
IMPLICIT VS. EXPLICIT PROSODY TEACHING IN DEVELOPING LISTENING COMPREHENSION SKILLS BY INTERPRETER TRAINEES: AN EXPERIMENTAL STUDY

Mahmood Yenkimaleki

VU University Amsterdam, The Netherlands

ABSTRACT: *The present study investigates the effect of explicit vs. implicit prosody teaching in developing listening comprehension skills by Farsi-English interpreter trainees. Three groups of student interpreters were formed. All were native speakers of Farsi who studied English translation and interpreting at BA level at the University of Applied Sciences, Tehran, Iran. Participants were assigned to groups at random, but with equal division between genders (6 female and 6 male students in each group). No significant differences in English language skills (TOEFL scores) could be established between the groups. Participants took a pretest of listening comprehension skills before starting the program. The control group listened to authentic audio tracks and did exercises in listening comprehension skills. The first experimental group received implicit instruction of English prosody through the use of recasts. The second experimental group received explicit instruction of English prosody and did exercises based on the theoretical explanation which was provided by their Iranian instructor. The total instruction time was the same for all the groups, i.e. 10 hours. Students then took a posttest in listening comprehension skills. The results showed that explicit teaching of prosody had a significantly positive effect in developing listening comprehension skills. These results have pedagogical implications for curriculum designers, interpreter training programs, material producers and all who are involved in language study and pedagogy.*

KEYWORDS: Explicit Teaching, Implicit Teaching, Prosody, Interpreter Trainees

INTRODUCTION

The intentional process through which learners determine what will be learned so that the learners can express the acquired knowledge structure is defined as explicit learning (Kemper 2008). Implicit learning, on the other hand, is incidental learning of the structure of stimuli in the learner's environment, such that it is generally difficult for the learner to state what exactly this knowledge structure would be (Cleeremans 1993; Berry 1997). Kemper (2008) points out that the type of the learner and the rule which has to be learned determine the effectiveness of explicit and implicit instruction. Kemper (2008) ran two experiments in order to investigate the effectiveness of explicit and implicit instruction of two Dutch spelling rules for children with and without spelling problems. In Experiment 1 Kemper tested the acquisition of a morphological spelling rule by students. In this experiment, explicit instruction led to rule-based knowledge in both groups of students and explicit instruction turned out to be more effective than implicit instruction for the students without spelling problems and equally effective for those with spelling problems. In experiment 2 Kemper investigated the acquisition of an autonomous spelling rule by students. In this experiment, explicit instruction and implicit instruction were equally effective in both groups. Kemper concluded that the differences in the effectiveness of explicit and implicit instruction are determined by both the type of learner and the rule that has to be learned.

It is widely agreed by researchers in the fields of teaching English as a foreign language that metacognition enhances thinking and comprehension (Baker 2002; Wenden 1998). The act of thinking about thinking (metacognition) is the skill that EFL learners control their own thoughts and regulate their own learning. Metacognition plays a major role in learning how to listen. Considering the effective role of metacognition in learning how to listen, it does not have been received enough attention in many EFL classrooms (Vandergrift & Goh 2012).

One of the neglected areas in interpreting training programs is teaching prosody, i.e., the first phenomena interpreters are exposed to in the communication of messages. In the field of interpreting, one of the first deficiencies which are perceived clearly is a lack of experienced instructors who are familiar with the theoretical aspects of message perception and communication. The most important reasons would be that most interpreters are not qualified instructors themselves, because they are not aware of linguistic principles underlying message communication, especially the importance of prosody in message communication (e.g. Pearl 1995; Yenkimaleki & Van Heuven 2013, 2017a, b).

Whalley and Hansen (2006) talk about prosodic sensitivity. They state that prosodic sensitivity has three elements which contribute to linguistic rhythm awareness. These elements are (i) lexical stress, which would be any syllable in a word that receives emphasis, (ii) intonation patterns, which would be the rise and fall of pitch that over the course of the sentence, and (iii) pause patterns, which can be between words or anywhere in the utterance that would correspond with punctuation mark in a written text.

Prosodic feature awareness training can be useful for interpreters both in speech production and speech recognition. Studying the effect of prosodic awareness can provide a solid platform for developing theories of training interpreters. Mahjani (2003) states that prosodic feature awareness may enhance the naturalness and intelligibility of language in speech production and also can lead to more efficient processing of input speech in interpreting. Investigations in this area can make us understand different interactions between prosodic structure and other linguistic or paralinguistic domains (syntax, semantics, pragmatics...). Therefore, different languages with various prosodic types and with different intonation patterns widen our horizon to understand the importance of prosodic feature awareness and can help us develop efficient training methods that pave the way to communicate messages from one language to another.

Huber (2005) pointed out that interpreters systematically take advantage of prosodic properties of the non-native language to access complementary and compensatory information in message perception and to resolve ambiguities of utterances. Moreover, Derwing et al. (1998) experimentally demonstrated that awareness training of prosodic features resulted in better intelligibility of utterances produced by second-language learners who had been instructed to emphasize the prosodic feature of stress; later those second language learners were found to transfer their acquired perceptual skill to spontaneous speech production as well.

Compared with the general listening, listening in interpreting is a more complicated and difficult process. The setting, temporal and physical conditions, in which communication takes place also play an important role in the interpretation process. Time constraints for speakers at conferences often lead them to deliver their message at a furious pace. Noisy listening conditions make the reception of the communicating message difficult both for intended receptors and for the interpreter (Ma 2013).

Listening comprehension is a conscious process by which listeners, through using different types of cues from the context and their previous knowledge, construct meaning from the incoming input (O'Malley & Chamot 1989). Listeners consciously process utterances in particular settings so as to perceive the message (Mendelsohn 1994). Listening was viewed by some researchers as a complicated set of skills. No longer should it be perceived as something that could simply be picked up by EFL learners, but as a set of communicative skills that had to be instructed as one would learn other language skills such as reading comprehension and writing skills through teaching

Anderson (2009) states that the listening comprehension process includes three stages: perceiving, parsing and utilizing. Through perceiving, the listener decodes the spoken language. By parsing, the listener transforms the words in the utterance into a mental representation to get the meaning. In the final phase, using the mental representation, the listener reconstructs the sentence meaning. Conscious awareness of the rules and structures plays an important role in processing linguistic input and decoding the incoming information (Schmidt 1990; Tomlin & Villa 1994).

The usefulness of teaching pronunciation in language instruction remains controversial. Though past research (e.g. Goodwin et al. 1994) suggests that instructors can make little or no difference in improving their students' pronunciation, current findings (Derwing et al. 2012; Yenkimaleki 2015; Yenkimaleki & Van Heuven 2016a,b,c,d; Yenkimaleki et al. 2017) suggest that second language pronunciation can improve to be near native-like with the implementation of certain criteria such as the utilization of prosodic elements. With the emphasis on meaningful communication and the understanding that speech production is affected by speech perception, there is a need to integrate prosodics with communicative activities providing situations to develop student pronunciation through listening and speaking (Adams-Goertel 2013).

Buck (2001) stated that listeners take advantage of stress as an important cue in message perception. Explicit teaching of suprasegmentals and raising the learners' awareness of prosodic differences through formal teaching may have a positive effect on perceiving the meaning of sentences (Lord 2005; Pennington & Ellis 2000). Yenkimaleki and Van Heuven (2016a) showed that the explicit teaching of prosodic (i.e. suprasegmental) features led to a significant improvement of listening comprehension skills for interpreter trainees. They formed two groups of interpreter trainees who were native speakers of Farsi. The control group only received exercises in listening comprehension skills, while the experimental group spent part of the time on theoretical explanation of, and practical exercises with, prosodic features of English. Students then took a standard listening comprehension test. Explicit teaching of prosody led to a modest but significantly better improvement for the experimental group (by 2 points; scores ranged between 44 and 64% across both groups) on a standard listening comprehension test.

Cutler et al. (1997) reviewed the exploitation of prosodic information in the comprehension of spoken language. They looked at the use of prosody in the recognition of spoken words, in which most attention has been paid to the question of whether the prosodic structure of a word plays a role in initial activation of stored lexical representations; the use of prosody in the computation of syntactic structure, in which the resolution of global and local ambiguities has formed the central focus; and the role of prosody in the processing of discourse structure, in which there has been a preponderance of work on the contribution of accentuation and deaccentuation to integration of concepts with an existing discourse model.

Papachristou (2011) ran an experimental study investigating the effectiveness of pronunciation teaching of English to Greek state school students aged 16 years old, examining the production of English vowels. The implicit form of pronunciation instruction resulted in more native-like production of vowels. Bailey et al. (1999) investigated implicit learning of primary word stress patterns from natural languages. Bailey et al.'s work substituted pitch patterns for stress patterns, arguing that pitch patterns are more perceptually salient indicators of lexical stress than syllable duration or intensity. They found evidence that their participants were able to learn the training patterns implicitly in the experiment. In this line, Zellers et al. (2011) also studied whether a lexical stress pattern could be implicitly learned after short exposure. They found that English-speaking learners showed learning of the Spanish-based lexical stress patterns from the exposure phase. The response patterns showed that both abstract rules and probabilistic information were learned.

Main aim and the research question

Therefore, considering all the studies reviewed above, in training future interpreters, paying attention to prosodic features as an important aspect in the curriculum of interpreter training seems of utmost importance. The present study addresses the potential effect of explicit vs. implicit teaching of English prosody for Iranian interpreter trainees on developing listening comprehension skills. In order to see which methodology would be more effective in prosody instruction (implicit vs. explicit) for interpreter trainees this study is set up to investigate this issue systematically so that the results would elucidate this aspect for curriculum designers in different academic settings for training the next generation of interpreters. Therefore, the following research question was asked concretely: *Does explicit or implicit method of prosody teaching lead to develop listening comprehension skills for interpreter trainees?*

The assumption is that explicit teaching of English prosody would lead Iranian interpreter trainees develop listening comprehension skills more than that of implicit teaching of English prosody. For native speakers of Farsi the prosody differs substantially between Farsi and English in word stress (complex and weight sensitive in English, fixed final in the vast majority of the vocabulary in Farsi) and rhythmic structure (stress timing in English versus syllable timing in Farsi) (see details in Yenkimaleki 2016).

METHOD

Participants¹

Thirty-six students of translation and interpreting between Farsi and English were chosen randomly from 100 senior students at the University of Applied Sciences, Tehran, Iran. Using systematic random sampling, participants were divided into three groups of twelve students that each incorporated six male and six female students. The participants were native speakers of Farsi with an age range of 18-27 years. They participated in all sessions of the training program.

¹ The ethical issues were observed as well (I received ethical approval). All the participants signed a formal written agreement to take part in the research project.

Procedure

Before any instruction all participants took a pre-test of general English proficiency. This was done in order to ascertain that the three groups were equal in terms of their command of English at the beginning of the study. The test battery used was the standard Longman's TOEFL English proficiency test (paper-based version, <http://www.ets.org/toefl/pbt/about/content/>), with separate modules testing the learner's skills as follows:

- (1) Listening comprehension: 30 questions about short conversations, 8 questions about longer conversations, 12 questions about lectures or talks
- (2) Reading comprehension: 50 questions about reading passages
- (3) Structure and written expression: 15 exercises of completing sentences correctly and 25 exercises of identifying errors

The score test takers receive on the Listening, Reading and Structure parts of the TOEFL test is not the percentage of correct answers. The score is converted to take into account the fact that some tests are more difficult than others. The converted scores correct these differences. Therefore, the converted score is a more accurate reflection of the ability than the raw score is. The final test score on the paper-based version of the TOEFL test ranges between 310 and 677. In the results section we report the raw scores on the three components as well as the overall TOEFL score (after weighting and conversion).

The control group listened to 400 minutes of authentic audio tracks and did exercises in listening comprehension skills. Moreover, both the control group and the experimental groups listened during 200 minutes to the Iranian instructor who explained how to do exercises and also provided feedback on the students' task performance. Both experimental groups altogether listened for 200 minutes to authentic audio tracks and did exercises in listening comprehension skills corresponding to the contents of the audio tracks. The first experimental group received 200 minutes of explicit instruction of English prosody and did the exercises based on the theoretical explanation which was provided by their Iranian instructor (for details see Yenkimaleki 2017). The second experimental group received 200 minutes of implicit instruction in English prosody through authentic audio tracks and did the exercises based on the tasks. This group received instruction of prosodic features implicitly through the use of "recasts", i.e. reformulating the learner's immediately preceding erroneous utterance while maintaining his or her intended meaning (for details see Ammar & Spada 2006). The activities covered by the three participant groups and the time (in minutes) spent on them are summarized in Table 1.

Table 1. Summary of activities and time spent (minutes) by three groups of participants in the experiment.

Activity	Group		
	Control	Explicit	Implicit
Audio tracks/ exercises in listening comprehension skills	400	200	200
Listening to instructor for feedbacks	200	200	200
Explicit prosody instruction		200	
Implicit prosody instruction			200
Total time spent	600	600	600

Both at the beginning and at the end of the program, standard Longman's TOEFL listening comprehension test modules were administered as pretest and as posttest to evaluate global listening comprehension for both groups. Both pretest and posttest had 50 multiple-choice items with four alternatives per item. The participants listened to a conversation or description of some phenomenon and, based on that, chose one option from four choices. These standardized pretest and posttest have the same level of difficulty as claimed by the documentation that goes with these standard tests.

RESULTS

Oneway analyses of variance were run for the three TOEFL component scores separately as well as for the overall (i.e. mean) TOEFL score with group (control, implicit, explicit) as a fixed factor. The very small differences in the scores were never statistically significant for any of the four dependent variables, $F(2, 33) < 1$ in all cases. It is concluded that there were no differences between the three groups in terms of proficiency in English prior to the experiment.

Table 2. Raw component and overall (mean) scores on TOEFL proficiency test obtained by control and experimental (implicit instruction; explicit instruction) groups. Within each group subjects are listed in descending order of the overall TOEFL score.

Control group					Experimental groups											
					Implicit instruction					Explicit instruction						
Gender	List.	Struct.	Read.	Overall TOEFL	ID	Gender	List.	Struct.	Read.	Overall TOEFL	ID	Gender	List.	Struct.	Read.	Overall TOEFL
Mean	56.4	56.7	56.0	563.5	Mean		56.5	57.1	54.8	561.6	Mean		56.5	56.2	56.0	562.7
SD	6.4	5.2	6.9	6.14	SD		7.5	6.1	7.5	6.96	SD		6.7	5.8	6.5	6.26

Before starting the awareness-training program, a standard pretest of listening comprehension skills was run to investigate the participants' listening comprehension skills. Table 3 lists the mean scores of listening comprehension skills and their SD for pretest, posttest and the gain.

The score differences between the three groups are within one point on the scale from 0 to 50. None reach statistical significance as determined by a oneway Repeated Measures Analysis of Variance (RM ANOVA, with Huyhn-Feldt correction for violation of sphericity requirement) with participants matched across groups on the basis of their TOEFL scores, $F(9,2)=13.31$, $p=0.072$. This confirms that the three groups were not statistically different in terms of listening comprehension skills at the start of the intervention.

Table 3. Overall quality rating of listening comprehension skills in the pre-test, post-test and the gain (on a scale between 0 and 50). Within each group subjects are listed in descending order of the overall TOEFL score (see Table 2).

Control group				Experimental groups							
				Implicit instruction				Explicit instruction			
	Pretes	Postte	Gain	ID	Pretes	Postte	Gain	ID	Pretes	Postte	Gain
Mean	37.08	37.66	0.58	Mean	37.25	38.25	1.00	Mean	36.66	39.00	2.33
SD	3.94	4.03	1.08	SD	3.72	3.49	0.95	SD	3.96	4.08	1.23

At the end of the training program, a standard posttest of listening comprehension skills (a different version of Longman's Listening comprehension test) was run to assess the effect of the treatments. The pretest and posttest had the same level of difficulty as stated by Longman TOEFL Company. The mean scores and the SDs are presented in Table 3, for control group and experimental groups separately. This time the RM ANOVA shows that the effect of group is highly significant, $F(8,3) = 9.97$, $p=0.042$. Each of the three groups differed significantly from the other two (Bonferroni post hoc tests with $\alpha = 0.05$).

The overall scores obtained in the posttest were roughly the same as those obtained in the pretest for the control group as well as for the experimental group with implicit instruction. The mean score the control group gained after the treatment was 0.58, while the implicit-instruction group had gained 1 point. The second experimental group, with explicit instruction of prosody, obtained a score of 39 points in posttest, which is a considerable (2.33 points) improvement vis-à-vis the pretest. The effect of group on the posttest scores was statistically significant by the same type of RM-ANOVA as was used in the pretest, $F(8,3) = 9.97$, $p=0.042$. Post-hoc analyses revealed, however, that the difference between the control group and the implicit-instruction group was not significant; that the explicit-instruction group differed from the other groups.

In order to compare the results of the control group and the two experimental groups and to know whether the difference in the means truly stems from the type of the treatment for developing listening comprehension skills in different groups, a oneway ANOVA was performed on the individual participants' gain between pretest and posttest. Ideally, for this test, the subjects should be randomly assigned to three groups, so that any difference in response is due to the treatment and not to other factors, which conditions were clearly met in the present case. Table 3 also illustrates the gain, i.e. the difference between the posttest and the pretest scores.

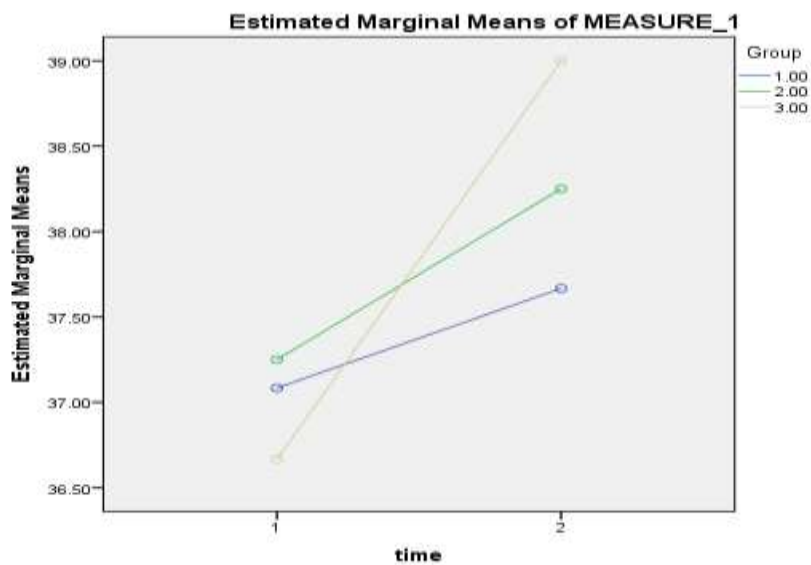


Figure 1 shows the overall mean scores obtained in pretest and posttest broken down by control group and experimental groups (group one, control group; group two, implicit prosody training; group three, explicit prosody training) both before and after the intervention. For better visual comparison, the overall score has been expressed here as the mean (rather than the sum) of the pretest and posttest in control and experimental groups.

CONCLUSION AND DISCUSSION

This study investigated the effect of explicit vs. implicit prosody teaching on developing listening comprehension skills by Farsi-English interpreter trainees. The results revealed that explicit instruction in the use of prosody leads to a greater improvement of listening comprehension skills for interpreter trainees than that of implicit instruction. The results of this study converge with Yenkimaleki and Van Heuven (2016a, b, c, d) who argued that the explicit teaching of prosodic features should improve interpreter trainees' speech perception and production, which in turn should result in better perception of message for interpreter trainees. This clearly indicates that the training is specific and that the students' improved performance are not due to some halo-effect caused by the novelty of this part of the curriculum. Rather, we would argue that the gain in performance is obtained because of what Whalley and Hansen (2006) claimed, viz. that increased awareness of prosodic cues in the (non-native) input speech facilitate the listener's task of breaking up the incoming stream of sound into syllables, words and phrases, inform syntactic structure, and emphasize salient content words. It has been shown before that a closer approximation of the prosody of native English yields better intelligibility and comprehensibility of non-native speech (e.g. Derwing et al. 1998). The results of this study are also in line with Fullana (2006), who stated that second-language learners cannot achieve native-like pronunciation without the help of explicit instruction. Therefore, we would advocate teaching the differences between the word stress systems of the two languages, and providing the students with lots of practice to learn the correct stress pattern of the English words. Also, teaching the communicative importance of sentence prosody and practicing the correct phrasing and accentuation of important words in sentences, using appropriate timing and speech melodies, should be given high priority. Success of speech communication depends on the quality of the speaker's pronunciation which can be argued as a matter of logic – rather

than as the results of experimental studies. If a listener cannot recognize the sounds, word recognition fails, and communication breaks down. Incorrect choice of words and flawed word order can only compromise intelligibility of the incorrectly used or placed words are recognized in the first place (Van Heuven 1986; Wang 2014).

The emphasis on prosodic features in this study was addressed because of the contribution it could have on developing listening comprehension skills which has been pointed out in practitioners' beliefs and, in pronunciation instruction research (Derwing et al. 1998; Derwing & Rossiter 2003; Hahn 2004; Yenkimaleki and Van Heuven 2016 a, b, c, d,e). This has resulted in an increased importance of the role of prosody in the comprehensibility of native and non-native speech (Anderson-Hsieh et al. 1992; Munro & Derwing 1999), that prosodic features often producing promising results in speech recognition (Anderson-Hsieh et al. 1992; Benrabah 1997; Hutchinson 1973; Tiffen 1992). In fact, inappropriate timing and stress patterns are often pointed as the main reasons of intelligibility problems (Adams 1979; Hahn 1999, 2004; Kenworthy 1987; Nelson 1982; Yenkimaleki & Van Heuven 2017a) or unnaturalness (Ono 1991; Yenkimaleki & Van Heuven 2017a,b).

The pedagogical implications of the present study could be applied to interpreting programs and EFL curriculum. The learners' first language should be taken into account when teaching prosody to interpreter trainees and this perspective demands that instructors be highly proficient enough in the target language so that to be correct model for their students since in EFL teaching situation learners tend to imitate their instructor's pronunciation. The curriculum developers and practitioners need to make a number of changes in their overall approach in methodology choice in teaching prosody at interpreter training programs. General proficiency in the target language is a necessary condition for perceiving and producing suprasegmentals. Therefore, before applying any methodology to increase awareness of suprasegmentals, there should be pedagogical procedures to improve the general proficiency of the interpreter trainees.

REFERENCES

- Adams-Goertel, R. (2013). Prosodic elements to improve pronunciation in English language learners: A short report. *Applied Research on English Language*, 2, 117-128.
- Ammar A. & Spada, N. (2006). One size fits all? Recasts, prompts and L2 learning. *Studies in Second Language Acquisition*, 28, 543-574.
- Anderson, J. R. (2009). *Cognitive psychology and its implications, seventh edition*. New York: Worth Publishers.
- Bailey, T., Plunkett, K., Scarpe, E. (1999). A cross linguistic study in learning prosodic rhythms: rules, constraints, and similarity. *Language and Speech*, 42(1), 1-38.
- Baker, L. (2002). Metacognition in comprehension instruction. In C.C. Block & M. Pressley (Eds.), *Comprehension instruction: Research-based best practices* (pp. 77-95). New York: Guilford.
- Berry, D. C. (1997). *How implicit is implicit learning?* Oxford, UK: Oxford University Press.
- Buck, G. (2001). *Assessing Listening*. Cambridge: Cambridge University Press.
- Cleeremans, A. (1993). *Mechanisms of implicit learning. Connectionist models of sequence processing*. Palatino, MA: MIT Press.
- Cutler, A., Dahan, D. & Donselaar, W. van (1997). Prosody in the comprehension of spoken language: A literature review. *Language and Speech*, 40, 141-201.

- Derwing, T. M., Diepenbroek, L. G. & Foote, J. A. (2012). How well do general-skills ESL textbooks address pronunciation? *TESL Canada Journal*, 30, 22–44.
- Derwing, T. M., Munro, M. J., & Wiebe, G. E. (1998). Evidence in favor of a broad framework for pronunciation instruction. *Language Learning*, 48(3), 393-410.
- Fullana, N. (2006). The Development of English (FL) Perception and Production Skills: Starting Age and Exposure Effects. In Muñoz, C. (Ed.), *The Age and Rate of Foreign Language Learning* (pp. 41-64). Clevedon: Cromwell Press.
- Goodwin J. D. Brinton & M. Celce-Murcia (1994). Pronunciation Assessment in the ESL/EFL Curriculum. In J. Morley (Ed.), *Pronunciation pedagogy and theory: New views, new directions*. Alexandria, VA: Teachers of English to Speakers of Other Languages.
- Heuven, V. J. van (1986). Some acoustic characteristics and perceptual consequences of foreign accent in Dutch spoken by Turkish immigrant workers. In van Oosten, J., Snapper, J. F. (eds.), *Dutch Linguistics at Berkeley*. Berkeley: The Dutch Studies Program, U.C. Berkeley, 67–84.
- Huber, D. (2005). Phonetic aspects in translation studies. *Proceedings of FONETIK*, Department of Linguistics, Göteborg University.
- Kemper, M. (2008). *Implicit and explicit instruction of spelling rules*. PhD Dissertation. Radboud Universiteit Nijmegen.
- Lord, G. (2005). (How) Can we teach foreign language pronunciation? On the effects of a Spanish phonetics course. *Hispania*, 88(3), 557-567.
- Ma, J. (2013). A Study of Interpreting Skills from the Perspective of Interpreting Process. *Journal of Language Teaching and Research*, 4, 1232-1237.
- Mahjani, B. (2003). An instrumental study of prosodic features and intonation in Modern Farsi (Persian). MA Thesis, University of Edinburgh.
- Mendelsohn, D. J. (1994). *Learning to listen: A strategy-based approach for the second language learner*. San Diego: Dominie Press.
- O'Malley, J. M. & Chamot, A. U. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10(4), 418-437.
- Papachristou, V. (2011). Explicit vs. implicit Pronunciation Teaching to Greek children: the case of the acquisition of English vowels. *Selected Papers from the 19th ISTAL*, 371-381.
- Pearl, S.B. (1995). Lacuna, myth and shibboleth in teaching simultaneous interpreting. *Perspectives: Studies in Translatology*, 3, 161–190.
- Pennington, M. C. & Ellis, N. C. 2000. Cantonese speakers' memory for English sentences with prosodic cues. *Modern Language Journal*, 84(3), 372-389.
- Schmidt, R. (1990). The role of consciousness in second language learning. *Applied Linguistics*, 11(2), 129-158.
- Tomlin, R. & Villa, V. (1994). Attention in cognitive science and second language acquisition. *Studies in Second Language Acquisition*, 16(2), 183-203.
- Vandergrift, L. & Goh, C. (2012). *Teaching and learning second language listening: Metacognition in action*. New York: Routledge.
- Wang, Z. (2014). Developing Accuracy and fluency in spoken English of Chinese EFL learners. *English Language Teaching*, 7, 110–118.
- Wenden, A. (1998). *Learner Strategies for Learner Autonomy*. Great Britain: Prentice Hall.
- Whalley, K., & Hansen, J. (2006). The role of prosodic sensitivity in children's reading development. *Journal of Research in Reading*, 29, 288–303.
- Yenkimaleki, M. & Heuven, V. J. van (2013). Prosodic feature awareness training in interpreting: An experimental study. In L. Gómez Chova, A. López Martínez & I.

- Candel Torres (Eds.), *Proceedings of the 6th International Conference on Education, Research and Innovation, November 18-20, 2013, Seville*, 4179–4188.
- Yenkimaleki, M. & Heuven, V. J. van (2016a). Effect of explicit teaching of prosodic features on the development of listening comprehension by Farsi-English interpreter trainees: An experimental study. *International Journal of English Language Teaching*, 4, 32–41.
- Yenkimaleki, M. & Heuven, V. J. van (2016b). The effect of prosody teaching on developing word recognition skills for interpreter trainees: An experimental study. *Journal of Advances in Linguistics*, 7, 1101–1107.
- Yenkimaleki, M. & Heuven, V. J. van (2016c). Prosody teaching matters in developing speaking skills for Farsi-English interpreter trainees: An experimental study. *International Journal of English Language and Linguistics Research*, 4, 82–91.
- Yenkimaleki, M. & Heuven, V. J. van (2016d). Effect of prosody awareness training on the performance of consecutive interpretation from Farsi into English: An experimental study. *Asia Pacific Translation and Intercultural Studies*, 1–17.
- Yenkimaleki, M. & Heuven, V. J. van (2017a). Effects of prosody awareness training on the intelligibility of Iranian interpreter trainees in English (submitted).
- Yenkimaleki, M. & Heuven, V. J. van. (2016e). Explicit teaching of segmentals versus suprasegmentals: which would yield better listening comprehension skills for interpreter trainees? An experimental study. *British Journal of English Linguistics*, 4, 11–22.
- Yenkimaleki, M. & Heuven, V. J. van. (2017b). The effect of teaching prosody teaching on interpreting performance: An experimental study of consecutive interpreting from English into Farsi. *Perspectives: Studies in translatology*, 1–16. DOI: 0.1080/0907676X.2017.1315824.
- Yenkimaleki, M. (2015). Pedagogy of interpreting reviewed: Some prominent issues. *SBESS Journal*, 1, 52–69.
- Yenkimaleki, M. (2016). Why prosody awareness training is necessary for training future interpreters. *Journal of Education and human development*, 5, 256–261. DOI: 10.15640/jehd.v5n1a26.
- Yenkimaleki, M. (2017). *Effect of prosody awareness training on the quality of consecutive interpreting between English and Farsi*. LOT: Utecht.
- Yenkimaleki, M.; Coene, M. & De Jong, N. (2017). Prosodic training benefit for Farsi-English interpreter trainees: does gender matter? *International Journal of English Language Teaching*, 5, 14–23.
- Zellers, M., Post, B. & Williams, J. (2011) Implicit learning of lexical stress patterns. In *Proceedings of ICPHS 2011*, Hong Kong.