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Barriers to Acquiring Listening Strategies for EFL Learners and Their Pedagogical Implications

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Barriers to Acquiring Listening Strategies for EFL Learners and Their Pedagogical Implications

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Abstract

As theorized in Anderson's (1983, 1995) associative stage of skill acquisition, errors or obstacles become an important index of the learning process. However, learning obstacles have not been widely researched in the field of language learning strategies. This study explores the difficulties or barriers confronted by the EFL (English as a Foreign Language) learners while acquiring listening comprehension strategies during a training program. The findings indicate that the obstacles confronted by the learners are multifaceted. Each facet carries a probable risk of comprehension failure. Learning barriers are associated with the internal factors of learners such as their affective statuses, listening habits, information processing capacities, English proficiencies, and their belief about listening activities. Other barriers concerned the nature of listening strategies and the listening material used. Based on the findings, a series of pedagogical implications are provided.

Introduction

This study looks into the barriers that inhibit EFL learners from acquiring listening comprehension strategies during strategy training. As most of the listening strategy studies concern learners' strategy use or the effects of strategy training, inadequate attention has been given to the obstacles that EFL listeners experience in strategy acquisition. Thus, qualitative methodologies, instead of quantitative ones, are adopted in order to investigate the questions of *how* listening strategies are learned and *why* certain strategies are not learned, rather than the questions of *what* kinds of listening strategies are employed and *what* improvement learners have achieved. Pedagogical implications grounded in the data of the study are provided for creating more effective and learner-centered strategy training.

Theoretically, the study is based on the framework of the information-processing model rooted in cognitive psychology. The literature review starts with the rationale of applying the cognitive approaches into the research of language learning strategies, following the research in L2/FL listening comprehension problems, strategy applications, and training models. [-1-]

Literature Review

The Cognitive Framework

The view that the acquisition of skill, language, and learning strategies share conceptual commonalities is supported by many cognitive psychologists as well as linguists (e.g., Bialystok, 1978; Ellis, 1994; Fillmore & Swain, 1984; McLaughlin, 1987; O'Malley, Chamot, Stewner-Manzanares, Russo, & Kupper, 1985; Wenden & Rubin, 1987). For instance, Ellis (1994) recognizes the commonalities: "They [learning strategies] are also used to refer to how they [learners] develop specific skills. It is possible, therefore, to talk of both 'language learning strategies' and 'skill-learning strategies'" (p. 712). This view echoes Fillmore and Swain's (1984) model of language development, which hypothesizes that the conscious strategies applied in L2 learning may be no different from those used with non-language tasks.

To verify this hypothesis, O'Malley et al. (1985) found that most of the language learning strategies identified by the subjects in their study were not different from the general learning strategies discussed in cognitive psychology literature, such as thinking skills, problemsolving, and so forth. As they indicate, "There is neither a theoretical nor an empirical reason why most of the learning strategies identified in this study should be considered unique to second language learning" (p. 576). Using this rationale, L2/FL learning and strategy learning are considered to be the learning of complex cognitive skills. Also, language comprehension strategies are considered a subset of general learning strategies in L2/FL skill development. Therefore, the present study is contextualized within the cognitive approaches such as Anderson's (1983, 1995) learning models.

Anderson's Models for Language Learning

Anderson (1983, 1995) distinguishes two kinds of mental representations in the information-processing model: declarative knowledge and procedural knowledge. Declarative knowledge refers to static information in memory, or what we already know about. Procedural knowledge includes dynamic information in memory, or what we know how to do. Strategic knowledge is categorized as procedural knowledge because it works on the applications of our knowledge of rules to solve linguistic problems. While declarative knowledge or factual information may be acquired quickly, procedural knowledge is acquired gradually and only with extensive opportunities for practice (O'Malley, Chamot, & Walker, 1987). [-2-]

To describe the learning process that proceeds from the rule-constrained declarative knowledge to the more self-acting proceduralized phase, Anderson (1983, 1995) proposes three stages of skill acquisition process: cognitive, associative, and autonomous stage. The first stage involves conscious mental activity under instruction or during a learner's self-education. The learner tries to figure out how to do the task and is acquiring declarative knowledge. The second stage transforms the declarative knowledge into its procedural form. Errors are gradually corrected and discarded in the preliminary declarative representation. The third stage is a "fine-tuned" phase of performance. Errors that cause the performance difficulties vanish. The target skill is carried out virtually automatically and effortlessly, so there is more room left in working memory, which allows more incoming information into the initial processing space.

This study mainly concerns the barriers or difficulties depicted in the first two stages (cognitive and associative stage) of Anderson's model. Before reaching the autonomous stage, learners might confront different kinds of barriers as they try to implement strategic knowledge into practice.

Studies Related to Listening Comprehension Problems

The listening process is often described from an information processing perspective as "an active process in which listeners select and interpret information that comes from auditory and visual clues in order to define what is going on and what the speakers are trying to express" (Thompson & Rubin, 1996, p. 331). Considering various aspects of listening comprehension, Underwood (1989) organizes the major listening problems as follows:

- 1. lack of control over the speed at which speakers speak,
- 2. not being able to get things repeated,
- 3. the listener's limited vocabulary,
- 4. failure to recognize the "signals,"
- 5. problems of interpretation,
- 6. inability to concentrate, and
- 7. established learning habits.

Underwood (1989) sees these problems as being related to learners' different backgrounds, such as their culture and education. She points out that students whose culture and education includes a strong storytelling and oral communication tradition are generally "better" at listening comprehension than those from a reading and book-based cultural and educational background. Moreover, learners whose native language possesses the stress and intonation features similar to those of English are likely to have less trouble than the learners whose L1 is based on different rhythms and tones. Under these assumptions, the learners in the present study, of Chinese background, appear to operate under the least-optimal English language learning circumstances.

Focusing on EFL learners with Chinese language backgrounds, Goh (2000) investigated listening comprehension problems in students in college EFL studies. The data were collected from learner diaries, small group interviews, and immediate retrospective verbalization. Findings include ten listening comprehension problems in relation to three cognitive processing phases—perceptions, parsing, and utilization, proposed by Anderson (1983, 1995). Perceptual processing refers to maintaining attention to spoken input, parsing means encoding the input to establish a meaningful representation in short-term memory, and utilization concerns using the background knowledge to interpret the input for storage.

First, in the perception stage, learners reported most difficulties as: "do not recognize words they know," "neglect the next part when thinking about meaning," "cannot chunk streams of speech," "miss the beginning of texts," and "concentrate too hard or unable to concentrate." Second, in the parsing stage, Goh (2000) found that listeners complained of problems such as "quickly forget what is heard," "unable to form a mental representation from words heard," and "do not understand subsequent parts of input because of earlier problems." Third, in the utilization stage, "understand the words but not the intended message" and "confused about the key ideas in the message" were often mentioned. These reported difficulties partially reflect Underwood's (1989) views on L2/FL listening problems. However, as learners attempt to incorporate certain strategies into the listening process, they are likely to face different challenges or problems.

Studies Related to Listening Comprehension Strategies

Rubin (1994) classifies research topics on listening strategies in the L2/FL field. These topics parallel those of general learning strategies. They include the types of the strategies used, contrasting strategy use at several proficiency levels, the use of cognitive and metacognitive strategies, the relation of the strategy use to text, task, and setting, etc. These topics concern the types and applications of listening strategies and the relationship to other learning factors. There has been little research on the barriers that listeners face in acquiring listening strategies. Nevertheless, some of the existing studies do offer an understanding to the general application of listening comprehension strategies (e.g., Bacon, 1992a, b, c; Goh, 2002; Murphy, 1985, 1987; O'Malley, Chamot, & Kupper, 1989; Rost & Ross, 1991; Teng, 1998; Thompson & Rubin, 1996; Vandergrift, 1992, 1996, 2003; Wu, 2003).

In the 1980s, the research by Murphy (1985, 1987) explored the types of strategies used and the contrast of strategy usage at different proficiency levels. Murphy (1985) investigated college students by analyzing their oral and written responses to listening selections. Seventeen specific strategies were identified and categorized. The results show that both more and less proficient listeners could be distinguished by the frequency of the strategies they used. For instance, more proficient listeners used the strategies of elaborating, inferencing, anticipating, conclusion drawing, self-description, etc., more frequently than less-proficient learners. Murphy (1985) also explores the sequential patterns of the strategies that both more proficient listeners and less proficient listeners followed. For example, more proficient listeners tended to apply "wide distribution" strategies (i.e., in relation to an open and flexible use of strategies) while less proficient listeners were found in use of "text heavy" strategies (i.e., in relation to reliance on the text and paraphrasing). [-4-]

In the 1990s, Rost and Ross (1991) examined the use of certain strategies correlated with language proficiency, and, with training, whether the use of listening strategies increased and listening comprehension improved. They focused on EFL listeners' feedback on paused texts. The use of clarification questions in native speaker vs. nonnative speaker discourse was also investigated. The results show that more proficient listeners resorted to "hypothesis testing" (asking about specific information in the story), "forward inference" (inquiring by using information already given in the story), and continuation signals or backchannel communication more frequently than "lexical pushdowns" (asking about word meanings), and "global reprises" (asking for general repetition, rephrasing, or simplification). After training, listeners at elementary as well as intermediate/advanced levels showed improvement on listening comprehension tasks and were able to ask more hypothesis-testing questions.

Bacon (1992a, 1992b, 1992c) conducted a series of experiments in foreign language listening. The comprehension processes of learners were examined across different factors. The results show that there are significant differences between male and female listeners in strategies, confidence, and affective response (1992a). And, significant differences could also be found between effective and less effective listeners in both their level of comprehension and learning (1992b). Positive views were expressed regarding the use of authentic input for

listening (1992c).

Goh (2002) looked into the mental tactics or specific techniques through which a general strategy is operationalized. The subjects were Chinese learners of ESL in Singapore. Immediate retrospective verbalizations were conducted to collect data. It was found that, for instance, in order to operate the contextualization strategy, learners related new information to a wider familiar context by using tactics such as placing input in a social or linguistic context, finding related information on hearing a key word, or relating one part of text to another. Similarly, to operate monitoring strategy, the learners might use tactics such as identifying words or ideas not understood, checking current interpretation within the context of the message or prior knowledge, or confirming that comprehension has taken place.

Based on the relatively extensive research on the range of listening strategies, some researchers have started to attend to how best to promote pedagogically more successful listening comprehension (Rubin, 1994). For this purpose, the instruction models for general language learning strategies have established the groundwork for listening strategy training.

Training Models of Language Learning Strategies

Strategy training or development is defined as teaching explicitly how, when, and why to apply language learning and language use strategies to enhance students' efforts to reach language program goals (Carrell, 1996; Cohen, 1998; Ellis & Sinclair, 1989). With respect to explicitness of purpose, Wenden (1987) asks, "[S]hould students be informed of the value and purposes of the training or not?" (p. 159). At the two extreme ends of the explicitness continuum, two types of instruction can be identified—direct instruction and embedded instruction, in O'Malley and Chamot's (1990) terms, or informed training and blind training, according to Brown, Bransford, Ferrara, & Campione (1983).

In direct instruction, learners are informed of the value, purpose, and importance of the strategies taught. That is, learners are not only instructed in the use of the strategy but also in its rationale. Furthermore, learners are provided with feedback about their performance so that they can estimate the effectiveness of the training (Wenden, 1987). This type of direct and informed training has been favored by a number of researchers, such as Brown, Armbruster, and Baker, (1986), Palincsar and Brown (1984), Weinstein and Mayer (1986), and Wenden (1987). The strategy instruction administered in the present study is of the direct type.

In embedded instruction, learners are presented with activities and materials structured to elicit the use of the target strategies, but are not informed of the reasons this approach is being practiced or when a certain strategy is appropriate to use (O'Malley & Chamot, 1990; Wenden, 1987). As Wenden (1987) indicates, the focus of blind instruction is on learning something rather than on learning to learn. It results in improved performance of the task to which it is tied. But the shortcomings of such training lie in the failure to maintain and transfer the strategy taught. That is, learners do not tend to continue to use the strategy and have difficulties in identifying similar situations for strategy application. Given this, Derry and Murphy (1986) suggest a combined type of strategy instruction. That is, learners can first be trained in a separate strategy program and then given opportunities to apply the strategies in content classrooms. [-5-]

Other than the content and integration criteria, the affective dimension has also gained attention. For example, MacIntyre and Noels (1996) use social-psychological variables to predict the use of language learning strategies. The variables including anxiety, motivation, attitude toward the language community, etc, are considered as important factors when conducting and evaluating strategy instruction.

Models have been developed and utilized to teach learning strategies explicitly (Chamot & O'Malley, 1986; Ehrman, Leaver, & Oxford, 2003; Hosenfeld, Arnold, Kirchofer, Lanciura, & Wilson, 1981; Jones, Palincsar, Ogle, & Carr, 1987; Mendelsohn, 1994; Oxford, 1990; Pearson & Dole, 1987; Robbins, 1996). For instance, in Mendelsohn's (1994) "strategy-based approach" to the teaching of listening, strategy instruction becomes the core of the listening program and the organizing framework around which the listening course is designed. Each of the strategy-instruction units concentrates on one or a cluster of associated strategies. Mendelsohn (1995) offers some principles for the structure of a unit in such a course:

- 1. attend to awareness and consciousness-raising,
- 2. use pre-listening activities,
- 3. focus the listening,
- 4. provide guided activities,
- 5. practice with real data, and
- 6. use what has been comprehended.

Chamot and O'Malley also develop a content-based instruction model for language learners, namely, the Cognitive Academic Language

Learning Approach (CALLA) (Chamot, Barnhardt, El-Dinary, & Robbins, 1999; Chamot & O'Malley, 1986, 1994). This approach is perceived as a social-cognitive learning model, in which collaborative learning, learners' prior knowledge, and metacognitive awareness and self-reflection of learners is emphasized (Chamot et al., 1999). Part of CALLA is devoted to providing explicit instruction of language learning strategies within the context of academic content areas. CALLA consists of five phases: preparation, practice, evaluation, and expansion.

Another established instruction model is proposed by Oxford (1990). She provides a guideline for instructors in the teaching of learning strategies. It includes eight steps, in which the first five involve planning and preparation, and the last three concern conducting, evaluating, and revising the training program. These steps are:

- 1. determine the learners' needs and the time available,
- 2. select strategies well,
- 3. consider integration of strategy training,
- 4. consider motivational issues,
- 5. prepare materials and activities,
- 6. conduct "completely informed training,"
- 7. evaluate the strategy training, and
- 8. revise the strategy training. [-6-]

Related to the Reviewed Research

The reviewed literature serves a base in understanding strategy use, comprehension problems in listening, and procedures for strategy instruction. Based on this understanding, the study focuses on the obstacles that emerge while learners acquire listening strategies in an explicit type of training. It is hoped that the study provides information about what EFL learners actually do in "learning to listen," and what difficulties that they face in incorporating strategy use when listening.

The Study

The Research Question

The main concern of the study is: What are the common obstacles or barriers expressed by learners when learning listening comprehension strategies? The investigation involves qualitative procedures in order to elicit common factors or patterns surrounding the difficulties of learning listening strategies.

Subjects

Sixty-four EFL learners, ages 19 to 21, voluntarily participated in the listening strategy training. They were fourth level students in a five-year program in a junior college in Taiwan. They were learning English as a foreign language and taking the English courses at the tertiary level. The SLEP (Secondary Level English Proficiency) test was conducted before the training program in order to determine participants' English proficiency. In the listening section, four participants ranked as advanced (scoring above the 70th percentile of the entire cohort), four as high-intermediate (scoring between the 50th and 70th percentile of the entire cohort), and fifty-six participants, the majority of the participants, as low-intermediate (scoring between the 30th and 50th percentile of the entire cohort).

The Training Program

An eight-week training period, concentrating on listening comprehension strategies, was conducted by the researcher during a summer vacation, during which time the student participants were not involved in other academic courses. The training included eight two-hour sessions. During each session, one or two related listening strategies were introduced, explained, demonstrated, and practiced. The main strategies consisted of the following (for definitions of the strategies, refer to O'Malley et al., 1985):

- 1. grasping the main idea
- 2. key-word strategy
- 3. selective attention
- 4. using contextual clues
- 5. grouping

- 6. inferencing
- 7. elaboration,
- 8. self-monitoring
- 9. imaging

[-7-]

Other minor strategies were also introduced and explained but more briefly, including:

- 1. note-taking
- 2. repeated listening
- 3. prediction
- 4. advance organizer
- 5. previewing

Pedagogically, the training was based on Oxford's (1990) model, and integrated some principles from Mendelsohn's (1995) strategy-based approach. That is, the strategies were presented in a direct, explicit, and informed way and in each session, the target strategy was labeled and given a rationale, and adequate of opportunities were offered to compare and evaluate the strategies. As to the listening texts used in class or as assignments, the researcher used a variety of authentic materials, suggested by Mendelsohn (1995), such as radio broadcasts, off-air TV programs, movies, and so forth.

Instruments

The participants were required to keep working journals every week during the training. The journals offered the participants opportunities to record thoughts, feelings, or comments regarding the listening tasks and strategy learning of the week. The learners were free to write in either English or Chinese. In addition, after the training course was completed, each participant was interviewed individually by the researcher. During the unstructured interviews, the participants were given freedom to talk about anything that came to mind, either in English or Chinese, such as their learning process, the application of the listening strategies or the training course itself.

Data Collection and Analysis

The data were collected from two main sources. One was the working journals described above, and the other was the unstructured interviews. The data were analyzed qualitatively. Since there were few existing systems in the literature to provide a categorization scheme, the characteristics or categories had to be derived directly from the data without a predetermined scheme. Thus, an inductive procedure was adopted, suggested by Seliger and Shohamy (1989).

A numerical system was applied to identify each data entry. The code for each account indicated the learner ID, data source, time of data recorded, and the account number. For instance, "S26-3-2" stands for the account (number 2) made in the third week of training by the learner (learner ID: S26). "S50-I-4" represents the account (number 4) made during the interview (which was conducted at the end of training course) by the learner (learner ID: S50).

The procedure first dealt with part of the data to derive categories or representative characteristics of participants' learning process. Once the categories or characteristics were identified and sorted, they were applied to the remainder of the data for refinement. As the data analysis proceeded, the refinement of categories and characteristics continued until commonalities or patterns emerged. For analysis validity, the steps followed by the researcher in the coding scheme were:

- 1. translation and transcription
- 2. the design of coding form and data numerical system
- 3. review of a portion of the data
- 4. types of characteristics identified
- 5. categories derived by building upon the characteristics types
- 6. application of the preliminary categories to the remainder of the data
- 7. refinement of the category group
- 8. the derivation of a finite group of patterns
- 9. repetition of analysis procedures for checking intra-rater reliability
- 10. examination of inter-rater reliability

To examine reliability, the researcher asked another researcher in a related field to act as an independent coder. The independent coder was shown a sample of the data and worked on the same coding form worksheet as the researcher used in this analysis. The coding results and classification were then compared with those of the researcher. In the formula suggested by Young (1997), the inter-coder reliability was 0.73 and the intra-rater reliability was 0.87.

Results

After the data analysis, seven major categories of learning obstacles were derived, including 22 minor groups. The categories are affective barriers; habitudinal obstacles; learning difficulties related to individual learner's information processing, English proficiency, and beliefs about listening; problems centering the nature and procedures of strategy use; and the listening materials that learners practiced with. An overview of the findings was shown in Table 1.

Table 1: Categories of barriers reported in learning the listening strategies

Barrier category 1: Affective barriers
Barrier category 2: Habitudinal barriers
Barrier category 3: Information processing barriers
Type 1: Obstacles pertaining to spoken-word recognition
Type 2: Obstacles pertaining to processing speed
Type 3: Obstacles pertaining to input retention
Type 4: Obstacles pertaining to processing distraction
Type 5: Obstacles pertaining to interpretation
Type 6: Obstacles pertaining to fatigue
Barrier category 4: English proficiency barriers
Type 1: Obstacles pertaining to limited English vocabulary
Type 2: Obstacles pertaining to poor grammar
Type 3: Obstacles pertaining to overall English proficiency
Barrier category 5: Strategic barriers

Type 1: Forgetting to activate strategies while listening
Type 2: Regarding strategies as extra burdens to information processing
Type 3: Challenged by the complex nature of the strategy
Type 4: Having problems conducting the proper strategies
Type 5: Still unable to comprehend the text after applying strategies
Barrier category 6: Belief barriers
Type 1: Applying strategies after other language skills were acquired
Type 2: Attending to every word or demanding full comprehension of text
Barrier category 7: Material barriers
Type 1: Obstacles pertaining to difficulty level of materials
Type 2: Obstacles pertaining to spoken features
Type 3: Obstacles pertaining to length of sentences or texts
Type 4: Obstacles pertaining to text genre
Type 5: Obstacles pertaining to topics

Following are brief descriptions and representative examples for each category and type.

Barrier category 1: Affective barriers

[-9-]

Some affective influence might distract learners from learning the target strategies. The affective factors that play a negative role in strategy acquisition include anxiety, distress, frustration, and resistance. For example, learner (S58-2-5) felt depressed when she failed to comprehend: "I felt so depressed because I was totally lost in the blablabla." She related the comprehension failure to the failure of the listening strategies applied: "The strategies I learned were not helping me enough." Likewise, learner (S55-6-1) experienced similar affective influence when a self-monitoring strategy was not functioning well: "I couldn't get the details out of the textEven though I felt I had self-monitored myself... Feeling so

depressed. It's so difficult for mefeel like giving up." The frustration led thoughts of giving up the listening task or/and the target strategy.

Barrier category 2: Habitudinal barriers

Some learners reported that they were more inclined to resort to their old "survival kit," i.e., their former listening habits, than to try the listening strategies introduced in the training. Although not all of the former listening habits disadvantaged comprehension, some did draw learners away from activating the potential strategies in the comprehension process. The habitudinal barriers found were: listening for every spoken word, relying on Chinese subtitles, and non-purposeful listening.

For instance, learner (S59-1-2) was predisposed to listen word by word, instead of listening for the main idea of the text, and to attend to the familiar words only, instead of other aspects of language input: "[G]etting the main idea is not working for me. Because I am still paying attention to the words which are familiar to me I listen carefully but sometimes I still can't get every word." She repeated the word "still" several times in her accounts, which implied the habitudinal influences on her listening process. Learner (S22-3-1)'s reliance on Chinese subtitles overpowered the use of other listening strategies. Despite the fact that the discourse was "easier and slower," Chinese subtitles seemed to bar the learner from using potential listening strategies for comprehension: "Because it's a cartoon animation, the conversations are easier and slower. But there are still Chinese subtitles. So I used fewer strategies." Likewise, learner (S50-1-3) tended to translate English words into Chinese: "I always think about their Chinese meanings first and then go on listening." Also, learner (S26-2-1) commented in the second-week working journal: "I'm more used to my own way, listening all the way to the end."

There were signs showing how habitudinal barriers were tackled. For instance, some learners indicated the ways in which they dealt with the reliance on Chinese subtitles or written transcriptions. For learner (S11-3-4), self-monitoring was used: "I tried to remind myself from time to time. Not to read the subtitles on the TV screen, unless I really didn't get a word. . . .". And for learner (S37-4-1), after the first viewing with the aid of subtitles, she lessened the translation to a certain degree in second viewing: "I have watched Armageddon twice. The first time I watched it, I always read the Chinese subtitles. But for the second time, I did not check the subtitles very often." Learner (S58-5-1) simply listened to the English learning program on radio without accompanying written materials, and reported 80% understanding of the content: "This month I forgot to buy a copy of 'Studio Classroom' but I still tried to listen to the program. Guess what, I could understand 80%"

Interestingly, learner (S48-1-4) stated her psychological transition by using a metaphor: [-10-]

I feel it is a bit of hard for me now. Because I am already used to some skills. But now, I am suddenly given a new skill to learn. I feel a little difficult to accept that. It's like if someone is used to smoking the "Long Life" brand and you suddenly give him the cigarettes of "Seven Star" brand. I think he must be very uncomfortable in the beginning. But time after time, he will get used to it. Just like me. So, I feel this should come slowly, I mean, learn slowly.

Barrier category 3: Information processing barriers

Type 1: obstacles pertaining to spoken-word recognition

Learners reported the obstacles in strategy use that were complicated by spoken-word recognition problems. Some, like learner (S62, S26) were having trouble with the matching task between the pronunciation of the spoken words and the words they already knew. Others, like learner (S18, S64), were unable to recall the meanings of the spoken words. And, there were also learners such as (S59) who experienced both obstacles.

In the first group, learner (S62-5-2) remarked, "I can't listen to linking words clearly." This shows the difficulty of identifying or differentiating individual sounds in a stream of sounds. Similarly, learner (S26-2-4) couldn't employ the key word strategy due to the barriers in perceiving or differentiating sounds that seemed to sound alike to the learner: "For instance, 'b' and 'v' are hard to discern. Under the condition, it's a little difficult to obtain the right key words from the text and combine them." In the second group, learner (S18, S64) was able to identify or differentiate the flow of sounds, but matching the pronunciation with the word meaning was difficult. The accounts from learner (S64-I-5) specified this barrier: "The pronunciation is familiar to me but I forget what the word is." In the third group, learner (S59-4-1) encountered both problems addressed above, reporting: "Some spoke very fast. . . . I couldn't hear clearly about the

pronunciation. . . . I thought of certain words but it turned out that they were the other words instead."

Type 2: obstacles pertaining to processing speed

Some learners reported their failure to process spoken input efficiently, even though they attempted to apply strategies. For example, learner (S21-2-1) pointed out a general problem when trying to apply strategies: "The speakers usually speak too fast for me to think about strategies. It takes too much time. So, I don't feel like using strategies." It seemed to learner (S21) that processing input with listening strategies took up additional mental efforts and precious processing time. Thus, strategy use was dropped. For learner (S50-1-3), although the keyword strategy was attempted, it failed due to the speed of processing problem: "I couldn't react to the words that I listened to as fast as possible, even though I've sensed that they might be the key words." Learner (S53-2-1) addressed a similar problem by making a comparison between reading and listening tasks: "When I read articles, to use the selective attention or contextual clues is quite useful. But problems come up when I listen to . . . Before I can react, it's over." With respect to strategy use, it appears that time pressures affected the processing of written input less than processing spoken input did. [-11-]

Type 3: obstacles pertaining to input retention

Some learners experienced difficulties in retaining perceived input for further processing. These difficulties might result from learners' memory limitations or capacity in the sensory register or/and short-term memory. This type of obstacle caused a breakdown of listening strategy application. Learner (S49-I-1) expressed that the contextualization and inferencing strategy were not carried out successfully due to failing to remember the previous text part: "For strategy 5 [contextualization], if what I have to listen to is long, I forget the beginning part. It's impossible for me to use . . . and strategy, strategy 8 [inferencing], the same" Learner (S48-3-1) even showed frustration with certain strategies while attempting to retain the spoken input: "The more I tried to memorize, the worse it got. Then, I got into a panic. I don't know what to do."

Type 4: obstacles pertaining to processing distraction

Some learners reported that their attention was distracted or information processing was interrupted while they tried to apply strategies in listening. Possible reasons are that, for EFL listeners, the perceptual attention or processing capacity can become overloaded with language processing, leaving little space for strategic processing. For instance, learner (S50-I-1) complained about the use of self-monitoring due to the distraction resulted from the attempt of strategy use: "Sometimes I kept telling myself 'concentrate, concentrate, concentrate.' Then, I got distracted by doing this." Learner (S44-I-2) was aware of her frequent distraction in the listening process, which forced her to abandon the attempt of using strategies: "I did not think too much of the strategies. Because . . . because my attention was easily distracted."

Type 5: obstacles pertaining to interpretation

Some learners experienced problems regarding interpretation of the perceived input, even though some comprehension strategies were used. Learners were unable to find the appropriate meaning or interpretation of particular vocabulary items, expressions, or entire text. The reasons for this might be associated with learners' command of contextualizing the input, activating related schemata, or simply lack of cultural awareness.

For learner (S59-2-2), the interpretation of the whole text remained problematic, although certain strategies, such as inferencing were involved: "I inferred the word meaning from the context. Sometimes I understood all the words, but when all the parts were put together, I didn't know what the speaker was trying to say." Learner (S17-I-3) could not decide how to interpret the meaning of the word "mine" from the context although resourcing strategy was in use:

They seemed to mention the word 'mine' several times. But very strange. After I went home, I looked it up in the electronic dictionary. Then, I realized there were several meanings in 'mine.' But to tell you the truth, I don't know which meaning is the right one.

And, learner (S64-3-2) did not succeed in applying a prediction strategy to listening comprehension due to insufficient background knowledge or schemata: "But, for a topic, story, or report that I have never heard of, prediction is hard."

Type 6: obstacles pertaining to fatigue

Some learners mentioned fatigue as one of the causes in the malfunction of spoken word processing. For learner (S50-I-3) and (S17-I-3), their attention or other mental efforts for listening were affected by their overall condition, i.e., whether they were tired or not. As stated by learner (S50-I-3): "It depended on whether I was tired or not. If my energy was low, I couldn't listen very well. Maybe listening to English songs was all right. But not the assignments." Or, learner (S17-I-3): "I had to work full time during the summer vacation. When I got home from work, I was exhausted. I did not feel like using my brain. If I listened to English, I got dizzy."

Barrier category 4: English proficiency barriers

Type 1: obstacles pertaining to limited English vocabulary

Some learners regarded their limited English vocabulary as a barrier to activating listening strategies. For example, learner (S58-1-2) believed that the first priority in improving listening comprehension was to increase her vocabulary instead of using strategies such as getting the main idea of the text. She thought that once she increased her English vocabulary, listening strategies would fall into place: "I think if I can improve myself to remember more vocabulary, maybe I can use that strategy [getting the main idea] more smoothly." In addition, Learner (S4-1-3) applied the keyword strategy without satisfaction: [-12-]

Even if I know some words might be the key words due to the stressed emphasis, I still don't know what they mean. . . . Maybe it is because I know too few English words. So, when I try the strategy, there are still some sentences that I don't understand.

It seems that she could identify some keywords, but she failed to further employ other listening strategies, such as contextual clues or inferencing to guess what the keywords might refer to. In her own analysis, a limited vocabulary was considered responsible for the comprehension breakdown.

Type 2: obstacles pertaining to poor grammar

Some learners stressed the importance of grammar in relation to listening comprehension or strategy application. For instance, learner (S58-1-1) says: "I don't think 'picking up the key words' is useful strategy for me. . . . My ability to listen for phrases or sentences is too bad, and also I know my English grammar is as terrible as my ability to English conversation." Learner (S29-6-1) states similarly: "My grammar is poor so my English isn't good. . . . They [listening, reading, and writing] all need grammar, vocabulary, and so on. . . . In the training class, I feel this way, too.". Although neither learner explicitly illustrates the relationship between grammar and strategy use, the concern was there.

Type 3: obstacles pertaining to overall English proficiency

There were learners who attributed the difficulties of strategy acquisition to their listening skills or overall language skills. As learner (S22-1-2) claimed, the failure of the listening strategies resulted from the poor listening ability: "It's not the fault of the strategy; it's all my fault because of my poor listening ability. I'll work harder. [whining]." Learner (S3-I-1) also articulated this barrier: "My English is not good. It's difficult for me to use strategies."

Barrier category 5: Strategic barriers

Type 1: Forgetting to activate strategies while listening

Learners sometimes forgot to apply listening strategies while listening. For instance, learner (S48-4-1) wrote, "I can't always remember it [inferencing strategy] and cannot use it often," exemplifying this type of strategic barrier. Learner (S18-7-2) attempted to use self-monitoring and directed attention strategy, but often forgot to employ them in listening process: "[S]ometimes I forgot to remind myself." This might imply that strategy use has not yet reached an automatic stage of learning for these learners, or that strategies were not yet internalized as part of their existing repertoire of listening skills.

Type 2: Regarding strategies as extra burdens to information processing

Some learners described one learning obstacle as having to process both language input and strategy utilization at the same time. In the remark, "[W]hile listening, I have to attend to this and attend to that," learner (S64-I-1) exemplifies the barrier fairly typically. Learner (S48-4-2) also addressed the difficulty of the simultaneous processing: "I have to wait until the listening is finished and then only at that time, I can make an effort to use these strategies. . . . Then, I am able to connect everything." If attending to the strategy use, learners sometimes missed the language input such as learner (S26-5-1) shows: "I had a little trouble getting used to the strategy use of 'elaboration.' In order to elaborate, I often missed the next sentence." [-13-]

Type 3: Challenged by the complex nature of the strategy

There were some strategies that imposed a greater challenge to the learners than other strategies did. The challenge was usually related to the complexity of the strategy. That is, more mental effort was usually involved for some strategy application than others, perhaps because more contextual clues or schematization needed to be elicited and activated. In the case of learner (S58-I-7), she commented on which strategies were more difficult to learn:

I rarely used no. 5 [contextualization], no. 9 [elaboration], Uhand no. 7 [prediction]. No. 9 and 7, I almost never used. Can't associate. It's hard to use contextual clues. Once I think of the context, especially right in the middle of listening, the situation gets even more confusing.

As to learner (S26-I-2), the grouping strategy imposed a barrier to comprehension: "[T]he strategies, listening for phrases and grouping, are too complicated. . . . So, I don't bother."

Type 4: Having problems conducting the proper strategies

Some learners encountered practical problems while trying to put their understanding of strategies into practice. It might be that the learners were not familiar with the procedures or the optimal conditions for specific strategy application. As exemplified in (S59-5-1)'s account: "Roughly, I know what 'elaboration' is about. But, when it comes time to apply it, it gets somewhat difficult," the learner understood the strategy of elaboration but was unable to apply it in listening process. Problems also emerged while learner (S58-6-3) attempted to practice the strategy of directed attention: "[W]hat's difficult for me is after focusing my attention, I still can't get much out of it."

Type 5: Still unable to comprehend the text after applying strategies

Another frequent report from learners was that the texts were still not comprehensible in spite of strategy use. As learner (S59-2-2) indicated, when the inferencing strategy was used: "I inferred the word meaning from the context" but still "when all the parts are put together, I don't know what the speaker is trying to say." Likewise, learner (S61-7-2) probably used the imagery strategy, but was left puzzled: "Easy to imagine. Hard to know what the people are going to say exactly. . . . I don't know what they mean."

Barrier category 6: Belief barriers

This category included two typical beliefs that prevented the learners from exploring strategies.

Type 1: Applying strategies after other language skills were acquired

Some learners considered strategies as the last priority in improving listening comprehension, and believed that other language skills such as vocabulary or grammar development were more important. With this belief, learners were prevented from realizing the potential that listening strategies could provide as a compensation for their inadequate language proficiency. Learner (S3-I-1) states, "My English is not good. It's difficult to me use strategy." Learner (S58-1-2) also reflects this belief: "I think if I can improve myself to remember more vocabularies, maybe I can use that strategy [getting the main idea] more smoothly." [-14-]

Some learners, such as (S58-2-6), regarded listening as a task to apprehend every spoken word or a task to gain complete understanding of the whole text, as with (S30-4-3). As learners made use of the newly learned strategies in listening and did not see the results they expected, they experienced frustration. For example, learner (S58-2-6) resorted to the resourcing strategy in order to understand all the unfamiliar words in the text. She believed that if these words were not tackled, comprehension problems would occur. This conception might have stopped her from exploring the possibilities of using other strategies: "If I don't look them [new words] up in the dictionary, I'll have more and more troubles with my English listening ability." Learner (S30-4-3) thought that being unable to have a complete understanding of a passage was due to unfamiliar words: "New words are a problem to make 100% understanding."

Barrier category 7: Material barriers

Type 1: obstacles pertaining to difficulty level of materials

Learners were more inclined to practice strategies with materials that were not too difficult for them. If the materials were above the listeners' level to a certain degree, complaints were often made about the difficulties of strategy use or the listening process. For instance, learner (S30-1-3) compared two sources of English radio broadcasts, one a magazine for EFL learning ("Studio Classroom") and the other authentic materials from an English-speaking radio station ("ICRT"). For him, the former material was easier for the keyword strategy because of the text level: "Use [keyword strategy] with Studio Classroom is a good idea. Because they say slowly. Use with ICRT would be a very difficulty job." Learner (S26-1-1) compared two levels of text complexity (marked as "Basic Level" and "Advanced Level") in one EFL learning magazine ("Studio Classroom"). She chose the easier text ("Basic Level") to practice target strategies: "But, if it's Advanced Level, I feel it's a little hard to understand. So, I listen to Basic."

Type 2: obstacles pertaining to spoken features

A substantial number of learners' accounts were devoted to the challenges imposed by the spoken features in the materials. The three most frequently mentioned features were: (1) rate of speech, (2) clarity of voice, and (3) accents. They are illustrated below.

1. data pertaining to the rate of speech:

Learner (S62-2-2) mentioned the use of the selective attention strategy and contextual clues in relation to the materials, commenting: "I try to use it [selective attention strategy and contextual clues]. Because many words important or not important [come] so fast, I can't listen very clear." This shows that the limited span of learners' memory or attention might be crowded with input waiting for further processing. The non-processed information might cause difficulties in utilizing contextual clues.

There were data showing how this kind of barrier was dealt with. For instance, learner (S22-2-2) emphasized mass exposure: "[L]isten to . . . day and night. . . . gradually I am getting used to their speed and the way they talk."

Learner (S37-5-1) applied the repetition strategy to the same portion of text, and could perceive more auditory input during repetition: "[M]ore and more words got into my ears this way." However, the effect of the repetition strategy was limited if the delivery "went really fast." For learner (S64-I-3), she used the keyword strategy and identified other acoustic features in the speech. Words spoken at a relatively slower speed were considered keywords and drew more attention: "[T]here are usually some words they'll slow down, then, they seem to be the key words." For learner (S64-I-4), the acoustic features such as intonation and voicing signified the intended messages of the speaker: "[H]is voice got very exaggerated and words around the numbers were also slowed down, then I knew they were the points." [-15-1]

2. data pertaining to clarity of voice:

Learner (S62-5-2) was concerned about linking words in the text and the use of elaboration strategy: "This week is about elaboration. . . . I can't listen to linking words clearly." As linking words might influence the perceptual processing in sensory register, learner (S62) considered it a problem in practicing elaboration. In addition, learner (S53-2-3) wrote about the "fuzzy" quality of speech in her journal during the week when selective attention and

contextual clues were taught. This quality together with the pacing feature led to an aggravating experience for her: "It goes really fast and rather fuzzy. It's such a pain to listen."

3. data pertaining to accents

Learner (S18-I-2) mentioned in an interview that unfamiliar accents sometimes caused difficulties in strategy use: "The strategy is a little difficult to apply. . . . And the pronunciation [of the speakers] is not standard." Learner (S43-I-5) also pointed out the accent issue. In her contact with native speakers, she compared the accents of the Philippines and North America, preference being given to the latter because she was more used to it.

Type 3: obstacles pertaining to length of sentences or texts

For some learners, length of the sentences or the texts also counted for the difficulties of strategy application. For example, learner (S22-5-3) marked her existing listening problem, "Even though I've learned strategies, my listening problems are still there. As long as the sentence gets longer, my chance of understanding it decreases." Learner (S58-I-2) articulated that a long text caused her to forget the beginning part of the text, which caused the comprehension to breakdown, as cited in "it's too long for me . . . too much information. . . . I forgot the beginning part of it. . . . I just gave up in the middle."

Type 4: obstacles pertaining to text genre

In the present study, different genres of authentic materials were used to practice strategies. Learners reported that some genres (e.g., interviews on radio (S53-3-1), news reports (S58-2-2), commercials (S61-2-4), etc.) presented more challenges than others (e.g., weather forecasts (S64-I-8), cartoons (S53-3-1), call-in programs (S61-2-4)). In the case of a less demanding genre, learner (S64-I-8) stated:

[P]rediction strategy is useful while listening to weather forecast. Because, you know, the format of their report is all fixed. After listening to a few forecasts, I know the words they often use, then I catch the meaning.

In the case of more challenging genres, learner (S61-2-4) regarded commercials as the most complicated one: "The commercial program, still, not so simple, too fast." Learner (S53-3-1) also thought that the interviews on the radio were not easy to follow due to the fast delivery and lack of background knowledge: "About some cartoons, if I know the story line before viewing them, I could follow them more or less. . . . But if it's an interview on the radio, I may not be able to follow them because they often talk too fast." [-16-]

Type 5: obstacles pertaining to topics

Some learners regarded text topic as another factor in strategy application. Whether they were familiar with the topic of the text or not influenced the success or failure of the strategy use. This implies that background knowledge or schemata on the listener's part is needed for listening comprehension. When learner (S63-I-3) was informed of the type of news report, she could apply the strategies of advance organizer and directed attention: "They usually tell you first what kind of news is coming up, such as sports, business, etc. So, I get the title. I get the direction." Similarly, for learner (S62-5-1), lack of background knowledge might be the obstacle in understanding international news: "But the international news, it's difficult . . . And, I don't know what happened."

Type 6: obstacles pertaining to modalities

Some learners were concerned about the modality of the materials. Some saw a combined mode, using both visual and auditory channels as beneficial (learners (S50, S59); others thought that materials delivered through a single modality were more helpful for strategy application (S3) or attention concentration (S64). The former outnumbered the latter in the accounts made by different learners.

In the examples favoring visual support, learner (S50-1-2) pointed out "the gesture or facial expressions" gave her some clues about the speakers' emotions and intended message. Similarly, visual support was considered by learner (S59-I-2) as a "more relaxing" and "easier" form, which facilitated the use of the inferencing strategy: "If it's on sound, I have to listen

with full attention. But if there's an image, it's more relaxing for me. It's easier. Because of the image, I can guess more." In the examples favoring the auditory channel, learner (S3-I-2) concluded: "I think of using strategies more often if it's on audio tape." Visual support was regarded by the learner as a source of distraction: "[M]y eyes become the busiest. Because of that, I got distracted." Learner (S64-I-9) also reported this kind of distraction, stating: "I will keep watching their movement or gesture, and I will forget to listen," while "with audio tapes . . . I am more focused."

Pedagogical Implications

I hope that the findings here can serve as a reference for instructors who want to diagnose the learning difficulties of students and to help them to tackle these difficulties effectively with respect to strategy learning. For diagnosis of barriers to listening strategy learning, instructors may ask, "Why is the learner unable to, or why does the learner choose not to use particular listening strategies?" It is possible that when a learner complains about strategy use, he or she has problems directly or indirectly related to the nature of the strategy itself.

The first question instructors need to examine is, "Does learner's listening habits and belief about listening comprehension contradict the strategy use?" If a learner holds beliefs such as "strategies can succeed in comprehension only when other language skills have been acquired," or "I should pay attention to every word and understand every detail in the text," or "I have to translate the target language to my native one in order to understand the text," as addressed above, the learner may be less likely to acquire strategies such as inferencing, elaboration, prediction, or selective attention. This shows the importance of an "awareness and consciousness-raising" stage in strategy training, as proposed in Mendelsohn's (1995) strategy-based approach. In other words, the value and power of strategies needs to be made explicit to learners.

The second issue to look at is, "Does the learner have an affective barrier against strategy learning?" The findings here indicate that negative affective influences, such as anxiety, distress, frustration, resistance, and so forth, might distract learners from learning the target strategies. This kind of psychological barrier interacts with learners' motivation and attitudes toward strategy learning, as MacIntyre and Noels (1996) also note. [-17-]

The third question that instructors need to ask is, "Have the listening materials and the learner's English proficiency been taken into account?" As the findings suggest, learners were more likely to practice strategies with texts that did not present too much difficulty in terms of vocabulary, grammar, topics, spoken features, or length of sentences or texts. Instructors have to be cautious about the selected material's being appropriate to the learner's language level. Although the value of authentic materials for strategy learning is emphasized by many scholars (e.g., Mendelsohn, 1995), its use poses a practical challenge to instructors who have to choose suitable segments from a great amount of unorganized "real" texts. In this regard, determining the level of the task could be an alternative to determining the level of the material. While working on the same materials, instructors could differentiate the task requirements for learners at different language proficiencies.

Once the peripheral aspects have been investigated, attention should be paid to the information processing of the learner's listening process, in which target strategies are integrated. Therefore, the fourth question arises, "With which phase of information processing does the learner have difficulties—perceptions, parsing, or utilization?" As the findings suggest, learners might experience problems regarding the processing speed of auditory input, retention of the input in short-term memory, distraction in processing, interpretation in context, matching between mental representations and input, etc. In order to diagnose these difficulties, instructors can use various segments of listening material to test learners' processing problems. Since the procedures require comments and feedback from learners while listening, instructors are advised to work with individual learners or learners in small groups.

After the information processing problems are identified, the following important question concerns strategy selection, "Is the strategy appropriately selected in order to facilitate the specific goals in particular phase of information processing?" When it comes down to a specific strategy that the learner needs to acquire, instructors should be aware that strategy acquisition may go through three stages, similar to other cognitive skills (Anderson, 1983, 1995), i.e., cognitive, associative, and autonomous. Each stage may pose different challenges to learners. Thus, the next question to deal with is, "In which stage of development does the learner experience difficulties with a certain strategy?" Based on the strategic barriers derived from the data, it is suggested that instructors can examine whether learners have sufficient understanding of particular strategies, have hands-on problems while trying to implement the learned strategies into listening tasks, or have troubles related to orchestrating strategies for particular listening tasks.

Overall, one of the tasks for instructors is to find learners' learning difficulties in strategy acquisition and help them to overcome the

barriers. Therefore, I suggest that strategy training include one more component, i.e., barrier analysis in strategy acquisition. The purpose is to facilitate the instructors and learners to recognize and tackle learning barriers as learners proceed towards processing autonomy in listening strategies.

Recommendations

Future studies might consider the following directions:

- 1. The derived categories of the present study may be re-examined by using quantitative methods such as factor analysis.
- 2. The relationship between learning barriers and other learning factors needs to be further inspected.
- 3. The optimal combination of the learning factors can be explored in order to elicit the best learning outcomes of listening strategies.
- 4. A standardized inventory of learning difficulties could be created to provide instructors and learners with an efficient way to diagnose strategy difficulties.
- 5. Learners with different language proficiencies could be studied to compare their strategy learning difficulties.
- 6. Although the present study focused on listening strategies, strategies for other language skills such as reading, writing, communication, etc. could also be further explored in terms of the difficulties in the strategy acquisition process.

 [-18-]

References

Anderson, J. R. (1983). The architecture of cognition. Cambridge, MA: Harvard University Press.

Anderson, J. R. (1995). Cognitive psychology and its implications. 4th ed. New York: Freeman.

Bacon, S. M. (1992a). The relationship between gender, comprehension, processing strategies, and cognitive and affective response in foreign language listening. *The Modern Language Journal*, *76*, 160-178.

Bacon, S. M. (1992b). Authentic listening in Spanish: How learners adjust their strategies to the difficulty of the input. *Hispania*, 75, 398-412.

Bacon, S. M. (1992c). Phases of listening to authentic input in Spanish: A descriptive study. Foreign Language Annals, 25 (4), 317-334.

Bialystok, E. (1978). A theoretical model of second language learning. Language Learning, 28, 69-83.

Brown, A. L., Armbruster, B. B., & Baker, L. (1986). The role of metacognition in reading and studying. In J. Orasanu (Ed.), *Reading comprehension: From research to practice* (pp. 49-75). Hillsdale, NJ: Erlbaum.

Brown, A. L., Bransford, J. D., Ferrara, & Campione, J. C. (1983). Learning, remembering, and understanding. In J. H. Flavell & M. Markman (Eds.), *Carmichael's manual of child psychology* (Vol. 3, pp. 77-166). New York: Wiley.

Carrell, P. L. (1996). Second language reading strategy training: What is the role of metacognition? Atlanta, GA: Department of Applied Linguistics and ESL, Georgia State University.

Chamot, A. U., Barnhardt, S., El-Dinary, P. B., & Robbins, J. (1999). *The learning strategies handbook*. White Plains, NY: Addison Wesley Longman.

Chamot, A. U., & O'Malley, J. M. (1986). *A cognitive academic language learning approach: An ESL content-based curriculum*. Wheaton, MD: National Clearinghouse for Bilingual Education.

Chamot, A. U., & O'Malley, J. M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. White Plains, NY: Addison Wesley Longman.

Chao, J. Y. G. (1996). The influence of strategy use on comprehension and recall of authentic English listening texts by Chinese EFL students in Taiwan. Unpublished doctoral dissertation, University of Minnesota, MN, USA.

Cohen, A. D. (1998). Strategies in learning and using a second language. New York: Longman.

Derry, S. J., & Murphy, D. A. (1986). Designing systems that train learning ability: From theory to practice. *Review of Educational Research*, *56*, 1-39.

Ehrman, M. E., Leaver, B. L., & Oxford, R. L. (2003). A brief overview of individual differences in second language learning. *System, 31*, 313-330.

Ellis, R. (1994). The study of second language acquisition. Oxford: Oxford University Press.

Ellis, G., & Sinclair, B. (1989). Learning to learn English: A course in learner training. Teacher's book. Cambridge: Cambridge University Press.

Fillmore, L. W., & Swain, M. (1984). *Child second language development: Views from the field on theory and research.* Paper presented at the 18th Annual TESOL Convention, Houston, TX.

Goh, C. C. M. (2000). A cognitive perspective on language learners' listening comprehension problems. System, 28, 55-75.

Goh, C. C. M. (2002). Exploring listening comprehension tactics and their interaction patterns. System, 30, 185-206.

Hosenfeld, C., Arnold, V., Kirchofer, J., Lanciura, J., & Wilson, L. (1981). Second language reading: A curricular sequence for teaching reading strategies. *Foreign Language Annuals*, 14 (5), 415-422.

Jones, B. F., Palincsar, A. S., Ogle, D. S., & Carr, E. G. (1987). *Strategic teaching and learning: Cognitive instruction in the content areas.* Alexandria, VA: Association for Supervision and Curriculum Development.

MacIntyre, P. D., & Noels, K. A. (1996). Using social-psychological variables to predict the use of language learning strategies. *Foreign Language Annals*, *29*, 373-386.

McLaughlin, B. (1987). Theories of second language learning. London: Edward Arnold.

Mendelsohn, D. J. (1994). Learning to listen: A strategy-based approach for the second-language learner. San Diego: Dominie Press.

Mendelsohn, D. J. (1995). Applying learning strategies in the second/foreign language listening comprehension lesson. In D. J. Mendelsohn & J. Rubin (Eds.), *A guide for the teaching of second language listening* (pp. 186-221). San Diego: Dominie Press.

Murphy, J. M. (1985). *An investigation into the listening strategies of ESL college students*. (ERIC Document Reproduction Service No. ED 178 275).

Murphy, J. M. (1987). The listening strategies of English as a second language college students. *Research & Teaching in Developmental Education*, 4 (1), 27-46. [-19-]

O'Malley, J. M., & Chamot, A. U. (1990). Learning strategies in second language acquisition. Cambridge: Cambridge University Press.

O'Malley, J. M., Chamot, A. U., & Kupper, L. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10 (4), 418-437.

O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Russo, R., & Kupper, L. (1985). Learning strategy applications with students of English as a second language. *TESOL Quarterly*, 19, 285-296.

O'Malley, J. M., Chamot, A. U., & Walker, C. (1987). Some applications of cognitive theory to second language acquisition. *Studies in Second Language Acquisition*, *9*, 287-306.

Oxford, R. L. (1990). Language learning strategies: What every teacher should know. Boston: Heinle & Heinle.

Palincsar, A. S., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*, 117-175.

Pearson, P. D., & Dole, J. A. (1987). Explicit comprehension instruction: A review of research and a new conceptualization of learning. *Elementary School Journal*, 88 (2), 151-165.

Robbins, J. (1996). Language learning strategies instruction in Asia: Cooperative autonomy? (ERIC Document Reproduction Service No. ED 409 728).

Rost, M., & Ross, S. (1991). Learner strategies in interaction: Typology and teachability. Language Learning, 41, 235-273.

Rubin, J. (1994). A review of second language listening comprehension research. Modern Language Journal, 78, 199-221.

Seliger, H. W., & Shohamy, E. (1989). Second language research methods. Oxford: Oxford University Press.

Teng, H. C. (1998). A study of EFL listening comprehension strategies. (ERIC Document Reproduction Service No. ED 422 745).

Thompson, I., & Rubin, J. (1996). Can strategy instruction improve listening comprehension? Foreign Language Annals, 29 (3), 331-342.

Underwood, M. (1989). Teaching listening. New York: Longman.

Vandergrift, L. (1992). *The comprehension strategies of second language (French) learners*. Unpublished doctoral dissertation, University of Alberta, Edmonton, Alberta, Canada.

Vandergrift, L. (1996). Listening strategies of Core French high school students. Canadian Modern Language Review, 52 (2), 200-223.

Vandergrift, L. (2003). Orchestrating strategy use: Toward a model of the skilled second language listener. *Language Learning*, 53 (3), 463-496.

Weinstein, C. E., & Mayer, R. E. (1986). The teaching of learning strategies. In M. C. Wittrock (Ed.), *Handbook of research on teaching* (pp. 315-327). New York: Macmillan.

Wenden, A. (1987). Incorporating learner training in the classroom. In A. Wenden & J. Rubin (Eds.), *Learner strategies in language learning* (pp. 159-168). Englewood Cliffs, NJ: Prentice-Hall.

Wenden, A., & Rubin, J. (Eds.). (1987). Learner strategies in language learning. Englewood Cliffs, NJ: Prentice-Hall.

Wu, C. T. (2003). A comparison of English listening comprehension strategies used by Taiwanese EFL high school and college students. Unpublished doctoral dissertation, Texas A & M University, Kingsville, TX, USA.

Young, M. Y. C. (1997). A serial ordering of listening comprehension strategies used by advanced ESL learners in Hong Kong. *Asian Journal of English Language Teaching*, 7, 35-53.

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