

METACOGNITIVE AWARENESS OF LISTENING STRATEGIES

IN L2 ENGLISH AND L3 ITALIAN



ELİFCAN ÖZTEKİN

BOĞAZIÇI UNIVERSITY

2016

METACOGNITIVE AWARENESS OF LISTENING STRATEGIES

IN L2 ENGLISH AND L3 ITALIAN

Thesis submitted to the

Institute for Graduate Studies in Social Sciences

in partial fulfillment of the requirements for the degree of

Master of Arts

in

English Language Education

by

Elifcan Öztekin

Boğaziçi University

2016

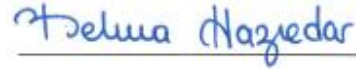
Metacognitive Awareness of Listening Strategies
in L2 English and L3 Italian

The thesis of Elifcan Öztekin
has been approved by:

Assoc. Prof. Gülcan Erçetin
(Thesis Advisor)



Prof. Belma Haznedar



Assist. Prof. Zeynep Çamlıbel
(External Member)



August 2016

DECLARATION OF ORIGINALITY

I, Elifcan Öztekin, certify that

- I am the sole author of this thesis and that I have fully acknowledged and documented in my thesis all sources of ideas and words, including digital resources, which have been produced or published by another person or institution;
- this thesis contains no material that has been submitted or accepted for a degree or diploma in any other educational institution;
- this is a true copy of the thesis approved by my advisor and thesis committee at Boğaziçi University, including final revisions required by them.

Signature 

Date 15.08.2016

ABSTRACT

Metacognitive Awareness of Listening Strategies

in L2 English and L3 Italian

Transfer of language skills across languages has been an essential question in the field of bilingualism. Theoretical approaches to this issue proposed assumptions on metacognitive awareness defined as learners' own introspective consciousness on their learning processes. Second language (L2) research on language skills has investigated transfer issue especially in reading skills; however, there is limited research on the transfer of language skills in third language (L3) learning and listening skills and strategies. To address this gap, the current study examined the role of metacognitive awareness in listening strategies in an L2 English L3 Italian context with university students in Turkey. The study explored learners' metacognitive awareness of listening strategies in their more proficient L2 compared to their less proficient L3, and whether L2 and L3 metacognitive level correlated with L3 listening comprehension. To this end, a questionnaire of metacognitive awareness of listening strategies in L2 and L3, and a listening comprehension test in L3 were implemented. Results indicated higher levels of metacognitive awareness in certain strategies depending on the language, pointing to the role of proficiency in the use of listening strategies. In addition, metacognitive awareness of listening strategies in L2 and L3 were significantly correlated, suggesting possible transfer of skills across languages. Finally, the results yielded a direct relationship between L3 proficiency and L3 listening comprehension while L2 proficiency was not related to L3 listening comprehension.

ÖZET

İkinci Dil İngilizce ve Üçüncü Dil İtalyancada Dinleme Stratejilerinde Üstbilişsel Farkındalık

Birinci dilden (D1) ikinci dile (D2) dil becerilerinin aktarımı olgusu ikidillilik alanyazınında önemli bir araştırma konusu olmuştur. Bu alandaki yaklaşımlarda, ikidilliliğin bilişsel beceriler ve öğrencinin kendi bilişsel süreçlerinin farkındalığı olarak tanımlanan üstbilişsel farkındalık üzerinde artırıcı etkisi olduğu öne sürülmektedir. İkidillilik alanında dil becerilerinin aktarımı olgusu daha çok okuma becerisine yoğunlaşmıştır, fakat bu alandaki varsayımların üçüncü dil (D3) ve dinleme becerisi konusunda araştıran çalışmalar sınırlıdır. Bu çalışma, üçüncü dil öğrenimini dinleme becerisi aktarımı ve üstbilişsel farkındalık açısından ele almıştır. Bu amaçla D2 İngilizce ve D3 İtalyanca profilinde Türkiye’de bir üniversitedeki öğrencilere dinleme stratejilerinde üstbilişsel farkındalık anketleri ve D3 İtalyancada dinleme testi uygulanmıştır. Bulgular dinlemede üstbilişsel farkındalığın D2 ve D3 içinde farklı olduğunu ve bazı stratejilerin D2 ve D3 arasında önemli ilişkilerini göstermiştir. Bunun yanında, belirli dinleme stratejilerinin D3 dinleme başarısıyla önemli ilişkileri saptanmıştır. D2 dil yeterlilik düzeyinin D3 dinleme başarısıyla doğrudan bir ilişkisi bulunmazken, D3 dil yeterlilik düzeyi ile önemli ilişkileri bulunmuştur. Bu çalışma, D3 öğreniminde dinleme becerisinin aktarımını üstbilişsel farkındalık ve dil yeterliliği konularıyla bağlantılı olarak araştırarak alanyazına katkıda bulunmayı amaçlamıştır.

ACKNOWLEDGEMENTS

This thesis has been a long and enlightening journey in my academic development. It would not have been such an invaluable experience for me if it were not for the guidance of my thesis advisor, Assoc. Prof. Gülcan Erçetin, therefore I should express my gratitude to her first for supporting me to complete this thesis. I have always kept my motivation thanks to her kind and thoughtful attitude towards me and her professional approach to our work even at hard times during this study. I will always feel grateful to her for the support and time she provided me on this thesis.

I would also thank my thesis committee members, Prof. Belma Haznedar and Assist. Prof. Zeynep Çamlıbel for their insightful suggestions for this study. I also feel indebted to Prof. Belma Haznedar for her contributions to my academic development by providing me new perspectives in my research interests.

My sincere thanks also go to Ivana Viappiani, who has provided me great help during the development and administration of tests in Italian. Her warm smile and positive energy have always helped me all the way through the difficulties of data collection in this study.

I should also mention my friends Ecehan Sönmez and Yavuz Kurt, with whom I shared my joy as well as my worries at all times during this study, and they have always encouraged me to concentrate on my work. I feel grateful to my colleagues, Filiz Rızaoğlu, Sezen Bektaş, Talip Gülle, Serhat Kurt, and Gizem Mutlu as well for their support. The lively and friendly office environment we created all together has always motivated me to go on when I lost my focus on work. I should also mention our dear furry friend Ponçık Fledgil who has meant a lot for us with her presence in our lives.

I finally thank my dear parents and lovely sister for their unconditional love and faith in me and my work, for which I always feel indebted in my life.

This thesis has been completed at the end of my graduate studies during which I received the financial support from TUBİTAK with 2210-A scholarship for graduate studies.



TABLE OF CONTENTS

CHAPTER 1: INTRODUCTION	1
CHAPTER 2: LITERATURE REVIEW	5
2.1 Development of the listening process and the models of listening	5
2.2 Learning strategies and listening skill	13
2.3 Metacognitive knowledge	14
2.4 Metacognitive awareness in listening.....	16
2.5 Metacognitive awareness and language proficiency	20
2.6 Transfer of language skills and strategies	23
2.7 Third language learning.....	26
CHAPTER 3: METHODOLOGY	29
3.1 Research questions and hypotheses.....	29
3.2 Participants	30
3.3 Instruments	33
3.4 Procedures	37
3.5 Data analysis.....	38
CHAPTER 4: RESULTS	40
4.1 Metacognitive awareness in L2 and L3.....	40
4.2 Metacognitive awareness and listening comprehension.....	44
4.3 L2 and L3 proficiency level and listening comprehension	45
CHAPTER 5: DISCUSSION	47
5.1 Metacognitive awareness in L2 and L3.....	47
5.2 Metacognitive awareness and listening comprehension.....	48
5.3 L3 listening comprehension and language proficiency in L2 and L3	50
CHAPTER 6: CONCLUSION.....	53
APPENDIX A: METACOGNITIVE AWARENESS LISTENING QUESTIONNAIRE (MALQ).....	55
APPENDIX B: L3 LISTENING COMPREHENSION TEST (ITALIAN TEXT 1).....	56
APPENDIX C: L3 LISTENING COMPREHENSION TEST (ITALIAN TEXT 2).....	57
APPENDIX D: L3 LISTENING COMPREHENSION TEST (ITALIAN TEXT 3)	58
APPENDIX E: DEMOGRAPHIC AND LINGUISTIC INFORMATION FORM	59
REFERENCES	60

LIST OF TABLES

Table 1. Descriptive Statistics for L2 and L3 MALQ Components Based on Percentage Scores	40
Table 2. Language Status and Metacognitive Awareness in Relation to L3 Listening Comprehension	41
Table 3. Inter- Correlations among L2 and L3 Metacognitive Awareness Components Based on the MALQ.....	44
Table 4. Correlations between MALQ Components and L3 Listening Comprehension	45
Table 5. Descriptive Statistics for Higher and Lower L3 Italian Groups on L3 Listening Comprehension Test	46



CHAPTER 1

INTRODUCTION

The notion of metacognition has been an essential issue of theorization and research in the field of learning and language development. In very fundamental terms, metacognition refers to one's own introspective hold of cognitive functions and processing on a conscious level. Flavell's 1979 model of metacognitive knowledge has been an influential attempt to structuralize metacognitive knowledge. Three basic components of metacognitive knowledge are defined under this model. These are person knowledge, task knowledge and strategy knowledge. In a wide sense, metacognitive knowledge entails individuals' inner holdings on their personal potentials in learning a language, the knowledge of cognitive requirements of certain tasks or knowledge of what strategy to apply for what goals (Flavell, 1979). In general, research has revealed an advantage for learners with higher metacognitive awareness in obtaining higher listening comprehension scores in L2 (e.g. Goh, 1998; Graham, 2006).

Assessment of metacognitive awareness primarily relies on methods such as interviews and diaries which require learners to reflect upon and report the inner processes or strategies used during the learning process (e. g. Goh, 1997, 1998; Mareschal, 2002; Vandergrift, 2002, 2005; Goh & Hu, 2014). Along with qualitative methods, attempts have also been made to develop standardized instruments to measure metacognitive awareness through a reflection of complex cognitive processes regarding the end product. To this end, moving from Flavell's 1979 metacognitive knowledge model as the theoretical basis, Metacognitive Awareness Listening Questionnaire (henceforth MALQ) was developed by Vandergrift, Goh,

Mareschal, and Tafaghodtari (2006) with the aim of exploring learners' own reflections on their own processes in a systematic way by providing them a guide to monitor their own strategies. A number of studies implemented the MALQ with different second language (L2) learners along with listening comprehension measures (e.g. Al-Alwan, Asassfeh & Al-Shboul, 2013; Bidabadi & Yamat, 2011; Coskun, 2010). The questionnaire requires the learners to rate themselves on given listening strategies in relation to different constructs derived from metacognitive knowledge model. Research findings so far have generally shown a positive relationship between learners' reported metacognitive awareness level and listening comprehension scores in the second language.

An important question that remains to be answered is whether metacognitive knowledge is transferable across languages. The question of transfer in bilingual or multilingual literature is largely concerned with syntactic or pragmatic transfer (e.g. Carvalho & Silva, 2006; Slabakova & Garcia Mayo, 2013). Transfer of language skills across languages has also been investigated but mainly in relation to reading. The question of whether poor reading performance in 2 stems from a poor first language (L1) reading ability or from low L2 language proficiency poses the problem of skill versus language in reading skills (Alderson, 1984). Theoretically, the issue of transfer is grounded in the developmental interdependence hypothesis (DIH) and the threshold hypothesis (TH). While the former argues for common skills underlying first and second language, allowing for transfer of skills from L1 to L2 if they are automatic and fluent in the L1, the latter argues for the necessity of a certain level of language proficiency in the L2 for transfer to take place.

Metacognitive awareness is attached to the cognitive growth of language learners in the framework and it is hypothesized to display a positive relationship

with proficiency in all the languages in mind. In a similar vein, the DIH assumes that proficiency above threshold levels in languages create a certain set of skills and strategies that help learn other languages more efficiently, making the individual more advantageous with an enhanced cognitive ground for a multilingual mind. The main focus point of this theoretical scrutinizing has been on bilingualism with evidential basis drawn from L2 acquisition research. However, with the increasing number of third language (L3) learning settings in the educational area, it becomes possible to stretch the assumptions of these theories towards multilingual settings where the interaction of more than one language is at play. Lasagabaster (2000) recorded an early attempt of such an implementation of this theorization in a study where language skills of secondary school students are investigated in L1, L2 and L3 language abilities with relation to language instruction types in Spanish, Basque and English languages in Spain. The students with a balanced command of L1 and L2 displayed higher achievement in L3 skills compared to students with lower competence levels in L2, although the students' L1 competence was comparable. This finding could be interpreted as a confirming piece of evidence for the assumption that language proficiency in all learned languages attained above a threshold level could contribute to the learning of additional languages.

The transfer of listening skills in general and metacognitive awareness of listening strategies with particular focus on third language learning is an under-investigated area. Hence, the present study aims to investigate the relationship of L3 listening comprehension with metacognitive awareness in L2 and L3 for Turkish-English-Italian multilinguals with different levels of proficiency in the L2 and L3. To this end, the data regarding metacognitive awareness on listening were collected using the MALQ (Vandergrift et al., 2006) in L2 English and L3 Italian. Listening

comprehension in L3 was measured through a multiple-choice listening comprehension test developed by the researcher. The data were analyzed in relation to the participants' proficiency levels in L2 and L3. As such, the current study aims to present an essential common ground to explore possible interrelations between L2 and L3 metacognitive awareness in listening and, L3 learning from a language skill perspective and language proficiency aspects.



CHAPTER 2

LITERATURE REVIEW

2.1 Development of the listening process and the models of listening

Language establishes itself as a set of meaningful symbols that are encoded in the form of visual and aural, verbal and non-verbal symbols to serve for communication of messages among its users. In this respect, the users of any form of language perform four basic skills: reading, listening, speaking and writing. If communication through a language is to be decomposed into these basic skills, it is essential to mention the basic contrast between receptive and productive nature of them. As one of the two receptive skills, listening draws attention for its role in comprehension and as a basic supply of input essential for productive output in language use.

In order to provide a systematic flow of theoretical frameworks of listening, it is essential to follow an order starting from the mechanical building of listening processes to the complexity of this ability in relation to other interrelated contextual and psychological factors. Therefore, listening processes will be discussed in the comprehensive manner introduced by Rost (2002, 2011) in order to open up the discussion and continue to some componential models of the skill (Bae & Bachman 1998, Freedle & Kostin 1994, 1999).

Rost (2002, 2011) establishes a comprehensive account of linguistic and cognitive processes that underlie the listening ability. Although single functions are not sufficient to explain the complexity of the listening process, the transactional interactions between different elements are important in explaining how listening occurs and functions for language comprehension within the whole language paradigm.

Before all language-related processes, Rost (2002, 2011) describes neurological processing as the physiological basis for listening to occur. By this account, how hearing and listening differ is indicated in fundamental features and certain cognitive executions to make listening a part of language and comprehension in humans. In a very basic sense, hearing constitutes the source of environmental input by allowing for “reception and conversation of sound waves” (Rost, 2011, p. 11). This step is performed through the involvement of the sound recognition system through ears to the brain in the physiological path. After the mechanical process of transmitting the physical input to the brain, some cognitive functions are executed which provide the basis for listening to occur. At this point, Rost (2011) mentions two essential factors to distinguish hearing from listening: consciousness and attention. These two important functions work in close interaction as consciousness is the mechanism that triggers attention as Rost also puts consciousness as “the root concept for describing the processes that initiate attention, meaning construction, memory and learning” (2011, p. 17). In this respect, it is possible to visualize the first essential aspect of listening as the conscious attention paid to aural input from the environment. The first signals for the individual to start making meaning out of the auditory input can be related to the context which includes the clues in this account as “consciousness involves the activation of portions of the listener’s model of the surrounding world – a model that is necessarily self-referenced” (Rost, 2011, p.17). In relation with consciousness, attention is the final essential cognitive mechanism, which is “the focus of consciousness on an object or train of thought, which activates parts of the cortex that are equipped to process it” (Rost, 2011, p.19).

Having the neurological processing as the first physiological background for listening, linguistic processes continue to build on for the final product of the path.

As the brain works through the neurological input to construct meaning, encoded symbols of language come into play starting from segmental levels.

Rost continues his account with linguistic processes with how phonological units of language help perceiving speech, the processes of word recognition and the role of phonotactic rules, elements of parsing the string of speech, the influence of prosodic features in language and non-verbal cues that facilitate listening in various contexts.

As the very first step of linguistic processing, the perception and recognition of sounds and words play the basic role in the complete procedural hierarchy. Rost explains this in a meticulous description:

Humans perceive speech through the sampling of sound characteristics in the speech signal frequency, duration and amplitude. The redundant nature of the speech signal allows for selective sampling. The listener does not need to attend to the speech signal continuously to assure accurate perception. (2011, p.27)

The next step that involves these particular units of sounds brings word recognition process. Phonemes (or segments) signpost particular building elements within word recognition and this process is essentially automated as the nature of the spoken language also involved a string of speech sounds within particular linguistic forms. The bridge that incorporates the extraction of meaning with the word recognition process is two-fold: identification of words and lexical phrases, which are “formulaic elements consisting of frequently used clitic groups and phonological words”, and activation of knowledge related to these words and phrases (Rost, 2011, p. 35).

The nature of the input that one attends to during listening does not always base on verbal resources such that the roles of non-verbal as well as visual sources

cannot be ignored. As one distinctive factor of this type, kinesic signals are described, which involve the body and even eye movements of speakers during their speech in a very plain sense. One subcategory of these signals are baton signals that include “hand and head movements” (Rost, 2011, p. 51). Another is directional gaze that is “eye movement” establishing a connection between the audience and the speaker without any verbal communication, while guide signals mean “the systematic gestures and the movements of any part of the body, such as extending one’s arms or leaning forward” (Rost, 2011, p.51). Considered from all the aspects documented in the account, the linguistic processes provide the basis for constructing meaning at mechanical and formal levels.

The next step beyond neurological and linguistic processes toward making meaning is the level where semantic processes occur. These functions cover the mapping of recognized words with existing language and world knowledge involving an interaction of different cognitive processes. Rost particularly mentions the concept of schemata as this term gathers the basic process of meaning making through constant adaptations between the new piece of input and the existing knowledge in the conceptual mappings that the mind constructs. At this point, a schema is “a figurative description for any set of simultaneous activated connections (related nodes) in the vast frontal cortex of the brain” (Rost, 2011, p.58). When the smallest mechanism of extracting meaning out of given input is visualized with the notion of schemata, inference gains an important role in meaning construction. The reasoning behind this process is given as the following:

Since we do not have direct access to a speaker's intended meaning in producing an utterance or a series of utterances (and since the speaker often is not fully aware of all of his or her intended meanings in any event), the listener has to rely repeatedly on the process of inference to arrive at an acceptable interpretation of each utterance and the connection between a series of utterances. (Rost, 2011, p. 61-62)

The bidirectional nature of verbal communication establishes the notion of discourse in language and this brings certain conversational features, which creates a pragmatic basis for communication. As pragmatics entails the contextual network of linguistic forms and intended meanings in particular boundaries, the interpretation of messages by the listener gains a different processing level with relation to conversational discourse.

Rost's detailed account of the linguistic and neurological processes that build up the complex nature of listening that leads to comprehension suggests the employment of two basic directions of processing of information: bottom-up and top-down processing. These two terms have a rather wide range of use in the literature and theoretical accounts regarding listening and comprehension issues. These processes have been widely used in the theorization of foreign language reading and listening. As receptive skills, due to the similarity in the nature of processing input in reading and listening, they are frequently applied to explain processes in both skills; therefore some models are applicable to reading as well. For instance, Field (1999) states:

In accounts of foreign-language listening and reading, perceptual information is often described as "bottom up", while information provided by context is said to be "top-down". The terms have been borrowed from cognitive psychology, but derive originally from computer science, where they distinguish processes that are *data-driven* from those that are *knowledge-driven*. (p. 338)

This description summarizes an ongoing transfer of the listener between more piece-by-piece processing steps in phonological level, which signifies bottom-up term, and those that aim to make meaning by connecting the information to semantic connotations and contextual clues known to the listener through pragmatic competence in the language, which implies top-down term in the terminology.

To extend the view from cognitive perspectives, the comprehension processes models take an approach in text level and an example from Kintsch (1998) visualizes the process this way: “The chapter and the lecture have to be processed word by word and sentence by sentence. As each text segment is processed, it is immediately integrated with the rest of the text that is currently being held in working memory” (p.101). The processing Kintsch describes here emphasizes the online processing of a given text in reading which shows a parallelism with other top-down and bottom-up processes in an integrated manner that could be hypothesized to be adapted by listeners during listening as well. If a similar action of transforming these processes rapidly to construct meaning takes place during listening as well, it might occur in a sequence of decoding the input at phonemic level and placing that analysis into existing frameworks in mind to have word-level meaning. This step can be integrated with employing larger units of pragmatic and semantic clues built up in the form of schemata to make use of background knowledge.

An examination of bottom-up and top-down approaches to listening leads Buck (2001) to propose an interactive model of listening:

[...] listening comprehension is the result of an interaction between a number of information sources, which include the acoustic input, different types of linguistic knowledge, details of the context, and general world knowledge, and so forth, and listeners use whatever information they have available, or whatever information seems relevant to help them interpret what the speaker is saying. (p. 3)

From this account, it could be noted that an all-inclusive employment of cognitive resources can be at play during listening. Such a process would suggest that application of bottom-up processing of aural input at phonemic level in its smallest unit is meaningful only when it is processed with a top-down functioning in order to result in meaning making, in a way what could be called comprehension.

In a different but related perspective regarding influences of individual differences on reading proficiency, Stanovich (1980) evaluates top-down and bottom-up approaches of processing with relation to interactive-compensatory models, which Stanovich finds more comprehensive to explain reading process and states: “Word recognition during ongoing reading can be facilitated by expectancies based on the prior sentence context. Interactive-compensatory processing appears to be operating during this process, since poorer readers often show larger contextual facilitation effects than do good readers” (p. 64). The difference in poor and effective readers’ reliance on their background knowledge or the immediate context provided during listening is still explained through an ongoing integrative process of top-down and bottom-up processing through a compensatory function.

In an attempt to evaluate the use of the top-down and bottom-up processes for comprehension tasks in an L2 reading and listening setting, Park (2004) investigated the participants’ listening and reading comprehension performances with relation to linguistic knowledge, background knowledge and question types. The data were

obtained from 168 Korean students learning English at a university in Korea. The findings of the study showed that the role of background knowledge was larger for L2 listening as the participants processed inferential information more easily than factual information while the opposite was observed for reading process. Park interprets the findings of the study under the light of “interactive process model”, and the assumption of the model is defined as “...L2 listening and L2 reading comprehension can be summarized as ‘linguistic knowledge + background knowledge’” (p. 449).

In a similar vein, Bae and Bachman (1998) examined reading and listening performances of second, third and fourth grade Korean-American and non-Korean-American children learning Korean. It was found that although listening and reading are two separable factors, there is a considerably high correlation between the two skills. The examination of these skills with young students also provided a new perspective for the investigation of these skills with relation to the components of oral and visual comprehension studies.

What underlies the theoretical background suggests an important role of top-down and bottom-up processing types in reading and listening skills. Interactive models between these two types offer a more comprehensive account. The purposeful use of all these processes by language learners to achieve comprehension provides the ground for the noting of language learning strategies. The next section will provide a background for language strategies with particular attention to the listening skill in L2 learning.

2.2 Learning strategies and listening skill

The goal or outcome of the listening process is comprehension or making meaning out of the text which primarily depends on learners' background knowledge. In other words, listeners can make different meanings out of the same text depending on their background knowledge. In this process, the use of strategies by the listener is of primary importance.

Hall (2001) defines learning strategy as "goal-directed actions that are used by learners to mediate their own learning" (p. 92). Applying the concept of learning strategies into language learning, Oxford (1990) provides a comprehensive model of language learning strategies and categorizes them under direct and indirect strategies as two main groups. Oxford differentiates between cognitive and metacognitive strategies in that cognitive strategies fall under the direct strategies category and involve synthesis of language structures, translations or analyzing. On the other hand, metacognitive strategies fall under indirect strategies and involve learners' own monitoring of their learning process, setting goals or evaluating their own errors.

Applied into the listening skill in L2 learning, Vandergrift (2005) explores listening strategies on a questionnaire that includes items tapping on cognitive, metacognitive, and affective strategies. Cognitive listening strategies referred to abilities such as focusing on formal similarities of words or speakers' voice tones at points of difficulty in comprehension. Metacognitive listening strategies on the other hand, involve abilities such as evaluating one's own understanding during listening, monitoring points to paying particular attention to, or using comprehension questions as cues to aid listening comprehension during the task. Defined as metacognitive-affective strategy, Vandergrift includes an item tapping the listeners' self-regulatory

mechanism to maintain self- motivation and recover their attention when faced with difficulty in understanding.

Vandergrift's cognitive listening strategies are similar to Oxford's cognitive language learning strategies in that they focus directly on structural aspects of the target language. Metacognitive listening strategies, on the other hand, focus on abilities such as monitoring and evaluating understanding during listening, determining particular key points to check comprehension or setting goals during listening.

2.3 Metacognitive knowledge

The notion of one's own control on cognitive processes performed during tasks has received many attempts of definition in the literature. The term "metacognition" is linked to such constructs as "metacognitive knowledge" or "metacognitive awareness" in theoretical mappings with different conceptual networks. Hence, it should be useful to overview the definition of the term and move towards its relationships to other constructs examined in research.

Shimamura (2000) basically defines metacognition as "evaluation and control of one's own cognitive processes" (p.313). The emphasis on one's own inner control of cognitive processes is observed as some of this approach stemmed from studies focusing on individuals' ability to keep track of their own memory and attention processes to remember items using certain techniques such as mnemonics (e.g. Brown, 1978) or the notion of metamemory (e.g. Flavell & Wellman, 1977) which is suggested to be related to one's own introspective vision of memory.

In a similar vein, Nelson (1996) relates metacognition to the feeling of knowing based on a critical synthesis of research in the field (p. 106). Feeling of knowing as a construct received attention in two studies Hart (1965) conducted with undergraduate psychology students. Using a Likert-scale, the students were asked to rate their “feeling of knowing” about some questions such as ‘the largest planet’ or ‘the playwright of a famous classical play’. The accuracy of the answers were compared to the feeling of knowing scores. The results of two similar experiments Hart (1965) reported indicated that the measures of “feeling of knowing” judgments reflected a certain level of accuracy as indicators of what is kept in memory (p.214). Further investigation of the relationship between the feeling of knowing (also referred to as FK) about correctly answered and unanswered or unrecalled general information questions and memory storage indicated that there can be a significant link between the self-monitoring measured through FK and what is actually stored in memory. This suggests that the students’ intuitive judgments on their success or failing in recall revealed an accurate reflection of their performance on the tests (e.g. Hart 1967a, 1967b). These findings can suggest that one’s own intuitive judgments about what he knows or remembers can accurately reflect the true material that is processed in the mind.

Flavell (1979) defined metacognitive knowledge as “the segment of your (a child’s, an adult’s) stored world knowledge that has to do with people as cognitive creatures and with their diverse cognitive tasks, goals, actions and experiences” (p. 906). Flavell proposed a model of metacognitive knowledge that provided a basis for various theories and measures of metacognition related to language. The model involves three basic types of metacognitive knowledge: person knowledge, task knowledge, and strategy knowledge.

“Person knowledge” entails “everything that you could come to believe about the nature of yourself and other people as cognitive processors” (Flavell, 1979, p.907). This notion can further be enlarged to one’s personal holdings about how he himself learns a particular concept in a set of cognitive processes as well as other people’s learning. It can also cover one’s personal learning preferences such as defining oneself as a visual learner that chooses visual channels to process content.

Task knowledge identifies the type of “information available to you during a cognitive enterprise” (Flavell, 1979, p.907). It could include the knowledge that a certain type of task might require more complicated steps than others, for instance, thinking that writing an essay is a harder task than a dictation task. The strategy knowledge involves “strategies that are likely to be effective in achieving what subgoals and goals in what sorts of cognitive undertakings” (p.907). This type of knowledge can be exemplified with one’s knowing that paying particular attention to less known pieces of information and connecting them with previously learned parts repetitively.

2.4 Metacognitive awareness in listening

The methodologies used to investigate the metacognitive awareness constructs with relation to listening varied across different studies. Goh (1997) investigated 40 ESL learners’ beliefs and knowledge about their listening through the examination of their diaries. The qualitative analysis of these diaries indicated that learners had a clear understanding of some major points related to listening such as strategies to use for better comprehension, the demands of tasks in listening and their potentials and personal states with relation to listening. Other qualitative studies also involved the

administration of motivation questionnaires, reflective exercises, group interviews along with listening comprehension tasks (e.g. Goh, 2000; Vandergrift, 2002, 2005). Several studies also investigated the relationship between listening comprehension and metacognitive knowledge with a particular emphasis of strategy knowledge supporting learning in findings (Nisbet & Shucksmith, 1986).

Despite the predominance of qualitative methods of data collection, the development of standardized instruments tapping metacognitive knowledge opened up a different perspective to the field. In this regard, Vandergrift, Goh, Mareschal, and Tafaghodtari (2006) made an important contribution to the field with the development of Metacognitive Awareness Listening Questionnaire (MALQ). In the light of Flavell's (1979) model of metacognitive knowledge, the MALQ consists of five components reflecting Flavell's basic model of metacognitive knowledge. One of these components is named "problem solving", which taps such strategies as making inferences and checking these inferences at points where the learners lack comprehension during listening (Vandergrift et al, 2006, p. 450). The second component is called "planning and evaluation" that covers such skills as preparing oneself for the task before listening and making connections to previous knowledge during listening. The third component called "mental translation" involves the listeners' translation of the input in the target language into another language in his mind during listening. It implies a negative strategy which is not observed in advanced listening; therefore, successful listeners are expected to apply this component as little as possible. Items pertaining to "person knowledge" refer to the learners' opinions about the difficulty they perceive about listening or affective attitudes towards listening among other language skills namely, reading, writing and speaking. The last component named "directed attention" involves the listeners'

ability to repair their concentration on the task at points they fail to comprehend the text. The questionnaire consists of a total of 21 items pertaining to the components defined above with different numbers of items pertaining to each of them (problem solving represented with six items, planning and evaluation with five items, mental translation with three items, person knowledge with three items, and directed attention with four items), which are evaluated on a six-point Likert scale by the learners. The final version of the questionnaire was obtained after an exploratory factor analysis was conducted with data from 966 language learners and a confirmatory factor analysis upon data from another group of 512 language learners.

The studies applying MALQ range within a diverse context of learners and languages. Vandergrift and Tafaghodtari (2010) applied MALQ with 106 learners of French as a second language (FSL) context. The experimental group received an instruction of mental strategies that are hypothesized to take place during successful listening while the control group had no training before the listening comprehension tests. The metacognitive awareness levels of the learners were measured using MALQ. The results indicated a significantly better performance of the experimental group, which confirmed the researchers' expectation. The administration of MALQ before and after the experimental process also allowed observing a greater growth in the metacognitive awareness levels of less skilled learners in the control group.

Zeng (2014) reports another study where MALQ is administered with 90 Chinese EFL learners and an intervention study testing the effectiveness of metacognitive listening training compared to traditional approaches. The findings indicated that although both metacognitive and traditional training groups exhibited growth in listening comprehension, the metacognitive instruction group performed significantly better than the traditional instruction group. Zeng argues that the

administration of the MALQ might have exerted an accelerative influence over metacognitive awareness of the control group as well. Considering that one of the potential uses of the MALQ is to raise learners' awareness through helping learners tap on the strategies reflected in the items (Vandergrift et al., 2006, p. 452), the interpretation augments the effectiveness of the instrument in its instructional value.

A correlational investigation of metacognitive awareness and listening comprehension based on the data from 386 tenth-grade EFL students in Jordan (Al-Alwan, Asassfeh, & Al-Shboul, 2013) indicated that the learners reported higher levels of employment of strategies related to problem solving and lower levels in person knowledge among all the other subconstructs. Problem solving, planning and evaluation, person knowledge and directed attention were detected to be variables that predicted the L2 listening ability. These findings might suggest that certain subcategories interplay at different rates in listening comprehension in different contexts.

Yeganeh (2013) compared sixty Iranian-English bilingual and sixty Iranian monolingual participants on the MALQ in terms of their listening in an EFL context. The results indicated that bilingual participants reported higher levels of metacognitive awareness than monolingual participants, which suggests that knowing more languages might have a positive influence on metacognitive awareness.

2.5 Metacognitive awareness and language proficiency

Among various independent variables investigated in relation to metacognitive awareness and language skills, language proficiency deserves a special attention. Zhang and Wu (2009) examined the role of metacognitive strategies in reading achievement with Chinese EFL students at high school level. Proficiency-related results showed that advanced students outperformed intermediate and low-level groups in global and problem-solving strategies in reading while there were no statistically significant differences across the levels in support strategy use.

A longitudinal study of foreign language learning strategies and the strategy use of less proficient and more proficient students over time in the course of an instructional treatment setting was conducted with 34 college students learning Russian and 67 high school students learning Spanish as a foreign language (Chamot, O'Malley, Kupper, & Impink-Hernandez, 1987). The groups were attending two different proficiency levels of the language classes based on the course instructors' classification of students as effective and ineffective learners. Data the SILL (Strategy Inventory for Language Learning) and interviews showed that the proficiency groups did not differ in terms of the learning strategies they used. On the other hand, the frequency of metacognitive strategies involving evaluation, planning and monitoring increased over time at all levels. Based on the observation that ineffective learners reported use of strategies as effective learners did, the researchers criticize the assumption that poor learners do not use strategies. However, it was also observed that the frequency of the reported use of strategies by effective learners was higher than that of ineffective learners. The analysis of think-aloud tasks conducted during certain language tests also revealed that effective learners used more and a wider range of metacognitive and cognitive strategies than ineffective learners (p.

75). These findings imply that proficiency might positively influence strategy use for effective performance in listening tasks.

Vandergrift (2005) defined motivation in three orientations with amotivation (AM) as the “lack of motivation” that signifies the learners’ unwillingness to learn L2 French in the particular context, while intrinsic (IM) and extrinsic motivation (EM) define self-determined and instrumental types of motivation respectively (p.72). In this study, proficiency was examined with relation to variables of motivation and metacognitive awareness reporting an implication that a higher metacognitive awareness in listening could be observed in more motivated learners. The study is conducted in L2 French setting at a Canadian junior high school. The relationship between listening proficiency as measured through comprehension test and AM showed a negative correlation while small correlations were found between comprehension and both IM and EM. Based on this finding, Vandergrift suggests that the reason for small correlations between proficiency and motivation might stem from learners’ immigrant backgrounds. It might be the case that despite higher intrinsic motivation to learn French, insufficient French proficiency might hinder learners from performing well enough in a comparable degree to motivation (p. 84). In terms of metacognitive awareness measured with listening strategies questionnaire, as motivation status increased from AM to EM and IM, correlations with listening strategies increased.

On similar grounds, Wu (2008) investigated language learning strategies used by 137 ESL students at a university in Taiwan. Two groups of English proficiency were defined by Wu. 49 sophomore students were categorized as higher level proficiency group while 88 freshmen as lower- level proficiency group. A general English proficiency test and the SILL were used for data collection. The results

indicated that the higher proficiency group used metacognitive strategies as well as cognitive and social strategies more often than lower proficiency group. Although there was no significant difference in memory strategies between the two proficiency levels, English proficiency had a significant relationship with cognitive strategies. It should be noted for the setting of this study that strategies defined as cognitive strategies included such skills as synthesis of the target language, analysis, transformation and translation while metacognitive strategies entail planning learning goals, monitoring and regulating one's own learning (Wu, 2008, p. 78). The classification of these skills might fall under metacognitive strategies within different definitions, therefore, the relationship observed between cognitive strategies and language proficiency could exhibit a similar pattern for metacognitive strategies and language proficiency.

Another study (O'Malley, Chamot, Stewner-Manzaneres, Kupper, & Russo, 1985) that categorized participants as intermediate and beginning students on the basis of English proficiency in an ESL context reported that more proficient learners reported more frequent use of strategies along with the observation that students employed strategies more frequently with less complex tasks. The study confirmed that higher proficiency levels in language taps more frequent use of strategies, which could also be connected to higher levels of metacognitive awareness.

Park (1997) also investigated the relationship between L2 proficiency and language learning strategy use with university students in Korea. The findings showed that cognitive and social strategies explain 13 % of the variance in TOEFL scores of the participants. These findings are similar to previous research in that individuals who are more successful in the measures of language performance tend to employ a wider range of strategies with higher levels of frequencies.

The review of the relevant literature suggests that L2 proficiency is closely related to metacognitive awareness and higher levels of L2 achievement involves wider and more frequent use of strategies. It is possible to conclude that metacognitive awareness might have a positive relationship with language proficiency as it is hypothesized to facilitate language tasks (O'Malley et al., 1985). It is necessary to investigate the place of language proficiency in understanding the phenomena related to metacognition in a more detailed and wider perspective.

2.6 Transfer of language skills and strategies

The question of whether the language skills gained in L1 are transferable to L2 during skills development has received substantial attention in bilingualism research. Two main hypotheses are proposed regarding the transfer of skills across languages. The developmental interdependence hypothesis (DIH) initially proposed by Cummins (1979, 1991) posits that academic language skills transfer from L1 to L2 in that those who have developed literacy in their L1 will make stronger progress in the L2 as well. This implies that L1 and L2 share common underlying skills and that when L1 skills become automatic and fluent, they will transfer to the L2 (Grabe, 2009). On the other hand, the language threshold hypothesis (TH) posits that transfer of skills across languages is only possible beyond a certain level of proficiency in the L2. Clarke (1988) called this the *short-circuit hypothesis* such that the lack of proficiency in the L2 may lead the use of poor reading strategies. As such, Alderson (1984) posed the question of whether poor reading skills in L2 stem from a general reading problem observable in L1 or from a lack of L2 linguistic knowledge that hinders learners from applying reading skills for comprehension. If it is a reading problem, then it is assumed that poor readers in L2 are poor readers in L1 as well. On

the other hand, if it is a language problem, poor reading ability in L2 stems from the lack of L2 knowledge that prevents the use of L1 reading strategies in L2 reading. While the literature provides convincing evidence for the TH (Grabe, 2009), the evidence for the DIH remains inconclusive since arguments lack conceptual definitions of good and poor L1 readers to argue for a general reading ability missing in L2 as well (e.g. Cowan & Sarmad, 1976; Cowan, 1976).

In a recent thesis study, Garrison-Fletcher (2012) examines the question for L2 reading in adolescents in L1 Spanish and L2 English context. Measures of L1 reading comprehension, L1 and L2 vocabulary and syntax knowledge were tested on L2 reading comprehension as a dependent variable. The results indicated that L1 reading comprehension was the most important predictor on L2 reading comprehension leaving L2 linguistic knowledge behind in the order of importance. Regarding the general reading or L2 language problem dichotomy, the researcher interprets the results as an indication of L1 skills as more important predictors of L2 skills achievement after a certain level of proficiency is achieved in L2.

In another study, Pichette, Segalowitz & Connors (2003) examined L1 Serbo-Croatian adult L2 French learners' reading skills in relation to the role of active reading in L1. The results indicated that although individuals who did not actively use their reading skills in L1 achieved L2 reading comprehension tasks, the group that maintained the L1 reading skills active had an enhanced level of L2 reading performance. This might indirectly suggest that more actively used L1 skills that help develop better reading ability in L1 enhance the same skills in L2 with a cross-language transfer effect.

The development of reading skills are investigated in both micro-level skills such as phonological awareness, word recognition, orthographic awareness (e.g. Cardenas-Hagan, Carlson, & Pollard-Durodola, 2007; Durgunoğlu, Nagy, & Hancin-Bhatt, 1993) and macro-level processes in text comprehension aspect (e.g. Jung, 1992; Graham, 2012) as well. A general figure deriving from these studies point to the relationships of L1 micro-skills that are prerequisites of reading comprehension with L2 micro-skills of reading. Although these skills do not form reading comprehension at text level as a global skill, the basic mechanical aspects of reading in L1 and L2 demonstrate some relationships that could have a similar direction for macro-level skills.

The issue of skills transfer in relation to listening has not received as much attention as reading. An outstanding step has been recorded in Vandergrift's (2006) work with English-speaking learners of L2 French. The measurements of L1 and L2 listening comprehension as well as L2 proficiency were applied to investigate the related factors on L2 listening comprehension. The analyses showed L1 listening comprehension and L2 language proficiency as significant predictors of L2 listening comprehension. Compared to the role of L2 proficiency on L2 reading comprehension, this study does not reveal L2 proficiency as a robust predictor of L2 listening comprehension. This leaves a larger role for L1 listening comprehension in explaining the variance in L2 listening comprehension; however, Vandergrift states that L2 proficiency should be operationalized through valid vocabulary and grammar tests in order to examine the role of L2 proficiency thoroughly.

In the light of the previous research and theoretical discussions of skills transfer in L2, it is observed that listening comprehension needs more attention to understand the nature of cross-language transfer of skills other than reading. The rise

of third language learning contexts provides a different perspective for the skills transfer issue, raising the questions of whether the transfer of L2 skills to L3 is possible. However, these questions have not yet been asked with structured research study designs. Next section will examine the prevailing questions of existing research in third language learning and what has been recorded so far in the field.

2.7 Third language learning

The field of L3 acquisition has its roots in the investigation of linguistic development and cross-linguistic influence from L1 and L2 during the acquisition of a L3 (e.g. Cenoz, 2003). The cross-linguistic influence perspective created different approaches to L3 acquisition and three main L3 acquisition models were proposed in the field: L2 status factor (Bardel & Falk, 2007, 2010), the Cumulative Enhancement Model (Flynn, Foley & Vinnistkaya, 2004) and the Typological Primacy Model (Rothman and Cabrelli Amaro, 2010; Rothman, 2010). These models seek to provide an account of possible roles for L1 and L2 over L3 learning and interactions between these languages in the multilingual mind. The available studies provide the evidential basis focus on the acquisition of lexicon (e.g. Schönplflug, 2000; Molnár, 2010; Ringbom, 2001), syntax (e.g. Carvalho & Silva, 2006) or syntax-pragmatics interface areas (e.g. Slabakova & Garcia Mayo, 2013).

As such, L3 acquisition research focused primarily on transfer of L1 and L2 knowledge leaving a large gap in terms of transfer of skills. Although the transfer of language skills (e.g. reading, listening) across languages has received substantial attention within bilingual contexts, it is largely ignored in L3 learning. In a wholistic perspective, TH and DIH posit that the acquired language skills in L1 are transferred

during L2 learning and that there is a minimum level of proficiency to be achieved in L1 and L2 (the threshold level) in order to benefit from the cumulative advantages of both languages.

The growing roots of TH and DIH lie in bilingual research and there is not much attempt to extend the assumptions of these hypotheses into L3 learning context. One pioneering study in this respect is reported by Lasagabaster (2000), who examined trilingual children in an academic context in Spanish-Basque linguistic environment. Applying the implications of DIH to L3 learning, it was observed that bilingual children with higher proficiency levels in both L1 and L2 in grade 5 and 8 demonstrate a higher performance on academic language skills in L3 English than children with lower levels of language proficiency in their L1 and L2. The students in the study were selected from educational institutions that implemented different linguistic models with model D involving an immersion program in Spanish and Basque. This program had both Spanish and Basque as medium of instruction and students obtain higher scores in Basque, while model B is a partial immersion program with mediocre levels of Basque proficiency. And model A is the regular program in which Basque is taught as a subject matter with L1 Spanish as the medium of instruction. With the assumption that students in model D as the closest to balanced bilingualism, the performances of L3 English was investigated through listening, reading and writing tests in L3 English. The results of the study was consistent with the assumption in that students from model D outperformed the students in models A and B in both grade 5 and 8 in all L3 English tests. As far as the Basque and Spanish proficiency levels are concerned, model D and B students were better than model A students in L2 Basque, while the L1 Spanish levels were significantly the same across the three groups.

As observed in the relevant literature, the transfer of language skills in L3 learning needs more attention with use of language-skills orientation in methodology. Although L2 reading and listening skills received some attention within bilingual contexts with relation to proficiency in L1 and L2, the assumptions of TH and DIH are important to be discussed in L3 learning in terms of transfer of L2 skills in to L3. Therefore, the current study aims to shed light on L3 listening skill in the framework of L2 and L3 proficiency. Questions of whether L2 and L3 proficiency have a relationship with L3 listening comprehension will receive particular attention within the scope of the present study.

CHAPTER 3

METHODOLOGY

3.1 Research questions and hypotheses

This study examined the interrelationships of L2 and L3 proficiency level and metacognitive awareness with L3 listening comprehension with a view to examine the role of metacognitive awareness in listening comprehension in Italian as a L3 context. The research questions and hypotheses can be stated as follows:

1. Does the learners' metacognitive awareness level reported for the L2 differ significantly from that reported for the L3?
2. Is there a significant relationship between metacognitive awareness strategies reported for the L2 and those for the L3?
3. Is there a significant relationship between L3 Italian listening comprehension performance and metacognitive awareness level reported for the L2 and the L3?
4. Is proficiency level in the L2 and L3 related to L3 listening comprehension?
 - a. Do participants with higher L2 proficiency level perform significantly better than those with lower L2 proficiency level on L3 listening comprehension test?
 - b. Do participants with higher L3 proficiency level perform significantly better than those with lower L3 proficiency level on L3 listening comprehension test?

The hypotheses for the first three questions are as follows. Given the relationship between proficiency level and metacognitive awareness (Wu, 2008; O'Malley et al., 1985), higher levels of metacognitive awareness are expected in L2

English than L3 Italian, as the participants are more proficient users of their L2 English than in L3 Italian (Hypothesis 1). In addition, it is expected that the mean scores for directed attention (DA), problem solving (PS), planning & evaluation (PE), and person knowledge (PK) would be higher for the participants' more proficient language (i.e. L2) and those for mental translation (MT) would be lower (Hypothesis 2). On the other hand, a positive relationship was expected between the L2 and L3 metacognitive awareness levels reported by the participants, considering the skills-based research findings regarding the transfer of strategies across languages beyond a certain proficiency level (Hypothesis 3).

Regarding the relationship between metacognitive awareness in L3 listening, a positive relationship was hypothesized between metacognitive awareness in L3 and L3 listening comprehension, given the facilitative role of metacognitive awareness in skill performance (e.g. Vandergrift & Tafaghodtari, 2010; Goh, 1998; Mareschal, 2002). If metacognitive awareness level in L2 is correlated with that in L3, then it should also correlate with L3 listening comprehension (Hypothesis 4).

As for the role of L2 and L3 language proficiency and L3 listening comprehension, it was hypothesized that L2 and L3 proficiency should yield significant differences on L3 listening comprehension in such a way that higher proficiency groups should obtain higher scores than lower proficiency groups on the measures of L3 listening comprehension (Hypothesis 5).

3.2 Participants

The participants of the present study are 51 adult learners of L3 Italian at a state university in Istanbul, Turkey. All the participants are students at an English-medium

university and registered in Italian language courses offered by the university's foreign language education department. The course schedule consists of three hours of Italian language instruction per week in the form of two block sessions of 90 minutes. These courses continue over one semester period of the university's academic calendar, which consisted of 13 weeks for the academic term at the time of the current research. The reported age of first exposure to L3 Italian ranges between 15 and 23 years, the earliest age of first exposure being at a state high school and the latest being at the university they currently attend. Two groups of language proficiency were existent within the participants before the current study started. Sixteen of the participants were registered in intermediate Italian class (ITA 202), while thirty-five participants were registered in beginner Italian language class (ITA 102). The intermediate proficiency group had been taking Italian language classes for four semesters and the beginner group for two semesters at the time of data collection.

L3 Italian proficiency groups were formed for proficiency-related analyses. The 16 participants registered in intermediate Italian course (ITA 202) were assigned to higher L3 Italian proficiency group, while 16 participants at the lowest range on listening performance test within beginner Italian language course (ITA 102) were assigned to lower L3 Italian proficiency group.

The students are required to get a minimum score of C on the institutional English language proficiency test in order to start their study in their departmental programs. This is a cut-off point of proficiency for all the departments at the university and is accepted to be equivalent to a score of 550 on TOEFL PBT, 213 on TOEFL CBT, 79-93 on TOEFL IBT, and 6.5 on Academic IELTS. In the current study, the participants' actual BUEPT (Bogazici University English Proficiency

Test) or equivalent scores were distributed on BUEPT scale as follows: 7 participants had a score of A, 22 participants had B and 22 participants had C score. Depending on the BUEPT scores of participants, two L2 English proficiency were formed for data analysis. Participants with A or B grades or scores within the equivalent range on other English language proficiency exams were assigned to “higher L2 English proficiency” group, while participants with scores falling in BUEPT C grade range were included in “lower L2 English proficiency” group. There were 29 participants in higher L2 English group and 22 lower L2 English proficiency group.

Along with the English language requirements of the university, all participants have the formal educational background in Turkish national education context, which also involves English language instruction as a foreign language. Within the national curriculum implemented at primary and secondary school levels that was applied for the participants’ age group, English was first introduced as a foreign language at grade four, which coincided the age of 10-11 at primary school level. The grading system and the age of schooling have undergone fundamental changes with recent years in Turkey with new implementations of the Ministry of Education,; however, the participants in the present study started English language instruction at grade 4 in primary school. Finally, all participants are L1 Turkish speakers. There is not an additional language spoken as a L1 context reported by the participants in the demographic background questionnaires. These features provide a highly homogeneous linguistic profile in the sample of participants with L1 Turkish, L2 English and L3 Italian.

Although the status of languages is rather similar in the sample group, the academic background and major subjects the participants study come from a wide range of areas. The large pool of academic areas includes 5 different faculties at

university. The numbers of the participants distributed into their faculties are as follows: 21 students at the Faculty of Arts and Sciences, 18 students at the Faculty of Education, 9 students at the Faculty of Economics and Administrative Studies, 4 students at the School of Applied Disciplines, and 3 students at the Faculty of Engineering.

3.3 Instruments

Several instruments were utilized for data collection as measures of different constructs investigated in the study. In addition to an informative demographic info and language proficiency profiles questionnaire to obtain information on language use and L2 proficiencies, a 21-item metacognitive awareness questionnaire for listening, and a 24-item L3 Italian listening comprehension test along with cognitive load scales were used to obtain data in the relevant fields.

3.3.1 Metacognitive Awareness Listening Questionnaire (MALQ)

As the measure of metacognitive awareness on listening skills, the Metacognitive Awareness Listening Questionnaire (MALQ from this point on) (Vandergrift, Goh, Mareschal & Tafaghodtari, 2006) was used. This questionnaire was designed to measure L2 learners' awareness levels about their own internal processing during listening activities in the target language. The questionnaire was adapted to many different language contexts such as English, Spanish and German (Vandergrift *et al.*, 2006, p.441).

The theoretical basic point of MALQ comes from Flavell's (1979) model of metacognitive knowledge. Flavell describes three types of metacognitive knowledge: person knowledge, task knowledge and strategy knowledge, which tap abilities such as directing attention on particular parts of a task, analyzing the purpose and goals of a given task or beliefs and holdings about one's own learning and processing (1979, p.907). Following the theoretical frameworks and findings of previous research, more than ten factors are identified in the first version of the MALQ, which yielded only five significant factors after exploratory and confirmatory factor analyses along with listening comprehension results. These five factors that are included in the finalized version of the questionnaire are problem-solving, planning-evaluation, directed attention, person knowledge and mental translation (Vandergrift *et al.*, 2006, p.444-446). Of these factors, only mental translation is supposed to be negatively correlated with listening comprehension while higher agreeing scores are expected to correlate positively with listening comprehension performance. A significant relationship between the overall MALQ and listening comprehension scores, $r=.36$, $p<.001$, was reported. A further analysis was conducted to test the prediction power of the MALQ on listening comprehension and the regression analysis yielded a significant result, $F=65.74$, $p<.001$ with R^2 value of 0.129, which indicates that MALQ can explain a significant amount of variance in listening comprehension (Vandergrift *et al.*, 2006, p.449).

The format of the items required the learners to rate themselves on a six-point Likert scale with respect to every item in the target language. For the purposes of this study, the participants were required to complete the questionnaire separately for L2 English and L3 Italian. For the purposes of data analysis in the current study, component scores were calculated by adding up all the ratings on the items

pertaining to the same factors. For instance, the possible maximum score for problem solving was 36 since there were six items related to this factor and each item could be rated on a six-point scale. The number of items pertaining to planning and evaluation is five, for directed attention it is four and three items for person knowledge and mental translation each, making a total of twenty-one items on the questionnaire. In order to keep the scores obtained from components on a comparable scale in the statistical analyses, percentage values of ratings out of the maximum possible scores on each component were calculated. For instance, every participant's problem solving score was converted into a percentage score depending on the 36-point scale of the component.

The internal reliability coefficients were calculated separately for each of the five factors for MALQ and the reported Cronbach's alpha value is .74 for problem solving, .76 for planning & evaluation, .78 for mental translation, .74 for person knowledge and .68 for directed attention (Vandergrift *et al.*, 2006, p.446). The Cronbach's alpha values obtained on overall MALQ data were .83 for English and .79 for Italian in the present study.

3.3.2 Listening comprehension test in L3 Italian

As the measure of listening comprehension in L3 Italian, a comprehension test consisting of 24 multiple-choice items was developed for the current study with reference to the materials used in the curriculum of the Italian language courses the participants attended. Three different recorded audio texts were used as the listening texts; eight questions were prepared pertaining to each listening text. The audio recordings were adopted from an Italian-originated published course book *Linea*

Diretta (Conforti & Cusimano, 2009). The course books used for the text selection were graded for different proficiency levels and the chosen texts were selected to represent three difficulty levels for the sample group: an easy text, a moderately difficult text, a difficult text; and the text lengths for each level were 2.15, 2.55, and 4.14 minutes respectively. The graded proficiency levels of the textbooks and the expert opinion from the course instructor were coherent in relation to text appropriacy in terms of vocabulary and syntactic complexity.

The multiple-choice items were designed to measure the test-takers' ability to make inferences and draw specific pieces of information within the flow of listening activity. The questions were designed to test the participants' ability to interpret the contextual clues with the linguistic details given in the texts through the level of linguistic knowledge they had in Italian. The course instructor checked and approved the content of the texts and the appropriateness of the tasks for the sample group. The scoring of the items was set on a 1 and 0 system. Every correct answer received one point. Incorrect answers and unanswered items received zero point; therefore, the possible highest score was 24 on the test.

A pilot administration was carried out with a group of seven learners outside the sample group of the study. Those learners were also attending the Italian courses taught by the same instructor. A revision session was carried out with the learners who participated in the pilot study and the items and options were revised and reworded with a thinking-aloud process with the learners. After the final corrections, the 24-item multiple-choice comprehension test with three different texts was administered with the sample group. The internal consistency of the test was calculated on a Cronbach's alpha value with a coefficient score of .77 on the overall test.

3.4 Procedures

The data collection process was completed over a four-week period within the second semester of the academic year of the university. The language background questionnaire and MALQ were given two weeks before the listening comprehension tasks. The participants filled in the consents forms and linguistic background questions and completed MALQ at the same session. The researcher met the participants during their regular class meeting for this session.

The listening comprehension tests were given in two sessions during the regular class hours of the participants as a language practice activity. The first half of the test included 16-question part including two listening texts with low and moderate difficulty levels. The third and the most difficult text was given in a separate session with 8 questions to answer. The participants had five minutes to read the questions before listening to the texts. The researcher aided the participants with unknown words and sentence structures in Italian in the comprehension questions but there was no intervention regarding the listening texts. The participants listened to the texts two times and they could answer the questions while listening to the texts. After the first listening, the participants were given one minute to check their own answers and the parts they missed. The same procedure was applied in all sessions. The researcher met the participants during their regular class meeting over two weeks for thirty minutes for the first part and twenty minutes for the second part of the listening comprehension test. Some participants who were not present at class meetings at the time of test administration took the tests at their available times under the same conditions as the rest of the participants during the regular class hours.

The listening comprehension questions were printed on regular sheets and distributed to the participants. They used pens and pencils to mark their answers on

their question sheets. The listening texts in audio recording format were played on a laptop with speakers in the regular classrooms where the participants meet for the Italian language course.

3.5 Data analysis

The quantitative data collected in this study were statistically analyzed using SPSS 21 software program. In order to conduct analyses to answer the research questions, some variables were computed using the raw data on MALQ scores. The items reflecting the five separate factors, which are suggested to be related constructs to metacognitive awareness for the listening ability by Vandergrift *et al* (2006), were categorized and the scores of these items were summed up under each category. The items that contained reverse wording (negative sentence structures that reflected false disagreement in the scoring) were re-coded in the reverse order to produce an increasing numeric value with the degree of agreement on the individual items and thus implying a higher level of awareness. With the computation of these variables, 5 variables were obtained under each category named planning & evaluation (PE), problem-solving (PS), directed attention (DA), person knowledge (PK), and mental translation (MT), as suggested by Vandergrift *et al* (2006). Higher scores on PE represented more frequent use of goal setting, checking understanding at difficulty points. Similarly, higher scores on PS meant more use of background knowledge to understand the texts, guessing meaning of words when there are unknown words. Higher DA scores meant more persistence to stay on-task when distracted during listening, or more control of concentration. Higher PK implied less difficulty perceived about listening skill or less anxiety about listening tasks. Finally, higher

MT scores suggest a tendency to word-by-word translation in mental processing of listening texts.

A 2 (L2 English, L3 Italian) x 5 (PE, PS, DA, PK, and MT) repeated measures ANOVA with metacognitive awareness constructs and language status as within group factors was conducted in order to examine if the metacognitive awareness listening scores reported for the L2 English significantly differed from those reported for the L3 on the defined five levels of MALQ.

In order to examine whether there is significant relationship between L2 English and L3 Italian metacognitive awareness levels described in MALQ, Pearson product-moment correlation coefficients were obtained for all five levels of MALQ between L2 and L3 data.

Pearson product-moment correlations were obtained between the listening comprehension scores and MALQ L2 English and L3 Italian data on the five-factor basis of the questionnaire in order to examine if there are significant relationships between the awareness levels and the listening performance in L3 Italian.

CHAPTER 4

RESULTS

4.1 Metacognitive awareness in L2 and L3

In order to examine whether the participants' metacognitive awareness level as they report on MALQ significantly differed between L2 and L3, a repeated measures ANOVA with language status (L2 and L3) and metacognitive awareness components (problem-solving, planning & evaluation, directed attention, person knowledge and mental translation) as repeated measures factors was conducted in a 2 x 5 repeated measures design. The descriptive statistics for each component can be seen in Table 1. The Greenhouse - Geisser conservative F-test results were interpreted as a safeguard against type I error. The results (see Table 2) point to a significant interaction between language status and metacognitive awareness. The main effects of language status and metacognitive awareness strategies were also significant.

Table 1. Descriptive Statistics for L2 and L3 MALQ Components Based on Percentage Scores

MALQ component	L2 English		L3 Italian	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Planning & evaluation	62.85	22.30	68.89	16.76
Problem Solving	81.65	15.03	76.27	15.87
Directed Attention	68.66	10.76	62.93	12.25
Person Knowledge	79.16	17.77	50.23	20.94
Mental Translation	39.00	23.13	57.40	21.26
Overall MALQ	66.26	10.28	63.146	9.18

N=48

Table 2. Language Status and Metacognitive Awareness in Relation to L3 Listening Comprehension

<i>Source</i>	<i>SS</i>	<i>Df</i>	<i>MS</i>	<i>F</i>
Subjects		47		
Language status	1168.4	1	1168.4	6.2*
Error 1	8782.7	47	186.8	
MALQ	45896.4	2.72	16881.8	29.5*
Error 2	72940.7	127.7	387.9	
Language status x MALQ	29412.3	1.74	16898.4	37.3*
Error 3	37055	81.8	437.5	
Total	195255.5	261.96		

* $p < 0.05$

The main effect of language status shows that the participants' overall metacognitive awareness in L2 English differs significantly from their awareness in L3 Italian as they report on MALQ. In other words, they had significantly higher metacognitive awareness level in the L2 than the L3, confirming the first hypothesis. The main effect of the MALQ points to significant mean differences across the five subcomponents of metacognitive awareness. The interaction of language status and metacognitive awareness suggests that the metacognitive awareness strategies differ significantly depending on the language status (see Figure 1).

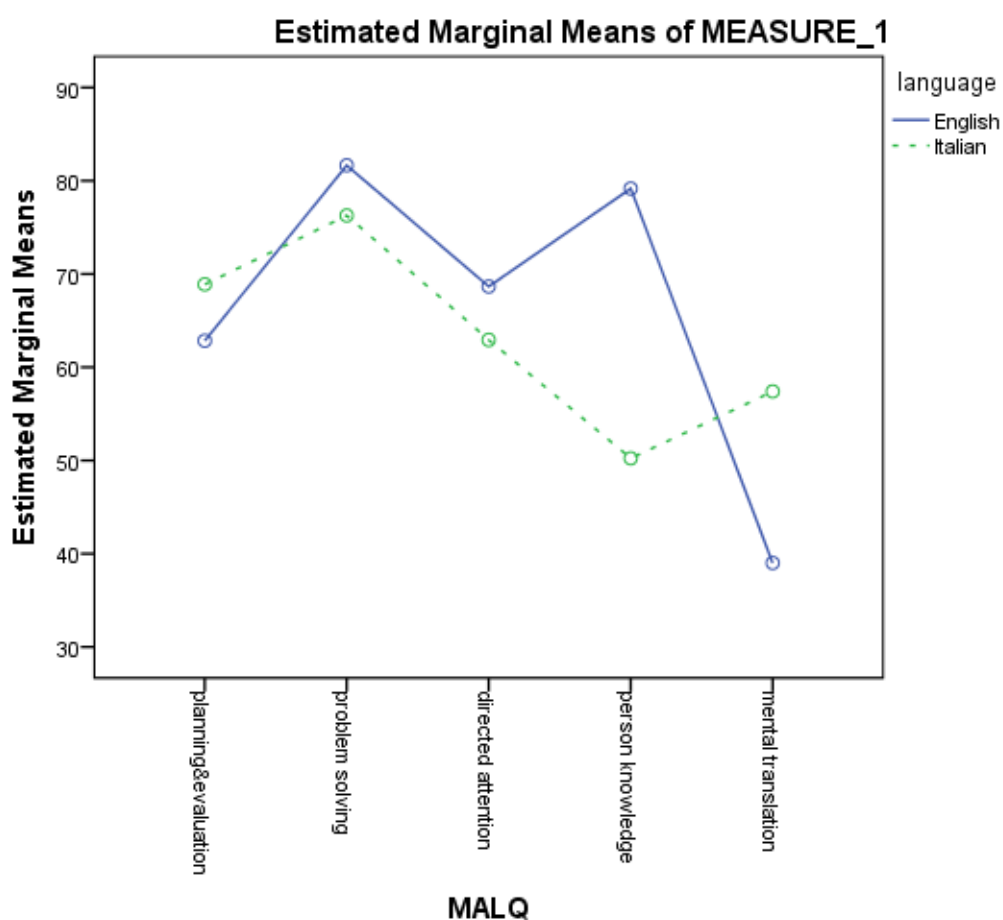


Figure 1. The interaction between metacognitive awareness components and language status

The interaction was further probed through correlated samples t-tests. The results indicated significant differences between L2 and L3 in terms of mental translation, $t(47) = -5.035, p < .01$. It should be noted that mental translation was worded in a negative direction in the design of the MALQ. Strong agreement reported on items of mental translation implied that the learners “translate word by word” during listening or “translate continuously” rather than processing the input in the form of chunks with integration of global knowledge drawn from other contextual clues. As this type

of processing is not assumed for skilled listening, a lower score was expected for higher proficiency languages. This assumption was confirmed in this study and a lower level of mental translation in L2 was observed. Contrary to the second hypothesis, planning and evaluation also yielded a significantly higher mean in L3 Italian than in L2 English, $t(47) = -2.194, p < .05$. In line with the predictions of the second hypothesis, problem solving indicated a significantly higher level in L2 English than in L3 Italian, $t(47) = 2.468, p < .05$. The same was also true for person knowledge, $t(47) = 8.256, p < .01$ as well as directed attention $t(47) = 3.515, p < .01$. In brief, as predicted by the second hypothesis, the participants had higher levels of metacognitive awareness in the L2 in terms of PS, DA, PK, and MT. Unlike the predictions of the second hypothesis, the mean scores for PE were higher for L3 compared to L2.

The relationship between the listening strategies in L2 English and L3 Italian that the participants reported on the MALQ was examined through bivariate correlations by calculating Pearson product-moment correlations between the five components of the MALQ reported for L2 and L3. As can be seen in Table 3, there were statistically significant correlations between L2 and L3 planning evaluation, problem solving, directed attention and mental translation, while there was no statistically significant correlation between L2 and L3 person knowledge, confirming the third hypothesis to a great extent.

Table 3. Inter- Correlations among L2 and L3 Metacognitive Awareness

Components Based on the MALQ

	PE L3	PS L3	DA L3	PK L3	MT L3	MALQ overall L3
PE L2	.598**	.234	.274	.163	.070	.522**
PS L2	.411**	.528**	.283*	.007	.142	.496**
DA L2	.250	.109	.554**	.032	.044	.333*
PK L2	.066	.025	.010	.257	-.172	.086
MT L2	.439**	.153	.219	-.035	.344*	.250
MALQ overall L2	.488**	.368*	.462**	.183	.185	.598**

Note. PE=planning & evaluation, PS=problem solving, DA=directed direction, PK=person knowledge, MT= mental translation. * $p < .05$ level, ** $p < .01$ level

4.2 Metacognitive awareness and listening comprehension

In order to investigate the relationship between metacognitive awareness of listening strategies and L3 listening comprehension, Pearson product-moment correlations were calculated for both L2 and L3 subconstructs of MALQ and L3 listening comprehension scores. There were significant relationships between L3 listening comprehension and DA reported for L3 Italian, PS reported for L2 English and PS reported for L3 Italian (see Table 4). No significant correlations were observed between L3 listening comprehension and other MALQ subcomponents for L2 English or L3 Italian. Results partially confirm the fourth hypothesis.

Table 4. Correlations between MALQ Components and L3 Listening Comprehension

	L2 English					L3 Italian					
	PE	PS	DA	PK	MT	PE	PS	DA	PK	MT	
L3 listening comprehension	.138	.299*	.197	.013	.072	.045	.392**	.418**	.064	-	.125

* $p < .05$ level, ** $p < .01$ level

In order to further explore the prediction power of metacognitive awareness of listening strategies on the variance observed in L3 listening comprehension, a stepwise regression was conducted with L2 and L3 metacognitive awareness scores as independent variables and L3 listening comprehension as the dependent variable. PS reported for L3 Italian came out as the only significant predictor $\beta=.41$, $t(46)=3.08$, $p<.01$, explaining 17 percent of variance on L3 listening comprehension, $R^2 = .17$, $F(1, 46) = 9.50$, $p < .05$.

4.3 L2 and L3 proficiency level and listening comprehension

The participants were grouped into higher and lower proficiency groups based on their BUEPT scores in L2 English and based on the level of the course they were enrolled in L3 Italian. The mean scores of L2 and L3 proficiency groups are demonstrated in Table 5. An independent samples t-test on the listening scores of the higher and lower L2 groups was conducted to compare the groups' means. The results indicated no significant difference between higher and lower L2 proficiency groups, $t(49) = 1.92$, $p > .05$.

On the other hand, independent samples t-test on the listening scores of the L3 English proficiency groups indicated that higher level L3 proficiency group had significantly higher scores than lower proficiency group, $t(49) = 4.19$, $p < .001$, partially confirming the fifth hypothesis.

Table 5. Descriptive Statistics for Higher and Lower L3 Italian Groups on L3 Listening Comprehension Test

	Higher proficiency			Lower proficiency		
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>
L2 English	16.34	4.64	29	14.05	3.60	22
L3 Italian	18.63	2.82	16	13.86	4.11	35

CHAPTER 5

DISCUSSION

5.1 Metacognitive awareness in L2 and L3

The comparison of metacognitive awareness in L2 and L3 showed that learners had significantly different metacognitive awareness levels of listening strategies in their L2 and L3. It is possible to interpret this finding within the perspective of language proficiency and metacognitive awareness. Findings from previous research on listening strategies and proficiency showed that more proficient learners reported more frequent and various types of strategy use (e.g. Zang & Wu, 2009; Wu, 2008; Chamot et al., 1987). Based on the participants L2 and L3 use as also reported on language use questionnaires, it is observed that they use L2 English in wider contexts for various purposes while their L3 Italian use is more confined to classroom settings. Regarding this linguistic profile, it could be argued that the participants had a higher proficiency level in their L2 compared to their L3 and this might have resulted in higher metacognitive awareness levels in L2 English than in L3 Italian in problem solving, directed attention, person knowledge and mental translation aspects. Planning and evaluation, however, displayed a lower level of awareness in L2 English. Although this component is defined as abilities to set goals before listening, connecting previous knowledge of similar texts to facilitate comprehension while processing new contents or checking and evaluating comprehension at certain points while listening, it might pose itself as a more facilitative strategy with insufficient language knowledge. It may be less likely for the learners in the current study to use this strategy since listening in English along with reading is part of their daily language activities and may have become an automatized skill. As such they

may not be aware that they apply planning and evaluation processes. An investigation of the actual strategy use through more introspective methods such as think-aloud protocols or interviews may provide evidence that learners that are more proficient unconsciously carry out this strategy.

Findings also indicate that metacognitive awareness components based on the MALQ displayed significant correlations between L2 and L3. The significant correlations between L2 and L3 metacognitive awareness of listening strategies suggest that the learners' metacognitive awareness on areas of planning and evaluation, problem solving, directed attention and mental translation in their L2 show a similar pattern to their L3. This may indicate a possibility of transfer of the listening strategies from the more proficient L2 to the less proficient L3.

The findings regarding the L2 and L3 metacognitive awareness could be discussed in a wider perspective in relation to transfer of skills as well. It could be argued that the similarity in the direction of L2 and L3 metacognitive awareness of listening strategies demonstrated in significant correlations suggests transfer of strategies from more proficient L2 to less proficient L3. However, given the fact that the L2 and L3 proficiencies are not yet comparable for the participants, attainment of higher proficiency could provide a comparable level of metacognitive awareness of listening strategies in both L2 and L3 at later stages of L3 learning.

5.2 Metacognitive awareness and listening comprehension

The significant correlations between problem solving in L2, problem solving in L3 and directed attention in L3 with listening comprehension in L3 might suggest that there is a close relationship between certain metacognitive awareness strategies in

both L2 and L3 and L3 listening comprehension. However, other components such as planning and evaluation, person knowledge and mental translation in either L2 or L3 indicated no significant relationships with L3 listening comprehension. Given the regression results, problem solving seems to be the most important component related to L3 listening comprehension. The regression model with L3 problem solving as predictor could explain about 17% of the variance in L3 comprehension. Problem solving was in a similar line with the findings of previous research using the MALQ and listening comprehension in L2 (Al-Alwan et al., 2013; Zeng, 2014). Al-Alwan et al. (2013) also found problem solving as a significant predictor of L2 listening comprehension, along with directed attention, person knowledge, planning and evaluation in the regression model.

It could be further suggested that PS reported in L3 being the only predictor on L3 listening comprehension implies that the participants applied more strategies of making use of previous knowledge or guessing meaning of unknown words in listening text in L3 more consciously. It should be noted here that the metacognitive awareness measure leans on learners' conscious ratings of their strategy use. This procedure requires participants' conscious reflection on the strategy use. If these strategies are used in a more automatic fashion in more proficient L2 and in a more deliberate way in less proficient L3, then it might be the case that the learners' PS strategies in L3 stand out more easily than strategies in L2. The representation power of PS in L3 might explain its relationship with L3 listening comprehension in the findings of this study.

5.3 L3 listening comprehension and language proficiency in L2 and L3

The comparisons of higher and lower proficiency groups in L2 and L3 on L3 listening comprehension produced different results. It was observed that L2 English proficiency groups did not differ significantly in L3 listening comprehension. At this point, it could be argued that the participants are more homogenous in their L2 and the difference in the higher and lower proficiency as described in the design of this study did not result in a difference in L3 listening performance. However, higher proficiency group in L3 Italian outperformed the lower L3 proficiency group. This might result from a more sensitive proficiency more like a threshold level that differentiates the achievement level in listening performance. The findings from Lasagabaster's (2000) study in trilingual educational system in Spain also reported that the participants' L1 proficiency was in a comparable level across three groups of L3 English learners while immersion program students were classified as "balanced bilinguals" with higher L1 and L2 proficiencies. In that case, what created the difference in L3 English achievement was attributed to differences in L2 rather than L1 in which all the participants were more homogeneous. In the context of this study, L2 English proficiency of students is also more homogenous, which could leave a larger gap for L3 Italian proficiency to explain differences in L3 listening comprehension performance.

The overall findings of the study indicate three main points to be highlighted. The first is that the participants' metacognitive awareness of listening strategies is different in L2 and L3. The degrees of reported use of strategies differed on component basis on the MALQ. The second point is that certain components on the MALQ had significant relationships with L3 listening comprehension. These components are problem solving in both L2 and L3 and directed attention in L3,

confirming the findings of previous research in L2 listening with problem solving and directed attention as closely related components to listening comprehension. Problem solving in L3 was particularly important in this study as it holds a significant predictor variable on L3 listening comprehension. The third point is that L2 and L3 proficiencies could produce different results in metacognitive awareness and listening comprehension. While L3 proficiency created a difference in L3 listening comprehension, metacognitive awareness did not differ in lower and higher L3 proficiency. L2 proficiency had no significant differences on metacognitive awareness or L3 listening comprehension. In this respect, L2 language proficiency accounts for differences as a within subjects variable but there were no differences as between subjects factor across lower and higher proficiency groups. Only L3 proficiency recorded a different pattern on L3 listening comprehension as a significant independent variable. These observations could be interpreted as a result of the variance in the participants' L3 knowledge which might still be under a threshold level hindering the additive influences of multilingualism and transfer of skills in listening in line with the assumptions of developmental interdependence hypothesis.

The study aimed to investigate the interrelations between metacognitive awareness of listening strategies and language proficiency. The findings showed that metacognitive awareness of listening strategies differs in L2 and L3. This suggests an association between the level of proficiency (more proficient L2 profile of the participants compared to their L3) and metacognitive awareness. Certain metacognitive awareness components such as L2 DA, L2 and L3 PS had significant relationships with L3 listening comprehension. However, L3 PS stood out as a predictor on L3 listening comprehension. L3 Italian proficiency created a significant

difference in L3 listening comprehension, while L2 English proficiency had no significant differences between higher and lower proficiency groups. It could be argued that this finding from a group comparison on L2 proficiency might result from the more homogeneous L2 English proficiency profile of the participants across groups above a threshold level. It is probable that all the participants in the study have L2 English proficiency above a cut-off point, while their L3 Italian proficiency is at more fluctuating levels across the proficiency levels below a threshold level. In this respect, these findings confirm that transfer of skill might not occur if proficiency above threshold in all languages is not yet achieved.

CHAPTER 6

CONCLUSION

This study contributes to the field in several ways. First, it focuses on the listening skill, an under-investigated area compared to reading in terms of skills development in the bilingual literature. Based on the findings, it could be suggested that cross-language transfer of listening strategies from more proficient L2 to less proficient L3 is possible for trilinguals. Second, it was observed that metacognitive awareness of listening strategies increases as the proficiency in the trilinguals' languages increases pointing to the role of proficiency in metacognitive awareness. Third, it was observed in the findings that L3 metacognitive awareness has a direct relationship with L3 listening comprehension while L2 metacognitive awareness might be indirectly related to L3 comprehension (i.e. L2 and L3 metacognitive awareness levels have a significant relationship). In this regard, it could be suggested that L2 may have a mediating role in L3 metacognitive awareness and L3 listening comprehension relationship.

There are several limitations of this study. One of them is the small sample size restricted to the participants registered in L3 Italian courses. This resulted in unequal numbers of participants in L3 proficiency groups which was also insufficient for certain statistical analyses. Second, participants' comprehension in L1, L2, and L3 listening could have been measured on similarly standardized measures. Various task types could be incorporated into a more comprehensive listening comprehension test. This study employed a listening comprehension test developed for the context of this study, therefore validation and standardization procedures were not possible to apply. Finally, it can provide useful findings to investigate language proficiency with

continuous measures to form reliable groups of comparison rather than dichotomous groupings based on language proficiency.

It could provide a better understanding of the issue for further research to investigate listening comprehension in L3 with participants who have comparable proficiencies in both L2 and L3 in order to observe the transfer of skills supposedly above a threshold level. Different language pairings and other measures of metacognitive awareness could be employed to test the assumptions of TH and DIH in various contexts. Moreover, think-aloud protocols or structured interviews could offer a deeper picturing of the underlying processes during listening since questionnaires provide a more indirect screening of metacognitive strategies.

This study could propose some pedagogical implications. Based on the finding that L3 metacognitive awareness has a relationship with L3 listening comprehension, instruction on listening strategies in classroom settings could yield positive results in listening comprehension. Besides the under-investigated nature of listening skill in foreign language learning contexts, strategy-based instructions of listening skills poses an area to be improved in educational basis. Explicit instruction of listening strategies and directing learners on improving their awareness on L2 and L3 listening strategies could help them benefit from possible mediating influences of L2 listening skills as well as building a common listening skill across all languages in trilingual minds.

APPENDIX A

METACOGNITIVE AWARENESS LISTENING QUESTIONNAIRE (MALQ)

Metacognitive Awareness Listening Questionnaire (MALQ)

The statements below describe some strategies for listening comprehension and how you feel about listening in the language you are learning. Do you agree with them? This is not a test, so there are no "right" or "wrong" answers. By responding to these statements, you can help yourself and your teacher understand your progress in learning to listen. Please indicate your opinion for your listening in Italian and English after each statement. Circle the number which best shows your level of agreement with the statement.

For example:

<i>I like learning another language.</i>	Strongly disagree 1	Disagree 2	Slightly disagree 3	Partly agree 4	Agree 5	Strongly agree 6
--	---------------------------	---------------	---------------------------	----------------------	------------	------------------------

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

Adapted from Vandergrift, Goh, Mareschal, and Tafaghodtari (2006)

APPENDIX B

L3 LISTENING COMPREHENSION TEST (ITALIAN TEXT 1)

Ascolta il dialogo fra quattro persone e scegli le risposte corrette secondo il dialogo.

1. Giancarlo è un amico di ...

- a. Monica
- b. Marcello
- c. madre di Marcello

2. Giancarlo capisce che Marcello cucina perché ...

- a. sente un buon profumo
- b. sente dei rumori in cucina
- c. vede Marcello in cucina

3. Cosa fa Marcello dopo che ha presentato Monica a Giancarlo?

- a. va in salone con i suoi ospiti
- b. chiede a sua madre di fare un brindisi a con Marcello
- c. ritorna in cucina

4. Come capisce Giancarlo che Monica non è italiana?

- a. Perché Monica parla italiano con accento straniero
- b. Perché Monica ha un cognome straniero
- c. Perché Monica non vive in Italia

5. Perché Monica sta a Roma?

- a. Per lavoro
- b. Per trovare un lavoro
- c. Si è trasferita a Roma

6. Marcello fa ...

- a. il cuoco
- b. il giornalista
- c. l'insegnante

7. Giancarlo prende

- a. Un prosecco
- b. Un Campari
- c. Un Aperol

8. Monica prende...

- a. la stessa cosa che beve la madre di Marcello
- b. la stessa cosa che beve Giancarlo
- c. una cosa diversa da quella che prende Giancarlo

APPENDIX C

L3 LISTENING COMPREHENSION TEST (ITALIAN TEXT 2)

Ascolta il dialogo tra Marta e Roberto e scegli le risposte corrette secondo il dialogo.

1. Perché va Roberto in Francia?

- a. per continuare un corso di lingua che ha aveva già cominciato
- b. per organizzare un corso di lingua
- c. per fare un corso di lingua

2. Il corso di lingua include...

- a. delle lezioni di sera
- b. delle lezioni di mattina e dopo mezzogiorno
- c. delle lezioni tutto il giorno

3. Cosa pensa Roberto dei piatti francesi?

- a. Non è soddisfatto dei piatti.
- b. Ha trovato delle cose che gli sono piaciute.
- c. Non gli sono piaciuti perché Roberto è troppo selettivo.

4. Perché Roberto non ha conosciuto tanti francesi ?

- a. Era il periodo delle vacanze in Francia
- b. Non ci sono tanti francesi a Montpellier
- c. Roberto preferisce incontrare persone di nazionalità diverse

5. Che cosa faceva Roberto il fine settimana?

- a. Andava sulla costa nel sud-est della Francia
- b. Visitava i piccoli paesi
- c. Visitava i musei a Montpellier

6. Cosa interessa Marta dei viaggi del fine settimana di Roberto?

- a. il suo viaggio a Nizza
- b. le passeggiate in spiaggia
- c. i viaggi che ha fatto con i pullman

7. Come Roberto ha imparato francese?

- a. Frequentando il corso di lingua a Montpellier
- b. Studiando francese all'università
- c. Frequentando una scuola a Nizza

8. Perché è stato utile il corso di lingua per Roberto?

- a. Ha cominciato ad imparare il francese
- b. ha ricevuto una diploma in francese
- c. ha rinfrescato il suo francese

APPENDIX D

L3 LISTENING COMPREHENSION TEST (ITALIAN TEXT 3)

Ascolta il dialogo in un'agenzia turistica a Roma e scegli le risposte corrette secondo il dialogo.

1. Dov' è l'imbarco più vicino a Lipari?

- a. A Napoli
- b. Alle isole Eolie
- c. A Roma

2. Quante volte ci sono le partenze per Lipari?

- a. Ogni 12 ore
- b. Ogni sera
- c. Tre volte alla settimana

3. Quando è vietato il traffico privato nelle isole Eolie per i turisti?

- a. Tutto l'anno
- b. Per due mesi in estate
- c. A luglio

4. Perché la macchina sarebbe utile a Lipari?

- a. Perché Lipari è un'isola particolarmente grande.
- b. Perché lì è consentito il traffico privato
- c. Perché i turisti possono portare le loro macchine a Lipari.

5. Di quale opzione non parlano il cliente e l'agente per il trasporto a Lipari?

- a. Affittare un motorino
- b. Piccoli mezzi pubblici
- c. Prendere il treno

6. Perché il cliente preferisce il treno invece della sua macchina per andare a Napoli?

- a. Non vuole pagare per il garage privato
- b. Non c' è spazio per le macchine sulla barca
- c. Il cliente vuole andare all'imbarco a piedi

7. Perché il cliente preferisce l'Eurostar?

- a. Perché i biglietti sono più economici
- b. Perché ci mette meno tempo
- c. Perché non c' è un limite per il bagaglio

8. Che cosa può offrire l'agente di viaggi per l'alloggio?

- a. delle case private a Lipari
- b. degli alberghi di tipi diversi
- c. delle camere da affittare

APPENDIX E

DEMOGRAPHIC AND LINGUISTIC INFORMATION FORM

I agree to participate in this study:

Signature: Name: _____

Date: _____

I. PERSONAL INFORMATION (Will Remain Confidential)

Last Name, First Name: _____

E-mail address: _____

Sex: Female _____ Male: _____ Age _____

Department: _____

II. LINGUISTIC INFORMATION

Mother Tongue: _____

Language of Education: _____

Primary School: Secondary School: _____

High School: University: _____

Age & place of first exposure to Italian: _____

How long have you been learning Italian? (e.g. for 8 months) _____

Have you ever been to / lived in Italy? If yes, how long did you stay in Italy? _____

How often do you use Italian? (e.g., 5 hours a week) _____

What language do you generally use? Home: School: Work: Social: _____

Are there other languages you started learning before or after Italian? If so, which languages? Before: _____ After: _____

III. ITALIAN LANGUAGE INSTRUCTION

How long have you been taking formal instruction in Italian?

Have you taken Italian language instruction somewhere other than at Boğaziçi? If yes, where? _____

Have you taken any Italian proficiency/placement test? If so, please note the result _____

Have you taken any specific instruction for the listening skill?

IV. ENGLISH LANGUAGE INSTRUCTION

How long have you taken formal instruction in English?

Where have you taken English language instruction?

Have you taken any English proficiency/placement test? If so, please note the result

REFERENCES

- Al-Alwan, A., Asassfeh, S., & Al-Shboul, Y. (2013). EFL learners' listening comprehension and awareness of metacognitive strategies: How are they related? *International Education Studies*, 6(9), 31 - 39.
- Alderson, J. C. (1984). Reading in a foreign language: A reading problem or a language problem. In Alderson, J. K. & Urquhart, A. H. (Eds.), *Reading in a Foreign Language* (pp.1-27). London, New York: Longman.
- Bae, J., & Bachman, L. F. (1998). A latent variable approach to listening and reading: testing factorial invariance across two groups of children in the Korean/English two-way immersion program. *Language Testing*, 15(3), 380 - 414.
- Bardel, C. & Falk, Y. (2010). Object pronouns in German L3 syntax: Evidence for the L2 status factor. *Second Language Research*, 27(1), 59 - 82.
- Bardel, C. & Falk, Y. (2007). The role of the second language in third language acquisition: The case of Germanic syntax. *Second Language Research*, 23(4), 459 - 484.
- Bialystok, E. (1991). Metalinguistic dimensions of bilingual language proficiency. In Bialystok, E. (Ed.), *Language Processing in Bilingual Children* (pp. 113 – 140). Cambridge, U.K.: Cambridge University Press.
- Bialystok, E. (2001). Metalinguistic aspects of bilingual processing. *Annual Review of Applied Linguistics*, 21, 169 - 181. doi: <http://dx.doi.org/10.1017/S0267190501000101>
- Bialystok, E., Craik, F. I., Klein, R., & Viswanathan, M. (2004). Bilingualism, aging, and cognitive control: evidence from the Simon task. *Psychology and Aging*, 19(2), 290 - 303.
- Bidabadi, F. S., & Yamat, H. (2011). The relationship between listening strategies used by Iranian EFL freshman university students and their listening proficiency levels. *English Language Teaching*, 4(1), 26 - 32.
- Brown, A. L. (1978). Knowing when, where, and how to remember: A problem of metacognition. In Glaser, R. (Ed.). *Advances in Instructional Psychology* (pp. 77- 165). New York: Halsted Press.
- Buck, G. (2001). *Assessing Listening*. Cambridge: Cambridge University Press.

- Cárdenas-Hagan, E., Carlson, C. D., & Pollard-Durodola, S. D. (2007). The cross-linguistic transfer of early literacy skills: The role of initial L1 and L2 skills and language of instruction. *Language, Speech, and Hearing Services in Schools*, 38(3), 249 - 259.
- Carvalho, A. M., & Silva, A. J. B. (2006). Cross-Linguistic influence in third language acquisition: The case of Spanish-English bilinguals' acquisition of Portuguese. *Foreign Language Annals*, 39(2), 185-202.
- Cenoz, J. (2003). The additive effect of bilingualism on third language acquisition. *International Journal of Bilingualism*, 7(1), 71 - 87.
- Chamot, A. U., O'Malley, J. M., Kupper, L., & Impink-Hernandez, M. V. (1987). *A Study of Learning Strategies in Foreign Language Instruction: First Year Report*. Retrieved from <http://files.eric.ed.gov/fulltext/ED352824.pdf>
- Clarke, M. A. (1988) The short-circuit hypothesis of ESL reading or when language competence interferes with reading performance. In Carrell, P. L., Devine, J., & Eskey, D.E. (Eds.), *Interactive Approach to Second Language Reading* (pp. 114-124), Cambridge: Cambridge University Press.
- Conforti, C. & Cusimano, L. (2009). *Linea Diretta Nuovo*. Perugia: Guerra Edizioni.
- Coskun, A. (2010). The effect of metacognitive strategy training on the listening performance of beginner students. *ERIC-Online Submission*, 4(1), 35 - 50.
- Cowan, J. R. (1976). Reading, perceptual strategies, and contrastive analysis. *Language Learning*, 26(1), 95 - 109.
- Cowan, J. R. & Sarmad, Z. (1976). Reading performance of bilingual children according to type of school and home language. *Language Learning*, 26(2), 353-376.
- Cummins, J. (1976). The influence of bilingualism on cognitive growth: A synthesis of research findings and explanatory hypotheses. *Working Papers on Bilingualism*, 9, 1 - 44. Retrieved from <http://files.eric.ed.gov/fulltext/ED125311.pdf>
- Cummins, J. (1979). Linguistic interdependence and the educational development of bilingual children. *Review of Educational Research*, 49(2), 222 - 251.
- Cummins, J. (1991). Interdependence of first-and second-language proficiency in bilingual children. In Bialystok, E. (Ed.), *Language Processing in Bilingual Children* (pp. 70-89). Cambridge, New York: Cambridge University Press.
- Cummins, J. (1999). BICS and CALP: Clarifying the Distinction. Retrieved from <http://files.eric.ed.gov/fulltext/ED438551.pdf>

- Durgunoğlu, A. Y., Nagy, W. E., & Hancin-Bhatt, B. J. (1993). Cross-language transfer of phonological awareness. *Journal of Educational Psychology*, 85(3), 453 - 465.
- Field, J. (1999). 'Bottom-up' and 'top-down'. *ELT Journal*, 53(4), 338-339.
- Flavell, J. H. (1979). Metacognition and cognitive monitoring. A new area of cognitive-developmental inquiry. *American Psychologist*, 34(10), 906 - 911.
- Flavell, J. H., & Wellman, H. M. (1977). Metamemory. In Kail, R. V. & Hagen, W. (Eds.), *Perspectives on the Development of Memory and Cognition* (pp. 3-31). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Flynn, S., Foley, C., & Vinnitskaya, I. (2004). The cumulative-enhancement model for language acquisition: Comparing adults' and children's patterns of development in first, second and third language acquisition of relative clauses. *The International Journal of Multilingualism*, 1(1), 3-16.
- Freedle, R. & Kostin I. (1994). Can multiple-choice reading tests be construct valid? *Psychological Sciences*, 5(2), 107-110.
- Freedle, R., & Kostin, I. (1999). Does text matter in a multiple-choice test of comprehension? The case for the construct validity of TOEFL's minitalks. *Language Testing*, 16(1), 2 - 32.
- Garrison-Fletcher, L. (2012). *The acquisition of L2 reading comprehension: The relative contribution of linguistic knowledge and existing reading ability*. (Unpublished PhD Thesis). City University of New York, USA.
- Goh, C.C. (1997). Metacognitive awareness and second language listeners. *ELT Journal*, 51(4), 361-369.
- Goh, C. C. (1998). How ESL learners with different listening abilities use comprehension strategies and tactics. *Language Teaching Research*, 2(2), 124-147.
- Goh, C. C. (2000). A cognitive perspective on language learners' listening comprehension problems. *System*, 28(1), 55-75.
- Goh, C. C., & Hu, G. (2014). Exploring the relationship between metacognitive awareness and listening performance with questionnaire data. *Language Awareness*, 23(3), 255-274.
- Grabe, W. (2009). *Reading in a Second Language: Moving from Theory to Practice*. New York: Cambridge University Press.
- Graham, S. (2006). Listening comprehension: The learners' perspective. *System*, 34(2), 165-182.

- Graham, S. (2012). *The Role of First Language in Second Language Comprehension of Informational Text: A Study of Fourth and Fifth Grade Bilingual Hispanic Students* (Unpublished Ph.D. thesis). Texas A&M University-Commerce, Texas, USA.
- Hall, J. K. (2001). *Methods for Teaching Foreign Languages*. Upper Saddle River, NJ: Prentice-Hall, Inc.
- Hart, J. T. (1965). Memory and the feeling-of-knowing experience. *Journal of Educational Psychology*, 56(4), 208 - 216.
- Hart, J. T. (1967a). Memory and the memory-monitoring process. *Journal of Verbal Learning and Verbal Behavior*, 6(5), 685 - 691.
- Hart, J. T. (1967b). Second-try recall, recognition, and the memory-monitoring process. *Journal of Educational Psychology*, 58(4), 193-197.
- Jung, H. (1992). *The relationship between adult second language readers' metacognitive awareness of reading and their processes in a second language*. (Unpublished Ph. D. thesis). University of Arizona, Arizona, USA.
- Kintsch, W. (1998). *Comprehension A Paradigm for Cognition*. Cambridge, New York, Melbourne: Cambridge University Press.
- Lasagabaster, D. (2000). Three languages and three linguistic models in the Basque educational system. In Cenoz, J., & Jessner, U. (Eds.). *English in Europe The Acquisition of a Third Language* (pp. 179-197). Clevedon: Multilingual Matters.
- Mareschal, C. (2002). *A cognitive perspective on the listening comprehension strategies of second language learners in the intermediate grades*. (Unpublished MA thesis). University of Ottawa, Ottawa, Canada.
- Mareschal, C. (2007). *Student perceptions of a self-regulatory approach to second language listening comprehension development*. (Unpublished PhD thesis). University of Ottawa, Ottawa, Canada.
- Molnar, T. (2010). Cognate recognition and L3 vocabulary acquisition. *Acta Universitatis Sapientiae Philologica*, 2(2), 337-349.
- Nelson, T. O. (1996). Consciousness and metacognition. *American Psychologist*, 51(2), 102 - 116.
- Nisbet, J., & Shucksmith, J. (1986). *Learning Strategies*. Boston: Routledge.

- O'Malley, J. M., Chamot, A. U., Stewner-Manzanares, G., Kupper, L., & Russo, R. P. (1985). Learning strategies used by beginning and intermediate ESL students. *Language Learning*, 35(1), 21-46.
- Oxford, R. L. (1990). *Language Learning Strategies: What Every Teacher Should Know*. New York: Newbury House Publishers.
- Park, G. P. (1997). Language learning strategies and English proficiency in Korean University students. *Foreign Language Annals*, 30(2), 211-221.
- Park, G. P. (2004). Comparison of L2 listening and reading comprehension by university students learning English in Korea. *Foreign Language Annals*, 37(3), 448-458.
- Ringbom, H. (2001). Lexical transfer in L3 production. In Cenoz, J., Hufeisen, B., & Jessner, U. (Eds.), *Cross-linguistic Influence in Third Language Acquisition: Psycholinguistic Perspectives* (pp. 59-68). Clevedon: Multilingual Matters.
- Rost, M. (2002). *Teaching and Researching Listening*. London: Longman.
- Rost, M. (2011). *Teaching and Researching Listening*. Harlow: Pearson Education Limited.
- Rothman, J. (2011). L3 syntactic transfer selectivity and typological determinacy: The typological primacy model. *Second Language Research*, 27(1), 107-127.
- Rothman, J., Cabrelli Amaro, J. (2010). What variables condition syntactic transfer? A look at L3 initial state. *Second Language Acquisition Research*, 26(2), 189-218.
- Schönpflug, U. (2000). Word-fragment completions in the second and third language: A contribution to the organisation of the trilingual speaker's lexicon. In Cenoz, J. & Jessner, U. (Eds.), *English in Europe: The Acquisition of a Third Language* (pp. 121-142). Clevedon: Multilingual Matters.
- Shimamura, A. P. (2000). Toward a cognitive neuroscience of metacognition. *Consciousness and Cognition*, 9(2), 313-323.
- Slabakova, R., & Garcia-Mayo, M. D. P. (2013). The L3 syntax-discourse interface. *Bilingualism: Language and Cognition*, 18(2), 208-226.
- Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly*, 16(1), 32-71.
- Vandergrift, L. (2002). 'It was nice to see that our predictions were right': Developing metacognition in L2 listening comprehension. *Canadian Modern Language Review*, 58(4), 555-575.

- Vandergrift, L. (2005). Relationships among motivation orientations, metacognitive awareness and proficiency in L2 listening. *Applied Linguistics*, 26(1), 70-89.
- Vandergrift, L. (2006). Second language listening: listening ability or language proficiency? *The Modern Language Journal*, 90(1), 6-18.
- Vandergrift, L., Goh, C. C. M., Mareschal, C. J., & Tafaghodtari, M. H. (2006). The metacognitive awareness listening questionnaire: Development and validation. *Language Learning* 56(3), 431-462.
- Vandergrift, L., Tafaghodtari, M. H. (2010). Teaching L2 learners how to listen does make a difference: An empirical study. *Language Learning*, 60(2), 470-497.
- Wu, Y. L. (2008). Language learning strategies used by students at different proficiency levels. *Asian EFL Journal*, 10(4), 75-95.
- Yeganeh, M. T. (2013). Metacognitive listening strategies awareness in monolingual versus bilingual EFL learners. *Procedia-Social and Behavioral Sciences*, 70, 1787-93. doi:10.1016/j.sbspro.2013.01.254
- Zeng, Y. (2014). Investigating the effects of metacognitive instruction on Chinese EFL learners' listening performance. *International Journal of Innovation in English Language Teaching*, 3(2), 139-249.
- Zhang, L. J., & Wu, A. (2009). Chinese senior high school EFL students' metacognitive awareness and reading-strategy use. *Reading in a Foreign Language*, 21(1), 37-59.