Deanship of Scientific Research

The Effect of Metacognitive Monitoring Strategy on Improving English Listening Comprehension among Tenth Graders in North Eastern Badiah Directorate

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Abstract

This study aims at exploring the effect of metacognitive monitoring strategy of instruction on developing English listening comprehension among tenth graders in North Eastern Badiah directorate. The study used a quasi-experimental design. The sample of the study consisted of 123 male and female students who were intentionally chosen from four schools. Experimental and control groups were assigned randomly. The groups of the study were found equivalent upon analyzing students' scores on a listening comprehension test using Two-way ANCOVA. The experimental group was instructed using metacognitive monitoring program, whereas students of the control group were taught in a conventional way. A jury of judges was invited to comment on a listening test and an instructional program to establish their validity. The findings of the study revealed that there were statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the listening comprehension in favor of the experimental group. In the light of the findings, the researcher provides some recommendations to the Jordanian Ministry of Education and TEFL educators.

Keywords: Metacognitive monitoring, comprehension, instruction, listening, English, TEFL.

أثر تدريس إستراتيجية الرقابة ما وراء المعرفية في الاستيعاب السمعي في اللغة الإنجليزية لطلبة الصف العاشر الأساسي في مديرية تربية البادية الشمالية الشرقية

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ملخّص

هدفت هذه الدراسة إلى كشف أثر تدريس استراتيجية الرقابة ما وراء المعرفية في تطوير الاستيعاب السمعي في اللغة الإنجليزية لطلبة الصف العاشر الأساسي في مديرية تربية البادية الشمالية الشرقية. ولتحقيق الدراسة أهدافَها استخدم الباحث التصميم شبه التجريبي، وتكونت عينتُها من 123 طالبًا وطالبة تم اختيارهم بطريقة قصدية من أربعة مدارس، وتم توزيع المدارس على المجموعات بشكل عشوائي. أعدَّ الباحث برنامجًا تدريبيًّا قائمًا على الرقابة ما وراء المعرفية لتدريس المجموعة التجريبية (ذكور وإناث)، بينما تم تدريس المجموعة الضابطة بالطريقة الاعتيادية. وفي نهاية التجربة تم تطبيق اختبار الاستيعاب السمعي الذي أعده الباحث، وتم التأكد من صدقه بعرضه على مجموعة من المحكّمين. ومن أجل الإجابة عن أسئلة الدراسة تم حساب المتوسطات الحسابية والانحرافات المعيارية لعلامات المجموعات، ثم استخدم الباحث تحليل التباين الثنائي لدراسة أثر التدريس باستخدام استراتيجية الرقابة ما وراء المعرفية والجنس والتفاعل بينهما في استيعاب الطلبة السمعي، وقد أظهرت النتائج وجود أثر لإستراتيجية الرقابة في الاستيعاب القرائي لصالح المجموعة التجريبية، وأظهرت كذلك عدم وجود أثر للجنس وللتفاعل بين الإستراتيجية والجنس في استيعاب الطلبة السمعي. وفي ضوء نتائج الدراسة قُدمت بعض التوصيات التربوية لوزارة التربية والتعليم ومعلمي اللغة الانجليزية.

الكلمات الدالة :: ما وراء المعرفة، الرقابة ما وراء المعرفية، رقابة الاستيعاب، تدريس استراتيجية ما وراء المعرفة، الاستيعاب السمعي.

1. Introduction

English language has become more dominant around the world. People all over the world have given English instruction great importance, and there is an increasing interest in language learning and strategies of teaching language. Teachers and students can benefit from different research and references that describe and list many learning strategies with explanation of how to apply them to English language skills (Hussein, 2007). Teachers and students can find references that list many learning strategies with explanation of applying them to all language skills.

Metacognition is considered a main component of teaching and learning. Manning and Payne (1996) claimed that quality of teaching is determined by different factors. One of these important factors is the regulation of metacognitive strategies. Other researchers reported that the implementation of metacognitive strategies help learners to perform unique processes such as thinking about thinking and decision making (Liebler, 2000).

The term metacognition was originally coined by John Flavell in the late 1970s to mean "thinking about thinking "(Flavell , 1979, p.906; Ratibi,2013). " Metacognition is awareness of one's own thinking , awareness of the content of one's conceptions, an active monitoring of one's cognitive processes, an attempt to regulate one's cognitive processes in relationship to further learning, and an application of a set of heuristics as an effective device for helping people organize their methods of attack on problems in general "(Hennessey,1999,p.3).

Metacognition has two components: Knowledge about cognition and monitoring or regulation of cognition (Cubukcu, 2008). Knowledge about cognition includes knowledge about one self as a learner and the factors that may affect cognition, knowledge about strategy and the types of strategies likely to be useful, and knowledge about why and when to use strategies. Regulation of cognition is the monitoring of learner's cognition which has two components: The first one is evaluation of progress toward a cognitive goal and the efficacy of monitoring strategies. The second one is regulation of learning activities by using corrective strategies (Khonamri, 2011).

In language classrooms, teachers can help students improve their language abilities by modeling and explaining the needed language strategies. They can also encourage students to practice metacognitive strategies in planning, monitoring, and evaluating learning processes. This is necessary in developing self-regulated learning. Wenden (1998) claimed that learners are expected to construct their own understanding of knowledge and they should be encouraged by their teachers to be self-regulated learners. Few students receive instruction about regulating their learning in school, and few students have opportunities to regulate this process .Self- regulated learning is an important process through which students practice different metacognitive strategies such as planning, monitoring , regulating, and evaluating (Pintrich, 2000).

Metacognitive monitoring– or comprehension monitoring-has received a great attention in learner's strategies literature (Ranalli , 2018).It is an important strategy that encourages learners to observe their thoughts and behaviors. It allows learners to observe their effort toward desired goals. This strategy can be taught to help students better comprehend listening and reading (Hoffman, 2010).Students need to be taught how to monitor their comprehension by explicit instruction with modeling and guided practice. This strategy assists learners to compensate for lost comprehension and to use suitable strategies to enhance comprehension (Schunk , 1997). There are three aspects of comprehension monitoring: evaluation, planning, and regulation. The evaluation component deals with the knowledge while reading and listening. The planning component involves using and selecting of fix-up strategies, while regulation component involves implementing the regulatory behavior by using fix- up strategies (paris ,1981).In fact , this strategy is important because it is a signal of progress toward the learning goals and comprehension failures. The learners must have the ability to monitor their comprehension as they read and listen so that they can stop and employ corrective strategy when there is any comprehension failure (Hoffman, 2010).

Listening comprehension is a very important process in which listener must distinguish between speech sounds, understand different vocabularies and grammatical structures, interpret stress and intonation (Vandergrift, 1999). It is a very important component of language learning. It plays a crucial role in facilitating the emergence of other language skills. Listening comprehension is a metacognitive, reflective activity in that it requires knowledge of cognitive processes as well as ability to monitor such processes. Listener should be able to recognize comprehension failure and to do

something about that by using monitoring strategies.

As noted above, listening comprehension is a demanding skill that learners need. EFL students still have difficulties in listening comprehension, and in applying metacognitive strategies. Using metacognitive strategies helps learners to foster their learning (Zheng,2018). The researcher supposes that in order to overcome students' listening problems and improve their comprehension, teachers are in need to adopt explicit instruction of metacognitive monitoring strategies and encourage their students to use them independently while listening. The study comes to address the importance of metacognitive monitoring (comprehension monitoring) strategy instruction on developing listening comprehension among tenth grade students in Jordan.

Statement of the Problem:

Listening skill is considered the most neglected aspect of language teaching (Sabouri,2016).Jordanian students encounter different challenges and problems in mastering English language skills (Bani- Khaled, 2013). They rarely admire English as school subject and they don't try to listen critically.

The researcher has become interested in this problem while working in governmental schools. The Jordanian English textbook is based on the communicative approach that emphasizes the pupils' role in learning the English language, but many English language teachers in Jordan use certain approaches in teaching listening comprehension without encouraging their students to adopt and utilize crucial strategies such as metacognitive monitoring strategies where they can use them to assess and repair comprehension difficulties.

Wenden (1998) indicated that learners equipped with metacognitive abilities have the following advantages over those who are not aware of the role of metacognition in learning English language:

- They are strategic learners.
- Their rate of progress in learning, the quality and speed of their cognitive engagement is faster.
- They are more confident in their learning abilities.
- They provide accurate assessment of being successful learners.

In the actual environment of English language learning, students are not skillful at using learning strategies. "They probably neither have successful learning strategies nor know how to use them properly"(Yan,2018, p.92).Therefore, teachers should find out the current situation of their students' knowledge and ability to use metacognitive strategies and teach them how to use them.

The present study investigated the effect of metacognitive monitoring strategy instruction on developing listening comprehension in English language among tenth grade students in North Eastern Badiah directorate of education. There is a crucial need to explore the effect of using metacognitive monitoring (comprehension monitoring) which Jordanian teachers need in order to develop their students' listening comprehension and enhance their creative thinking skills. There is also an important need to find the way to encourage our students in Badiah to have the opportunity to listen in various situations and be aware of metacognitive strategy they use to construct meaning.

Questions of the study:

This study seeks to answer the following research questions:

1- What is the effect of metacognitive monitoring strategy instruction on the listening comprehension of tenth grade students in North Eastern Badiah directorate of education?

2- Is there an interaction between metacognitive monitoring strategy instruction and gender on tenth grade students' listening comprehension?

Hypotheses of the study:

1- There are no statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the listening comprehension that may be ascribed to metacognitive monitoring strategy instruction.

2- There is no interaction between the use of metacognitive monitoring strategy instruction and gender on tenth grade students' listening comprehension.

Purpose of the study:

This study is intended to investigate the effect of metacognitive monitoring strategy instruction on developing listening comprehension in English language among tenth grade students in North Eastern Badiah directorate of education.

Significance of the Study:

This study is significant in that it opens avenues for active use of metacognitive monitoring to develop listening comprehension of Jordanian students.

The current study -on the effect of metacognitive monitoring strategy instruction on developing listening comprehension among tenth grade students in Jordan- is quiet significant since it is one of few studies that examines the effect of metacognitive monitoring strategy and its application in listening classes in Jordan. Ministry of Education should include metacognitive strategies especially comprehension monitoring in English language curricula and introduce special programs for TEFL teachers on the use of comprehension monitoring.

The researcher hopes to highlight the value of metacognitive monitoring strategy instruction in listening comprehension. Moreover, this study is needed to build upon what we already know about using metacognitive strategies especially by Jordanian students. Listening comprehension is considered a forgotten skill in English language learning (Vandergrift, 2004). This study will shed light on developing listening comprehension by using metacognitive monitoring strategy. Finally, findings of this study may be of great value for learners through equipping them with effective application of metacognitive monitoring strategy and how to monitor their comprehension by explicit instruction with modeling and guided practice.

Operational Definitions of Terms:

Metacognitive monitoring strategy is a recommended strategy that" allows learners to observe their thoughts and behaviors"(Hoffman, 2010,p.43). It also helps learners by making accurate metacognitive judgments regarding progress and making modifications based on those judgments. This strategy is teachable to achieve better listening comprehension (Hoffman, 2010).The effect of this strategy on listening comprehension was measured by using listening test prepared by the researcher

Metacognitive strategy instruction: is the instruction of strategies which is based on giving students the opportunity to understand what they can learn and how they can learn the language they are studying. The model of strategy instruction used in this study to teach listening is a model proposed by Vandergrift and Tafaghdtari(2010).

Listening comprehension is an interactive interpretation of spoken language by which students connect what they hear with their prior knowledge, know sound of speech and words meaning to create meaningful communication (Vandergrift, 1999; Rost, 2002). The researcher measured students' achievement in listening comprehension by a listening test constructed for this purpose

Tenth grade students are Jordanian tenth grade students at their last year of basic stage who learn in governmental schools and study Action pack 10.

Limitations of the study:

1- This study was applied on tenth grade students in four public schools at North- Eastern Badia directorate of education .The participating schools were selected purposefully based on prior relationships with principals and cooperative teachers

2- The study was conducted during the first semester of the academic year 2016/2017.

3- The treatment of the experimental group was based on teaching module one, two and three of Action Pack 10 which

consists of four units limited to listening comprehension.

4- The instruments used for collecting data.

5- Length of instruction time. More instruction time would have resulted in better effects.

Review of related studies:

Abdel Hafez (2006) carried out a study to investigate the effect of a suggested training program in some metacognitive language learning strategies on developing listening and reading comprehension of first year EFL students. The sample of the study consisted of 80 first years EFL majors at the faculty of education, Minia University. They were divided into two groups: one as experimental group and the other as control group. Each group consists of 40 students. The study adopted a pre- posttest design. The experimental group received training in some metacognitive language learning strategies in listening and reading comprehension tasks; while the control group received no training in metacognitive strategies. Two tests of reading and listening comprehension were used to measure the effects of the suggested training program. The results of the study revealed that the experimental group outperformed the control group on the reading and listening tests, and training in metacognitive language learning strategies developed EFL learners' listening and reading skills.

Waswas (2007) investigated the effect of using a proposed remedial program based on the cognitive and metacognitive strategies on the listening comprehension achievement of the Jordanian seventh grade female students in English. The sample of the study consisted of five seventh grade classes at Juwaydah School. They were 100 female students distributed on four experimental groups and one control group. Four sets of training material and a pre- post – test were used in this study. The findings of the study indicated that experimental groups outperformed the control group in listening comprehension.

Coskun (2010) conducted a study to investigate the effect of metacognitive listening strategies training on listening performance of a group of beginner preparatory school students at a university in Turkey. Two groups, a control group and an experimental group were chosen as the participants of the study. The experimental group received five weeks of metacognitive strategies training while the control group did not. At the end of the training, students were tested. The analysis of the test scores revealed that the mean scores of experimental group were significantly different from the control group and experimental group surpassed the control group in terms of listening performance.

Zhang (2012) conducted a study on 56 intermediate foreign language learners at Shandong Economic College. The researcher examined the impact of listening strategy on listening comprehension .Teacher and experimental students worked out a list of important strategies, self-monitoring was suggested at the top of the list. The results of the pre-posttest indicated that the experimental group outperformed the control group on all the tasks, and there was a significant relationship between the use of strategies and listening comprehension.

Birjandi and Rahimi (2012) carried out a study to explore the effect of metacognitive strategy instruction on the listening performance of EFL university students. The participants were 62 male and female students studying English at Shahid Beheshti University. They were selected and assigned to both experimental and control group. The experimental group received the strategy training using models proposed by Vandergrift and Tafaghodtari (2010) and O'Malley and Chamot (1990), while participants in the control group received no strategy instruction .The researcher utilized a section of TOFL to measure the listening performance of the students. The results of the study revealed that experimental group significantly outperformed the control group after the treatment sessions and metacognitive strategy instruction had a positive effect on the listening performance of the students.

Ratibi and Amirian (2013)" investigated the types of metacognitive strategies used by Iranian university students majoring in English, and the differences in the use of these strategies between listeners across two levels of high and low proficiency". The results revealed that Iranian university students used "problem- solving strategies" most frequently and " person – knowledge strategies "least frequently. It was also found that more proficient listeners used metacognitive strategies more frequently than less proficient listeners. There was also a significant difference in the use of "person-knowledge strategies" between high and low proficient listeners.

Tabeei, Tabrizi and Ahmadi (2013) investigated the effect of metacognitive strategies instruction on listening comprehension of Iranian EFL learners: focusing on gender at Iran language institutes. 72 EFL learners were selected to conduct the study. They were divided into experimental and control groups .Metacognitive Awareness Listening Questionnaire was administered to identify learners' metacognitive awareness. The experimental group received instruction based on Chamot & O'Malley (1994) model; while control group received no strategy instruction. Learners in the experimental group underwent 6-sessions of instruction. The results of the study revealed that instruction based on metacognitive strategy had positive effect on listening comprehension of the learners and there was no differential effect on listening comprehension of female and male learners.

Xvehua and Zhenmei (2013) in their case study of three English language learners in a Chinese university investigated the effectiveness of metacognitive instruction on listening comprehension. Teachers explained metacognitive listening methodology to their students and monitoring strategy was one of metacognitive strategies which was being used. The researchers found out that metacognitive instruction improved listening comprehension of intermediate and more advanced level students. It was also found that the effectiveness of metacognitive teaching is related to motivation.

Shams, M. and Rahimirad, M(2014) investigated the effect of activating metacognitive strategies on the listening performance of English as foreign language university students and explored the impact of such strategies on their metacognitive awareness of the listening task .Participants of the study were 50 students, they were randomly assigned to both experimental and control groups. The experimental group received metacognitive strategy instruction based on a model proposed by Vandergrift and Tafaghodtari (2010), while the control group received no instruction on metacognitive strategy instruction. The result of the post- test revealed that the experimental group significantly outperformed the control group, and according to the analysis of the (MALQ) there was significant improvement in students' level of metacognitive awareness. The interview results also supported the previous findings.

Movahed (2014) investigated the effect of metacognitive strategy instruction on the listening performance, metacognitive awareness, and listening anxiety of beginner Iranian EFL students. The participants were 65 male and female Iranian beginner EFL students studying English translation and teaching in university of Zabol, Iran."After screening the participants through TOFEL'S listening section as the pre- test, 55 of them were selected and randomly divided into experimental and control groups". The experimental group received metacognitive strategy instruction based on a model proposed by Vandergrift and Tafaghodtari (2010), while the control group received no instruction on metacognitive strategy instruction .The results of the study revealed that the experimental group significantly outperformed the control group on the post- test and instruction based on metacognitive strategy had positive effect on students' listening performance, metacognitive awareness and listening anxiety.

In light of related studies' review, conclusions can be drawn:

1- The use of metacognitive monitoring (comprehension monitoring) in teaching English language skills has proved to be effective.

2- Few studies addressed gender differences, so it would be worthy to study the effect of metacognitive monitoring due to the gender.

3- This study is needed to build upon what we already know about using metacognitive monitoring especially by Jordanian students.

4- metacognitive strategy instruction had a positive effect on students' listening comprehension.

Methods and procedures

This section discusses the methods and procedures of the Study. It includes the subjects of the study , the instruments of collecting data and their validity and reliability , the description of the instructional metacognitive monitoring program and its validity and reliability , variables of the study , the procedures of the study and the study design and statistical analysis.

Subjects of the study

The subjects of the study consisted of all female and male tenth grade students in the public schools of North Eastern Badiah directorate of education during the first semester of the academic year 2016/2017. The subjects of the study consisted of (1439) males and females students (696) male students and (743) female students. The sample of the study was purposeful one consisting of 123 tenth grade students (60 males and 63 females) at Alkaum Alahmer comprehensive secondary school for girls, Alkaum Alahmer comprehensive secondary school for boys, Um Aljemal comprehensive secondary school for girls and Um Aljemal comprehensive secondary school for boys. These four schools were chosen for three reasons: First, these schools are big and comprehensive. Second, they have a good reputation. Third, the good relationship between the researcher and teachers of these schools who volunteered to conduct the study. Students were randomly assigned to experimental and control groups. The experimental group consists of 30 boys and 33 girls; whereas control group consisted of 30 boys and 30 girls. Table (1) shows the distribution of the sample of the study by gender and type of the group.

Table (1) Distribution of the sample of the study by gender and type of the groups

	Experimental	Control	Total
Male	30	30	60
Female	33	30	63
Total	63	60	123

Equivalence of the study groups

To establish the equivalence of the groups, the listening comprehension test was applied on the study groups. The researcher computed the means and standard deviations for the students' scores on the listening comprehension pre-test as shown in table (2)

Table (2) Means and Standard Deviations for The students' Scores on the Listening Comprehension pre-test According to their Group and Gender

Group	Gender	N.	Means	Std. Dev.
Control	Male	30	19.63	8.21
	Female	30	19.63	6.06
	Total	60	19.63	7.15
Experimental	Male	30	22.33	5.64
	Female	33	19.42	6.59
	Total	63	20.80	6.28
Total	Male	60	20.98	7.11
	Female	63	19.52	6.29
	Total	123	20.23	6.72

Table (2) shows that there are observed differences a among the means of students' scores on the listening comprehension pre-test according to their group and gender .To test the significance of the differences , a Two-way ANCOVA test was used as seen in table (3)

Table (3) Two-way ANCOVA test results for the students' scores on the listening Comprehension pre-test according to their Group and Gender

Source	SS	Df	Ms	F	Sig.
Group	47.617	1	47.617	1.062	.3050
Gender	64.947	1	64.947	1.449	.2310

Source	SS	Df	Ms	F	Sig.
Group*Gender	64.947	1	64.947	1.449	.2310
Error	5334.661	119	44.829		
Total	55877.000	123			

*Significant at (α = 0.05)

Table (3) shows that there are no significant differences at (α = 0.0 5) between students' scores of experimental and control groups on the pre- listening test that may be ascribed to the group , gender or interaction between group and gender which means that the groups are equal before conducting the study.

Instruments of the study

The researcher used the following instrument to collect data:

The Listening Comprehension Test

The instrument of the study was the listening comprehension test designed by the researcher. The aim of the test was to measure the students' listening comprehension achievement before and after completing the metacognitive monitoring instruction. The test consisted of two sections .In the first section; students heard a conversation and questions on the recording. In the second section, students heard a description of Petra and questions on the recording, the texts included in the test are unseen and the types of questions were multiple choice items. The total scoring was forty. The testing time allowed was one hour.

Validity of the Listening Comprehension Test

To establish the validity of the listening comprehension test, a jury of judges from departments of English and departments of curricula and instruction at Jordanian universities, supervisors and experienced English teachers was invited to comment on the test to ensure its validity. Their comments were taken into consideration, so the test was modified on that basis.

Reliability of the Listening Comprehension Test

To ensure the reliability of the listening test, it was tried out on a pilot group of (26) students who were excluded from the participants of the study. The researcher used Kuder –Richardson-20 formula to find its internal consistency. The reliability of the test was 0.71. This indicates that the test items are consistent. The difficulty co-efficient was calculated for all questions of the test and it was between 0.37 and 0.74. The discrimination co-efficient was also calculated and it was between 0.44 and 0.78.

The instructional material was chosen by the researcher from the tenth grade English textbook. The researcher adopted metacognitive monitoring strategy instruction and redesigned the six listening texts. A jury of judges from the departments of English and departments of curricula and instruction at Jordanian universities, supervisors and experienced English teachers were invited to comment on the instructional program to ensure its validity. The study took place over the course of eight weeks. The instruction was once a week and lasted for 45 minutes. The first and last weeks were reserved for pre- and post-tests. Students in the control groups were given the same listening tasks but without listening strategy instruction. What follows is a description of the instructional sessions.

The first session: The researcher met the participants, talked with them about the study and told them they are going to participate in a listening comprehension study. They received listening strategy instruction during the six weeks. Pre- test of listening comprehension was administered to both experimental and control groups.

The second session: The researcher told students that what is important for them as listeners is not understanding everything they hear, but that they learn how to recognize times when they don't understand and to do something about that. This is "monitoring". The monitoring strategy is important because it helps us recognize times when we don't fully

understand and learn how to act upon that. Students listened to the first task (Sameer Abu Kouta). They were taught how to monitor their comprehension by using some steps of the model proposed by Vandergrift and Tafaghodtari (2010). The steps taken during the instruction were as follow:

1-The concept of the strategy was explained again. Students in the experimental group were told that there are times when they don't fully understand. They should be aware of the problems of listening tasks which include:

- The message may be too long.

-The message may be too complex or unclear.

-Not enough information is given to answer the questions.

2-Students were informed of the topic of the oral text (Samer Abu Kouta) which was about an inventor who was talking about his invention) and wrote it on a piece of paper.

3-They were asked to brainstorm the kind of information and vocabularies they may hear, and write them on the paper based on their background knowledge. The metacognitive process involved in this step is planning which is important for comprehension monitoring.

4-Students listened to the oral text to answer some questions. Students read the questions before the first listening.

5-Students listened to the text for the first time. They were asked to put a check mark beside the information they predicted, and write down any new information they hear.

They may ask themselves questions to monitor their comprehension:

- Why am I listening?

- What does this mean?

- Does this information make sense?

- How can I use this piece of information?

-What should I do with this piece of information?

6-Students were told to work in pairs to compare their predictions and new information they comprehended. Students were encouraged to discuss points of confusion and disagreement, modify as required and decide the parts of the text and information that require careful attention during the second listening.

7-Students listened to the text a second time. They attempted to make sense of the point of difficulty of the first listening, and wrote new information on the paper.

8-Students were given enough time to answer the comprehension assessment of different questions.

9-Students were engaged in a class discussion to confirm the understanding of the text and how they monitored their comprehension.

The third, fourth, fifth, sixth and seventh sessions: The teacher utilized the following oral texts:

* Radio program

* Robert Allen describing his precious stone

* Alfred Nobel

* Science matters

* Interview with a scientist

The same steps of the listening strategy instruction were applied to teach students how to monitor their comprehension. The comprehension assessments and the audio scripts for the previous oral texts are attached with the instructional program.

The last session: After the completion of the treatment, the post- test was administered to both experimental and control groups to see whether the strategy instruction has any effect on the participants' performance or not.

Variables of the Study

1- Independent variables

a- The strategy of teaching listening which has two levels; the metacognitive monitoring strategy and the conventional strategy

b- Gender.

2- The dependent variable is students' achievement in listening comprehension.

Study Design and Statistical Analysis

The study utilized the quasi- experimental design because the main goal of the study was to investigate the effect of metacognitive monitoring strategy instruction on developing listening comprehension among tenth grade students in North Eastern Badiah directorate of education. In this design the researcher used one experimental group with two sections (male and female) and one control group with two sections (male and female). These groups were selected purposefully. The study groups took a pretest to measure the equivalence of the study groups before applying the strategy. After that the same tests were repeated as a post-test to investigate any significant differences between the groups after the treatment.

To answer the first and second questions, means and standard deviations were computed for the experimental and control groups on the listening comprehension. A two- way ANCOVA was used to test the effect of metacognitive monitoring strategy instruction, gender and the interaction between them on students' listening comprehension.

Study Procedures

The following procedures were carried out throughout the study:

1- The researcher got a letter from the University of Jordan, addressed to Ministry of education seeking permission and cooperation to conduct the study in North Eastern Badiah directorate schools.

2- Four schools were purposefully chosen for the implementations of the study .students were randomly assigned to experimental and control groups.

3- Metacognitive monitoring strategy instruction was based on Action Pack (10). The researcher prepared sessions of instruction about using metacognitive monitoring strategy on listening comprehension during the first semester of the academic year 2016/2017.

4- Getting the approval of schools' principals for the implementation of the study.

5- Principals of these schools were given clear idea about the study.

6- The cooperative teachers were also given clear idea about the study, the instructional program and the time schedule for implementation of the study.

7- Four meetings were held to train cooperative teachers in applying the instructional program prepared by the researcher.

8 – Pre-testing the experimental and control groups to measure their equivalence before applying the program based on metacognitive monitoring strategy instruction.

9 - Starting the experiment and visiting the cooperative teachers at least once a week to help them overcome and eliminate any difficulties during the experiment and to get feedback from teachers , principals and students

10 - Post-testing the experimental and control groups to measure their listening comprehension after applying the program based on metacognitive monitoring strategy instruction. The listening comprehension test was given on Tuesday, November 15 th 2016.

11- Data were collected and (ANCOVA) was used in the statistical analysis of the study.

Results of the study

The purpose of the study was to investigate the effect of metacognitive monitoring strategy instruction on developing listening comprehension in English language among tenth grade students in North Eastern Badiah directorate of education by answering the following questions **:-**

1- What is the effect of metacognitive monitoring strategy instruction on the listening comprehension of tenth grade students in North Eastern Badiah directorate of education?

2- Is their an interaction between metacognitive monitoring strategy instruction and gender on tenth grade students'

listening comprehension?

Results Related to Students' Performance on the Listening Comprehension Test

Descriptive Data: The lowest mark obtained by the students was 2 while the highest mark was 37 out of 40. Table 4 presents the frequent distribution of students' scores on the listening comprehension test.

Table (4) Frequent Distribution of Students' Scores on the listening Comprehension

| Categories | Total frequencies | Frequencies | | | | | |
| | | Experimental Group | | | Control Group | | |
		Male	Female	Male& Female	Male	Female	Male& female
1-5	2	0	1	1	1	0	1
6-10	3	0	1	1	2	0	2
11-15	17	1	0	1	6	10	16
16-20	7	0	0	0	3	4	7
21-25	25	2	5	7	12	6	18
26-30	37	12	14	26	2	9	11
31-35	22	11	7	18	3	1	4
36-40	10	4	5	9	1	0	1
Total	123	30	33	63	30	30	60

Table(4) shows that the number of the students in both the experimental and the control group who achieved less than 20 was 29 with the percentage of 24% and who attained more than 20 were 94 with the percentage of 76 % . Students who achieved less than 20 in the experimental group were 3 with the percentage of 5% while students who achieved more than 20 were 60 with the percentage of 95%. Students who achieved less than 20 in the control group were 26 with the percentage of 43 % while students who achieved more than 20 were 34 with the percentage of 57%. Male students who achieved less than 20 were 13 with the percentage of 22 % and who achieved more than 20 were 47 with the percentage of 78 %. The number of female students who achieved less than 20 was 16 with the percentage of 25 % and who achieved more than 20 were 47 with the percentage of 75%.

Inferential statistics:

Results Related to the first Hypothesis

The first hypothesis says " There are no statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the listening comprehension that may be ascribed to metacognitive monitoring strategy instruction.

To examine this hypothesis, means and standard deviations for the students' scores on the listening comprehension post-test were computed as shown in table (5).

Table (5) Means and Standard Deviations for The students' Scores on the listening Comprehension post-test According to their Group

Group	N.	Means	Std. Dev.	Mini.	Max.
Control	60	20.58	7.209	2	37
Experimental	63	29.43	6.507	2	37

Table (5) shows that there are observed differences between means of students' scores according to their group. To test the significance of these differences, Two-Way ANCOVA was used as shown in table (6)

Table (6) Two-way ANCOVA test results for the students' scores on the listening Comprehension post-test according to their Group

Source	SS	Df	Ms	F	Sig.
Group	2420.812	1	2420.812	50.928	*000.
Gender	10.555	1	10.555	222.	638.
Group*Gender	24.117	1	24.117	507.	478.
Error	5656.579	119	47.534		
Total	85673.000	123			

*Significant at (α = 0.05)

Table (6) shows that the f value of the group is 50.928 which is significant at (α = 0.0 5).This means that there are significant differences in the tenth graders' achievement in listening comprehension test between control and experimental groups due to using metacognitive monitoring strategy instruction in favor of the experimental group as indicated also in table (5) . Therefore , the first null hypothesis which states There are no statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the post listening test that may be ascribed to the effect of metacognitive monitoring strategy instruction, was rejected and the alternative hypothesis which states There are statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the listening comprehension in favor of the experimental group that was instructed using metacognitive monitoring strategy instruction, was accepted .

Results Related to the Second Hypothesis

The second hypothesis says "There is no interaction between metacognitive monitoring strategy instruction and gender on tenth grade students' listening comprehension.

To examine this hypothesis, means and standard deviations for the students' scores on the listening comprehension post-test according to their group and gender were computed as shown in table (7).

Table (7) Means and Standard Deviations for The students' Scores on the Listening Comprehension post-test According to their Group and Gender

Group	Gender	N.	Means	Std. Dev.	Mini.	Max.
Control	Male	30	20.43	8.157	2	37
	Female	30	20.73	6.258	12	33
	Total	60	20.58	7.209	2	37
Experimental	Male	30	30.20	4.874	12	37
	Female	33	28.73	7.711	2	37
	Total	63	29.43	6.507	2	37
Total	Male	60	25.32	8.284	2	37
	Female	63	24.92	8.075	2	37
	Total	123	25.11	8.	2	37

Table (7) shows that there are differences between means of students' scores according to their group and gender. To test the significance of these differences, Two-Way ANCOVA was used as shown in table (8)

Table (8) Two-way ANCOVA test results for the students' scores on the listening Comprehension post-test according to their Group and Gender

Source	SS	Df	Ms	F	Sig.
Group	2420.812	1	2420.812	50.928	*000.
Gender	10.555	1	10.555	222.	638.
Group*Gender	24.117	1	24.117	507.	478.
Error	5656.579	119	47.534		
Total	85673.000	123			

*Significant at (α = 0.05)

Table (8) shows that the f value for the gender is 222. and for group*gender is 778. Which is not significant at (α = 0.0 5). This means that there are no significant differences in the tenth graders' achievement in listening comprehension due to the gender or to the interactions between group and gender .Therefore , the second null hypothesis which states " There is no interaction between metacognitive monitoring strategy instruction and gender on tenth grade students' listening comprehension", was accepted.

Discussion and Recommendations

The purpose of the study was to investigate the effect of metacognitive monitoring strategy instruction on developing listening comprehension in English language among tenth grade students in North Eastern Badiah directorate of education.

The first section presents a discussion of results attained by implementing metacognitive monitoring strategy instruction .The second section includes recommendations which are based on the results of implementing the strategy instruction.

Discussion of the Results Related to the Listening Comprehension Test

The first hypothesis says" There are no statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the listening comprehension that may be ascribed to the use of metacognitive monitoring strategy instruction.

The second hypothesis says" There is no interaction between the use of metacognitive monitoring strategy instruction and gender on tenth grade students' listening comprehension".

The results related to the listening comprehension test indicated that there were significant differences between the mean scores of the experimental and control groups on the reading comprehension in favor of experimental group. The mean of students' scores in the experimental group on the reading test was (29.43), while mean of students' scores in the control group was (20.58) as shown in table (5). Two-way ANCOVA was used to test the significance of the differences as shown in table (6).Also , the results of the study indicated that there was no interaction between using metacognitive monitoring and gender on the listening comprehension of tenth graders as shown in table (8). This indicates that only metacognitive monitoring strategy instruction was behind the improvement in listening comprehension of the experimental group and gender has no contribution to the results of the study.

As a result, the first null hypothesis was rejected while the alternative one was accepted " There are statistically significant differences at (α =0.05) between students' total achievement of the experimental and the control groups in the listening comprehension in favor of the experimental group ".

The high mean scores of the experimental groups was due to the effect of metacognitive monitoring instruction based on a well – prepared instructional program prepared by the researcher which proved to be more effective than the traditional method. This finding may be attributed to the following reasons: First, the metacognitive monitoring program based on a model proposed by Vandergrift and Tafaghodtari (2010) that the students received might help them better understand the steps of monitoring passages and deal with comprehension problems. Second, teachers who participated in

the study were given clear idea about the importance of the program with sufficient feedback provided by the researcher. Third, students were taught some fix-up strategies to deal with any comprehension failures. Finally, the instructional program could have helped students get rid of fear they might have felt during conventional method which is based on testing listening rather than teaching it.

The findings of this study are in line with the findings reported by Coskun (2010), Zhang (2012), Birjandi & Rahimi (2012), Tabeei, Tabrizi & Ahmadi

(2013), Xvehua & Zhenmei (2013), Shams & Rahimirad (2014), Movahed (2014),AbdelHafed(2006).

The findings of the study are partially supported by the findings of the study conducted by Ratibi & Amirian (2013).However; the previous study was different from this study in that it investigated the types of metacognitive strategies used by Iranian university students majoring in English.

Also, the findings of this study are partially supported by the findings of the study reported by Waswas (2007). However, the previous study investigated the effect of using remedial program based on the cognitive and metacognitive strategies on the listening comprehension.

Recommendations

Based on the results of the study, some recommendations are proposed to Ministry of Education and TEFL teachers:

- Ministry of Education should include metacognitive strategies especially comprehension monitoring in English language curricula.

- Ministry of Education is recommended to introduce special programs for TEFL teachers on the use of metacognitive strategies especially comprehension monitoring.

- TEFL teachers are recommended to train their students to apply metacognitive monitoring strategy instruction.

- Metacognitive learning and teaching should receive more attention as an important topic for future studies.

References

Abdel Hafez, A.M. (2006). The effect of a suggested training program in some metacognitive language learning strategies on developing listening and reading comprehension of first year EFL students. Unpublished M.A thesis, faculty of education, Minia university.

Bani-Khaled, T.A. (2013). Learning English in different circumstances: The case of North Badiah disadvantaged schools in Jordan. *Australian Journal of basic and applied sciences*,7(8),269-284.

Birjandi, P., & Rahimi, A. H. (2012). The effect of metacognitive strategy instruction on the listening performance of EFL students. *International Journal of Linguistics*, 4(2), 495-517.

Coskun, A. (2010). The effect of Metacognitive Strategy Training on the Listening Performance of beginner students. *Novitas - ROYAL, Research on youth and language*, 4(1),35-50

Cubukcu, F. (2008). Enhancing vocabulary development and reading comprehension through metacognitive strategies. *Issues in Education Research*, 8(1), 1-11.

Gilakjani, A., & Sabouri, N. (2016). Learners' listening comprehension difficulties in English language learning: literature review. *English language teaching*, 9(6),123-129

Hennessy, M.G. (1999). Probing the dimensions of metacognition: Implications for conceptual change teaching-learning. Paper presented at *the annual meeting of the National Association for Research in science teaching*, Boston, MA

Hoffmann, K. F. (2010). *The Impact of Graphic Organizer and Metacognitive Monitoring Instruction of expository science text comprehension in 5th grade students*. Unpublished dissertation, NC. State University.

Hussein, S. (2007). *The effect of an instructional program based on using metacognitive strategies on the reading comprehension and writing performance of the secondary stage students in Jordan*. Unpublished dissertation, Amman Arab University.

Khonamri, F., & Kojidi, E. (2011). Metacognitive Awareness and comprehension monitoring reading ability of Iranian EFL

learners. *Profile Issues in Teachers Professional Development*, 13(2), 99-111.

Liebler, R. A. (2000). Assessing for Metacognition Competencies in an Adult Degree Completion Program. *Access to Quality and Success: Applying Principles of Good Practice. AHEA 2000 Conference Proceedings*, Chicago, Illinois, edited by K. Lee. Adult Higher Education Alliance, 2000. (ED 446 214).

Manning, B., & Payne, B. (1996). *Self-talk for teachers and students' metacognitive strategies for personal and classroom use*. Allyn & Bacton.

Movahed, R. (2014). The Effect of Metacognitive Strategy Instruction on Listening performance, Metacognitive awareness, and listening anxiety of beginner Iranian EFL students. *International journal of English linguistics*, 4(2),88-99.

Paris,S.G, Wasik, B.A., & Turner, J.C. (1991). The development of strategic readers. In *the Handbook of reading research*. NewYork: Longman,

Pintrich, P. R. (2000). The role of goal orientation in self-regulated learning. In *the Handbook of self-regulation* (pp. 451-502). Academic Press.

Rahimirad, M., & Shams, M. R. (2014). The effect of activating metacognitive strategies on the listening performance and metacognitive awareness of EFL students. *International Journal of Listening*, 28(3), 162-176.

Ranalli, J. (2018). Inaccurate metacognitive monitoring and its effects on metacognitive control and task outcomes in self-regulated L2 learning. *Journal of Iowa State University*, 21(4),1-20.

Ratebi, Z., & Amirian, Z. (2013). Use of metacognitive strategies in listening comprehension by Iranian university students majoring in English: a comparison between high and low Proficient listeners. *Journal of Studies in Education*, 3(1), 140-154.

Rost, M. (2002). *Teaching and researching listening*. London, UK: Longman.

Shunk, D. (1997). Self- monitoring as a motivator during instruction with elementary school students. ERIC document No. ED 404035

Tabeei, S. N., Tabrizi, A. R., & Ahmadi, G. (2013). The effect of metacognitive strategies instruction on listening comprehension of Iranian EFL learners: Focusing on gender. *International Journal of Language Learning and Applied Linguistics World*, 4(4), 13-29.

Vandergrift, L. (1999). Facilitating second language listening comprehension: acquiring successful strategies. *ELT Journal*, 53(3),168-176.

Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual review of applied linguistics*,24, 3-25.

Waswas, H. (2014). *The effect of a proposed remedial program based on cognitive strategies on the listening comprehension achievement of the Jordanian higher basic stage students in English*. Unpublished doctoral dissertation, Amman Arab University, Amman, Jordan.

Yan, Y. (2018). A study on the non-English majors use of metacognitive strategies in English learning. *Theory and Practice in Language Studies*,4(1),92-99

Zhang, Y. (2012). The Impact of listening strategy on listening comprehension. *Theory and Practice in Language Studies*, 2(3),625-629.

Zheng, J. (2018). The metacognitive strategy in English listening comprehension. *Theory and Practice in Language Studies*, 5 (2), 226-231.

Zhenmei, S., & Xuehua, A. (2013). Does metacognitive instruction improve listening comprehension? *Theory and Practice in Language Studies*,3(4),632-636.