Effects of Prosodic Feature and Cognitive Listening Strategy Instruction on Low-Intermediate EFL Learners' Listening Comprehension
ผลของการสอนลักษณะทางสัทสัมพันธ์และกลวิธีการฟังเชิงรู้คิด ต่อการฟังเพื่อความเข้าใจของผู้เรียนภาษาอังกฤษ ในฐานะภาษาต่างประเทศระดับกลางค่อนข้างต่ำ

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ABSTRACT

This study aims to investigate the effects of teaching pronunciation: word stress and sounds linking, and cognitive listening strategies: visualization and inferencing, on listening comprehension by 34 low-intermediate EFL learners. Data collection methods included pretest and posttest scores, students' diary, and a questionnaire. Test scores were submitted to statistical analysis, (dependent t-test), while other descriptive data were analyzed by the researcher. The results showed that participants made improvement with significant difference in the posttest and had positive opinions toward the treatment. Still, there were some difficulties to concern revealed from the participants. Discussion of the present study benefits language teachers, learners, and policy makers to be aware.

บทคัดย่อ

งานวิจัยนี้มีจุดมุ่งหมายเพื่อศึกษาผลของการสอนการออกเสียง ได้แก่ การเน้นคำ (word stress) และการเชื่อมเสียง (sounds linking) และกลวิธีการฟังเชิงรู้คิด ได้แก่ การมโนภาพ (visualization) และการอนุมาน (inferencing) ต่อผู้เรียนภาษาอังกฤษในฐานะภาษาต่างประเทศระดับกลางค่อนข้างต่ำจำนวน 34 คน เครื่องมือที่ใช้ในการเก็บข้อมูล ได้แก่ แบบทดสอบความรู้ก่อนและหลังเรียน บันทึกการเรียนของผู้เข้าร่วมวิจัย และแบบสอบถาม คะแนนแบบทดสอบได้ถูกนำไปวิเคราะห์โดยการทดสอบสมมติฐานการวิจัยด้วยสถิติ t-test ขณะที่ข้อมูลเชิงพรรณนาได้ถูกนำไปวิเคราะห์โดยผู้วิจัย ผลการวิจัยนี้พบว่าคะแนนแบบทดสอบของผู้เข้าร่วมงานวิจัยมีการพัฒนาพัฒนาอย่างมีนัยสำคัญ และมีทัศนคติที่ดีต่อการสอนนี้ด้วย อย่างไรก็ตามนักศึกษายังคงมีปัญหาการฟังที่ควรแก้ไข การอภิปรายงานวิจัยนี้ยังเป็นประโยชน์ต่อครูผู้สอนภาษา ตัวผู้เรียนภาษา และผู้วางนโยบายการสอนภาษาอีกด้วย

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Introduction

Listening is used the most (53%) in face-to-face communication [1]. However, Thai students are claimed having quite low proficiency of listening skills [2-3]. In the nature of listening, listeners require top-down process (world knowledge) and bottom-up process (linguistic knowledge) to understand a listening text. Top-down process relies on context and situations to make sense of the sounds heard [4]. Top-down processing is mostly used by learners with high English proficiency to comprehend listening text [5-6]. However, sometimes bottom-up process such as using key words to concept the ideas is used in listening [7]. Bottom-up process is a way of collecting detail information from sounds heard to combine the smallest units of sound as words, phrases, utterances [4], syntax, and grammar to process information [8]. Once the listener grasp the meaning of phonological representation, he replaces word meanings instead of exact words he heard [7]. Bottom-up processing is mostly used by lower English proficiency learners to comprehend listening text [5-6]. Linguistic proficiency or bottom-up processing ability is considered a key and fundamental skill in listening comprehension especially for learners with lower listening proficiency as it is stated that a certain level of linguistic ability affects the proficiency improvement [9].

In addition, human's understanding and storing information involve their cognition or mental process which consists of both top-down and bottom-up process. Goh [10-11] illustrates Anderson's [12] cognitive framework of comprehension model to explain a listener's cognitive framework. Firstly, mental process receives and encodes sounds as words. The utterance is divided into syntactic structures or semantic cues to form mental representation of the sounds' meanings. Then, the received information connects to schema (prior knowledge already stored in listeners' long-term memory). If the information does not match prior knowledge, it cannot be processed further so the information is replaced by the following sounds and finally loses. If the information matches, it is understood and finally stored in long-term memory. That means if listeners have enough background knowledge of both top-down and bottom-up process, it would be easier for them to comprehend and remember information in their memory. Hence, the present study focuses on knowledge of prosodic features and listening strategies to enhance listening comprehension.

Previous studies revealed that teaching either prosodic features or listening strategies was not enough, but they should be taught along together. Teng's [13] study teaching six groups of listening strategies, categorized by Oxford [14], to low-intermediate EFL learners found that students could not use some strategies such as imagery because they did not get the meanings in their language so they could not shape images from the listening. Therefore, the problem of linguistic

knowledge affects the ability of using some strategies. Correspondingly, Goh's [10] study revealed that Chinese EFL students with both higher and lower proficiency had the problem of "sound-to-script relations" the most. They could not recognize the words they had known the spelling. Firstly, students could not discriminate speech sounds as single words or chunks to form meaning which referred to the features of sounds linking. That was because there are not linking sounds in Chinese language, neither is in Thai language. In addition, the students misremembered word stress which caused their listening confusion. The problem derived from the different language systems, including stress-timed or syllable-timed [15]. Stress-timed languages contain the feature where the stressed syllables are pronounced at regular intervals, and unstressed syllables are shortened or reduced [15-16] such as English, Russian, and German. Syllable-timed languages contain almost equal or the same amount of time [15] such as French, Spanish, Chinese, and Thai. Correspondingly, results of the studies by Noom-ura [17] and Alia [18] revealed that listening difficulty of Thai students is directly relevant to their pronunciation problem. It implies that the lack of English pronunciation knowledge causes difficulties of discriminating sounds and identifying words in speech. Therefore, instructing word stress and sounds linking, which are the most problematic pronunciation features, to Thai EFL students would benefit them in English listening comprehension.

However, teaching only pronunciation features may not enough but integrating teaching listening strategies is necessary to overcome difficulties and fulfill listening comprehension. The second and third difficulties in Goh's [10] study were derived from learners' lack of relevant context and background knowledge which led to "not understanding intended message" and "quickly forget what is heard. According to Anderson's [12] comprehension framework, if the new information cannot match prior information in the listener's memory, it is hard for the listeners to understand what they listen. Otherwise, if listeners recognize words in the message but are not familiar with the topic, they may understand but commonly forget the new information quickly. Nevertheless, listening strategies can deal with the difficulties in every stage of the cognitive framework of the comprehension process to help listeners comprehend and remember information more effectively [10, 19].

There are three groups of listening strategies including cognitive, metacognitive, and social/affection strategies. In listening instruction, cognitive and metacognitive strategies are more interesting. However, high and low listening proficient learners use listening strategies differently [5-6, 20]. Successful learners use strategies employing more top-down process like metacognitive strategies [6, 20-21]. On the other hand, low listening proficient learners use strategies employing more bottom-up process like cognitive strategies [6]. In teaching listening,

teacher should carefully choose appropriate strategies for students in different levels. To do this, teaching cognitive listening strategies could be appropriate for lower listeners because they are considered fundamental strategies and have not too complicated usage.

There are 8 sub-strategies of cognitive listening strategies according to Goh's [11] taxonomy. The present study is interested in inferencing and visualization because their usages are supposed to support all of the process of comprehension framework without obstructing listening smoothness. Inferencing, also called 'compensation' [14] was proved effective to enhance listening ability in Zhang's [22] study. Despite obstacles of linguistic knowledge such as missing words, new words, or unclear words heard [11, 14, 22] inferencing strategy encourages listeners to guess or infer meanings by contextual clues, familiar content words, knowledge of the world (general background knowledge), and knowledge about the target language (linguistic knowledge) [11]. This strategy can be employed before, while, or after listening to process the information input. Visualization strategy, also called imagery strategy, provides techniques of mentally displaying the shape of key words (spelling) and imagining the described scenes, events, and objects [11]. If listeners imagine pictures of the utterances, it is easier to see or understand details and remember the information in long-term memory because *"brain remembers experiences and images better than words"* [23]. Therefore, this strategy helps listeners in the process of comprehending and remembering information [14]. This strategy can be applied while and after listening. In conclusion, the sub-strategies of inferencing and visualization would support the listening comprehension process of trying to understand and remembering ideas effectively.

Consequently, linguistic knowledge of prosodic features and listening strategies need to interact with each other to help listeners try to understand a text. So far, there are few studies investigating teaching pronunciation and listening strategies to the same group of learners. Carrier's [9] study proved the effectiveness of explicit teaching prosodic features together with listening strategies to improve intermediate ESL students' listening comprehension on academic content. The explicit instruction is broadly used because it can raise students' awareness of learning through activities to call consciousness of what is being taught [24]. Firstly, the study focused on teaching prosodic features. Then, listening strategies were taught. Listening materials used in the tests consisted of authentic audio for bottom-up listening test and authentic video for top-down listening test. Despite of its difficulty, authentic materials are highly advised because they help learners see the gaps between their current proficiency and their goal which would lead to faster and better proficiency development [25]. In addition, authentic videos contain real-life context such as pronunciation features and

language use, cross-cultural context such as discourse and people's reactions, and visual supports. These qualifications motivate listeners to learn more [26-27]. Carrier's [9] study found that the students improved their proficiency of listening to academic content in both bottom-up and top-down skills with significant differences. The researcher suggests that the result might not be able to generalize to other listening purposes such as non-academic content. Hence, to examine effects of teaching pronunciation features and cognitive listening strategies, this present study focused on a different group of language learners, Thai EFL learners, who are exposed to listening activities based on non-academic content or daily life conversations. Moreover, to evaluate the effectiveness of each type of treatment in students' opinions, participants were asked to write their feedbacks on a diary. This study was conducted to answer two research questions:

1) To what extent does the instruction of pronunciation (word stress and sounds linking) and cognitive listening strategies (inferencing and visualization) help Thai EFL students with low-intermediate proficiency improve their listening comprehension?

2) What are students' opinions toward the instruction to help them improve their listening comprehension?

Methods

Participants

The participants were 34 Thai volunteers who were university freshmen. They were assumed at low-intermediate English level and in need of training communicative listening skills because of two reasons. Firstly, this group of students started an English course in Level 1 which was the second level from 5, starting from mainstream to Level 4 ranked by Khon Kaen University Language Institute (KKULI), according to their English admission scores. It implied that they had moderate English proficiency including vocabulary and grammar. Secondly, the participants were enrolling an English course at Level 2 and had passed learning listening skills when taking Level 1 in the previous semester. Therefore, this group of students was assumed having low-intermediate English proficiency and should be improved their listening skills, so they were selected as participants of the present study.

The Treatment

According to Anderson's [12] comprehension model, the treatment selected to teach were expected to help listeners fulfill the gaps of listening difficulties. Pronunciation features was taught first as it is a fundamental skill for listening comprehension and aimed to familiarize students with English prosodic features so that students would be able to discriminate sounds and identify words when listening to English spoken language. Afterward, listening strategies were trained in order to help students overcome listening difficulties such as missing, unclear, and unknown words to infer meanings of the listening text. Cognitive listening strategy

training aimed to help students overcome their difficulties in order to comprehend the listening text and remember information they heard so that they could recall and use it later. Firstly, a lesson of word stress was taught in Class 1 (week 2) for 120 minutes. Word stress related the strategy of selective attention [14] which benefits listening for key words and ideas. The main rules of English word stress taught to students were adapted from Amer and Amer's [24] study including *1) nouns, 2) verbs, 3) noun-verb pairs, 4) compound nouns, 5) adjectives, and 6) words ending with suffixes.* These rules were chosen because vocabularies in these rules were common in the videos which emphasized non-academic content (everyday life conversations). Words provided in the exercise were chosen from the videos plus other words sharing the same rules to practice.

Secondly, a lesson of sounds linking was taught in Class 2 (week 3) for only 60 minutes because the rules were much less than word stress rules. Knowledge of sounds linking would help listeners discriminate linking sounds and then identify words in real speech which lead to listening comprehension. The lesson was adapted from BBC Learning English [28] website including *a) consonant to vowel linking and b) vowel to vowel linking.* Words and sentences provided in the exercise were chosen from the story in the videos plus others sharing the same rules to practice.

Thirdly, a lesson of visualization strategy was taught in Class 2 (week 3) for 60 minutes because its usage was considered not complicated. Visualization strategy would help listeners understand more deeply and remember information longer. The lesson was adapted from Goh [11] and Oxford [14]. Students were to imagine pictures of what they heard. Moreover, students could take advantages of visual supports from videos, used as a listening material, to remember the ideas such as matching the sound of key word they heard with the picture of an object or a scene to help them remember information more easily.

Fourthly, a lesson of inferencing strategy was taught in Class 3 (week 4) for 120 minutes. This strategy was taught last because its techniques were quite complicated as they applied all the knowledge the listeners have, both linguistic knowledge (word stress and sounds linking) and non-linguistic knowledge (picture clues in the scene, speakers' characteristics, previous story, and world knowledge) to infer the listening input. The lesson was adapted from Goh [11] and Oxford [14]. Inferencing strategy would directly help listeners infer or interpret what they heard into its concept/meaning despite the difficulties.

The experiment took 6 weeks including pretests, listening instructions, and posttests. The procedure of explicit instructions in each class included presentation, practice, and feedback (adapted from Cross [5]). Initially, the participants were told the topic to learn, its definition, and its importance in each class. For pronunciation instruction, students directly received the pronunciation rules in paper and teacher's explanation, as well as examples

from authentic sources: a dictionary online website *http://dictionary.cam bridge.org* providing both American English and British English pronunciations for word stress and a 30-second video segment for sounds linking. Then, the students practiced pronouncing in a *'reading aloud'* activity [24, 29]. For strategy instruction, students received the explanation and illustration of the strategy use from paper and teacher's explanation. Before practicing listening and using treatment, participants read questions in the exercise to set their focus of the listening [9]. In the last stage, students got answers by checking with script so that they could see all the words in conversations [5]. This activity reminded them of the pronunciation they had missed or had listened unclearly as well as noticing how to infer some words and situations. In addition, teacher's feedback and class discussion of how to obtain this answer were conducted such as where to notice and how to apply the treatment for more understanding.

Videos as a listening material

The listening material used in the tests and classes was authentic sitcom videos named 'The Suite Life on Deck'. The story was about high school student life. Typically, the video presented daily-life conversations and situations mostly among friends, family, teacher and students, and waiters and customers. Therefore, the discourse and speed rate would not be too difficult for Thai EFL university students with low-intermediate proficiency as its genre was a teen, high school series aired on Disney Channel whose the target groups were children and adolescences. With regard to pronunciation, the video was an American series which contained pronunciation in real speaking situations. With respect to visual supports, mostly, images in the scenes interrelated to the topics of conversations discussed in the videos as it was a characteristic of a sitcom series. Video segments were clipped and played 5.30 minutes for the listening test and approximately 5 to 6 minutes for listening practice because learners' concentration might be impeded by long duration of the videos [30].

Tools and Data Collection

A pronunciation knowledge test was used before and after the training period as a pretest and a posttest to find out whether participants' knowledge of pronunciation improved. It was conducted in a paper form because of limited time and convenience to check. It consisted of 2 parts including 30 items of finding word stress positions and 13 items of sentences to identify 20 positions of sounds linking. The test was graded one point for one correct position of identifying stress (one position for one word) and linking.

A listening comprehension test was used before and after the participants received the treatment. The test consisted of three parts. Part 1 and Part 3 included 5 items of four-multiple-choice test asking about main ideas and specific details orderly to elicit participants' comprehension relying on both pronunciation knowledge and listening strategy use. Part 2 included 5 items of

sentences with a space to fill short answers to elicit whether the participants could catch up words in real speech relying on pronunciation recognition skill. The test was graded one point for one correct item.

A questionnaire was used to investigate the participants' opinions toward the treatment after the posttests. The questions in the questionnaire were adapted from Wasuntarasobhit [31] and Siegel [32]. The questionnaire consisted of two parts. Part 1contained 19 items of statements to find participants' appreciation of the treatment with a form of a typical five-level *Likert scale* format for each question [33]. Part 2 provided three open-ended questions requiring participants to write good points, weak points of the instruction, and suggestions for future listening instruction. The questionnaire was taken after the posttests.

Student learning diary was used to collect data of students' learning process and their feedback during the training period. Results from the diary would support the statistic test results to triangulate validity of the results. Students were to hand in their diary four times, at the end of every class (Week 2 to 5). The points concerned in learning diary were a) what they thought and felt about the treatment and activities in class today and b) whether they meet any problem in class. The descriptive results were analyzed by the researcher to group the ideas.

Results

The effects of explicit instructions of pronunciation features and cognitive listening strategies

The improvement of listening comprehension and awareness of using the treatment

The mean scores of the two tests revealed the improvement with significant differences in the pronunciation knowledge test in both parts of word stress and sounds linking, and listening comprehension test in Part 2, filling words in gaps, and Part 3, comprehension in details. However, there was improvement with no significant difference in Part 1, listening for main ideas, of listening comprehension test. This implies that the treatment was effective to help the participants improve their knowledge of pronunciation features and listening comprehension for details. Therefore, the results indicate that listeners' English pronunciation knowledge relates to their listening comprehension ability. It is supported by descriptive data from the questionnaire that to facilitate listening comprehension while taking the posttest, the participants had awareness of using the treatment at 'high' level.

With regard to comprehension level according to Table 2, the test scores of listening comprehension test were analyzed to find proportions of correct answers, compared with the 5 full scores (100%) in each part. The mean of listening for main ideas showed that participants could understand

the listening text 71.6% (M = 3.59) in the pretest and 79.4% (M = 3.97) in the posttest which were considered in high level. On the other hand, despite the significant improvement, the means of comprehension on details and catching words to fill in gaps indicated that participants understood details 28.20% (M = 1.41) in the pretest and 58.80% (M = 2.94) in the posttest, and could catch words in speech 15.60% (M = 0.78) in the pretest and 44.80% (M = 2.24) in the posttest. The posttest scores showed that the participants could catch details only at the moderate level. Therefore, the participants could identify main ideas more than details. The result conforms to Pinitsakul's [34] study that, generally, listeners can get main ideas better than details. Pinitsakul [48] taught listening strategies to help students comprehend audio materials focusing on listening for main ideas and listening for details when taking notes as participants of the previous study focused on main ideas first and details later.

Listening difficulties faced by the participants

The results of the listening test and descriptive results indicated that the participants still had more problems identifying details when listening to the authentic English material. Also, their ability of listening for main ideas made a slightly improvement. It could be explained by the descriptive data obtained from student learning diary during the training indicating that the participants faced some listening difficulties. Firstly, the participants reported that they had limited vocabulary and grammar knowledge causing them to have difficulties listening to the story. Sometimes they could identify word pronunciation but did not know the words. Sometimes they knew the word they had learned in lessons but forgot them. Secondly, they could not use the treatment (knowledge of word stress, sounds linking, visualization, and inferencing) effectively to get ideas or catch words. They reported in Class 2, teaching sounds linking and visualization, that the content of rules and strategy usages were too much which sometimes made them confused. Sometimes they could not remember stress positions yet, could not distinguish sounds by stress, could not identify words in sounds linking, and could not use the strategies well. One participant also reported that inferencing strategy sometimes led her to misinterpretation. Thirdly, the participants were not familiar with listening to pronunciation in authentic materials because they had little experience of practice listening to native speakers' real conversations which have quite fast speed. In addition, some characters in the video spoke fast and they lacked listening practice out of class, so they could not identify words. However, this problem was reported decreasingly in each class. Fourthly, it was reported in Class 1 and 2 that the participants could not get the ideas from the listening text.

Students' positive opinions toward the instruction

Results from the questionnaire showed that after learning the 4 types of the treatment, firstly, the participants perceived

their improvement at the 'high' level. Secondly, the participants had more confidence in their listening ability at the 'high' level. Thirdly, the participants appreciated the pronunciation and cognitive listening strategy instruction at the 'very high' level. In the future, the participants intended to use the treatment learned from class of the present study at the 'high' level.

The participants' positive opinions toward the treatment were also found in student learning diary. They were categorized into 3 aspects. Firstly, the participants revealed that they learned new things they had never known—word stress and inferencing strategy—to help them understand. In addition, they had a chance to learn and understand more knowledge to pronounce words or utterances—word stress and sounds linking. Secondly, the participants reported that the treatment—word stress, sounds linking, visualization strategy, and inferencing strategy—facilitated their listening to get the ideas and to understand more easily. Thirdly, the participants understood the listening text more than in the previous class after they learned word stress, sounds linking, inferencing strategy, and reviewing all the lessons in Class 4, but no report for visualization strategy was shown in student diary. In addition, the participants felt more familiar with pronunciation in speech, reported in Class 4.

Furthermore, the participants also revealed that they were benefited from the class activities and videos used in the classes. They mentioned the class activities—skimming questions before listening, reviewing the lessons, relistening, and checking with video scripts—could help them focus on listening and support their listening comprehension. In addition, the videos helped them comprehend listening text better and encouraged them to practice listening because the videos were fun and motivated them to listen. The causes of the results are discussed in the next section.

Discussion and Implications

To answer Research Question 1, the extent of the instruction o prosodic features and cognitive listening strategies on Thai EFL students with low-intermediate proficiency included 1) the improvement of listening comprehension on details, 2) the high level of comprehension on main ideas without significant improvement, and participants' high awareness of the learning. To answer Research Question 2, the participants' opinions toward the instruction indicated that they appreciated and had positive opinions toward the instruction to help them improve their listening comprehension ability. However, they faced some listening difficulties. Considering the results of research questions 1 and 2, some of them shared the same causes which are discussed as follows.

The positive effects on students' comprehension and opinions

The significant improvement of listening for details, participants' high

awareness, and participants' positive opinions toward the instruction could be derived from the explicit instruction providing the activities to arouse students' attention and raise their awareness of learning. This is supported by the hypothesis of Cognitive Psychology that *"second language acquisition (SLA), like other learning, requires learners' attention and effort – whether or not the learner is fully aware of what was being attended to."* [35]). Students were explicitly stimulated to focus on each type of the treatment they were learning, including its importance and definitions, examples and illustration of how to apply the treatment to facilitate their listening, and appropriate feedback after their performance of using the treatment. These activities to arouse students to focus on learning process helped the participants recognize that they had learned new things which positively affected their confidence and opinions toward the instructions.

In addition, participants' positive opinions were because of motivation from the listening material. The participants revealed that it was because of the videos, which was authentic ones, selected as a listening material. Peacock [38] explains motivation from material derived from learners' interest in and enthusiasm for materials, and persistence with tasks. The persistence derives from level of concentration, action, and enjoyment. Generally, foreign language learners are interested in culture and lifestyle of the target language to which they learn [36]. The present study employed the authentic material which related to the participants' experience. As the story of the videos in the experiment provided real students' situations, the participants were motivated to learn.

No significant improvement but high level of comprehension on main ideas

The mean score of listening for main ideas showed improvement with no significant difference but was ranked at the high level of comprehension both in the pretest and posttest. It implies that the participants had fewer problems in listening for main ideas. This could be attributed to a nature of listening, participants' qualifications, and full context in the video. Firstly, it could be the nature of listening that listeners comprehend main ideas greater than details. Brown [36] raises Lund's (1991) study, comparing reading and listening in a foreign language, to explain. It was found that when reading, readers get more details. Conversely, when listening, listeners receive rushing words inputting. They usually get main ideas as a primary perception better than details. Secondly, the participants who had low-intermediate English proficiency were considered at moderate English level because their English admission score indicated that they had enough basic English grammar and vocabulary. Moreover, they had passed an English course that taught listening skills in the previous semester. Thirdly, visual supports and other context in the videos facilitated students' top-down processing to infer meanings of main ideas of the listening text. Visual input in the videos also encouraged the participants to guess

meanings from, such as, objects, speakers' gestures, and speakers' facial expression. This is explained by the "dual-coding theory" that verbal together with visual input support human's cognition to learn [37]. Another context clue was genre and discourse of the videos which provided conversations and situations relevant to the students' experience. In other words, the participants had sufficient background knowledge of the general ideas in the videos employed, In sum, a nature of listening, participants' qualifications, and full context in the video caused the participants made high scores of listening for main ideas both in the pretest and posttest.

Difficulties of pronunciation systems for non-native English speakers

The data from student diary and questionnaire showed four groups of difficulties including limited vocabulary and grammar knowledge, insufficient ability to use the treatment, unfamiliarity with authentic English pronunciation, and insufficient ability to get ideas. These problems are related to each other. Some of them have sharing causes including different language sound systems of the authentic videos and insufficient time discussed below.

Different language sound systems of the authentic videos

Firstly, the mean scores of listening comprehension test implies that the participants still have some difficulties of listening for details, especially in the part of identifying words in conversations to fill the gaps. The problem could derive from the different sound systems between Thai and English languages. Likewise, it is explained that the habitude of Thai pronunciation system which is grouped in a syllable-timed language causes difficulties of listening to English which is grouped in a stress-timed language for the participants [31]. Consequently, it was quite hard for them to distinguish some words pronounced quite similarly, such as 'OFten' and 'ofFEND'. In addition, the feature of sounds linking in speech requires EFL listeners to have ability to discriminate the sounds in order to identify words in speech [10]. However, this feature rarely occurs in Thai language which often causes listening difficulties for Thai EFL learners.

In addition, the characteristics of an authentic material contain other different pronunciation features between English and Thai. 'Authentic' is defined as *"not designed or recorded for non-native speakers or for language learning purposes"* [39]. The authentic video in the present study contained real pronunciation, normal speed, and real language use by native speakers, so it obviously brought the unfamiliarity with real pronunciation features leading to the ineffective ability to identify words and get ideas. Therefore, more pronunciation features not taught in the present study may be needed to teach to students for more familiarity with the real pronunciation.

Insufficient time to practice

The mean scores of both listening for main ideas and details as well as descriptive data indicated that the participants still need more time to review and practice using the treatment as well as expose to authentic material to help them comprehend the listening text more effectively. Firstly, the inability to recognize pronunciation of words they had known and inability to translate words could derive from the participants' lack of reviewing the lessons. To learn language, *"students probably do not attend to meaning after the first few repetitions"* [40]. Hence, it is necessary to drill and repeat exercises, especially on pronunciation learning [40]. Similarly, reviewing and remembering new word's meaning would lead to learners' information retention. The participants admitted that they rarely reviewed the lessons which provided the vocabulary, its pronunciation, and meanings after the class. When students saw the vocabulary they had missed, mostly, they knew it from both in the class and out of class. Consequently, the inability to recognize word pronunciation and translate words led to the ineffective ability to get ideas. Moreover, the descriptive data implies that the participants' need more exposure to the authentic materials in order to get familiar with the real pronunciation. Krashen [40] makes the point that although 'deductive methods' (rules first followed by practice) are more appropriate for adult learners, they are insignificantly more efficient than 'audio-lingual methods' (expose to dialogue, mimic, and memorize). Therefore, learners needed more chance to practice listening by exposure to real speech spoken by native speakers to adjust their cognitive process to absorb and get familiar with the realistic English pronunciation. Hence, they needed to repeat practicing the pronunciation and listening strategies as well as listening to authentic conversations spoken in real situations until the knowledge becomes automatic.

Secondly, the participants still needed more time to absorb new things they learn. The new things in the present study included features of authentic pronunciation, usages of strategies, and new vocabulary. Correspondingly, Krashen [40] explained the acquisition system as the utterance initiator. The learning system either 'monitor' or 'edit' to correct the language function until the learners know the rules, and the performer needs to have sufficient time to consciously consider and use rules effectively. In addition, there might be a fault that the present study taught two lessons—sounds linking and visualization—in the same class (Class 2) because their rules and usages were considered much fewer than those of word stress and inferening. That might cause the confusion in limited time to absorb new things. Moreover, participants' feedback in the descriptive data reflected that although learning and practicing only once a week could raise students' awareness of trying to use the four types of treatment to help them comprehend listening text, it seemed not to be enough frequency for

participants to retain and apply the new knowledge to help them listen effectively.

To sum up, the discussion of the present study imply that the explicit instruction positively affects students' awareness of learning which lead to their proficiency improvement. Authentic listening material with visual support benefits listeners' comprehension and motivation. In addition, students need more frequency and longer time to repeat practicing the treatment (pronunciation features and cognitive listening strategies) and expose to authentic materials to absorb the new things they have learned so that they will get familiar with the real pronunciation features and use the treatment more effectively to enhance their listening comprehension ability.

Limitation

The present study conducted only one experimental group. Although there was descriptive result supporting the effectiveness of the instruction on participants' improvement, it might be attributed to the learning in normal class. Hence, a comparing group of students might be needed for more accurate result.

Conclusion and Recommendations

The explicit instructions of prosodic features and cognitive listening strategy have positive effects on students' comprehension on details, awareness of using the treatment to facilitate their listening comprehension, and opinions toward the instruction. The explicit instruction of pronunciation help students identify more words, and the explicit instruction of listening strategies help students identify more words they miss and remember information they hear. However, students require more frequent and longer time to repeat the practice the usages of the four types of treatment, especially inferencing strategy.

Apart from the process of explicit listening instruction—presentation, practice, and feedback, appropriate listening materials are important supplement. Authentic videos are highly suggested because they are full of context to facilitate listeners' comprehension, especially on main ideas. Genre of the video should be carefully selected to suite each study' purpose and learners to motivate them to learn. Further studies interested in this process may add other features of English spoken language not taught in the present study to compare the result. Also, whether the usage of the treatment is difficult or not, the present study suggests teaching only one treatment in one class so that students will have enough time to absorb the new thing they have learned, and they will not be confused because of the overloaded information in one class. In addition, future studies may add a control group to compare the results of teaching the prosodic features and cognitive listening strategies.

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Table 1 Effects of pronunciation training on students' knowledge of pronunciation test

Tests		N	$\overline{X}$	S.D.	t	Sig.
Word stress	Pretest	34	17.03	3.865		
	Posttest	34	23.50	3.620	11.171	.000
Sounds linking	Pretest	34	7.62	4.038		
	Posttest	34	17.26	2.179	13.036	.000

The mean difference is significant at .05 level.

Table 2 Effects of pronunciation and cognitive listening strategy instructions on participants' listening comprehension test

Tests		N	$\overline{X}$	S.D.	t	Sig.
Listening for main	Pretest	34	3.59	1.131		
ideas	Posttest	34	3.97	1.218	1.509	.141
Listening for details	Pretest	34	1.41	0.892		
	Posttest	34	2.94	1.071	6.482	.000
Filling words in	Pretest	34	0.78	1.0531		
spaces	Posttest	34	2.24	1.3720	5.950	.000

The mean difference is significant at .05 level.

Lesson Plan
Prosodic Feature and Cognitive Listening Strategy Instruction

Class	Time	Activities	Materials
1	120 mins	1) Lecture and practice of English **word stress** 2) Practice listening comprehension 3) Teacher's feedback 4) Repetition of practice listening comprehension and teacher's feedback 5) Students' feedback	■ Lesson 1: Word Stress ■ www.dictionary.cam bridge.org ■ Segmental videos, episode named 'The Kidney of the Sea' ■ Listening comprehension exercise 1 ■ Student learning diary
2.1	60 mins	1) Lecture and practice of **sounds linking** 2) Practice listening comprehension 3) Teacher's feedback 4) Repetition of practice listening comprehension and teacher's feedback 5) Students' feedback	■ Lesson 2: Sounds Linking ■ A 30-second segmental video ■ A segmental video, episode named 'Suite Life Sets Sail' ■ Listening comprehension exercise 2 ■ Student learning diary
2.2	60 mins	1) Lecture and illustration of **visualization strategy** 2) Practice using visualization strategy 3) Teacher's feedback 4) Practice listening comprehension 5) Teacher's feedback 6) Repetition of practice listening comprehension and teacher's feedback 7) Students' feedback	■ Lesson 3: Visualization strategy ■ A segmental video, episode named 'Suite Life Sets Sail' ■ Listening comprehension exercise 2 ■ Student learning diary
3	120 mins	1) Lecture and illustration of **inferencing strategy** 2) Practice using inferencing strategy 3) Teacher's feedback 4) Practice listening comprehension 5) Teacher's feedback 6) Repetition of practice listening comprehension and teacher's feedback 7) Students' feedback	■ Lesson 4: Inferencing strategy ■ Segmental videos, episode named 'Family Thais' ■ Listening comprehension exercise 3 ■ Student learning diary
4	120 mins	1) All lessons reviewed 2) Practice listening comprehension 3) Teacher's feedback 4) Repetition of practice listening comprehension and teacher's feedback 5) Repetition of practice listening comprehension and teacher's feedback 6) Students' feedback	■ Lessons 1 – 4 ■ Segmental videos, episode named 'Love and War' ■ Comprehension exercise 4 ■ Student learning diary