PEOPLE: International Journal of Social Sciences ISSN 2454-5899

Mahmood Yenkimaleki, 2017

Volume 3 Issue 3, pp. 26 - 42

Date of Publication: 15th November, 2017

DOI- https://dx.doi.org/10.20319/pijss.2017.33.2642

This paper can be cited as: Yenkimaleki, M. (2017). Developing Listening Comprehension Skills by Interpreter Trainees Through Prosody Teaching: Does Methodology Make a Difference? PEOPLE: International Journal of Social Sciences, 3(3), 26 - 42.

This work is licensed under the Creative Commons Attribution-Non-commercial 4.0 International License. To view a copy of this license, visit http://creativecommons.org/licenses/by-nc/4.0/ or send a letter to Creative Commons, PO Box 1866, Mountain View, CA 94042, USA.

DEVELOPING LISTENING COMPREHENSION SKILLS BY INTERPRETER TRAINEES THROUGH PROSODY TEACHING: DOES METHODOLOGY MAKE A DIFFERENCE?

Mahmood Yenkimaleki

VU University Amsterdam, Amsterdam, the Netherlands m.y.yenkimaleki@vu.nl

Abstract

This study investigates the effect of explicit vs. implicit prosody teaching on 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 the 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 on developing listening comprehension skills. These results have pedagogical implications for interpreter training programs, EFL curriculum and all who are involved in language study and pedagogy.

Keywords

Listening Comprehension Skills, Explicit Teaching, Implicit Teaching, Prosody, Interpreter Trainees

1. Introduction

For a long time listening comprehension skills were presented as a complex set of skills and micro-skills. It is no longer perceived as something that could simply be picked up by language learners, but as a complex communicative skill that had to be learned as one would learn other language skills such as reading and writing. Metacognition, or the act of thinking about thinking, refers to the ability of learners to control their thoughts and to regulate their own learning. It plays an important role in learning to listen. There is a general consensus among researchers in the fields of comprehension and second language (L2) learning that metacognition enhances thinking and comprehension (Wenden 1998; Baker 2002). Although metacognition is a crucial aspect of learning to listen, it does not have a significant and explicit role in many language classrooms (Vandergrift & Goh 2012). Many researchers have emphasized the importance of awareness and 'consciousness raising' for second language learning (e.g. Schmidt 2010; Yenkimaleki & Van Heuven 2013b, 2016f, 2017c). Mainstream cognitive psychologists consider awareness a fundamental pre-condition to learning and even claim that that learning is impossible without conscious awareness (Brewer 1974; Lewis & Anderson 1985; Dawson & Schell 1987). Khaghaninejad and Maleki (2015) stated that explicit phonetic instruction has positive effect on students' listening comprehension skills. They ran a study with three groups of students, i.e. one control group and two experimental groups. The first experimental group received explicit teaching of segmentals and the second experimental group received explicit instruction of suprasegmentals. The results showed that the experimental group that received explicit teaching of segmentals outperformed other groups in listening comprehension skills after the training program.

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 & Van Heuven 2016a,b.c,d) 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).

Explicit learning is an intentional process requires that learners to determine what will be learned such that the learners can express the acquired knowledge structure (Kemper 2008), while implicit learning refers to incidentally learning the structure of stimuli in the learner's environment, so that it is generally hard for the learner to express what exactly this knowledge structure is (Cleeremans 1993; Berry 1997). 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.

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). Purdy (1997) states that listening is an active process through which listeners attend to, perceive, interpret, remember, and provide feedback on. Listeners should be able to decode meaning, apply different strategies, and exploit interactive processes in deciphering the message (Gilakjani 2011). Willis (1981:134)

elaborates on some skills that are necessary for listening comprehension, which she refers to as *enabling skills*. These are categorized as: (1) predicting the points people want to talk about, (2) guessing at unknown words or phrases, (3) using one's own previous knowledge of the subject to help one understand, (4) identifying all the relevant points; rejecting irrelevant information, (5) keeping relevant points by note-taking, (6) recognizing discourse markers, e.g., *well*; *oh*, *another thing is*; *now*, *finally*, etc., (7) recognizing cohesive devices, e.g., *such as* and *which*, including linking words, pronouns, references, etc., (8) understanding different intonation patterns and uses of stress, etc., which give clues to meaning and social setting, and (9) understanding inferred information, e.g. speakers' attitude or intentions. 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 positive effects of explicit instruction of phonological rules have been emphasized by different researchers (e.g. Leather 1990; Champagne-Muzar et al. 1993; Pennington 1998; Ahrens 2004; Derwing & Munro 2005; Venkatagiri & Levis 2007; Foote et al. 2011; Derwing et al. 2012; Robinson et al. 2012; Yenkimaleki 2016; Yenkimaleki & van Heuven 2013a, 2016 a, b,c, d, e; Suwartono 2014; Koike 2014). Ahangari et al. (2015) maintained that pronunciation teaching would significantly improve EFL students' listening comprehension skills. Derwing et al. (1998) found that speakers who had received instruction emphasizing suprasegmental features could transfer their learning to spontaneous speech production more effectively than those who received instruction with only segmental content i.e., vowels and consonants. However, some studies report a positive effect of implicit teaching of pronunciation rules (e.g. Bailey et al. 1999; Zellers et al. 2011; Papachristou 2011). For instance, 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.

Therefore, interpreting studies as a new discipline needs to consider the issue of prosody awareness training in the training of future interpreters. Since it is the researcher suggestion to

include prosody teaching in the curriculum of interpreter education (for details see Yenkimaleki 2017), therefore, the choice of methodology would be very important so that to make the trainees consciously aware about the use of role prosody in the perception of message. This needs systematic investigation of this issue with different working languages all around the world. Since there is no systematic study of the effect of implicit vs. explicit teaching of prosody awareness training on developing listening comprehension skills for interpreter trainees, this experimental study is conducted to investigate this issue so that results would pave the way for training qualified future interpreters. The results may lead to modification of the curriculum of interpreter training programs in order to enhance the interpretation quality of interpreters. Therefore, the following research question was raised: *does an explicit or implicit method of prosody teaching lead to develop listening comprehension skills for student interpreter trainees?* At this stage I suggest no specific hypotheses as to which of these methodologies will be more effective. This will depend on the working languages in different countries, the curriculum which students are adapted with, the practitioners' perspectives toward prosody teaching and their proficiency in applying the methods.

2. Method

2.1 Participants

Thirty-six interpreter trainees randomly were selected from 100 students who were majoring translation and interpreting studies at the University of Applied Sciences, Tehran, Iran. All participants were undergraduate students and they were at their last year of their studies for BA level. None had studied or lived abroad at that point. They were randomly 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.

2.2 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 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).

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.

2.3 Design

The present study is an experimental one. It is based on pre-test and post-test design. A control group and two experimental groups are included, with the placebo offered to the control group and the treatment to the latter ones. Participants were assigned to groups through random sampling from a uniformly distributed larger pool of subjects. The quality of interpreting English audio extracts was the dependent variable of the research that was affected by the independent variable of instruction in prosodic features of spoken English. Level of education, field of study, gender distribution, instructor variation, and nationality were the basic variables controlled primarily by the researchers.

2.4 Data Collection

In this study data come from pre- and posttests. The data from these two tests were numerical. The results of the general English proficiency (TOEFL) pre-test ranged between the limits of 217 and 677 according to the standard score calculations. The post-test results ranged

between 0 and 50. The obtained scores were described in terms of their means and variation. The means of three groups were compared through an ANOVA at a significance level of .05.

3. 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 1: 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

Contr	ol gro					Experimental groups												
Control group						Implicit instruction							Explicit instruction					
		List. Comp	Suuct.&	кеай.	Overall		Gender	List. Comp	Struct.&	Read.	Overall		Gender	List. Comp	Struct.&	Read.	Overall	
Ш	Gender		writing	Comp	TOEFL	ID			writing	Comp	TOEFL				writing	Comp	TOEFL	
C01	M	66	67	66	663	I01	M	68	65	65	660	E0 1	F	67	65	65	656	
C02	F	65	63	65	643	I02	M	66	65	63	646	E0 2	M	66	63	61	633	
C03	M	62	61	66	630	I03	F	65	63	63	636	E0 3	M	63	61	61	616	
C04	M	61	61	59	603	I04	M	62	60	61	610	E0 4	F	60	58	63	603	
C05	F	61	58	57	586	I05	F	60	59	60	596	E0 5	M	59	60	59	593	
C06	F	57	56	57	566	I06	F	57	58	56	570	E0 6	M	58	57	59	580	
C07	F	54	55	56	550	I07	M	55	60	53	560	E0 7	F	56	57	58	570	
C08	M	53	54	52	530	I08	F	52	56	53	536	E0 8	F	53	56	54	543	

C09	F	51	52	50	510	I09	F	50	53	47	500	E0 9	F	52	54	51	523
C10	F	50	51	49	500	I10	M	49	51	47	490	E1 0	F	50	49	50	496
C11	M	49	52	48	496	I11	М	48	50	46	480	E1 1	М	49	48	47	480
C12	M	48	51	47	486	I12	F	47	46	44	456	E1 2	М	46	47	45	460
		56.	56.	56.	563.			56.	57.	54.	561.			56.	56.	56.	562.
Mean		4	7	0	5	Mean		5	1	8	6	Mean		5	2	0	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 2: 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 g	roup			Experimental groups									
				Implicit in	struction			Explicit instruction					
О	Pretest	Posttest	Gain	О	Pretest	Posttest	Gain	П	Pretest	Posttest	Gain		
C01	42	43	1	I01	41	43	2	E01	40	43	3		
C02	41	42	1	I02	43	43	0	E02	43	44	1		
C03	41	43	2	I03	41	42	1	E03	43	45	2		

C04	40	39	-1	I04	39	40	1	E04	37	39	2
C05	38	39	1	I05	37	38	1	E05	38	41	3
C06	38	37	-1	I06	36	35	-1	E06	36	39	3
C07	39	38	-1	I07	39	39	0	E07	34	39	5
C08	37	39	2	I08	39	40	1	E08	35	38	3
C09	34	35	1	I09	35	37	2	E09	37	39	2
C10	32	32	0	I10	33	35	2	E10	35	37	2
C11	33	34	1	I11	33	34	1	E11	30	32	2
C12	30	31	1	I12	31	33	2	E12	32	32	0
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 2, 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 visà-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.

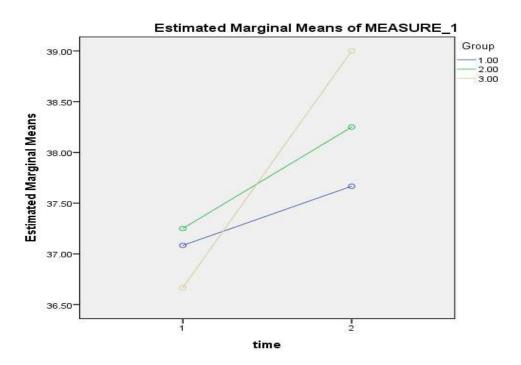


Figure 1: Shows the Overall Mean Scores Obtained in Pretest and Posttest Broken Down by Control Group and Experimental Groups (Group One, Control Group; Group Two, Implicit Prosody Training; Group Three, Explicit Prosody Training) both before and after the Intervention. For Better Visual Comparison, the Overall Score has been Expressed here as the Mean (Rather than the Sum) of the Pretest and Posttest in Control and Experimental Groups

4. Conclusion

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. 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; Yenkimaleki et al. 2017).

The results show that explicit prosody awareness training contributes significantly to developing listening comprehension skills by interpreter trainees. The effects of prosody training may differ for other native-foreign language pairs, depending on the linguistic and phonetic similarity of the prosodic systems involved. This would be an agenda for future to study the issue in wider contexts. The pedagogical implication of this study would be to incorporate explicit prosodic activities in the interpreter training curriculum. This can be done by explicit instruction of prosodic features with authentic materials spoken in English with an abundance of word and sentence stresses that occur in unusual positions from the Farsi point of view.

References

- Adams, C. (1979). English speech rhythm and the foreign learner. The Hague: Mouton. https://doi.org/10.1515/9783110879247
- Adams-Goertel, R. (2013). Prosodic elements to improve pronunciation in English language learners: A short report. *Applied Research on English Language*, 2, 117-128.
- Ahangari, S., Rahbar, S. & Maleki, S.E. (2015). Pronunciation or listening enhancement: Two birds with one stone *International Journal of Language and Applied Linguistics*, 1, 13–19.
- Ahrens, B. (2004). *Prosody beim Simultandolmetchen*. Frankfurt am Main: Peter Lang.
- Ammar A. & N. Spada (2006). One size fits all? Recasts, prompts and L2 learning. *Studies in Second Language Acquisition*, 28, 543-574. https://doi.org/10.1017/S0272263106060268
- Anderson-Hsieh, J., Johnson, R., & Koehler, K. (1992). The relationship between native speaker judgments of non-native pronunciation and deviance in segmentals, prosody, and syllable

- structure. *Language Learning*, 42, 529-555. https://doi.org/10.1111/j.1467-1770.1992.tb01043.x
- 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. https://doi.org/10.1177/00238309990420010101
- 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.
- Benrabah, M. (1997). Word-stress: A source of unintelligibility in English. *IRAL*, *XXXV*(3), 157-165. https://doi.org/10.1515/iral.1997.35.3.157
- Berry, D. C. (1997). *How implicit is implicit learning?* Oxford, UK: Oxford University Press. https://doi.org/10.1093/acprof:oso/9780198523512.001.0001
- Brewer, W. F. (1974). There is no evidence for operant or classical conditioning in human subjects. In W. Weimer & D. Palermo (Eds.), *Cognition and the symbolic processes* (pp. 1-42). Hillsdale, NJ: Erlbaum.
- Champagne-Muzar, C., Schneiderman, E. I. & Bourdages, J. S. (1993). Second language accent: The role of the pedagogical environment. *International Review of Applied Linguistics*, 31, 143–160.
- Cleeremans, A. (1993). *Mechanisms of implicit learning. Connectionist models of sequence processing.* Palatino, MA: MIT Press.
- Dawson, M., & Schell, A. (1987). Human autonomic and skeletal classical conditioning: The role of conscious cognitive factors. In G. Davey (Ed.), Cognitive processes and Pavlovian conditioning in humans (pp. 27-55). Chichester: John Wiley and Sons.
- 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. https://doi.org/10.1111/0023-8333.00047
- Derwing, T. M. & Munro, M. J. (2005). Second language accent and pronunciation teaching: A research-based approach. *TESOL Quarterly*, 39, 379–397. https://doi.org/10.2307/3588486

- 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. https://doi.org/10.18806/tesl.v30i1.1124
- Derwing, T. M., & Rossiter, M. (2003). The effects of pronunciation instruction on the accuracy, fluency, and complexity of L2 accented speech. *Applied Language Learning*, 13, 1-17.
- Foote, J. A., Holtby, A. K. & Derwing, T. M. (2011). Survey of the teaching of pronunciation in adult ESL programs in Canada, 2010. *TESL Canada Journal*, 29, 1–22. https://doi.org/10.18806/tesl.v29i1.1086
- Gilakjani, A. P. (2011). A study of factors affecting EFL learners' English listening comprehension and the strategies for improvement. *Journal of Language Teaching and Research*, 2(5), 977-988. https://doi.org/10.4304/jltr.2.5.977-988
- 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.
- Hahn, L. D. (1999). *Native speakers' reactions to non-native stress in English discourse*. Unpublished dissertation, University of Illinois at Urbana-Champaign.
- Hahn, L. D. (2004). Primary stress and intelligibility: Research to motivate the teaching of suprasegmentals. *TESOL Quarterly*, *38*, 201-233. https://doi.org/10.2307/3588378
- Hutchinson, S. P. (1973). *An objective index of the English-Spanish pronunciation dimension*. Unpublished Masters thesis, University of Texas, Austin, Texas.
- Kemper, M. (2008). *Implicit and explicit instruction of spelling rules*. PhD Dissertation. Radboud Universiteit Nijmegen.
- Kenworthy, J. (1987). Teaching English pronunciation. New York: Longman.
- Khaghaninejad, M. S. & Maleki, A. (2015). The effect of explicit pronunciation instruction on listening comprehension: Evidence from Iranian English learners. *Theory and Practice in Language Studies*, 5, 1249–1256. https://doi.org/10.17507/tpls.0506.18
- Koike, Y. (2014). Explicit pronunciation instruction: Teaching suprasegmentals to Japanese learners of English. In N. Sonda & A. Krause (Eds.), *JALT 2013 Conference Proceedings*, Tokyo, 361–374.
- Leather, J. (1990). Perceptual and productive learning of Chinese lexical tone by Dutch and English speakers. In J. Leather & A. James (Eds.), *New sounds. Proceedings of the 1990*

- Amsterdam Symposium on the Acquisition of Second Language Speech. Amsterdam: University of Amsterdam, 72–97.
- Lewis, M. & J. Anderson. (1985). Discrimination of operator schemata in problem solving: learning from examples. *Cognitive Psychology*, 17, 26-65. https://doi.org/10.1016/0010-0285(85)90003-9
- Mendelsohn, D. J. (1994). Learning to listen: A strategy-based approach for the second language learner. San Diego: Dominie Press.
- Munro, M. J., & Derwing, T. M. (1999). Foreign accent, comprehensibility, and intelligibility in the speech of second language learners. *Language Learning*, 49(Supp. 1), 285-310. https://doi.org/10.1111/0023-8333.49.s1.8
- Nelson, C. (1982). Intelligibility and non-native varieties of English. *The other tongue: English across cultures*, 15, 59-73.
- O'Malley, J. M. & Chamot, A. U. (1989). Listening comprehension strategies in second language acquisition. *Applied Linguistics*, 10(4), 418-437. https://doi.org/10.1093/applin/10.4.418
- Ono, Y. (1991). Experimental phonetic analysis of the speech sounds and prosodic features produced by native and non-native speakers. *Language and Culture*, 20, 241-288.
- 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.
- Pennington, M. C. (1998). The teachability of phonology in adulthood: A re-examination.

 *International Review of Applied Linguistics, 36, 323–341.

 https://doi.org/10.1515/iral.1998.36.4.323
- Purdy, M. (1997). What is listening? In M. Purdy & D. Borisoff (Eds.), *Listening in everyday life: A personal and professional approach (2nd ed.)*. Lanham, MD: University Press of America, 1-20.
- Robinson, P., Mackey, A., Gass, S. M. & Schmidt, R. (2012). Attention and awareness in second language acquisition. In S. Gass & A. Mackey (Eds.), *The Routledge handbook of Second Language Acquisition*. London: Routledge, 247–267.
- Schmidt, R. (2010). Attention, awareness, and individual differences in language learning. In W. M. Chan, S. Chi, K. N. Cin, J. Istanto, M. Nagami, J. W. Sew, T. Suthiwan & I. Walker

- (Eds.), *Proceedings of CLaSIC 2010*, *Singapore*, *December 2-4*. Singapore: National University of Singapore, Centre for Language Studies, 721–737.
- Suwartono, S. (2014). Enhancing the pronunciation of English suprasegmental features through reflective learning method. *TEFLIN Journal*, 25, 80–93.
- Tiffen, B. (1992). A study of the intelligibility of Nigerian English. In A. v. Essen & E. I. Burkart (Eds.), *Homage to W. R. Lee: Essays in English as a foreign or second language* (pp. 255-259). Berlin: Foris.
- Tomlin, R. & Villa, V. (1994). Attention in cognitive science and second language acquisition. Studies in Second Language Acquisition, 16(2), 183-203. https://doi.org/10.1017/S0272263100012870
- Vandergrift, L. & Goh, C. (2012). *Teaching and learning second language listening:*Metacognition in action. New York: Routledge.
- Venkatagiri, H. S. & Levis, J. M. (2007). Phonological awareness and speech comprehensibility: An exploratory study. *Language Awareness*, 16, 263–277. https://doi.org/10.2167/la417.0
- Wenden, A. (1998). Learner Strategies for Learner Autonomy. Great Britain: Prentice Hall.
- Willis, J. (1981). Teaching English through English. London: Longman.
- Yenkimaleki, M. (2017). Effect of prosody awareness training on the quality of consecutive interpreting between English and Farsi. LOT: Utrecht.
- Yenkimaleki, M. (2016). Why prosody awareness training is necessary for training future interpreters. *Journal of Education and human development*, 5, 256-261. https://doi.org/10.15640/jehd.v5n1a26
- 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.
- 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. (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. & Heuven, V. J. van. (2017c). The effect of memory training on consecutive interpreting performance by interpreter trainees: An experimental study. *FORUM: International Journal of Interpretation and Translation*, 157-172.

 DOI:10.1075/forum.15.1.09yen.
- 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. DOI: 10.1080/23306343.2016.1233930.
- 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. (2016f). The effect of memory training on interpretation performance. *International Journal of English Language, Literature and Translation studies*, 3, 79-86.
- Yenkimaleki, M. & Heuven, V. J. van (2013a). 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. (2013b). The effect of memory training on the quality of interpreting. 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, Spain*, 4107-4114.

Zellers, M., Post, B. & Williams, J. (2011). Implicit learning of lexical stress patterns. In *Proceedings of ICPhS 2011*, Hong Kong.