options that are similar, eliminate them.*



The correct choice is one of the two opposites. I hesitate between Options c and d. it seems to me that the best one in meaning is 'pleased', Because there are two words that are opposite, the answer is more likely to be one of them. So, ~ I will go for 'pleased'. Pleased with his work... the meaning is also okay."(Participant 11 on item 25)

Comment: The test-taker narrows down the possible correct alternatives to two words. However, This subject discards the first two options in favor of choosing from two alternatives of opposite meaning, provided for the same item. The description of how the subject arrives the answer is an indicator of the effect of the test taking instruction on the learner performance in the test.

HIGHEST AND LOWEST NUMBERS STRATEGY

It is human nature for teachers to add decoy choices that are above and below the correct answer. High or low numbers may be incorrect answers. If you must guess at this type of question, you may increase your chance of guessing correctly if you eliminate the lowest and highest numbers. Below is a description of how one of the participants uses such strategy.

Test item 6: According to the 2002 Carleton University study, it takes 20% of the workers -----minutes to respond to a text message on their mobile phone.

- A. 20 B. 60 C.30 D. 62

"In this question, the choices are a range of numbers (20, 30, 60 62).According to what I am taught, I eliminate the lowest and highest numbers. I will choose one of the ones in the middle of the range".(Participant 3 on item6)

SKIPS QUESTION

Skipping the difficult questions is another notable strategy.The participants who employed this strategy skipped the difficult question and returned to it later. This strategy seemed to be popular among the students of both groups.

The main reason for this strategy is to save time and to go on with the test to find later clues for

that skipped item. Here is an example of the difficult question in which some respondent get stuck. Let us see how they approach it:

Test item 15: In _____ to your inquiry, we regret to tell you that we are unable to help in that matter.

- A. response B. problem C. difficulty D. responsibility

One of the participants says,"*In my exam there are some difficult questions so I would leave this question maybe I will try all the questions that I can answer and then I will come back to this question".(participant 4 on item15)*

Another participant who utilized this strategy mentioned"*For this question I did not know the answer.I circle it,I come back to it later because I really don't know the meaning of "Inquiry". So, I skipped the question for now. so I'm not too sure whether this new terminology I should just sort of try figure out what it means, you know, by looking at the words and seeing if it makes sense".(participant 21 on item 15)*

Comment: It can be easily inferred that the reason why this subject rejects 'Inquiry' is simply that it is not known to him.This participant had difficulty with the vocabulary as well just like the earlier participant who had problems with the word 'Inquiry'.When the subject does not find the right answer for a test item, he skips the item and goes onto the next one and later comes back to the one/s he has not answered. One of the subjects reported that he was taught this strategy of skipping and returning later so as not to exhaust one' thinking and save some effort for the rest of the items. Another test taker reported that he skipped in the question to leave it to the end in order to eliminate as many alternatives as possible. Skipping a difficult item is a well known strategy in the reading comprehension literature (e.g. Anderson et al 1991, Addamegh2004, Cohen & Upton 2007)

ABSOLUTE STRATEGY

Another important strategy used by the experimental group respondents was absolute strategy. As with question stems, some options may include absolutes or specific determiners as *always*,



never, all, every, none...etc. These absolutes indicate that the option is false. Such words often imply that an alternative is incorrect because these words are very broad and difficult to defend. Therefore, in avoiding these words, you may be able to eliminate one or more alternatives. You may then be able to guess among a smaller group of alternatives. Here is an example of how one of the respondents uses this strategy to arrive at the correct answer.

Test item 16: The dropout rate in high schools is on the increase because:

- A. **all** students are unmotivated
- B. **some** students are disillusioned with school
- C. students **never** take high school seriously
- D. **every** high school student has emotional problems

The participant says, "in order to answer this item, I use the absolute strategy which I taught. In this item, options 'A, C, and D' contain terms that are more absolute than this in option b. so I eliminate Options A, C and D as possibilities because they are less likely to be true than some stated less absolutely".

(Participant 26 on item 16)

Comment: It is very important to note that the experimental group respondents benefit from test taking strategies instruction and employ them effectively (Pour-Mohammadi and Abidin, 2012; Alfridan, 2011; Assiri 2000).

QUALIFIER STRATEGY

Another strategy which is no less important than the previous strategy is the strategy of Qualifiers. A qualifier is the opposite of a specific determiner. Qualifiers represent a conditional word or phrase such as *usually, probably, often, generally, may, frequently, and seldom*. Qualifiers may appear either in the question stem or in one or more options. Qualifying words tend to make a question true. Question 17 is an example of how one of the respondents uses this strategy to arrive at the correct answer.

Test item 17. Because of the extreme pressure underwater, divers are sluggish.

- a) never
- *b) often
- c) only
- d) always

"While I was reading this question, I paid special attention to those absolutes such as never, only, and always. According to what I have taught in the training sessions, I can say that the options a, c and d are absolutes. In this case, only option b contains a qualifier and is in fact the correct answer". (Participant 4 on item 17).

It has also been found in think-aloud studies that the strategy of Qualifiers is often used while tackling items in the reading test. (Vann & Abraham, 1990, Addamegh 2004)

LONGER OPTION STRATEGY

Selecting the longest option is one of the important strategies reported by many participants in the experimental group. The length of a multiple choice option often signals its correctness. (Radojevic 2006). Given the choice among several options, if a student is unsure of which to choose, and one of the options is significantly longer (say twice as long), the longer option tends to be the correct one. The longest response is often the correct one, because the instructor tends to load it with qualifying adjectives or phrases. Below is a description of how one participant approaches the following item.

Test Item 18. The idiom "to turn the table" means

- A) to be happy
- B) to get angry
- *C) to change a situation to your own advantage
- D) to complain

"In this item, I use the "longer option strategy". As you see that option C is longer than the other options; it is also the only double option". (participant 2 on item 18) In Radojevic (2006)'s study, the subjects used this strategic behavior in doing a multiple choice reading test.

GRAMMATICAL CUE STRATEGY

The next important strategy is to look for grammatical clues. Some items may contain grammatical errors or inconsistencies which can help indicate the correct alternative. For example, the stem may end with the word 'an'. Usually, the word 'an' indicates that the following word begins with a



vowel. If an alternative begins with a consonant, this may imply that the alternative is not correct. Below is a description of how one participant approaches the following item:

Test item 36. Grandma Moses, popular painter, spent her life in a Little community.

- A) enormous B) unusual C) isolated
*D) tranquil

"Examining the alternatives: *The alternatives 'A', 'b' and 'C' are not suitable because they start with vowels, so the article 'a' occurs before a word starting with a consonant. I thought the correct option is 'd' because it starts with a consonant*". (Participant 5 on item 36)

Comment: In examining the alternatives, the subject clearly considers a grammatical feature of this stem, which leads him to eliminate an incorrect alternative. He discards three alternatives 'A', 'b' and 'C' because they do not follow grammatically or logically from the stem. Test wise students then have to choose d as a correct answer. The subject reported that he used his grammar knowledge of articles in order to arrive to the answer. The increase in implementing grammatical cue may be related to the amount and courses of grammar they have passed. Moreover, successful use of cues depends on previous test-taking instruction. This strategy is commonly cited in the reading comprehension literature as a positive strategy and widely used by EFL learners (e.g. Alfridan 2011).

FIRST LANGUAGE USED FOR TRANSLATION

Test item 37: That Company has the _____ to produce clothing quickly and efficiently.

- A) resources B) inflation
C) promotions D) magazines

That company has the _____ to produce clothing quickly and efficiently. That company has the (...) leisure time resources I guess { مصير 20 it means r e s o u r c e s } to produce clothing quickly and efficiently. OK I translated the sentence and the alternative and found the answer fits. (Participant 21 on item 37).

Comment: Comment: The subject clearly stated that he used L1 as a source to arrive at the answer. He translated the sentence and the alternatives. Subjects had a greater tendency to try and work out text and sentence meaning by translating concepts they understood in L1 (Cohen and Upton, 2007).

In using this strategy, the test-taker probably wants to ensure that the answer matches the meaning he has inferred for answering the question. It has also been found in think-aloud studies that L1 is often used while processing L2 tasks (Addamegh 2004; Pour-Mohammadi & Abidin, 2011).

ROOT AND PREFIX CLUES STRATEGY

Many English words can be traced back to Latin and Greek. Often you can guess the meaning of an unfamiliar word if you know the meaning of its parts. Below is a description of how one participant approaches the following item

Test Item20: To prevent infection, it is recommended that hospitals use:

- A) Cleaning fluids B) air filters C) chemical reactants D) disinfectants

The participant infers/confirms the meanings of new words through prefixes.

"I didn't know the word 'disinfectants',but I guess it is related to the word 'infect'. As I went through the four options, I found the word 'disinfectants'. The prefix 'dis' means not, so I selected this one". (Participant 26 on item20)

Comment: Vann & Abraham (1990) found that a Saudi EFL female learner used her intuition to supply answers in a test. One of our subjects stated that she always guess the meaning of an unfamiliar word if you know the meaning of its parts.

Test item 38: The boy's bedroom was divided in half by a _____.

- A. behalf B. partition C. strait D. spine

Participant (15) says: ... "Partition: I don't know what it means. May be 'part'? They could divide part of the room, so, partition". (Participant 23 on item 38)

Comment: This subject does not know what 'partition' (the correct alternative) means, but he



knows a similar word 'part' that could fit in the context. He correctly thinks the two words could share the same root. In other words, he uses this type of strategy to guess the meaning of an unknown alternative. When he has done that, the meaning found seems to be compatible with the meaning of the stem, so he picks this alternative.

FREQUENCY OF OCCURRENCE STRATEGY

Looking for items that appear in more than one of the choices was also one of the noticeable strategies used by many participants in the experimental group. Below is a description of how one participant approaches the following item to arrive at the answer.

Test Item 21: The following languages are spoken in the Comora Islands:

- A) Spanish and Arabic
- B) Arabic and French*
- C) German and Italian
- D) French and English

"Since 'Arabic' and 'French' appear in more than one of the choices. So I can choose the option that includes 'Arabic and French'. I thought the answer could be option 'b', but the other one could not be correct".
(Participant 13 on item 21)

Comment: The participant states that he choose "B" because French and Arabic appear in more than one of the choices. He uses test wise ability. This strategy was found in the think aloud studies (Alfridan 2011).

THE "UMBRELLA OPTION" STRATEGY

When answering a question, if you note that more than one option appears to be correct, look for the umbrella option (also known as the global option or comprehensive option). The umbrella option is the one that encompasses the other options. Below is a description of how one participant approaches the following item

Test Item22: To assist a child in developing social skills, a teacher should:

- A). talk to the child often
- C) observe the child's social behavior
- B) engage the child in a game
- D) provide a variety of social activities

Participant says, "According to the instruction that I received, I know if one option encompassed the other options, it will be the correct answer. When I read and analyze the four options, I found that option 'd' include all the social activities in the other options. Then 'd' includes all the other true responses and is correct".
(Participant 4on item22)

Comment: The student approaches the MC items indicates to what extent the instruction they receive affects their choice for the correct answer. This strategy is also found by Vann & Abraham (1990) when they examined two Saudi EFL learners while doing a reading test.

THE STRATEGY OF "TRYING TO MATCH THE OPTION WITH THE STEM"

'Stem option ' is another test taking strategy employed by the experimental group. The students were able to identify the correct answer by noticing that this information appeared earlier in the same sentence with the information which reappeared in the item stem. Below is an explanation of how one participant arrives at the answer by using this strategy.

Test Item 23: Granite crystals are large enough to be seen with

- *A) naked eyes
- B) big telescopes
- C) Precise spectacles
- D) geometrical devices

The participant says, " In this question, there are many difficult words. I began to match the stem with the four options and to check if they corresponded to the stem. For example, in the first choice, 'eyes'. I think this should be the right one".(Participant 29 on item 23)

Comment: The subject used his knowledge of the word 'eyes' as being often collocating with 'seen'. He uses the whole stem as a meaning then picks 'naked eyes' because it is pragmatically likely to be associated with that meaning. The experimental group participant probably grasped the idea that understanding the stem-option relationship was the key and prerequisite to find the correct answer. This



strategy is also found by Alfridan (2011) when they examined two Saudi EFL learners while doing a language test.

GUESSING

Another strategy in which the experimental group students had a better performance was "guessing strategy". Cohen and Upton (2007) conclude that guessing the meaning of unknown words has long been recognized as an important skill in the reading literature. Guessing can be an important strategy to enhance test success, if it is used advisedly. Below is a description of how one participant arrives at the answer by using this strategy

Test Item 24: I call the airline to my flight a week before I left England.

- A) strike B) confirm C) attack D) dominate

The participant chose 'b' as the best answer because he thought it had 'a stronger sense' than the other alternatives (strike, attack, dominate).

He said that "I don't know the meaning of dominate. I know the meaning of attack, but it doesn't fit. I have to eliminate it. Also the meaning of the word 'strike' does not make sense. I also discard this option because it is unreasonable. So, I guess option 'b' can be correct". (Participant 29 on item 24)

Comment: It is interesting to note that the experimental group students can use such strategy after the treatment, in contrast, the participants of the control group can't. The subjects repeatedly reported in the verbal protocols that they resort to this strategy whenever the alternatives were difficult and they had no clue about the answer either from context, alternatives or their mental lexicon. Nevo (1989) and Anderson et al (1991) found that their subjects guessed an unknown alternative without giving any justification. This is likely due to previous instruction that they had received.

THE STRATEGY OF USING CONTEXT CLUES TO FIND THE ANSWER

"Using the context clues" is one of the most commonly used strategies by students to figure out

the meaning of an unknown word. Context clues are words in a sentence or paragraph that help the reader deduce the meaning of an unfamiliar word. Many sentences and paragraphs contain enough information for you to use the clues that the writer has left to figure out the meanings of many words you do not know. Below is an example of how one of the participants uses this strategy to arrive at the answer. (NO.11).

Test item 11: All the train service to and from London were because of the heavy thunderstorm.

- A) debated B) cancelled C) benefited
D) advised

One participant says, "I got this answer because the question includes the word 'thunderstorm', I read, look for the answer, I read "however, for me cancelled" ... maybe because I see the word "thunderstorm" I was lucky to see the word "thunderstorm" in the stem, it was the clue for me to find the correct answer in the stem". (Participant 29 on item 11)

Comment: In this item, the participant was unsure how he came up with the answer but he mentioned that 'maybe' because he saw the word 'thunderstorm'. He used the word 'maybe' because he was not really sure. The subject here used clues from the context in order to retrieve a meaning and a word subsequently. The clues that subjects used were pragmatic and semantic, from key words in the sentence. In this example, it seems the word "thunderstorm" was the key to a correct answer. The subject activated his pragmatic knowledge of word "thunderstorm". He figured out a meaning that there is a relationship between "cancelled" and the word "thunderstorm" which led him to find a candidate word which was the correct choice. Using contextual clues to infer meaning is a widely used strategy in test situations (Cohen & Upton 2007; Nevo 1989; Addamegh 2004).

Test Item 27. By the end of their first year, children begin to-----their first words.

- A) internalize B) speak C) discover D) spell



"Question number 27, the answer is in the paragraph. I only look through the paragraph and come up with a keyword. Okay key point here means, I'm looking for first year. The answer is in the paragraph which has the keyword 'first year',. I just look for keyword in exam I find "first year"now. Okay I got the answer which is the word 'utter' which means 'to speak', I wrote here the key points only". (Participant 28 on item 27)

Comment: This participant utilized the strategy for this question on its own and combined it with another strategy. The choice of strategies was not random for these participants. The explanation and justification for their use of strategies conveyed their consciousness in utilizing the strategies. This could be inferred that this may be due to the effect of instruction on the experimental group participants as opposed to the control group participants who did not utilize this strategy.

The above mentioned picture with students' mental procedures or behaviors as being shown can be taken as indication that test-taking strategies instruction has noticeable impact on the students' performance on multiple-choice vocabulary and reading comprehension Tests. The students make an effort to apply what they have taught in test situations.

2. THE THIRD QUESTION

The third question concerns with the attitudes of students towards the learning and teaching of test taking strategies for reading comprehension Tests.

Regarding the attitudes of students towards the learning and teaching of test-taking strategies, the students in the experimental group unanimously reported positive attitudes towards the learning and teaching of test-taking strategies for multiple-choice English reading comprehension tests. They enjoyed studying test-taking strategies. They felt that learning test-taking strategies helped them become more relaxed while taking tests (84%). Eighteen participants (56.25%) perceived an increase in their confidence in solving multiple-choice test tasks.

Twenty-five participants (78.13%) agreed that they would continue using test-taking strategies taught in class when encountering MC tasks and twenty participants (71.88%) believed that they would benefit in taking MC tests with more test-taking strategy practice.

Besides, 53.13% of the participants maintained that learning test-taking strategies helped them reduce the anxiety when taking a multiple-choice test. They reported that learning test-taking strategies for multiple-choice English reading comprehension tests can help them improve their English reading test scores because they can manage the testing time appropriately (71.88%), they can take the test more carefully (81.25%), and they can guess effectively (81.25%). Moreover, all the test-takers agreed that they found learning test-taking strategies useful and students should be taught how to take a test. Furthermore, a high percentage of them (87.5%) acknowledged that learning test-taking strategies enabled them to be more comfortable, enthusiastic and confident about taking tests. Perhaps, one reason for such a strong and unanimous agreement on the importance of teaching and learning test-taking strategies could be the fact that most teachers may not recognize the significance of the teaching of test-taking strategies; or else, they should instruct so much English content that there is not enough room to teach test-taking strategies. In addition, the results also implied that all of the participants believed that there were also other factors besides linguistic competence affecting the test scores. For instance, it might be ascribed to poor use of time, carelessness, and anxiety and confusion caused by unknown procedures. In other words, poor performance in language tests might be also related to lack of test-taking strategies competence. It was also revealed that the majority of the participants lacked test-taking strategies competence. Only a small number of them had learned test-taking strategies up to that time.

This result is in consistence with the previous researchers' claim that training of test-taking strategies can lead to positive outcomes (Phakiti, 2003; Pour-Mohammadi and Abidin, 2011;



Kashkouli, Barati, and Ansari, 2015; Amer and Ghabelju, 2013). Based upon the findings in their studies, these researchers also suggested that teachers must highlight the proper use of test-taking strategies so that students can know what they should do during taking a test. In this regard, Nevo (1989) also reported that teaching test-taking strategies could decrease students' test anxiety. As teaching test-taking strategies enhances students' test performance, they would be more confident and motivated to have an active role in learning. In brief, teaching and learning test-taking strategies can be

beneficial to improve students' attitudes towards tests and language learning, to aid them to have better performance on tests, and more prominently to lower their test anxiety. Overall, the findings of this study along with those of other related studies suggest support for training in test-taking strategies and encouraging EFL instructors to provide such instructions.

Furthermore, results showed that the positive attitudes of the participants of the experimental group support the high mean test scores of their strategy use.

Table 4. Results of the Participants' Attitudes towards Test-taking Strategy Instruction

statements	No. of students			
	A	%	D	%
1. I enjoyed studying test-taking strategies.	32	100		
2. Learning test-taking strategies helped me become more confident.	18	56.25	1 4	43.75
3. Learning test-taking strategies helps me become more comfortable.	28	87.5	4	12.5
4. I find learning test-taking strategies very useful.	32	100		
5. Learning test-taking strategies helps me reduce the anxiety when I take a multiple-choice test.	17	53.13	1 5	46.87
6. Learning test-taking strategies helps me go through the test more carefully.	26	81.25	6	18.75
7. Learning test-taking strategies enables me to be more enthusiastic about taking tests.	23	71.88	9	28.12
8. I will suggest that teachers provide us with test-taking strategies for multiple-choice tests in class.	20	62.5	1 2	37.5
9. Learning test-taking strategies helps me enhance my multiple-choice test performance	24	75	8	25
10. I am willing to continue using test-taking strategies taught in class when encountering multiple-choice tasks.	32	100		
11. Learning test-taking strategies assists in time management more effectively.	23	71.88	9	28.12
12. Learning test-taking strategies makes me more relaxed while taking tests.	27	84	5	16
13. I think students should be taught how to take a test or test-taking strategies.	32	100		
14. Learning test-taking strategies helped me improve my English reading test scores.	29	90.6	3	9.4
15. Test-taking strategies should be taught in class.	32	100		
16. Learning test-taking strategies helped me guess effectively.	26	81.25	6	18.75



17. I can apply test-taking strategies in the real situation while taking tests.	30	93.75	2	6.25
18. Learning test-taking strategies makes me think that to get a good score in English is not too difficult.	25	78.13	7	21.87
19. Learning test-taking strategies enables me to do the easy items first, skip the difficult items and answer them later.	32	100		
20. Learning test-taking strategies enables me to do all the questions even if I have to guess sometimes.	32	100		
21. Learning test-taking strategies enables me to read all options before choosing the best answer.	32	100		
22. I feel that I can do the test better after learning test-taking strategies	27	84.38	5	15.62
23. I will benefit in taking multiple-choice tests if I do more test-taking strategy practice.	23	71.88	9	28.12
24. I am willing to continue using test-taking strategies taught in class when encountering cloze tasks.	25	78.13	7	21.87
Part Two				
25. Did you encounter any difficulties during the activities of learning and practicing test-taking strategies? Please describe it/them.				
26. What benefited you most during the activities of learning and practicing test-taking strategies?				

In addition to the quantitative data discussed above, two open-ended questions were included to engage the participants to make a self-evaluation of their difficulties and gains they had experienced during the instruction session. As for the difficulties, twenty-four participants mentioned that their lack of knowledge of vocabulary creates a big problem for them while taking their test. Some participants, as shown below, wrote:

"Failing to know the meanings of the words hinders my understanding of the passage." "Even test-taking strategies are of no use when I don't know the words." "I have to know not only the key words in the passage but also the words for the options."

Another difficulty was that similar distracters caused problems for test-takers. A third difficulty was that the length of the options also increased difficulty, since they required more information to be processed in order for the test-takers to falsify incorrect options and to confirm the

correct option. Also, vocabulary of the answer options or a question as well as the wording of a question was a source of the perceived difficulty of reading comprehension questions. This finding is consistent with Tian's (2000) and Liu's (2005). Liu finds in her study that the low-proficiency participants' major difficulties in completing supplementary reading tasks are vocabulary and low-level reading comprehension.

With regard to the gains from the test-taking strategy instruction, nine participants reported that they had learned a lot of test-taking strategies for solving a multiple choice test and their appropriate use. This, according to the participants' responses, helps them realize what a multiple choice test measures and how they can approach a multiple choice strategically. For the affective aspect, twenty three participants maintained that they would not be afraid of a multiple choice test anymore or make wild guesses while taking a test, and they had more confidence in themselves. It is also encouraging for



the researcher of the present study to read the comment by one of the participants: "I am happy that I get many answers right by applying these strategies, so I decide to learn more to achieve higher English proficiency." The participant's comment reveals the further goal of strategy training (Cohen 1998).

DISCUSSION

The above mentioned results show that after being instructed with the regular teaching alone, all the students improved their English reading scores. Nonetheless, the additional training in test-taking strategies resulted in an additional rise. A significant difference between the post-test mean scores of the two groups was found. The experimental group got higher scores in the post-test than those in the control group. This seems to indicate that the extra training on test-taking strategies helped the students in the experimental group achieve higher scores than those in the control group. Moreover, after being instructed with the test-taking strategy training, the participants were able to apply it in the real testing situation. It is clear from the verbal reports that the experimental group students employed a fixed set of test-taking strategies that they learned from their coaching reading instructor when preparing for the multiple-choice test. Analyses of the students' verbal report regarding how to arrive at the answer indicate that, after the treatment, they indeed benefited from the test-taking strategy instruction. The participants' use of a majority of the test-taking strategies witnessed radical change in their performance on MC vocabulary and reading comprehension test. Students were able to apply their knowledge of test taking strategies to reading texts and to verbalize the strategies that they were using (guessing, rereading, and using context). This outstanding change demonstrates that the test-taking strategy instruction as a whole was successful in increasing the use of strategies. Detailed analyses of the participants' explanation of the strategic process of test taking in the verbal report showed the increase in the use of test-taking strategies such as linking the main ideas of the reading texts with the questions,

finding the main ideas of the reading texts through scanning and skimming, making an inference based on the context, predicting my own answer before looking at the options, skipping unknown words, guessing the meaning of unknown words through using the contextual clues, stem option, grammatical cue, longer length option, option inclusion, similar option, and specific determiner.

The qualitative analysis also shows that the learner of the experimental group does not rely on familiar strategies that are used by the control group, such as rereading or translation, to understand the stem in the test. It can be inferred that the participants in the control group who did not receive specific training on test taking strategies and who receive regular instruction which focused mainly on vocabulary learning, made little progress in tackling the multiple choice tests.

This finding is similar to that of Radojevic (2006) and Amer and Ghabelju (2013) who suggested that test-taking skills are important skills for students, but only a few students have learned about them. This might be due to the fact that most teachers do not realize the importance of the teaching of test-taking strategies; or, they have to teach so much English content that there is not enough time to teach test-taking strategies.

It is interesting to note that the qualitative findings of the study based on the use of verbal report is in consistent with the quantitative results of the multiple choice vocabulary and reading comprehension test. The findings of the questionnaire lend credibility to the results of both verbal report and multiple choice vocabulary and reading comprehension test.

Moreover, the results of the present study are in line with the findings of other similar studies that have probed the impacts of test-taking strategies on test performance (e.g., Kashkouli, & Barati, 2013; Dodeenetal, 2014; Pour-Mohammadi and Abidin, 2012; Alfridan, 2011; Assiri 2000; Cohen and Upton, 2007; Nevo, 1989; Phakiti, 2008; Radojevic, 2006; Rezaee, 2005; Ghafournia, and Afghari, 2014; Amer and Ghabelju, 2013; Addamegh, 2003). They all supported that test-taking strategies



instruction improved the Saudi EFL students' reading comprehension test performance. Collectively these results confirm the benefits of providing students with instruction in reading comprehension and test taking skills.

In conclusion, integrating test taking strategies in teaching curriculum could be profitable for the students. Using presentation and modelling of strategies helps learners to benefit from test taking strategies and employ them effectively. English teachers should teach test-taking strategies and take the role of motivators.

CONCLUSION AND IMPLICATIONS

The current study set out to investigate the effects of test-taking strategies instruction on Saudi EFL learners' vocabulary and reading comprehension test performance. The study also intended to gain insight into the test-takers' mental processes when tackling an EFL test to explore their actual behaviors in answering the test items. Besides, it tried to take into account the participants' attitudes towards teaching and learning test-taking strategies in their reading comprehension classes. Sixty-four enrolled in intensive course classes participated in this study. They were divided into two groups, with thirty-two students in the Experimental Group and thirty-two students in the Control Group. Instruments utilized for data collection were Multiple-choice reading comprehension test, questionnaire and verbal report. The aim behind using the triangulated data collection approach was to lend credibility to the data gathered. With the application of data collection instruments, this study provides the following major findings.

Firstly, the analysis of the data collected indicates that test-taking strategies instruction could have a significant impact on the reading comprehension performance of the students. Test-taking strategies instruction as well as the use of such strategies leads to improvement in scores of reading comprehension test. Secondly, data obtained from the verbal reports also indicated that the experimental group students employed a fixed set of test-taking strategies that they learned from their coaching reading instructor when preparing for the

multiple-choice test. Thirdly, Based on the results of the questionnaire, the students in the experimental group unanimously reported positive attitudes toward the test-taking strategy instruction. Thus, the questionnaire results support the findings obtained from both the verbal reports and the multiple-choice reading comprehension test. It is worth noting that the present study shows a similar finding as those of the other similar studies that have probed the impacts of test-taking strategies on test performance (e.g., Amer and Ghabelju, 2013; Cohen, 1984; Nevo, 1989; Phakiti, 2008; Radojevic, 2009; Rezaee, 2005). They all supported that "performance on language tests can be improved by training in test taking strategies."

Throughout the training sessions, the researcher observed that students in the experimental group were generally very positive about using the presented strategies. The majority of students commented that they found the reading comprehension strategies and test taking skills beneficial when reading and responding to text. Many students in the experimental group added that they "would use the strategies whenever they were given any multiple choice test in any subject area in the future."

Some implications could be drawn on the basis of the findings of the present study. First, the findings of this study and other related studies indicate that test-taking strategies instruction could have a significant impact on the reading comprehension performance of the students. Thus, it seems wise that English teachers should teach test-taking strategies to improve their students' reading comprehension test performance and should not hesitate to incorporate this form of instruction with an entire class that may be performing at various reading levels. It would also appear useful to devote attention, time and effort to guiding and training students in coping effectively with a MC reading comprehension test and also with other test formats. Secondly, the findings can remind language teachers of different factors affecting test scores, particularly test-taking strategies that are often totally ignored in many English teaching programs. The findings can



encourage language teachers to interpret test scores from different sides to decrease error of measurement and make professional judgments about language learners rather than traditional subjective judgments.

Thirdly, knowing which strategies are used in the reading test is significant information for syllabus and materials designers. They can integrate test taking strategies in teaching curriculum. The role of test taking strategies should be stressed in Saudi EFL situation because it appears to be a neglected area. This could be profitable for the students.

Fourthly, the results, however, suggest verbal protocols as useful instruments for collecting a particular type of data which cannot be accessible in using other approaches. Think-aloud enables you to get a glimpse of how the human brain works and analyzes students' behavior and needs, and sheds light on the relatively unexplored area of test-taking strategies used by students on vocabulary and reading comprehension tests at the tertiary level.

In conclusion, it is hoped that educators would maintain to update and enhance ESL/EFL students' existing competencies and expertise especially in reading area.

RECOMMENDATIONS FOR FURTHER STUDIES

This study will hopefully constitute the basis for future research in the area of test-taking practices and specifically those required for successful performance in the exam.

1. The findings of this study indicate that the first year students could greatly increase their English reading test scores with test-taking strategies training. Therefore, a repeated study could be conducted with other tertiary level groups.

2. This study was focused on only the teaching of test-taking strategies for multiple choice English reading comprehension tests. A further study could encompass the teaching of test-taking strategies for other English skills.

3. Future research should examine both reading comprehension strategies and test taking skills to determine whether such combined strategy instruction would benefit students when confronted

with various types of testing throughout their educational careers.

4. This study could be carried out again allowing time for more practicing of test taking strategies. And finally, further study could encompass the teaching of test-taking strategies for other English skills and other test formats, such as listening tests, writing tests, matching tests, true-false tests and essay tests.

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