

Using Listening E-journals to Raise Metacognitive Awareness and Improve Listening Comprehension of Egyptian EFL University Students

Dr. Hanan Waer

Dept. of Curriculum & Instruction, Faculty of Education, New Valley University

Dr. Amira Desouky Ali

Dept. of Languages, Sadat Academy for Management Sciences

Abstract:

This mixed-method study investigated the effects of writing e-journals on the metacognitive listening awareness and listening comprehension of EFL university students. Participants were 70 sophomores English major at New Valley University in Egypt who studied English Phonology and Listening course. They were assigned randomly into a control ($N=36$) and an experimental ($N=34$) groups. While the two groups received in-class instruction and were assigned online listening home tasks, the experimental group was asked to submit listening e-journals after each listening task. Metacognition Awareness Listening Questionnaire (MALQ) (Vandergrift, Goh, Mareschal & Tafaghodtari, 2006) and a paper-based Longman TOEFL Listening Test were administered to the groups before and after the experiment. Analysis of listening post-test results showed that the experimental group significantly outperformed the control group. Analysis of the MALQ revealed statistically significant differences between the two groups with the advantage of the experimental group in the planning and evaluation, directed attention, person knowledge and problem-solving subscales; but not in mental translation. A positive correlation was also found between the two variables. High proficient listeners were found to use more planning and directed attention strategies and less mental translation than low-skilled listeners. Additionally, qualitative data gathered from the journals and interviews showed that students perceived keeping listening e-journals as helpful in setting goals, learning new vocabulary and monitoring learning. However, they identified some challenges in using e-journals like time-consuming and difficulty in reflecting on the listening process. Implications and recommendations for further research were provided.

Keywords: listening e-journal, metacognitive awareness, listening comprehension, EFL university students, mixed-method.

1. Introduction:

Listening is a vital skill that provides a rich input for language acquisition and facilitates learning other language skills. Being a complex process, listening is considered a challenge to second language learners. The

complexity lies in the fact that learners are required to process various linguistic and nonlinguistic factors which in turn increases their cognitive load (Ockey & Wagner, 2018). Besides, the distinguishing variables of the listening comprehension, namely auditory discrimination ability and working memory capacity, increase the complexity of listening. Therefore, listeners need to practice different strategies to cope with such variables (Vandergrift & Baker, 2015).

Due to the distinctive nature of listening, it is seen as a difficult skill in terms of research and teaching (Vandergrift 2007; Kemp, 2010; Vandergrift & Goh, 2012). On one hand, there is a relative paucity of research of listening in comparison with reading, writing and speaking. On the other hand, listening is frequently tested rather than taught methodically (Graham, 2017). This means that teaching listening often focuses on the product rather than on learning how to listen and improve listening strategies. Consequently, different researchers have emphasized the importance of teaching listening as a process and raising listening metacognitive awareness (Vandergrift & Goh 2012; Maftoon & Alamdari, 2016; Mahdavi & Miri, 2017). Research confirms the need for a more holistic approach to teaching listening as a process which is also called "metacognitive instruction" (Goh, 2008, p.192). This approach is based on the practice of bottom-up- vis-à-vis top-down strategies and metacognitive strategies (Vandergrift & Goh, 2012). One tool that helps learners to practice listening as a process and stimulate their metacognitive strategies is listening journal.

2. Literature Review:

2.1. Metacognitive listening awareness

Metacognitive instruction for L2 listening develops "learners' knowledge about learning to listen, as well as helps learners use effective strategies for managing their comprehension and overall listening development" (Goh, 2008, p.192). Among the three types of learning strategies that O'Malley et al. (1985) identify, metacognitive strategies are considered the most crucial in helping EFL learners reflect on their thinking and control their mental processes of language learning (Nelson, 1996). Metacognitive strategies include planning, monitoring and evaluation (O'Malley & Chamot, 1990). Wenden (1998) points out that metacognitive knowledge in language learning involves three types: a) person knowledge refers to general knowledge and factors affecting language learning; b) task knowledge indicates understanding the goals and procedures of accomplishing learning tasks; and c) strategic

knowledge involves learners' use of appropriate learning strategies to achieve effective learning.

According to Sheorey and Mokhtari (2001), metacognitive awareness is "planning and consciously executing appropriate actions to achieve a particular goal" (p. 432). Therefore, metacognitive listening awareness refers to listeners' awareness of the strategies they use to manage their listening performance (Vandergrift, Goh, Mareschal & Tafaghodtari, 2006). Metacognitive listening strategies comprise five kinds of strategies: problem-solving, planning and evaluation, person knowledge, directed attention and mental translation (Vandergrift et al., 2006). Problem-solving includes strategies that listeners employ to overcome difficulties while listening and manage inferences. While planning strategies are used by listeners to set goals and prepare for listening; evaluation strategies are effective in checking outcomes. As for person knowledge strategies, they affect listeners' self-efficacy and perceptions with regards to the listening task. Directed attention strategies refer to listeners' techniques to stay attentive; whereas mental translation encompasses strategies that should be avoided for better comprehension.

Plethora of research has been done regarding the effectiveness and usefulness of using metacognitive strategy in teaching listening as well as the relationship between metacognitive strategy awareness and listening comprehension (Vandergrift & Tafaghodtari, 2010; Goh & Hu, 2014; Rahimirad & Shams 2014; Khonmari & Ahmadi, 2015; Wang 2015; Maftoon, & Alamdari 2016; Mahdavi & Miri, 2017; Wang & Treffers 2017; Kök, 2018). Although recent research has recommended the use of a listening journal, few studies have investigated its role with metacognitive awareness (Chen, 2017).

2.2 Listening journals

Listening journals or listening diaries/ logs are mainly used to keep records for learners' "extensive and intensive listening practices, as well as reflections on their listening experiences" (Schmidt, 2016, p. 3). By keeping a listening diary, Goh (2002, p. 95) states that "learners become more reflective of their learning processes to develop a greater sense of responsibility for their learning". Besides, keeping listening journals helps to foster students' autonomous learning and improve listening through reflection on the listening process (Kemp, 2010).

A few researchers have used listening journals as a research tool. Most recently, Nascimento (2018) used action research to explore the use of

listening journals in developing listening skills and reducing listening resistance of students studying English for Specific Purposes (ESP) course in Brazil. The researcher created and administered a questionnaire to examine listening resistance. The results showed that students became less resistant and more confident and motivated to listen to lectures in English. Chen (2017) used listening journals to help her Taiwanese learners enhance metacognitive awareness as well as gauge their perceptions about keeping journals. She found evidence for the benefits of listening journal in raising students' metacognitive awareness; planning for listening, evaluation of comprehension, and solving comprehension problems. Fauzanna (2017) aimed to investigate the effectiveness of listening journal in helping students understand the overall meaning. The results showed that the journal assisted students in improving their vocabulary and understanding the meaning from many different sources.

In another study by Chen (2016), listening diaries were used as a research tool to explore issues related to students' material selection, listening problems, and perceived usefulness of the listening diaries. Via analyzing the diaries, she found that keeping a listening diary facilitated the development of future study plans, linguistic knowledge, listening and writing skills, and self-confidence. Besides, Galloway and Rose (2014) used listening journals as instructional as well as research tool to investigate their effect on ELT students' attitudes towards listening to global Englishes (GE). Their results showed the benefit of listening journals in raising awareness of global English and its usefulness as a pedagogical tool for exposing learners to different Englishes.

Additionally, Webb (2017) conducted action research with secondary school students and used the PET listening test, the listening segment of the Swedish National Test of English and the Metacognitive Awareness Listening Questionnaire (MALQ). Findings indicated an improvement in the aptitude test for the experimental and control groups with no significant differences. Khonmari and Ahmadi (2015) examined the influence of metacognitive strategy instruction on 20 female students in Iran. A TOEFL test and MALQ were administered before and after the experiment. Students were asked to write listening logs. Results revealed a slight improvement in metacognitive awareness in the majority of the strategies.

Despite its many benefits, Vandergrift and Goh (2012, p.133) stated that some learners might see keeping a diary "monotonous activity when they have to do it over a long period of time". Likely, Chen (2017), reported that some learners perceived writing listening journals as demanding and time-consuming.

It is clear from this review that previous studies have used listening journals as an exclusive research tool with a focus on learners' retrospective responses within a classroom setting (Galloway & Rose 2014; Chen 2016). Like Nascimento (2018), the present study used a listening e-journal along with a questionnaire. While this study used Edmodo, Nascimento used email and padlet for submitting journals. Moreover, this study used a mixed-method approach, whereas most previous studies used listening journals as their sole research qualitative research method (Galloway & Rose, 2014; Chen, 2016; Fauzanna, 2017). Besides, using listening e-journals with Egyptian EFL pre-service teachers have not been investigated. Thus, in light of the previous review, the current study aimed at finding answers to the following research questions:

1. To what extent do listening e-journals raise Egyptian EFL sophomores' metacognitive awareness?
2. To what extent do listening e-journals influence Egyptian EFL sophomores' listening performance?
3. What are the differences between high- and low-proficient listeners in relation to metacognitive awareness?
4. What are the metacognitive listening strategies that Egyptian EFL sophomores reported using more often in listening?
5. How do students evaluate the experience of keeping listening e-journals?

In addition to these questions, the current study tested the following hypotheses:

1. There is a statistically significant difference between the mean scores of the experimental and control groups on the MALQ posttest in favor of the experimental group.
2. There is a statistically significant difference between the mean scores of the experimental and control groups in listening comprehension posttest in favor of the experimental group.
3. There is a significant correlation between metacognitive awareness and listening comprehension of EFL students.

3. Research Method:

3.1 Participants

The participants were 70 university-level students of English major in the Faculty of Education at New Valley University in Egypt. Their average age was 19-20; with 24 males and 46 females. They were enrolled in a compulsory course called "English Listening and Phonology"; which they studied in the first semester of the academic year 2018/2019. In the listening part of this course, students are exposed to spoken English via listening to selected excerpts and learning new vocabularies in different topics. Students listen to different types of spoken English, including casual conversations, instructions, and lectures. Whilst the course focuses on essential listening skills as making inferences, note-taking, predicting, listening for gist, and listening to specific details, it lacks any strategy training component.

Once students consented to participate in the study, they were randomly assigned to either control or experimental group. Students of the two groups had a two-hour lecture every week. The researchers classified the students as high and low skilled listeners based on their performance on the TOEFL listening pretest. Those who achieved above the mean were identified as high-skilled listeners (48 students), and those with grades below the mean were recognized as low-skilled (22 students).

3.2. Instruments

3.2.1. Metacognitive Awareness Listening Questionnaire (MALQ)

MALQ was used in this study as a pre-post instrument to assess students' awareness of their perceived use of metacognitive strategies. As recommended in the literature (Vandergrift et al., 2006), the MALQ was conducted straight after the listening pretest. All MALQ items were normally coded (5: totally agree to 1: totally disagree) except for items 3, 8 and 16; which were reverse coded. MALQ consists of 21 items and includes five factors: problem-solving, planning & evaluation, mental translation, person knowledge, and directed attention. The questionnaire was translated into Arabic by an English-Arabic translator to ensure that students interpret the items correctly. To measure the internal consistency of this questionnaire, it was applied to a group of university students rather than the participants of the current study. The reliability coefficient was found to be strong ($\alpha=0.81$).

3.2.2. Listening comprehension test

A listening section of Longman Paper-based TOEFL Test (Phillips, 2001) was used to check students' listening proficiency. The test comprises three parts with 50 multiple-choice items. While part A includes 30 short conversations with a question for each, part B involves 2 long casual conversations, and each is followed by a set of multiple-choice questions with a total of seven to nine questions. Part C includes excerpts from lectures or talks about school or campus life with a total of eleven to thirteen questions.

3.2.3. Listening e-journals

The listening e-journal template was inspired by Chen (2017) to scaffold students in writing reflective journals. The template was uploaded weekly to Edmodo, a free social learning platform, where students downloaded, completed then turned them in to be graded. Students were asked to listen at least twice to one of the audios provided in the templates. Before the first listening, they should plan how to stay concentrated to comprehend the text fully. Before the second listening, students answered some questions that help correct their understanding and direct their attention to the parts of the texts that were unclear or they could not understand. After the second listening, students were asked to mention the techniques they used to stay concentrated and overcome nervousness as well as describe the types of translation they used while listening (e.g. word-by-word translation, keyword translation). If they still struggle with the text, they can listen one or two times, view the English subtitles or check the dictionary for unknown words. Students were required to specify the planning strategies they utilized (e.g. the number of listening times; use of scaffolds like captions, dictionary or background knowledge; and expected difficulties). Then, students evaluated their understanding and reflected on the strategies they used to overcome difficulties. Strategies to solve any problems were listed and students were required to select which ones they used, when and why and to add further strategies. The last step was to fill in a self-assessment checklist to assess their confidence and difficulty when listening as well as evaluate the listening skills that they believed have improved and those that still need improvement. Finally, students provided a plan for improving points of weaknesses.

3.2.4. Focus group interview

As this study adopted a mixed-method approach, the focus group interview was used to strengthen quantitative data. This type of interview helps to elaborate on students' responses in the e-journals and provide "a rich and detailed set of data about perceptions, thoughts, feelings and

impressions of people in their own words” (Stewart & Shamdasani, 1990, p.140). The interview questions focused on the metacognitive strategies used during listening, difficulties/ challenges and strategies used to overcome them, skills that have improved and those that still need improvement, and the benefits as well the challenges of using the e-journals.

The first researcher selected 10 students randomly (five high-skilled listeners and five low-skilled listeners). The setting was a class where students sit in a circle for more natural communication. The interview lasted for 40 minutes (three recorders were used for better sound quality). The researcher moderated the focus group and interfered only when there was dominance by some participants. The researcher also tried to interweave some questions/prompts within the discussion so as not to direct the discussion but rather to feed and extend short responses from some participants.

3.3. Procedures

In the first week of the semester, the TOEFL listening test and the MALQ were carried out to the participants before the intervention. The control and experimental groups were taught by the first researcher using the pre/during/post-listening approach. In the pre-listening stage, students were introduced to the listening topic to brainstorm ideas and predict vocabularies and information related to this topic in groups. Then, they listened to the audio twice, take some notes and check their expectations and understanding against the listening text. At the post-listening phase, students engaged in discussions and answered some comprehension questions or wrote one or two-sentence summary of the listening. At home, students of the two groups were asked to listen to authentic materials relevant to the topics they practiced then do some activities. The materials were selected mainly from BBC 6-minute English, ESL-lab, TED Talk, and VOA websites. Only students of the experimental group were asked to write listening e-journals along with the assignment.

The first researcher met the experimental group and explained the aims of the research and the benefits of integrating listening e-journals in their listening course. Students were introduced to the e-journal template as well as to Edmodo and the researcher modeled using them. They were asked to write an e-journal once a week. The second researcher provided regular online written feedback on students’ input in the e-journals to reinforce positive responses or require modifications and clarifications.

The comments aimed at redirecting students' attention to be on track, providing relevant reflections or completing missing parts. After week eight, the listening test and MALQ were carried out. A focus group interview was held to triangulate data obtained from the journals.

4. Data Collection and Analysis

The TOEFL listening test and the MALQ were carried out to the participants before and after the experiment. SPSS was utilized for statistical analysis of the quantitative data whereas Nvivo 10 was utilized for qualitative data. The results were analyzed in light of the research questions.

4.1. Quantitative data analysis:

4.1.1. Metacognitive Awareness Listening Questionnaire

Descriptive statistics were computed at the overall level of MALQ and on each item in the five factors. To measure differences between the groups in the MALQ pre- and post-tests, independent sample t-test was computed. While no significant differences were found between the experimental and control groups in the MALQ pretest $t(68) = .448$; $p = .655$; there were significant differences in the MALQ posttest of the two groups $t(68) = 8.11$; $p = .03$ favoring the experimental group. Consequently, hypothesis one that supposed a statistically significant difference between the mean scores of the experimental and control groups on the MALQ posttest in favor of the experimental group was confirmed. Table 1 displays MALQ posttest results on the five subscales of the questionnaire for the two groups.

Table 1.

T-test on the five dimensions of the two groups on MALQ posttest

Subscales	Experimental		Control		<i>T</i>	<i>p</i>
	Mean	SD	Mean	SD		
Planning & Evaluation	3.88	.328	3.25	.445	7.93	.00
Directed attention	3.99	.536	3.37	.642	5.88	.01
Person Knowledge	3.35	.030	2.74	.665	1.61	.01
Mental translation	3.71	.302	3.10	.332	9.30	.25
Problem-solving	3.98	.170	3.40	.154	7.71	.01
Total	3.82	.361	3.22	.462	8.11	.03

Thus, there were improvements in the experimental and control groups in the MALQ posttest on the overall level of awareness with means of 3.82 and 3.22 respectively. In terms of the five factors, the highest means were associated with directed attention and problem-solving while the lowest means were associated with person knowledge for the two groups. Results also showed that there were significant differences between the experimental and control groups in the subscales ($p < 0.05$) except for mental translation with means of 3.71 and 3.10 respectively ($p = .25 > 0.05$).

Descriptive statistics of MALQ factors indicated statistically significant differences among participants in the two groups in the planning and evaluation category as students of the experimental group reported more planning and setting goals for listening (items 1 & 21). About half of the participants believed that they evaluated their listening and planned for future listening (item 14) and agreed to be more curious to question their satisfaction with the listening experiences (item 20). However, participants in both groups did not recall similar texts while listening (item 10).

Moreover, there was a statistically significant difference in participants' responses to directed attention items 2, 6, 12 and 16. This shows that the experimental group students used more strategies when they lost attention in listening. About (63%) of the participants agreed on maintaining and recovering concentration while only 30% quitted listening.

Analyses of the person knowledge items 3, 8, and 15 indicated that (58%) of experimental group students felt less challenged and anxious when listening to English after writing the journals than before using them. In contrast, control group students kept their feeling of anxiety and nervousness in the two applications of the questionnaire.

Although there was no significant difference in mental translation subscale between the two groups on the MALQ posttest, 55% of the experimental group students reported translating keywords (item 11) than the control group did (38%). Whereas half of the students in the control group reported translating the aural input in their heads while listening, 37% of students in the experimental group indicated input translation (items 4 & 18).

The last subscale includes problem-solving strategies with the largest number of items (5, 7, 9, 13, 17 & 19). Though the majority of the students in the two groups indicated that guessing and inferring are the most used strategies to overcome problems in understanding new words; significant differences were found for the experimental group students. Using background knowledge and schemata were the second most-used strategy in this category. About one-third of the students in the experimental group and under a quarter of the control group reported comparing what they understood with their knowledge about the topic.

4.1.2 Listening proficiency test

Independent sample *t*-test for the listening pre-test showed no significant difference between the two groups $t(68) = -.439$; $p = .662$; which indicates the homogeneity of the groups. However, the results of the listening posttest showed a significant difference between the groups $t(68) = 3.89$; $p = 0.00$ in favor of the experimental group. Table 2 displays this result.

Table 2.
Independent sample t-test for listening posttest

Group	N	Mean	SD	t-value	df	Sig.	Partial Eta Squared
Experimental	34	21.62	7.190	3.899	68	.000	.324
Control	36	15.81	5.170				

* $p < 0.05$

Therefore, hypothesis two; which states that there is a statistically significant difference between the mean scores of the experimental and control groups in listening comprehension posttest in favor of the experimental group, was retained.

A paired *t*-test was run to examine if there was a difference in the growth rate between the listening pre- and post-tests of the experimental group. A statistically significant difference was found with a large effect size (Cohen's $d = .93$) between the means. This result is presented in table 3.

Table 3.
Paired sample t-test for listening pre- and post-tests of the experimental group

		N	Mean	SD	Df	t	Sig. (2-tailed)
Pair 1	Pre-test	34	15.74	5.316	33	-7.24	.000
	Post-test	34	21.62	7.190			

As shown in table (3), a statistically significant increase of 7.24 was recorded between the pretest ($M=15.74$) and the posttest ($M= 21.62$) in favor of the posttest. Therefore, experimental group students made significant gains in their listening proficiency after the experiment.

4.1.3. Correlation between Metacognitive Listening Awareness and Listening Proficiency

As presented in table 4, the results of Pearson coefficient showed a positive statistically significant correlation between listening proficiency and overall MALQ ($r= .248$; $p= 0.05$) as well as with four subscales: Planning and evaluation, directed attention, person knowledge, and problem-solving ($r=.262, .247, .303$ and $.293$; $p<0.05$ respectively). The only subscale that correlated insignificantly with listening proficiency was mental translation ($r=.218$; $p=.06$). This means that hypothesis three was maintained.

Table 4.
Correlations between listening proficiency and MALQ

	MALQ	Planning/ Evaluation	Directed attention	Person Knowledge	Mental Translation	Problem- solving
Listening Proficiency	.248* p = 0.03	.262* p = 0.02	.247* p = 0.03	.303* p = 0.01	.218 p = 0.06	.293* p = 0.01

*Correlation is significant at the 0.05 level (2-tailed).

4.1.4. Differences in Listening Performance by Metacognitive Awareness

The third research question concerned the relationship between listening proficiency level and metacognitive awareness. Descriptive statistic was calculated to specify this relationship. Table 5 represents this data.

Table 5
Descriptive statistics by listening proficiency level

	Proficiency level	Mean	SD
<i>Planning & evaluation</i>	Low	8.36	2.146
	High	10.07	2.120
<i>Directed attention</i>	Low	8.73	2.146
	High	11.47	4.033
<i>Person Knowledge</i>	Low	10.16	4.963

Dr. Hanan Waer	Dr. Amira Desouky Ali	
<i>Mental translation</i>	High	10.27 2.374
	Low	10.27 2.374
<i>Problem-solving</i>	High	8.75 3.187
	Low	8.84 3.299
	High	9.87 3.386

One-way between-groups MANOVA was computed (2 proficiency levels X 5 metacognitive subscales) to identify if there were differences in the proficiency levels based on the reported strategy awareness. Additionally, to minimize the chance of a Type 1 error Bonferroni adjustment was used. Conducting Wilk's lambda, a main effect for Level ($F = 3.850, p=.004 < 0.05$) was found. Therefore, there were statistically significant differences between the low- and high- proficient listeners in terms of their metacognitive awareness. Multivariate tests clarified how listeners are different in each subscale. With the Bonferroni alpha level ($p < 0.05$), there were significant differences between the proficiency level and planning and evaluation ($F=7.458, p=.008$); directed attention ($F=16.19, p=.000$); and mental translation ($F= 10.956, p= .000$). No differences were found for person knowledge ($F= .006, p=.938$) and problem-solving ($F= 1.275, p =.263$).

Checking the means of the proficiency groups on the three significant factors (see table 5), it was found that high proficient listeners used more planning and evaluation strategies than less proficient counterparts ($M=10.07$ & 8.36 respectively). The same finding applies to directed attention where good listeners ($M=11.47$) used more strategies to focus attention than weak listeners ($M=8.73$). On the other hand, mental translation strategies were used less by high proficient listeners than low proficient ones with means of 8.75 for the former and 10.27 for the latter.

4.2. Qualitative Data Analysis

4.2.1. Listening e-journals and interviews

To answer the fourth and fifth research questions, the researchers coded the data gathered from the e-journals and interviews into six themes based on students' responses. These themes include: reported metacognitive listening strategies, difficulties/ challenges and strategies used to overcome them, skills that have improved and skills that still need improvement (pronunciation, vocabulary, understanding main idea/

specific details, etc.) and challenges of writing listening e-journals. Based on these themes, the researchers found that:

- Participants reported frequent use of most metacognitive strategies. Planning and evaluation were the highest used strategies by (34%), followed by directed attention (25%) then problem- solving (22%), and only (19%) for person knowledge and mental translation.

- Whilst 79% of the participants indicated that the major challenge in listening was encountering new/unknown vocabularies, 21% found the pronunciation and the accent; especially the American one was difficult to comprehend.

- To overcome difficulties in understanding, students used more than one strategy. 66% reported using repetition and keywords; 40% checked the script or subtitles; 51% looked up the dictionary; 30% guessed the meaning from context and used inferencing; 44% made use of schemata knowledge. Only two students reported quitting listening when facing difficulty.

- Speaking about skills that improved by using the e-journals, 45% of the students believed that learning new vocabularies/expressions and improving pronunciation are prioritized followed by 23% listening for specific details; 20% listening for gist, and 12% listening to various accents and long talks. Therefore, the majority stated that the journals helped them to learn new vocabulary and master some suprasegmental features like stress and pitch.

- With regards to the benefits of using the e-journals, participants were generally satisfied with using the listening journal in this course. The researchers identified these advantages: a) providing objectives for listening; b) enhancing planning and concentration; c) focusing on some listening skills (mainly vocabulary and pronunciation); d) improving summary and writing skills; e) promoting reflective skills; and f) fostering autonomy and evaluation of personal strengths and weakness. Furthermore, participants mentioned that journals scaffolded their reflection on the listening process and helped them become more autonomous and aware of the strategies they used.

- When asked about the challenges of keeping an e-journal, participants reported their unfamiliarity with writing reflective journals; which

consumed a lot of time in the beginning. Additionally, three interviewees said that they found writing journals is boring and time-consuming as they need to focus more on listening rather than reflecting on their learning due to their low listening proficiency.

5. Findings and Discussions:

It was found that listening performance of the experimental group students has improved in the listening posttest in comparison to the control group. This indicates that listening e-journals were effective in developing students' listening comprehension. Moreover, results of MALQ showed statistically significant differences in the overall MALQ means as well as the means of the five subscales. To begin, there was a statistically significant difference in the planning and evaluation in the MALQ posttest. This finding was supported by Bozorgian (2014)'s finding that planning and evaluation and problem-solving factors were significant in MALQ posttest of EFL Iranian students. This is also consistent with Vandergrift (2002) and Goh and Hu (2014) who asserted that planning can promote listening comprehension by helping listeners to address expected difficulties while listening. Evaluation, on the other hand, allows listeners to make use of problem-solving techniques to assess the correctness of their outputs. Nevertheless, this is inconsistent with Tanewong (2018) who found planning and evaluation to be significant only with the control group.

Similarly, participants' responses in the interview and the listening e-journals showed their awareness of planning and evaluation strategies and how they became more goal-oriented and evaluative of their listening; which developed their listening performance. A participant stated "*I set goals and develop expectations. The first questions in the journal asked me about my plan. I brainstormed ideas about the topic and related vocab before listening. I started to take notes about the main ideas and vocab during listening*".

As for directed attention subscale, the findings confirm Goh and Hu (2014)'s conclusion that showed that directed attention is a significant indicator of L2 listening proficiency. This finding also echoes Tanewong (2018) who found significant gains in the development of directed attention. Vandergrift et al. (2006) argued that attention strategies are implemented by students in real-life situations and transferred from their first language. Listening e-journals supported participants with skills to focus on during listening; which kept them concentrated. Instead of

getting distracted by unknown words and speed, they focused on the parts which reduced their understanding; the factor that maximized their comprehension. This is supported in these words by an interviewee who said *“At first, I was distracted by the things I didn’t I understand. I tried to focus on the steps in the journals to stay focused”*.

Additionally, person knowledge factor was statistically significant. This is in agreement with Maftoon and Alamdari (2016) and Wang (2015). Vandergrift (2002) highlighted the importance of person knowledge in raising listeners’ self-awareness. This was evident in participants’ reported increased self-confidence and lowered anxiety after using listening e-journals. A participant said *“I became more confident in my listening to English than before. I am no more afraid to listen. I am now watching films without subtitles and understand better”*. Thus, the reflective feature of the journals scaffolded listeners in checking their perceived difficulty of listening tasks and overcoming these challenges with suitable cognitive and metacognitive strategies.

Results showed an insignificant difference in the mental translation factor between the two groups on the MALQ posttest. Likewise, no correlation was found between listening proficiency and mental translation. Insignificance with mental translation mirrors Tavakoli, Shahraki and Rezazadeh (2012)’s findings and asserted that using bottom-up processes (word-by-word translation) massively prevented listeners from utilizing top-down processes and understanding the whole meaning. Goh and Hu (2014) and Maftoon & Alamdari (2016) argued that due to the insufficient vocabulary stock and poor word recognition of less proficient listeners, they tend to depend more on literal and mental translation. A student wrote in her journal: *“I used to look up the dictionary to know the meaning in Arabic but with the existence of the subtitles, I started reading the script before listening to minimize the number of listening and understand new words”*.

With regards to the problem-solving subscale, findings showed significant growth in this factor. These findings agreed with Vandergrift and Tafaghodtari (2010), Bozorgian (2014), Goh and Hu (2014), and Tanewong (2018). Listening e-journals might help participants in identifying their problems and finding appropriate strategies to solve them. This was clear in analyzing qualitative data as participants reported using various strategies like using schemata to improve understanding or inferring and guessing the meaning of difficult words. This was

represented in these words by an interviewee commenting on finding new words. The student stated, “*Guessing the meaning and my knowledge about the topic helped me to keep listening*”.

Furthermore, the study showed a positive correlation between listening performance and all factors except mental translation. This means that the more the students plan for listening, pay attention, feel less nervous and challenged, and solve difficulties while listening; the better their listening will be. Furthermore, listening e-journals, as reflected in students’ responses, helped them to improve their usage of metacognitive strategies and thus their listening comprehension. Participants believed that they became more motivated and autonomous. This result is in accordance with Kemp (2010) who showed how listening logs motivated autonomous learning and reflection on participants’ learning experience.

The present study also found differences between high- and low-proficient listeners in the use of metacognitive strategies. This can be justified by the qualitative and quantitative results. This is consistent with Ummah and Arifani (2018) who found a significant difference in the use of metacognitive strategy by proficiency level. Planning and directed attention were used more by more-proficient listeners; which means that their planning and concentration improved their listening performance. Finding no differences between problem-solving and person knowledge agreed with Maftoon and Alamdari (2016). This might be attributed to students’ unawareness of the importance and usage of these strategies or lack of adequate time to master these skills. This was supported by students’ reported unfamiliarity with a reflection on their listening process. An interviewee said: “*I wasn’t familiar with the journal and how it will help me in listening. But step-by-step, I became familiar with this kind of writing*”.

Moreover, listening proficiency affected less-skilled listeners’ perception of writing e-journals as being boring and time-consuming as they need to concentrate on listening rather than on reflection. Similarly, Chen (2017) and Nascimento (2018) concluded that their participants perceived writing listening e-journals as demanding and time-consuming. This was expressed in these words “*It took me about an hour and half listening and writing the journal. I wasn’t interested at first because my focus was on listening*”. Like participants in this study, Nascimento (2018)’s participants reported having difficulties in vocabularies, speed and accent. Participants in the two studies used strategies like reading the subtitles to overcome the difficulty of listening speed and accent.

6. Conclusions and Implications:

The present study has attempted to explore the effect of listening e-journals on Egyptian EFL sophomores. The mixed-methods approach was implemented by the researchers to verify quantitative data with qualitative findings. Data were collected from experimental and control groups by MALQ and TOEFL listening test. The findings showed statistically significant differences between the groups in the post-administration in listening and metacognitive awareness in favor of the experimental group. This proved that listening e-journals improved EFL participants' listening performance as well as metacognitive awareness. Positive correlations were found between listening and all MALQ subscales except mental translation. Participants' usage of metacognitive strategies varied according to their listening proficiency with the good listeners using planning and directed attention and the slow listeners using mental translation. Participants' perceptions of keeping a listening diary were also investigated. Findings demonstrated overall positive attitudes towards writing reflective journals.

Given these findings, it is suggested that curriculum designers should incorporate metacognitive awareness listening strategies in EFL courses and textbooks. Teachers should teach metacognition to improve students' listening performance. They should also train students on using listening e-journals as a significant pedagogical tool for raising metacognitive listening awareness and fostering autonomy. Additionally, more scaffolding and modeling should be given in the initial stages of introducing listening e-journals. Constructive feedback and discussions should be provided to assist students' learning and evaluation skills. To this end, teachers should be adequately trained to teach metacognitive awareness strategies in EFL classrooms. Finally, students should be instructed to keep listening e-journals to reflect on the factors that affect their listening comprehension.

The study is limited to the small sample size (70 students) from one faculty; therefore, it is difficult to generalize results. Although the study lasted for two months, each participant wrote only six journals. Thus, the data gathered from these journals gave initial insights into participants' learning especially with their limited ability to express their thoughts and reflect on their listening process.

Concerning these limitations, researchers can replicate this study with a larger sample from different EFL contexts. Future studies can use a long-

term method to collect an adequate number of qualitative data to investigate the influence of listening e-journals on students' listening and strategy use. Other forms of listening tests can be used to explore listening comprehension subskills and not only overall listening proficiency. Further studies can consider other variables such as age, gender, listening anxiety and listening difficulties. Comparative studies to explore the effectiveness of listening e-journals to other techniques on listening performance or to compare the effect of listening e-journals on different listening sub-skills should be considered.

References

- Bozorgian, H. (2014). The role of metacognition in the development of EFL learners' listening skill. *International Journal of Listening*, 28(3), 149-161. doi: 10.1080/10904018.2013.861303
- Chen, C. W. (2016). Listening diary in the digital age: Students' material selection, listening problems, and perceived usefulness. *JALT CALL Journal*, 12(2), 83-101., 12(2), 83-101.
- Chen, C. W. (2017). Guided listening with listening journals and curated materials: A metacognitive approach. *Innovation in Language Learning and Teaching*, 1-14. doi: 10.1080/17501229.2017.1381104
- Fauzanna, W. (2017). *Listening journals for extensive listening practice of EFL students at Andalas University*. Paper presented at the Proceedings of ISELT FBS Universitas Negeri Padang, 5, 331–335.
- Galloway, N., & Rose, H. (2014). Using listening journals to raise awareness of global Englishes in ELT. *ELT Journal*, 68(4), 386-396.
- Goh, C. (2002). *Teaching listening in the language classroom*. Singapore: SEAMEO Regional Language Centre.
- Goh, C. (2008). Metacognitive instruction for second language listening development: Theory, practice and research implications. *RELC Journal*, 39(2), 188-213. doi: 10.1177/0033688208092184
- Goh, C., & Hu, G. (2014). Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness*, 23(3), 255-274. doi: 10.1080/09658416.2013.769558
- Graham, S. (2017). Research into practice: Listening strategies in an instructed classroom setting. *Language Teaching*, 50(1), 107-119. doi: 10.1017/s0261444816000306
- Kemp, J. (2010). The listening log: Motivating autonomous learning. *ELT Journal*, 64(4), 385-395. doi: 10.1093/elt/ccp099
- Khonmari, F., & Ahmadi, F. (2015). The effect of metacognitive strategy training and raising EFL learners' metacognitive knowledge on listening performance. *Indonesian Journal of Applied Linguistics*, 5(1), 19-28. doi:10.17509/ijal.v5i1.827.g575
- Kök, İ. (2018). Relationship between listening comprehension strategy use and listening comprehension proficiency. *International Journal of Listening*, 32(3), 163-179. doi: 10.1080/10904018.2016.1276457
- Maftoon, P., & Alamdari, F. (2016). Exploring the effect of metacognitive strategy instruction on metacognitive awareness and listening performance through a process-based approach. *International Journal of Listening*, 1-20. doi: 10.1080/10904018.2016.1250632
- Mahdavi, N., & Miri, M. (2017). Co-Shaping metacognitive awareness and developing listening comprehension through process-based instruction. *International Journal of Listening*, 1-18. doi: 10.1080/10904018.2016.1260454

- Nascimento, M. (2018). The effects of listening journals in the development of university students' listening skills. *ACE Action Research*, University of Oregon.153-180.
- Nelson, T. O. (1996). Consciousness and metacognition. *American Psychologist*, 51(2), 102-116. <http://dx.doi.org/10.1037/0003-066X.51.2.102>
- Ockey, J., & Wanger, E. (2018). *Assessing L2 listening: Moving towards authenticity* Amsterdam: John Benjamins Publishing Company.
- O'Malley, J. M. Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language learning*, 35(1), 21-46.
- O'Malley, J. M., O'Malley, M. J., & Chamot, A. U. (1990). *Learning strategies in second language acquisition*. Cambridge university press.
- Phillips, D. (2001). *Longman complete course for the TOEFL test: Preparation for the computer and paper tests*. Pearson Education, New York: Addison-Wesley Longman.
- 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. doi: 10.1080/10904018.2014.902315
- Sheorey, R., & Mokhtari, K. (2001). Differences in the metacognitive awareness of reading strategies among native and non-native readers. *System*, 29(4), 431-449.
- Schmidt, A. (2016). Listening journals for extensive and intensive listening practice. *English Teaching Forum*, 54(2), 2–11. doi: https://americanenglish.state.gov/files/ae/resource_files/etf_54_2_pg02-11.pdf
- Stewart, D., & Shamdasani, P. N. (1990). *Focus groups: Theory and practices*. Newbury Park: Sage.
- Tanewong, S. (2018). Metacognitive pedagogical sequence for less-proficient Thai EFL listeners: A comparative investigation. *RELC Journal*. doi: 10.1177/0033688218754942
- Tavakoli, M., Shahraki, S. H., & Rezazadeh, M. (2012). The relationship between metacognitive awareness and EFL listening performance: Focusing on IELTS higher and lower scorers. *The Journal of Language Learning and Teaching*, 2(2), 24-37.
- Ummah, F., & Arifani, Y. (2018). The relationship between metacognitive listening strategy Used by proficiency level and their listening comprehension for Eleventh Grade in SMA Negeri 1 Gresik. *Journal of English Teaching, Literature, and Applied Linguistics*, 1(2), 72-84.
- Vandergrift, L. (2002). It was nice to see that our predictions were right: Developing metacognition in L2 listening comprehension. *Canadian Modern Language Review*, 58(4), 555-575. doi: 10.3138/cmlr.58.4.555

- Vandergrift, L. (2007). Recent developments in Second and Foreign Language listening comprehension research. *Language Teaching*, 40(3), 191-210. doi: 10.1017/s0261444807004338
- Vandergrift, L., Goh, C. C. M., Mareschal, C. J., & Tafaghodtari, M. H. (2006). The metacognitive awareness listening questionnaire: Development and validation. *Language Learning*, 56(3), 431-462. doi: doi:10.1111/j.1467-9922.2006.00373.x
- Vandergrift, L., & Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make a difference: An empirical study. *Language Learning*, 60(2), 470-497. doi: doi:10.1111/j.1467-9922.2009.00559.x
- Vandergrift, C., & Goh, C. (2012). *Teaching and learning second language listening: Metacognition in action*. : Routledge.
- Vandergrift, L., & Baker, S. (2015). Learner variables in second language listening comprehension: An exploratory path analysis. *Language Learning*, 65(2), 390-416. doi: doi:10.1111/lang.12105
- Wang, W. (2015). Learning to listen: The impact of a metacognitive approach to listening instruction. *The Asia-Pacific Education Researcher*, 25(1), 79-88. doi: 10.007/s40299-015-0235-4
- Wang, Y., & Treffers-Daller, J. (2017). Explaining listening comprehension among L2 learners of English: The contribution of general language proficiency, vocabulary knowledge and metacognitive awareness. *System*, 65, 139-150. <https://doi.org/10.1016/j.system.2016.12.013>
- Webb, T. (2017). *Effects of a metacognitive approach to teaching L2 listening*. Master Thesis, Sweden. Retrieved from <http://muep.mau.se/handle/2043/19476>
- Wenden, A. L. (1998). Metacognitive knowledge and language learning. *Applied Linguistics*, 19(4), 515-537. doi: 10.1093/applin/19.4.515