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The effects of metacognitive listening strategy instruction on ESL learners' listening motivation

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Prior studies examining the effects of listening strategy instruction on motivation have shown a positive correlation between the two. However, the participants of these studies all shared a first language (L1) and were not enrolled in an intensive English program (IEP). This study aims to investigate the correlation between listening strategy instruction and listening motivation in an IEP classroom for students from different L1s. Listening motivation was recorded utilizing the English Listening Comprehension Motivation Scale (ELCMS), and strategy use was tracked with the Metacognitive Awareness Listening Questionnaire (MALQ). Pre- and post-test scores of 56 participants (control group, *n*=30; experiment group, *n*=26) were analyzed using a mixed-effects regression and paired t-test to determine differences after a 7-week treatment period. Results revealed that study participant motivation levels in both groups decreased over the treatment period, with the experiment group seeing a smaller decrease than the control group.

Key words: listening, motivation, metacognition, strategies

1. Introduction

Listening is an important skill in English language teaching that is often overlooked compared to the instruction of other core skills like reading, writing, and speaking (Flowerdew & Miller, 2013). Vandergrift & Goh (2012) observed that many classroom listening activities focus on learners' outcome of listening as opposed to the comprehension process. They further commented that, unlike reading a written text, listening does not easily allow for instructors to direct attention to certain segments of an aural passage or adequately scaffold thinking and comprehension. Although repeating and/or pausing a passage is an option, doing so can detract from the authenticity of the listening practice. They nevertheless emphasized the importance of listening as a language tool because "it enables language

learners to receive and interact with language input and facilitates the emergence of other language skills" (p. 4).

Different approaches have been used over the years to facilitate listening development. Hinkel (2006) explained that the bottom-up focus of the 1970s pedagogy emphasized the ability to "identify words, sentences boundaries, contractions, individual sounds, and sound combinations" while the focus shifted in the 1980s towards top-down skills emphasizing "listeners' abilities to activate their knowledge-based schemata, such as cultural constructs, topic familiarity, discourse clues, and pragmatic conventions" (p.117). However, neither of these foci proved to be especially effective alone, as "learners who rely on linguistic processing often fail[ed] to activate higher order L2 schemata, and those who correctly apply schema-based knowledge tend[ed] to neglect the linguistic input" (p. 117), leading to the listening pedagogy of metacognitive listening instruction.

Metacognition is "our ability to think about our own thinking or 'cognition', and, by extension, to think about how we process information for a range of purposes and manage the way we do it" (Vandergrift & Goh, 2012, p. 83). Metacognitive listening, therefore, can be viewed as thinking about how individuals listen and the processes they go through to comprehend aural input. Cross (2011) described metacognitive instruction in the listening class as "teaching that focuses on actively eliciting and promoting learners' knowledge of themselves as L2 listeners…and which provides them with direction about ways to discover how to manage their listening comprehension" (p. 408). One of the ways that L2 listeners can discover how to manage their listening comprehension is through strategy usage. Yang (2009) categorized metacognitive strategies into seven types: planning, monitoring, evaluation, selective attention, directed attention, functional planning, and self-management. While some strategy types are more frequently used than others, Yang asserted that listeners' metacognitive awareness should be cultivated and strategy instruction should be integrated into the teaching of listening (p. 134). Rahimirad (2014) also mentioned that the role of metacognitive strategy instruction is one that assists students in regulating their learning and awareness to consciously control their listening processes.

1.1. Metacognition and Listening

The intersection of listening and metacognition has only recently been explored. Vandergrift (2004) reviewed two approaches to listening: 1) developing lexical segmentation and word recognition skills, and 2) raising metacognitive awareness. He proposed an integrated model of using metacognitive strategies like planning, directed attention, monitoring, problem solving, selective attention, and evaluation combined with allowing learners to analyze a text after listening to ensure vocabulary comprehension.

Vandergrift later developed a 21-item metacognitive awareness scale for listening instruction (MALQ) to measure self-reported levels of metacognitive awareness by reflecting on their usage of and attitudes towards metacognitive listening strategies (Vandergrift, et. al., 2006) and then repeatedly administered the MALQ to two groups of learners of French as a second language (FSL) (Vandergrift & Tafaghodtari, 2010). The experimental group (n = 59) listened to and was guided through texts using the MALQ and practiced listening in five stages: planning/predating, first verification, second verification, final verification, and reflective; while the control group (n = 47) listened to the same texts without the MALQ. The researchers also administered the listening section of the university's FSL Placement Test to both groups. Listening comprehension gains showed that not only did the experimental group outperform the control group in terms of listening scores, but that the less-skilled listeners in the experimental

group significantly improved their listening in comparison to those of the control group and had greater listening gains than the more-skilled participants in their group.

Additional studies subsequently utilized the MALQ but used different instruments to measure listening comprehension gains including the International English Language Testing System (IELTS) among 30 high-intermediate EFL students in an eight-week program of metacognitive instruction using the same five pedagogical stages as Vandergrift and Tafaghodtari's 2010 study (Bozorgian, 2014); the IELTS among 50 Iranian university students (Rahimirad & Shames, 2014); and the Preliminary English Test (PET) and the English Listening Self-efficacy Questionnarie (ELSEQ) with 371 Iranian EFL learners in high school grades three and four (Rahimi & Abedi, 2014). In all of these studies, a metacognitive strategy instruction treatment was administered to an experimental group and a pre- and post-listening comprehension assessment measured differences in gains between the experimental and control groups. Results consistently showed the experimental groups, which received metacognitive strategy instruction, outperformed their respective control group counterparts.

Using slightly different approaches to listening and metacognition, additional studies demonstrate similar results with the experimental group outperforming the control group. Birjandi & Hossein (2012), Cross (2011), and Rahimirad (2014) took the same strategy-instruction model from Vandergrift & Tafaghodtari's (2010) study and applied it to their respective studies, but without using the MALQ to track metacognitive awareness. Birjandi & Hossein (2012) taught male and female Iranian university freshmen (n = 32) and used listening items from the Test of English as a Foreign Language (TOEFL) to measure listening proficiency. Cross (2011) used news items from the British Broadcasting Corporation (BBC TV) with 20 Japanese students attending an advanced-level English language course. Rahimirad (2014) opted to utilize the listening module from the Cambridge TOEFL as the listening proficiency test after the experimental group (consisting of 25 female English literature university students) received eight sessions of strategy instruction and metacognitive discussion over the course of four weeks.

Additionally, Goh & Taib (2006) conducted a small-scale study with 10 young learners, aged 11 and 12, in Singapore, who received eight listening lessons with a three-stage sequence of listen and answer, reflect, and report and discuss with similar results.

Thus it can be seen that while the study of listening and metacognition is still a relatively new area of exploration, it seems that exposure to strategy instruction in various forms strongly correlates with improved listening proficiency.

1.2. Motivation and Listening

Like strategy instruction, motivation has been investigated as a moderator to language learning (Gardner & Smythe, 1975). The hypothesis is that individuals who seek to integrate into a language community will demonstrate high motivation to learn the language and thus will achieve high levels of proficiency (see Gardner, 1985, 2000). Indeed, a meta-analysis of Gardner's motivation research revealed a strong and consistent positive correlation between motivation and language achievement (Masgoret & Gardner, 2003).

Researchers define motivation in various ways. For instance, Keller (1983) described motivation as "the choices people make as to what experiences or goals they will approach or avoid, and the degree of effort they will exert in that respect." Brown (1986) stated that motivation is "commonly thought of as an inner drive, impulse, emotion, or desire that moves one toward a particular action," mainly differing

from Keller's view of motivation as a choice. According to Dörnyei (1998), however, motivation is "a process whereby a certain amount of instigation force arises, initiates action, and persists as long as no other force comes into play to weaken it and thereby terminate action, or until the planned outcome has been reached." This third definition more clearly encapsulates the concept of motivation, taking into account not only what motivation does, but also when it ends or becomes diminished.

However, few studies have specifically analyzed the relationship between listening and motivation. In 2006, H. Hsu surveyed 480 Taiwanese university students to determine how motivated they felt towards practicing listening in English before comparing those participants' listening comprehension test scores. Hsu measured participant listening motivation utilizing an instrument composed of two sections: the English Listening Comprehension Motivation Scale (ELCMS) a 24-item, 5-point Likert scale survey designed to assess student motivation levels for practicing English listening comprehension, and a questionnaire that solicits self-reported average English listening comprehension scores and information regarding the environments and circumstances in which participants practice English listening. Analysis of participant responses to this instrument garnered a number of results: 1) a high correlation between English listening comprehension scores and general English scores; 2) significant main effects of gender and area of study for motivation; 3) more time on extracurricular English practice, higher self-confidence and personal expectations, and lower anxiety in practicing English listening among highly motivated respondents; and 4) a strong correlation between motivation for practicing English listening and English listening comprehension scores.

S. Hsu (2004) and Mohammad (2010) conducted similar studies looking at the relationship between English listening motivation and listening proficiency scores. S. Hsu's study involved 112 Taiwanese college students, while Mohammad's study consisted of 64 Iranian EFL students majoring in TEFL. The shared result of these three studies corroborates Motlhaka's (2012) claim that "…motivation plays a significant role in improving communicative ability…" (p. 60).

1.3. Metacognition and Motivation

Motivation and metacognition are recognized as key factors in the fields of second and foreign language learning. Moreover, Ziahosseini & Salehi (2008) asserted that the higher the language learner's level of motivation, the more likely they will be to use a language learning strategy. This is perhaps because both motivation and metacognition share some common factors, such as value, expectancy, self-efficacy, and attributions. Because of these commonalities, Vandergrift (2005) began exploring the relationship between these two areas wherein participants (57 Canadian FSL students aged 13 to 14) were given a French listening comprehension test, immediately following which they were given an early version of the MALQ and the Language Learning Orientations Scale (LLOS), a motivation questionnaire validated by Noels et. al. (2000) and derived from Vallerand et al.'s (1992) research regarding motivation assessment. The LLOS measures levels of intrinsic motivation, extrinsic motivation, and amotivation, with intrinsic and extrinsic motivation broken down into 3 subscales each. The study revealed that participants who "reported a greater use of metacognitive strategies also reported more motivational intensity," or, more specifically, those participants who were more extrinsically motivated reported a greater use of six specific listening strategies as defined by the MALQ, and that participants with higher intrinsic motivation reported a greater use of 10 specific listening strategies. An overall analysis of the data showed that all correlations between strategy use and motivations were significant (negative with amotivation, and positive with intrinsic and extrinsic motivation). These correlations culminate in the determination that the more internalized the level of motivation, the more language learners report using metacognitive listening strategies.

In a similar study, Kassaian & Ghadiri (2011) also used the MALQ alongside Vallerand's Academic Motivation Scale—the instrument from which LLOS was derived—to investigate the relationship between motivation and metacognitive awareness and perceived use of strategies among 30 Iranian undergraduate EFL learners at English Institutes, aged 18 to 28. Results showed that 1) problem-solving strategies are used more frequently than planning and evaluation strategies, and 2) a positive relationship between metacognitive strategies and extrinsic and intrinsic motivation exists. The study recommends that student metacognitive awareness be cultivated and that strategy instruction be integrated into listening instruction. Similarly, Harputlu & Ceylan's (2014) study utilizing the MALQ, LLOS, and TOEFL listening section with 33 Turkish English major students aged 20 to 24 revealed positive, though not statistically significant, correlations between the same metacognitive strategies and both extrinsic and intrinsic motivation.

Nezhad, Behzadi, & Azimi Amoli (2013) utilized a different metacognitive strategy questionnaire with the ELCMS in order to conduct a similar study among 60 Iranian university students, ages ranging from 21 to 31, studying English translation. Results showed that participants given a narrative text to listen to had significantly higher motivation than those given expository text. While the content of these texts was not reported, expository texts are usually defined as texts meant to inform or educate with facts while narrative texts are typically stories written to entertain (Saenz & Fuchs, 2002). The text types also affected listening comprehension differently, with the narrative being more positive. Finally, the narrative text group reported utilizing more top-down strategies, whereas the expository text group applied more bottom-up strategies.

Even though metacognition and motivation have been investigated as moderating variables to language proficiency and have likewise been demonstrated in listening studies to be correlated with each other, research has not yet indicated whether metacognitive strategy usage leads to increased motivation nor have researchers measured whether metacognitive strategies actually affect listening motivation since existing study designs take a single measurement of metacognition and motivation at a certain point in time. Yet this is an important consideration in listening instruction research since a causal relationship could indicate that teaching metacognitive strategies could result in increased motivation, which in turn could lead to improved listening proficiency. Furthermore, existing research studies of metacognition and motivation have only examined foreign language learning where students have limited exposure to the target language outside of class. No research has investigated metacognition and motivation in an ESL setting in which learners are exposed to the target language constantly in the environment, not just in school classes.

2. The Current Study

This study seeks to investigate the relationship between motivation, listening, and metacognitive strategy use to determine whether metacognitive listening strategy instruction, administrated over a period of time, would increase self-reported motivation toward improving English listening comprehension. Unlike previously conducted studies, this study uses adult English as a second language (ESL) learners in an intensive English program (IEP) setting and uses two instruments that have, thus far, not been used together, the ELCMS and MALQ. It was hypothesized that the experiment group would, as a result of the strategy treatment they received, see a significantly larger increase in listening motivation when compared with the control group. The following questions guided our study:

1) How do scores change on a pre- to post-test assessment of listening motivation?
    a. What, if any, is the difference between the control and experiment groups?

b. What is the change for participants with strategy instruction as a treatment?
c. What is the change for participants without strategy instruction as a treatment?

2) How do scores change on a pre- to post-test assessment of listening strategy use over a 7-week strategy course?
3) Which strategies on the MALQ do students most commonly report using before and after the strategy treatment?

3. Methodology

3.1. Participants

Participants were non-matriculated, advanced-low to advanced-mid level learners enrolled in an IEP at a large private university in the Western United States. Of the 56 participants, 32 were females and 24 males with a range of native languages. Table 1 provides demographic details for the control and experimental groups.

	Control group	Experimental group
Number	30	26
Sex	14 M / 16 F	10 M / 16 F
Age (mean)	19-46 (26)	18-35 (24)
Native languages (#)	Spanish (20), Portuguese (2), Mandarin (2), Bahasa (1), French (1), Hungarian (1), Korean (1), Mongolian (1), Russian (1)	Spanish (23), Albanian (1), Japanese (1), Portuguese (1)
Home countries	Bolivia, Bolivia, Brazil, Chile, China, Colombia, Ecuador, French Polynesia, Hungary, Indonesia, Mexico, Mongolia, Peru, Russia, South Korea, Taiwan, Uruguay	Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Japan, Kosovo, Mexico, Peru
Length of stay in the U.S.	> 1 year = 18 1-3 years = 11 5+ years = 1	> 1 year = 13 1-3 years = 12 5+ years = 1
Reason for studying English	Post-secondary education; work; personal interest	Post-secondary education; work; personal interest

Table 1. Demographic information for control and experimental groups

3.2. Instruments

The study administered the ELCMS and the MALQ through an online survey. Demographic items (participant ID number, instructor name, age, native language, native country, years spent in the United States, and reason for learning English) were added to the ELCMS, and the participant ID number and a list of strategies were added to the MALQ (see Appendix A and B). The ELCMS was administered to both control and experiment groups twice—as pre- and post-tests—whereas the MALQ was administered twice to only the experiment group. The control group did not take the MALQ as to avoid potentially exposing control group participants to metacognition outside of their instructors' lesson plans.

3.2.1. English Listening Comprehension Motivational Scale

The ELCMS was selected over other motivation scales, such as the LLOS, because it tracks participants' self-reported metacognitive strategy use instead of exploring the general areas of amotivation, extrinsic motivation, and intrinsic motivation. The ELCMS consists of 24 items scored on a five-point Likert Scale, ranging from 1 (*strongly disagree*) to 5 (*strongly agree*), to assess student motivation levels regarding practicing English listening comprehension. The 24 items on the ELCMS can be arranged into positive statements (items 1, 3, 5, 7, 8, 10, 12, 13, 14, 15, 17, 18, 19, 21, 22, and 24) to examine motivation for practicing English listening and negative statements (items 2, 4, 6, 9, 11, 16, 20, and 23) to examine a lack of motivation for practicing English listening. Every item is assigned a point score based on student responses with the positive group receiving points ranging from one point for strongly disagree to five points for strongly agree and the negative group scored in reverse with five points for strongly disagree to one point for strongly agree. All point values are added for a single respondent with higher totals indicating higher self-reported levels of motivation towards English listening practice.

3.2.2. Metacognitive Awareness Listening Questionnaire

The MALQ has 21 items scored on a 6-point Likert scale, with options of frequency being 1 (*never*), 2 (*rarely*), 3 (*occasionally*), 4 (*sometimes*), 5 (*frequently*), and 6 (*normally*) and assesses self-reported levels of student metacognitive awareness in regard to their understanding of their own listening processes, attitudes, and strategy usage. The MALQ items can be separated into five categories based on the content of each respective item: 1) problem-solving (items 5, 7, 9, 13, 17, and 19), 2) planning-evaluation (1, 10, 14, 20, and 21), 3) mental translation (4, 11, and 18), 4) person knowledge (3, 8, and 15), and 5) directed attention (2, 6, 12, and 16), with point values ranging from one point for rarely to six points for normally, with the exception of items 3, 4, 8, 11, 15, 16, and 18, which were given inverse scores. All point values are added together to create a score for each student, with higher scores indicating higher perceived levels of metacognitive awareness regarding a student's listening ability. When used as a pre- and post-test, the MALQ reveals gains or losses in students' perceived levels.

3.3. Procedure

Prospective participants were invited to take their respective survey(s) as detailed in the instruments section. Participants in the experimental group received a treatment of listening strategies coupled with metacognitive discussion over a duration of seven weeks. Participants took their respective survey(s) a second time, and a mixed-effect regression analysis was conducted in order see if the treatment influenced their scores over time. All surveys were administered in English since participants reported comprehending each item in a pilot test and in subsequent debriefing.

3.3.1. Strategy Treatment

The strategy treatment was implemented following the same integrated model used by previously described studies (Birjandi & Hossein, 2012; Bozorgian, 2014; Cross, 2011; Goh & Taib, 2006; Rahimi & Abedi, 2014; Rahimirad, 2014; Rahimirad & Shams, 2014; Vandergrift, 2004; Vandergrift & Tafaghodtari, 2010). The treatment period began with an introduction to the topic of metacognition, what it means, and how it can be applied to listening, and the first administration of the MALQ. During each week of the study, the regular course curriculum was supplemented with additional listening and note-taking practice for which participants followed a three-stage process: planning/prediction, verification, and reflection. Listening strategies taught during the treatment period included recognizing paraphrase, repetition, exemplification, and digression, predicting content and lecture direction, using abbreviations and symbols, and listening for cues for definitions, lists, causal relationships, descriptions, comparisons, and classification. The supplemental listening material was strategy-based, thus content topics ranged over a variety of topics such as history, biology, economics, and nutrition. Strategy instruction included teaching/reviewing cue words i.e. "For example", having participants listen for and stop audio upon identifying each respective cue word, and taking note of the information that proceeded each cue. The first author conducted the strategy treatment with experiment group participants.

3.3.2. Data Analysis

For the first research question, the data gathered from the ELCMS pre- and post-tests was analyzed using a mixed-effects regression to account for the repeated measures and the fact that participants gave multiple responses. This test also controls for extraneous variables that could affect the results such as age, gender, and native language, none of which were the focus of this study, all while comparing data between and within our participant groups. Our analysis used *scores* as the dependent variable, with *group*, *pre/post*, *gender*, and *native language* as factors, and *age* as a covariate. The fixed effects input looked at all of these factors and covariates as main effects, while also looking at all 2-way interactions of the *group* and *pre/post* factors. *Participants* was our random effect.

For the second research question, the MALQ results from the experiment group were analyzed using a paired t-test to look at the difference in pre- and post-test scores of the MALQ.

4. Results and Discussion

4.1. Research Question 1

The first research question asked how listening motivation scores changed over a 7-week treatment period and whether there was a difference between and within participant groups. A mixed-effects regression revealed differences in pre- and post-test scores between groups as well as within each respective group. There was no significant difference in the pre- to post-test scores among the control group ($p = .223$), nor the scores of the experiment group ($p = .639$). However, the interaction between pre/post-test scores and group yielded a significant difference with an F ratio of $F(1, 54) = 6.535$, $p = .013$. As can be seen in Figure 1, the mean scores of both groups' post-tests were lower than those of their pre-tests, but the experiment group's mean dropped by 1.38 points compared to the control group's 2.8 points.

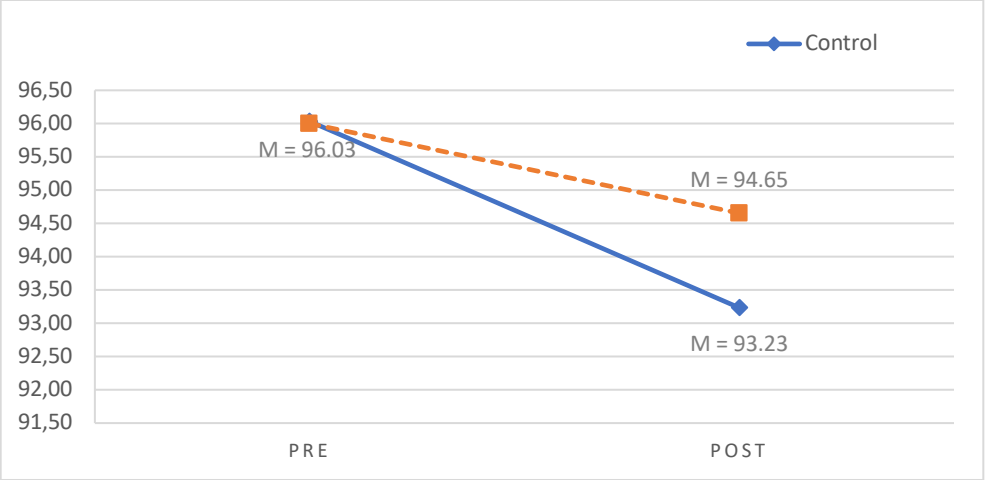

Figure 1. Plot of pre- and post-test score means for the experiment and control groups.

These results contradict Vandergrift's (2004) observation that increased strategy usage is correlated with increased motivation. A possible interpretation of these results is that the strategy treatment employed in this study did not have much of an effect on IEP-enrolled ESL learners of a higher proficiency, which corroborates the findings of previous studies that lower proficiency learners benefit the most from strategy instruction (Cross, 2011; Harputlu & Ceylan, 2014; Vandergrift & Tafaghodtari, 2010).

4.2. Research Question 2

The second research question asked how awareness of listening strategy usage changed over a 7-week treatment period using the MALQ. A paired t-test determined that there was a slight increase in self-reported levels of metacognitive awareness but with no statistical difference between the pre- (M=87.15, SD=9.5) and post-test (M=90.31, SD = 11.1) assessments of the experiment group's self-reported strategy use; t(25)= -1.722, p = .097.

Although our prediction that study participants would report an increased usage in listening strategies was correct, the increase was not statistically significant. This is likely due to the short duration of this study and the limited amount of practice participants had with each strategy, especially the ones taught towards the end of the treatment period. Had the post-test been delayed, or even administered again at a later time, allowing participants more time to practice the strategies taught, the resulting increase might have been greater.

4.3. Research Question 3

The third research question asked which listening strategies participants used at the time of data collection. Upon completion of the MALQ, participants were asked whether they used each of the 12 strategies taken directly from the MALQ. The results of the MALQ and the subsequent questions of which of the strategies the students use are reflected in Table 2.

The "Agreement Score" column in Table 2 shows the average score of each item selected on the actual MALQ (based on the Likert scale ranging from 1 [strongly disagree] to 6 [strongly agree]). Any score ranged between one and three would be on the disagree side, and scores between 4 and 6 on the agree side. Ideally, a strategy that is reported to be widely used would have a higher Agreement Score and would be more likely to be reported as a strategy of frequent use on the subsequent 12 strategy questions. Indeed, the strategies with highest reported usage have higher Agreement Scores. One item, "I use the general idea of the text to help me guess the meaning of what I don't understand" had the highest Agreement Score (5.0) for both the pre- and post-test despite having large differences in reported usage, with the pre-test showing 58% and the post-test showing 81%, respectively.

In addition, the three most commonly known/used strategies before strategy treatment were strategy 1 (81%), 2 (77%), and 3 (73%). After the strategy treatment, strategy 1 and 3 remained in their respective places and had higher usage reported at 96% and 77%, respectively, while the strategy number 4 rose to second place with 81% and strategy 2 dropped precipitously.

We predicted that the problem-solving strategies (strategies 1, 2, 4, 7, and 9) would be reportedly used more than the other types of strategies and that the mental translation strategies (strategies 10,11, and 12) would have the least-reported amount of usage based on previously conducted studies (Harputlu & Ceylan, 2014; Kassaian & Ghadiri, 2011; Vandergrift, 2005). Indeed, strategy 1, a problem-solving strategy, was the most used strategy reported in both the pre- and post-test results and its usage actually increased over the course of the study from 81% of participants using it before the strategy instruction and 96% afterwards. This increase could be attributed to explicit strategy instruction and in-class discussions or as a natural outcome of regular listening practice over seven weeks.

Another problem-solving strategy of interest, strategy 2, saw an 8% decrease in usage between the pre- and post-tests, but its agreement score increased from 4.3 to 4.5, which tells us that although there were fewer participants who reported using this strategy, its frequency of usage actually increased.

Strategy 4, another problem-solving strategy, saw one of the largest increases, going from 58% participant usage to 81% usage on the respective tests. This strategy saw the second-largest increase in usage and became the second most used strategy by the end of the study. It also has the highest and most consistent agreement score of all the strategies listed, a 5.0 for both pre- and post-test results. These results can be interpreted to mean that this is an important strategy for English learners because the agreement score shows it was considered to be used at the highest frequency possible.

In addition, strategy 7, another problem-solving strategy, saw the largest increase in reported usage, going from 38% to 73%. Interestingly, the agreement scores for this strategy remained fairly consistent, seeing only a slight increase from 4.4 to 4.8. This indicates that the participants who reported using this strategy on the pre-test used it fairly frequently and more or less maintained or increased that frequency when taking the post-test. This increase could be attributed to frequent discussion on the lesson's topics, the introduction of extracurricular materials, and regular pauses during listening practice to prompt participants to make connections to the material with what had already been heard/viewed in the class on the topic.

Another strategy of note is strategy 3, directed attention, which remained as the third most used strategy on both the pre- (73%) and post-test (77%). Again, the change in agreement scores, from 4.7 to 5.0, tells us that participants reported using this strategy more frequently by the end of the study.

Similar to the first reported strategy, this is a result that should be expected as a natural outcome of regular extended listening practice.

	Pre-test (N = 26)			Post-test (N = 26)		
Strategy	*n*	%	Agreement Score	*n*	%	Agreement Score
1. I use the words I understand to guess the meaning of words I don't understand. (PS)	21	81%	4.6	25	96%	4.9
2. When I guess the meaning of a word, I think back to everything else that I have heard to see if my guess makes sense. (PS)	20	77%	4.3	18	69%	4.5
3. I focus harder when I have trouble understanding. (DA)	19	73%	4.7	20	77%	5.0
4. I use the general idea of the text to help me guess the meaning of what I don't understand. (PS)	15	58%	5.0	21	81%	5.0
5. After listening, I think about what I might do better next time. (PE)	12	46%	3.7	13	50%	3.9
6. I have a plan in my head before I start to listen. (PE)	10	38%	3.5	9	35%	3.5
7. As I listen, I compare what I understand with what I know about the topic. (PS)	10	38%	4.4	19	73%	4.8
8. Before listening, I think of similar texts that I may have listened to. (PE)	10	38%	3.5	11	42%	3.8
9. As I listen, I quickly adjust my interpretation if I realize that it is not correct. (PS)	10	38%	4.3	10	38%	4.7
10. I translate key words as I listen. (MT)	7	27%	3.2	9	35%	3.3
11. I translate in my head as I listen. (MT)	6	23%	2.7	2	8%	2.5
12. I translate word by word as I listen. (MT)	1	4%	2.0	0	0%	1.8

N = number of participants who use the strategy; PS = problem-solving; DA = directed attention; PE = planning-evaluation; MT = mental translation

Table 2. Reported Listening Strategy Usage

Finally, as predicted, the three least-used strategies related to translating while listening. While the strategy involving translating keywords saw a slight increase in reported usage, the other two, translating mentally and translating word by word, decreased from 23% to 8% and from 4% to 0% respectively. The agreement scores for these strategies are also the lowest out of all the listed strategies. This corroborates previous studies' findings (Vandergrift et. al., 2006; Kassaian & Ghadiri's, 2011) that higher-proficiency learners use translation strategies less frequently than lower proficiency learners.

5. Conclusion

This study sought to look at how ESL learners' levels of motivation towards listening in English changed over a 7-week period of time, with and without explicit listening strategy treatment, in an ESL and IEP setting. The ELCMS and MALQ were the instruments used in order to determine participants' self-reported levels of listening motivation and metacognitive strategy usage and awareness, respectively. Upon analyzing data gathered from 56 participants, overall motivation was found to have decreased over the course of the study, with the experiment group's levels being slightly higher than those of the control group. Based on the literature, there is a strong argument for a positive correlation between metacognition and motivation in the listening classroom. However, the results of the present study would refute this argument.

It would be foolhardy to take one study and use it as the foundation for an argument against the positive correlation found between metacognition and motivation in previous EFL studies. Instead, additional studies should be conducted to further examine this correlation in an ESL and IEP context and with participants at multiple proficiency levels. Using research participants from an ESL classroom would allow for a focus on the possible effects of first language on listening motivation. Unlike the university students and young learners of previous studies, IEP learners are only taught English language skills and therefore may be inclined to lose motivation after prolonged exclusive English instruction.

One of the biggest limitations to this study was the small sample size with 30 of the participants composing the control group for this study and 26 composing the experiment group. The duration of the study was also fairly short: seven weeks, approximately half of a semester at the institution where the study took place; and the study took place in the middle of the semester. Finally, similar studies have shown that the students who gain the most from strategy instruction are low proficiency language learners, not high proficiency ones (Harputlu & Ceylan, 2014; Cross, 2011; Vandergrift & Tafaghodtari, 2010). The proficiency of the participants in this study were English learners at the advanced-low to advanced-mid level. Results from this study appear to reflect this idea of lower proficiency students gaining more benefits from strategy instruction, because, ideally, higher proficiency learners would already be at least somewhat familiar with such strategies.

For future research, it is recommended that a much larger sample size be utilized; we also recommend conducting the study over a longer period of time. Seven weeks of instruction with immediate testing before and after yields a bare minimum of information. Administering follow-up surveys a month or two after the study's conclusion would reveal if the strategy instruction had any longer-lasting effects. It also would be ideal to have participants be at a lower level of English proficiency, as studies have shown that lower-level learners benefit more from receiving explicit strategy instruction. Qualitative data regarding preferred strategy usage could also contribute greatly to the results of future research.

Due to the results of this study, it could be argued that strategy instruction does not have much effect on the listening motivation of higher proficiency ESL learners in an IEP setting. However, we have yet to see the extent and prolonged effects of strategy instruction in this context. Would language learners who have been given an arsenal of listening strategies start a new semester with higher motivation than the semester prior? Would they continue to use certain strategies and discontinue others? We anticipate that future studies will answer these questions in the affirmative, and results will likely contribute to the improvement of listening instruction in language teaching.

References

Birjandi, P., & Hossein Rahimi, A. (2012). The effect of metacognitive strategy instruction on the listening performance of EFL students. *International Journal of Linguistics*, *4*(2). http://doi.org/10.5296/ijl.v4i2.1707

Bozorgian, H. (2014). The role of metacognition in the development of EFL learners' listening skill. *International Journal of Listening*, *28*(3), 149–161. http://doi.org/10.1080/10904018.2013.861303

Cross, J. (2011). Metacognitive instruction for helping less-skilled listeners. *ELT Journal*, *65*(4), 408–416. http://doi.org/10.1093/elt/ccq073

Dörnyei, Z. (1998). Motivation in second and foreign language learning. *Language Teaching*, *31*(3), 117–135. http://doi.org/10.1017/S026144480001315X

Flowerdew, J., & Miller, L. (2013). *Second language listening: Theory and practice*. (J. C. Richards, Ed.). Cambridge: Cambridge University Press.

Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. London: Edward Arnold

Gardner, R.C. (2000). Correlation, causation, motivation, and second language acquisition. *Canadian Psychology, 41*, 10-24.

Gardner, R. C. & Smythe, P. C. (1975). Motivation and second language acquisition. *Canadian Modern Language Review, 31*, 218-230.

Goh, C., & Taib, Y. (2006). Metacognitive instruction in listening for young learners. *ELT Journal*, *60*(3), 222–232. http://doi.org/10.1093/elt/ccl002

Harputlu, L., & Ceylan, E. (2014). The effects of motivation and metacognitive strategy use on EFL listening proficiency. *Procedia - Social and Behavioral Sciences*, *158*, 124–131. Retrieved from http://ac.els-cdn.com.erl.lib.byu.edu/S1877042814061497/1-s2.0-S1877042814061497-main.pdf?_tid=04133f7e-dd93-11e5-afc8-00000aab0f27&acdnat=1456606100_cd22fb821a0cfceab0298a3252e1aa89

Hinkel, E. (2006). Current perspectives on teaching the four skills. *TESOL Quarterly*, *40*(1), 109–131. http://doi.org/10.2307/40264513

Hsu, H.-I. (2006). *The effects of motivation on Taiwanese college students' English listening comprehension*. Dissertation Abstracts International, UMI No.3216198.

Hsu, S. (2004). A study of learning motivation in English listening comprehension. *South Asian Journal of Twenty-Four*, 166–178. Retrieved from http://ir.lib.tiit.edu.tw/ bitstream/ 987654321/273/1/932412.pdf

Kassaian, Z., & Ghadiri, M. (2011). An investigation of the relationship between motivation and metacognitive awareness strategies in listening comprehension: The case of Iranian EFL learners. *Journal of Language Teaching and Research*, *2*(5), 1069–1079. http://doi.org/10.4304/jltr.2.5.1069-1079

Masgoret, A.-M., & Gardner, R. C. (2003). Attitudes motivation, and second language learning: A meta-analysis of studies conducted by Gardner and associates. *Language Learning, 53*(1), 123-163.

Mohammad Jafari, S. (2010). On the relationship between listening comprehension motivation and listening comprehension among Iranian EFL learners. *Indonesian Journal of English Language Teaching*, *6*(2), 89–106.

Motlhaka, H. A. (2012). *Developing ESL listening: Promoting student motivation*. Indiana University of Pennsylvania. http://doi.org/10.1017/CBO9781107415324.004

Nezhad, G. R. H., Behzadi, A., & Azimi Amoli, A. (2013). The relationship between motivation and cognitive and metacognitive strategy Use between two task types in listening skill. *Indian Journal of Fundamental and Applied Life Sciences*, *3*(3), 369–381.

Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language Learning*, *50*(1), 57–85.

Rahimi, M., & Abedi, S. (2014). The relationship between self-efficacy and metacognitive awareness of listening strategies. *Procedia - Social and Behavioral Sciences*, *98*, 1454–1460. Retrieved from http://ac.els-cdn.com.erl.lib.byu.edu/S1877042814026561/1-s2.0-S1877042814026561-main.pdf?_tid=6f5a09d4-dd93-11e5-afc8-00000aab0f27&acdnat=1456606280_7835194414356c25ebe996a5ac211048

Rahimirad, M. (2014). The impact of metacognitive strategy instruction on the listening performance of university students. *Procedia - Social and Behavioral Sciences*, *98*, 1485–1491. http://doi.org/10.1016/j.sbspro.2014.03.569

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. http://doi.org/10.1080/10904018.2014.902315

Saenz, L. M., & Fuchs, L. S. (2002). Examining the reading difficulty of secondary students with learning disabilities: Expository versus narrative text. *Remedial and Special Education, 23*(1), 31-41.

Vallerand, R. J., Pelletier, L. G., Blais, M. R., Briere, N. M., Senecal, C., & Vallieres, E. F. (1992). The academic motivation scale: A measure of intrinsic, extrinsic, and amotivation in education. *Educational and Psychological Measurement*, *52*, 1003–1017.

Vandergrift, L. (2004). Listening to learn or learning to listen? *Annual Review of Applied Linguistics*, *24*(8), 3–25. http://doi.org/10.1017/S0267190504000017

Vandergrift, L. (2005). Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics*, *26*(1), 70–89. http://doi.org/10.1093/applin/amh039

Vandergrift, L., & Goh, C. (2012). *Teaching and learning second language listening: Metacognition in action*. London: Routledge.

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. http://doi.org/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. http://doi.org/10.1111/j.1467-9922.2009.00559.x

Yang, C. (2009). A study of metacognitive strategies employed by English listeners. *International Education Studies*, *2*(4), 134–139. Retrieved from http://files.eric.ed.gov/ fulltext/EJ1065707.pdf

Ziahosseini, S. M., & Salehi, M. (2008). An Investigation of the relationship between motivation and language learning strategies. *Pazhuhesh-E Zabanha-Ye Khareji*, (41), 85–107. Retrieved from https://jor.ut.ac.ir/article_19141_556204a46b665b0ab0778eda4ba13780.pdf

Appendix A

Metacognitive Awareness Listening Questionaire (MALQ)

Strategy or belief/perception	Strongly Disagree					Strongly Agree
1 Before I start to listen, I have a plan in my head for how I am going to listen.	1	2	3	4	5	6
2 I focus harder on the text when I have trouble understanding.	1	2	3	4	5	6
3 I find that listening in English is more difficult than reading, speaking, or writing in English.	1	2	3	4	5	6
4 I translate in my head as I listen.	1	2	3	4	5	6
5 I use the words I understand to guess the meaning of words I don't understand.	1	2	3	4	5	6
6 When my mind wanders, I recover my concentration right away.	1	2	3	4	5	6
7 As I listen, I compare what I understand with what I know about the topic.	1	2	3	4	5	6
8 I feel that listening comprehension in English is a challenge for me.	1	2	3	4	5	6
9 I use my experience and knowledge to help me understand.	1	2	3	4	5	6
10 Before listening, I think of similar texts that I may have listened to.	1	2	3	4	5	6
11 I translate key words as I listen.	1	2	3	4	5	6
12 I try to get back on track when I lose concentration.	1	2	3	4	5	6
13 As I listen, I quickly adjust my interpretation if I realize that it is not correct.	1	2	3	4	5	6
14 After listening, I think back to how I listened, and about what I might do differently next time.	1	2	3	4	5	6
15 I don't feel nervous when I listen to English	1	2	3	4	5	6
16 When I have difficulty understanding what I hear, I give up and stop listening.	1	2	3	4	5	6
17 I use the general idea of the text to help me guess the meaning of words I don't understand.	1	2	3	4	5	6
18 I translate word by word as I listen.	1	2	3	4	5	6
19 When I guess the meaning of a word, I think back to everything else that I have heard to see if my guess makes sense.	1	2	3	4	5	6
20 As I listen, I periodically ask myself if I am satified with my level of comprehension.	1	2	3	4	5	6
21 I have a goal in mind as I listen.	1	2	3	4	5	6

Appendix B

English Listening Comprehension Motivation Scale

The following statements are about your own attitudes, concepts, or situations of learning English listening comprehension. Please circle the scale in terms of how well the statements reflect your actual experience, thoughts, and feelings when you are learning listening comprehension.

Directions: Please respond to the following questions using the scale provided:
(1) strongly disagree (2) disagree (3) neutral (4) agree (5) strongly agree

1. I like English listening materials that can arouse my interest in learning.
   1 2 3 4 5
2. I don't like to develop English listening comprehension because it takes me too much time.
   1 2 3 4 5
3. I think that the person who has great ability in English listening can find a well-paid job more easily.
   1 2 3 4 5
4. I often feel bored when learning English listening comprehension.
   1 2 3 4 5
5. In order to improve my English listening comprehension, I will try to do the homework well and often spend time practicing it.
   1 2 3 4 5
6. I often feel nervous and uncomfortable when learning English listening comprehension.
   1 2 3 4 5
7. I often notice the materials and activities concerning English listening comprehension; for example, English programs on the radio, English listening materials and tapes, CDs, and various English listening comprehension examinations.
   1 2 3 4 5
8. I like to learn English listening comprehension because it is very important, and I feel confident of learning it well.
   1 2 3 4 5
9. I think that English listening comprehension will not be helpful to me in the future.
   1 2 3 4 5
10. I like to know the culture and customs of other countries, and often feel excited about getting new knowledge and information in English listening comprehension class.
    1 2 3 4 5
11. I am often unable to concentrate on the content of the materials when practicing English listening.
    1 2 3 4 5
12. I attend English comprehension classes in earnest because I want to develop my listening skills and ability in order that I can use it in the future.
    1 2 3 4 5
13. I often actively show my ability in English listening and speaking in class, and I know I can perform very well.
    1 2 3 4 5
14. I believe that I can learn English listening comprehension very well as long as I make a great effort.
    1 2 3 4 5
15. I have a sense of achievement when I perform better than others in English listening comprehension class.
    1 2 3 4 5
16. Because my English is poor, I don't like to attend English listening comprehension classes.
    1 2 3 4 5
17. My purpose of developing the ability in English listening comprehension is to get good grades in tests and to receive compliments of my teachers and my parents.

1 2 3 4 5

18. If I am the only person that can answer the teacher's question, I feel excited.
1 2 3 4 5
19. I hope I can perform better in English listening comprehension than others.
1 2 3 4 5
20. After finishing taking English listening comprehension courses, I will not listen to the relevant materials anymore.
1 2 3 4 5
21. I hope the teachers and the classmates can notice that my English listening comprehension is better than other students.
1 2 3 4 5
22. When I can easily and smoothly understand English by listening, I feel satisfied and have great confidence.
1 2 3 4 5
23. I don't like hard English listening materials because those make me feel anxious.
1 2 3 4 5
24. I would like to learn English listening comprehension well because I want to make friends with English speakers and hope to be able to go abroad for advanced study in the future.
1 2 3 4 5

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