Effect of prosody awareness training on the quality of consecutive interpreting between English and Farsi

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Chapter eight

Effects of prosodic feature awareness training on consecutive interpreting from Farsi into English

Abstract

This study investigates the effect of explicit teaching of prosody on the performance of Farsi-English interpreter trainees. Two groups of student interpreters were formed. All were native speakers of Farsi who studied English translation and interpreting at the BA level at the State University of Arak, Iran. Participants were assigned to groups at random, but with equal division between genders (8 female and 8 male students in each group). At the beginning of the program all the participants took a pre-test of general English proficiency. No significant differences in English language skills (TOEFL scores) could be established between the groups. Three expert raters assessed quality measures of interpreting performance in both a pre-test and a post-test. All rating scales that pertain to prosodic aspects in the trainees' interpreting performance, proved susceptible to the explicit teaching of prosody. The results of the study showed that explicit teaching of prosody statistically did have a positive effect on the overall interpreting performance by Farsi-English interpreter trainees. The pedagogical implications of the present study would pertain to interpreting programs all over the world. Course developers should take these results into considerations and include contrastive prosody in the textbooks for interpreting programs.

Keywords: prosody teaching; awareness training; curriculum; TOEFL proficiency; interpreting programs

8.1 Introduction[1]

Although pronunciation teaching has received a lot of attention in the field of applied linguistics, there are still remarkably few studies paying attention to the effects of explicit instruction of prosody in the teaching of English as a Foreign Language (EFL) (Derwing & Munro 2005, Koike 2014). Several methodological perspectives are available for the explicit teaching of pronunciation (Derwing & Munro 2005, Foote, Holtby & Derwing 2011) but instructors often do not feel comfortable explicitly teaching pronunciation (Burns 2006, Baker, 2011, Foote et al. 2011, Koike 2014), either because they find it difficult to listen analytically to the students' pronunciation, identify errors and suggest remedies, or because they give priority to other aspects of communicative competence such as the acquisition of vocabulary and morphosyntax. Prosody awareness training is the most marginalized activity in the training of interpreters though prosody plays a key role in communicating the message. The neglect of prosody awareness training for interpreters may be due to the (apparent) complexity of this issue and the misconception about what content should be taught and how this could be done (Suwartono 2014). By prosody we understand the ensemble of properties of speech that cannot be derived from the mere sequence of phonemes that make up a spoken sentence. Prosody then includes such phenomena as lexical tone, stress at the word and at the sentence level, boundary marking and intonation. All these suprasegmental phenomena are characteristics of linguistic units larger than a single vowel of consonant, i.e., larger than a segment (Lehiste 1970, Nooteboom 1997, Van Heuven & Sluijter 1996). Although words are recognized mainly from the sequence of segments, word-level prosody assumes a crucial role in the recognition process when the segmental quality is poor (as is typically the case in foreign-accented speech (e.g., van Heuven 2008, Cutler 2012). Moreover, sentence prosody is often indispensable in the signaling of the speaker's intention (e.g., O'Neal 2010). Although quite probably overstating their case some authors (e.g., Suwartono 2014) claim that teaching suprasegmental features should take priority over segmental properties in teaching English as a foreign language. In the Iranian educational system, segmental features are taught and practiced in training interpreters more intensely than suprasegmentals.

Intelligibility and comprehensibility are fundamental aspects of second language pronunciation (Derwing et al. 2012). In this regard, prosodic features are very important in making the speech intelligible. Research shows that prosodic feature errors are barriers to the intelligibility of speech (Munro & Derwing 1995). Studies show that awareness training is an important factor contributing to second-language acquisition (Venkatagiri & Levis 2007, Robinson et al. 2012). Schmidt (2001, 2010) points out that awareness raising is fundamentally necessary in learning second-language linguistic

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features. Also supporting this perspective, Pennington (1998) claims that explicit instruction of phonological rules makes learners aware of the problems in their own pronunciation of the foreign language. This view is supported by other scholars who all agree that explicit instruction and awareness training are effective components in the teaching of English as foreign language (Norris & Ortega 2000, Spada & Tomita 2010, Koike 2014). Derwing & Munro (2005) also state that phonological forms should be taught and explained explicitly so that foreign-language learners perceive the differences between their own pronunciation and that of native speaker models.

Research shows the positive effects of explicit instruction of phonological rules (e.g., Neufeld 1977, Murakawa 1981, De Bot & Mailfert 1982, De Bot 1983, Leather 1990, Champagne-Muzar, Schneiderman & Bourdages 1993, Pennington 1998, Ahrens 2004, Derwing & Munro 2005, Venkatagiri & Levis 2007, Foote et al. 2011, Derwing et al. 2012, Robinson et al. 2012, Yenkimaleki & van Heuven 2013, 2016a, b, Suwartono 2014, Koike 2014). According to Ahrens (2004) the importance of prosody for an interpreter in the bilingual communication between two parties would be the same as in monolingual communication of message. She also states that since the prosodic features which exist in the source language carry an important part of the message that should be delivered in target language, the prosodic features in the target language would be of the utmost importance in rendering the message to the audience. Gut et al. (2007) argue that the goal of instructors in different academic settings should be to make second-language learners perceive and produce the prosodic features of the target language adequately. Considering the needs of the second-language learners, it can be targeted to comprehensible communicative abilities or near-native like language competence. Instructors take advantage of different methodologies such as teaching theoretical aspects of prosody, consciousness raising of language structure, production exercises and perceptual training. Gut et al. (2007) claim that researchers produce theories while teachers practice them in class so that their experiences tend to be different. An exchange of ideas between the two parties, i.e., the theory makers and the practitioners, is dearly needed. Unfortunately formal settings in which the various professional groups who are concerned with second language prosody exchange perspectives are largely lacking at this time. Jackson & O'Brien (2011) point out that studies on the relationship between prosody, second-language speech production and second-language comprehension were not enough and this area demands more investigation. The results of these studies which have been done so far should be considered as introductory points. Therefore, this area demands much more attention by having comprehensive experimental studies because of the importance of message communication. The systematic studies can provide us with enough information on how interpreters can take advantage of prosodic features in message perception and communication since there is a relationship between prosody and meaning. Also, the result of such studies in this area would help second-language learners in following different issues in the foreign language classrooms by perceiving the instructions and outside of the classrooms as well when using language communicatively. Derwing et al. (1998) argue that their experiment indicates that awareness training resulted in better understanding of utterances by second-language learners who had instruction emphasizing prosodic feature of stress; moreover, these second-language learners could transfer their perceptual learning to the spontaneous production as well (Field 2003).

A significant perspective in current cognitive psychology would be that awareness is a fundamental aspect of learning. It has even been stated that it is impossible to have learning without conscious awareness (Brewer 1974, Dawson & Schell 1987, Lewis & Anderson 1985). Rutherford and Sharwood Smith (1985) assert that drawing the learner's attention to the formal properties of language raises consciousness and may therefore be advantageous in second-language learning.

Therefore, interpreting studies as a growing field, in order to apply efficient didactic methods in training qualified future interpreters, needs to consider awareness training of prosodic features of the source and target languages and include appropriate procedures of prosody teaching in the curriculum of training programs. This perspective demands systematic investigation of this issue within the specific context of interpreter training programs. Accordingly, the present study is done to elaborate this issue so that the results may be a stepping stone towards improving the curriculum for training the next generation of interpreters.

8.2 Research question

The effect of prosodic feature awareness training and the conscious knowledge of prosodic features (of both native and foreign language) on the performance of interpreters from Farsi into English has not been investigated systematically. The present experiment was set up to shed light on the potential importance of prosody in the training of future interpreters. The result of such study can lead to modification of the curriculum for interpreter training through including exercises and materials about this issue in interpreting programs. The following research question was asked.

Does awareness training of prosodic features (stress at word and sentence level) from Farsi into English enhance the quality of consecutive interpretation performance for interpreter trainees?

8.3 Method

8.3.1 Participants

Thirty-two students of translation and interpreting studies at BA level at Arak University were chosen randomly. They were 16 male and 16 female students. They were divided into two classes that each incorporating 8 male and 8 female participants. Their age range was between 18 and 26 years old and they took part in all sessions of the program.

8.3.2 Procedures

The interpreter trainees who participated in the study were divided into two groups at random. One group was designated as the experimental group while the other was considered the control group. At the beginning of the program all participants took a TOEFL test in order to establish that they were homogeneous. The test battery was the standard Longman's TOEFL English proficiency test, with separate modules testing the learner's (i) Listening comprehension, (ii) Reading comprehension and (iii) Structure and writing skills.

Then, the control group and experimental group took a pre-test on interpreting so that their level of expertise in interpreting was assessed prior to receiving any type of training. In the next stage, the control group received instruction and practice about the techniques of interpreting, different aspects of interpreting, and types of interpreting. The experimental group received not only the same instruction as provided to the control group (in less time, however) but also awareness training on prosodic features (stress at word and at sentence level) of English and their effect on their performance. The prosody awareness training targeted the differences between the stress systems of English and Farsi, at the word and sentence level, in a cognitive way. Theoretical explanation was given and immediately put into practice in exercises (a detailed account of contents of the awareness training program can be found in Chapter 3, Appendix 3.2, pp. 50−86). Both experimental and control groups received exercises in interpreting by presenting authentic audio extracts. The experimental group received awareness training of prosodic features of English for 20 minutes each session and the control group received additional practice in consecutive interpreting through practical exercises. To receive feedback regarding the progress of teaching and to detect weaknesses in methodology, different types of formative test were administered in all the sessions. At the end of the program, a post-test with the same structure but with different items compared with the pre-test was administered to both groups in order to establish whether the treatment (explicit teaching of English prosody) of the experimental group had been effective or not.

Six authentic audio extracts of IRIB (Islamic Republic of Iran Broadcasting) news cast in Standard Farsi were chosen as test materials for the interpretation task. Through random sampling four of these were selected for the pre-test. Each fragment lasted 30 seconds. The other two fragments were used as the post-test. The procedure used in the pre-test and the post-test was the same. Students were seated in sound-proofed half-open cubicles which attenuated ambient noise well enough to yield clean recordings. They listened to the source texts being played to them over a loudspeaker at a comfortable listening level. After every 30-second fragment they were allowed one minute to record an interpretation of the source text in English. Recordings were made directly onto a digital computer through individual, table-mounted microphones. As part of the one-minute intervals, and also earlier while listening to the stimulus text, participants were allowed to make written notes (as is not uncommon in consecutive interpreting).

The participants' performance, both in the pre-test and in the post-test, was scored applying the criteria adapted from Sawyer (2004). These are:

1. *Accuracy*: Interpreters should be faithful all the time to the meaning of source language. It means than an optimal and complete message should be transferred to the target language such that the content and intent of the source language should be preserved without omission or distortion. Accuracy of interpretation should be a primary concern for interpreters. Discrepancies in meaning and intention between source and target text are not acceptable.
2. *Omission*: Jones (2014) pointed out that interpreters in some situations have insufficient time to render exact and complete messages. In such situations interpreters may omit part of the source text and yet deliver a coherent message to the audience. To do so, interpreters may intentionally omit part of the source language and concentrate on transferring the gist of the message. As a consequence, some omissions are considered errors but in certain complicated situations they are unavoidable, e.g., when the interpreter suffers from cognitive overload. In this study omissions were not counted against the interpreter as long as the interpretation preserved the content and intent of the source language; if not, they were scored as errors.
3. *Overall coherence*: Coherence is the extent to which the interpreter's output is meaningful and purposeful. Message coherence is a key aspect in interpretation, which includes conceptual connectedness, evaluative and dialogical consistency and textual relatedness.
4. *Grammar*: In this study the attempt was made to evaluate the speech production of the participants observing the standard structural rules of English.
5. *Expression*: Utterances should be appropriate regarding formality and informality with the target audience. Moreover, the utterances should be a manifestation of appropriate use of target language.
6. *Word choice*: The choice of words in the target language should be done according to the genre of source language. Moreover, in interpreting the expectations of the audience (in relation to the social class they belong to) should be taken into account as well.
7. *Terminology*: Interpreters should be familiar with technical terms of the subject matter that they are interpreting. In this study, the attempt was made to see to what extent the participants were choosing the technical terms when transferring the message.
8. *Foreign accent*: Since the interpreter's intelligibility will depend on the quality of his/her pronunciation of the target language, the strength of the interpreter's foreign accent in English was judged.
9. *Pace*: It is widely recognized that a rate of delivery of speech between 100 and 120 words per minute (wpm) is optimal for English speech (Gerver 1969, Seleskovitch 1978, Lederer 1981, Chang 2005). In the present study, an intuitive judgment was made of how optimal the interpreter's rate of delivery was, i.e., neither very slow nor so fast that intelligibility would be compromised.
10. *Voice*: Generally an interpreter with pleasant and relaxed voice is more appreciated than one with a strained or nervous voice. An attempt was therefore made to judge globally to what extent the voice of the participants is appropriate for transferring the message.
11. *Accentuation* is used to signal the information state of discourse constituents. English uses accentuation to indicate information structure. It also plays a crucial role in spoken discourse processing in communication. As a first approximation,

listeners consider a sentence appropriate when new information is accented and old information is unaccented (Birch & Garnsey, 1995, Li et al. 2008). Appropriate accentuation speeds up sentence processing by listeners when processing discourse (Van Donselaar & Lentz 1994; Terken & Nooteboom 1987; Bock & Mazzella 1983; Cutler 1976, Li et al. 2008). In the present study, the raters judged the appropriateness of the placement of sentence stresses (accentuation).

Table 8.1. Eleven evaluation criteria subdivided into three domains used in the quality judgment of interpreting performance. Weights add up to 110. After Sawyer (2004).

Meaning		**Language use**		**Presentation**	
Accuracy	20	Grammar	7	Pace	10
Omissions	15	Expression	7	Voice	10
Overall coherence	10	Word choice	7	Accentuation	10
		Terminology	7		
		Foreign accent	7		

8.3.3 Data analysis

To see whether the difference between the mean scores of the experimental and control groups is statistically meaningful and to see whether prosodic feature awareness training did have higher impact on test components specifically addressing prosody, t-tests were performed. The correlation between pre-test proficiency test scores and post-test scores was established by the Pearson correlation coefficient.

8.4 Results

At the beginning of the program all the participants took a pre-test of general English proficiency so that we can see whether the participants form a homogeneous group not. Table 8.2 shows the participants' TOEFL scores.

A set of t-tests for independent samples bears out that there is no significant difference between the experimental and control groups on any of the TOEFL components, $t(30) = .17$ ($p = .869$) for Listening comprehension, $t(30) = .29$ ($p = .774$) for Structure & writing, $t(30) = -.29$ ($p = .851$) for Reading comprehension, nor in the overall TOEFL score, $t(30) = .06$ ($p = .951$). The conclusion follows that the two groups of participants had the same level of proficiency in English at the beginning of the intervention. We may also observe, however, that students range widely with overall TOEFL scores between 531 and 633.

Table 8.2. Raw component and overall scores on TOEFL proficiency test obtained by control (left-hand part) and experimental groups (right-hand part). Within each group subjects are listed in descending order of the overall TOEFL score.

Control Group							Experimental group						
Nr.	ID	Gend.	List. Comp	Struct. & Writing	Read. Comp	Overall TOEFL	Nr.	ID	Gend.	List. Comp	Struct. & Writing	Reading Comp	Overall TOEFL
1.	AlB	M	62	65	60	623.3	1.	SaR	M	67	65	58	633.3
2.	FaP	F	57	65	58	600	2.	FaF	F	62	58	55	583.3
3.	VaH	M	60	61	58	596.7	3.	AmS	M	54	60	57	570
4.	NeJ	F	57	63	58	593.3	4.	MoS	F	57	58	55	566.7
5.	AmR	M	54	58	65	590	5.	HoY	M	52	60	57	563.3
6.	AtR	F	57	58	56	570	6.	FrN	F	51	56	59	553.3
7.	ReR	M	54	61	54	563.3	7.	AmN	M	54	56	53	543.3
8.	MeR	F	54	57	58	563.3	8.	SaS	F	52	56	53	536.7
9.	HaM	M	53	58	53	546.7	9.	FaM	M	45	56	54	516.7
10.	AzD	F	51	52	50	510	10.	AzS	F	50	54	49	510
11.	HoK	M	49	53	48	500	11.	MaM	M	45	54	53	506.7
12.	MaL	F	48	47	43	460	12.	NeN	F	48	52	49	496.7
13.	SiS	M	42	46	48	453.3	13.	HaM	M	49	50	48	490
14.	ZoA	F	41	49	46	453.3	14.	SiM	F	47	44	51	487.3
15.	SaG	M	45	47	43	450	15.	AkR	M	45	49	51	483.3
16.	ShS	F	44	46	43	443.3	16.	ZaS	F	44	48	45	456.6
Mean			51.75	55.37	52.56	532.26	Mean			51.38	54.75	52.94	531.04
SD			6.38	6.85	6.87	64.05	SD			6.42	5.25	3.92	45.90

In the next stage, two interpreted texts were selected for analysis in the pre-test. The same texts were used for all 32 participants. These were the second and third fragments presented out of the series of four (see § 8.3.2).

The selected test fragments were presented to three expert raters, who rated the participants' performance on the pre-test and on the post-test. The raters were experienced English interpreting instructors employed by universities in Iran, with Farsi as their native language. Raters judged the students' interpreting performance independently of one another, at different times and locations, using audio recordings of the target fragments collected during the pre-test and post-test sessions. With the exception of one (the author of the present dissertation), the raters were not familiar with the students they listened to, nor did they know which fragments were recorded in the pre-test and which ones in the post-test. Again with the exception of the present author, the raters did not know which students were members of the control group and who were in the experimental group. Rater's noted their judgments on each of the eleven rating scales (see § 8.3.2) during or immediately after listening to the student's fragments.

There were slight (but significant) differences in the mean judgments given by the three raters over pre-test and post-test combined, with Armand as the strictest judge (55 points), Rasti as the most lenient one (59 points) and Maleki in between (57 points) – see also Tables 8.4-5. The effect of judge is significant by a repeated measures analysis of variance, $F(2, 126) = 17.6$ ($p < .001$, $p\eta^2 = .218$). All judges differed from one another (post-hoc analysis with Bonferroni correction for multiple comparisons, $\alpha = .05$).

In spite of these small differences, the agreement between the judges was excellent, with Cronbach's alpha at .984, while alpha never dropped below .974 when one of the judges was left out in turn. This implies that there are no systematic differences between the ratings given by the present author (who was familiar with the students he rated) and those given by the other two raters (who did not know the students). On the basis of these findings it was decided carry out further statistical analyses on the ratings after averaging over the three scores given given by the individual raters.

The results of the rating of the pre-test are presented in Table 8.3. The table lists the overall judgment given by each rater separately as well as the mean of the three overall judgments. Component scores (for each of the 11 criteria) have been omitted from Table 8.3. We will present these later in the analysis. As is shown in Table 8.1, the overall ratings range between zero and 110, with different weights depending on the criterion at hand.

An independent-samples t-test was run on the difference between the experimental and control groups.[2] The means of the pre-test scores do not differ significantly between the control group (56.6) and the experimental group (56.1), $t(30) = 0.083$ ($p = .943$, two-tailed).

[2] For all t-test reported in this paper adjusted degrees of freedom were used to compensate for whatever differences exist in the sample variances. Nevertheless, we will report the nominal degrees of freedom in the text.

Table 8.3. Overall quality rating of interpreting performance in the pre-test (on a scale between 0 and 110). Ratings are listed for each judge separately as well as averaged over judges, for participants in the control (left-hand part) and experimental groups (right-hand part). Within each group subjects are listed in descending order of the overall TOEFL score (see Table 2).

Control Group							Experimental group						
Nr.	ID	Gender	Armand	Rasti	Maleki	Pre-test	Nr.	ID	Gender	Armand	Rasti	Maleki	Pre-test
1.	AlB	M	82	97	88	89	1.	SaR	M	94	87	92	91
2.	FaP	F	84	89	76	83	2.	FaF	F	80	91	84	85
3.	VaH	M	75	79	77	77	3.	AmS	M	75	80	73	76
4.	NeJ	F	68	69	76	71	4.	MoS	F	75	70	71	72
5.	AmR	M	65	74	68	69	5.	HoY	M	65	70	63	66
6.	AtR	F	60	68	64	64	6.	FrN	F	60	64	65	63
7.	ReR	M	57	50	52	53	7.	AmN	M	54	62	55	57
8.	MeR	F	50	55	48	51	8.	SaS	F	45	55	47	49
9.	HaM	M	52	46	46	48	9.	FaM	M	43	53	51	49
10.	AzD	F	46	51	47	48	10.	AzS	F	43	51	47	47
11.	HoK	M	44	49	45	46	11.	MaM	M	40	50	48	46
12.	MaL	F	42	47	46	45	12.	NeN	F	44	50	44	46
13.	SiS	M	42	46	44	44	13.	HaM	M	37	39	44	40
14.	ZoA	F	41	45	46	44	14.	SiM	F	35	41	41	39
15.	SaG	M	33	42	36	37	15.	AkR	M	33	40	35	36
16.	ShS	F	31	42	38	37	16.	ZaS	F	31	39	38	36
Mean			54.50	59.31	56.06	56.62	Mean			55.25	55.75	56.31	56.12
SD			16.52	17.63	16.17	16.54	SD			18.70	17.37	17.38	17.50

At the end of the training program, a post-test of interpreting was run to assess the effect of the treatment. The results of the post-test ratings are presented in Table 8.4.

The same independent-samples t-test on the post-test scores (mean interpreting performance rating) for the experimental and control groups shows that the advantage of the experimental group (58.1) over the control group (56.4) is not significant, $t(30) = .271$ ($p = .788$, two-tailed).

Table 8.5 lists the mean judgments (averaged over the three raters) and the standard deviation of the ratings for each of the 11 criteria separately as well as the total evaluation, i.e., the sum of the 11 judgments. This information is presented for the ratings of the pre-test and of the post-test side by side. The difference between post-test and pre-test is specified in the columns headed 'Gain'. Here a positive gain value represents a positive effect of the treatment. Finally, the table specifies the magnitude of the difference in gain obtained by the experimental group and by the control group. A positive gain difference (Δ) indicates that the experimental group benefited more form the training program than the control group.

The students' interpreting performance, whether in the pre-test or in the post-test, is far from ideal. Given that the maximum value on the overall rating scale is at 110, the means of the tests are only a little above the midpoint of the scale. Moreover, it would appear from Table 8.5 that the post-test posed more of a challenge than the pre-test, in spite of our attempts to keep the level of difficulty of the tests equal. It seems highly implausible that the control group would not benefit at all from the 22.5-hours training program. Be this as may, the experimental group gained a significant 2.0 points due to the intervention, whereas the control group lost an insignificant .2 of a point. The difference in gain obtained by the experimental and control groups, i.e., 2.2 points in favor of the experimental group, is significant, $t(30) = 2.2$ ($p = .018$, one-tailed).

So far we have examined the effects of the intervention in terms of the overall interpreting performance. It may be worthwhile looking at effects on the eleven quality criteria separately. Table 8.5 shows that there are significant differences in gain between the experimental and control groups in only three of the eleven rating criteria. For reasons we fail to understand, the control group made a significantly greater improvement than the experimental group in reducing the number of (true) omissions. In terms the other two criteria, it is the experimental group that benefits more by the intervention. The experimental group improves more in terms of voice and, especially, in correctness of accentuation. On the latter scale an impressive difference in gain was obtained by the experimental group, in the amount of 3.8 points on a 10-point rating scale.

Table 8.4. Post-test results (for further information see Table 8.3).

Control Group							Experimental group						
Nr.	ID	Gender	Armand	Rasti	Maleki	Post-test	Nr.	ID	Gender	Armand	Rasti	Maleki	Post-test
1.	AlB	M	88	96	89	91	1.	SaR	M	97	95	90	94
2.	FaP	F	88	86	78	84	2.	FaF	F	88	86	87	87
3.	VaH	M	76	71	75	74	3.	AmS	M	73	80	75	76
4.	NeJ	F	71	70	66	69	4.	MoS	F	68	70	75	71
5.	AmR	M	68	70	75	71	5.	HoY	M	70	69	80	73
6.	AtR	F	65	65	71	67	6.	FrN	F	61	70	64	65
7.	ReR	M	59	60	52	57	7.	AmN	M	59	64	54	59
8.	MeR	F	52	53	57	54	8.	SaS	F	43	50	48	47
9.	HaM	M	44	43	54	47	9.	FaM	M	49	58	52	53
10.	AzD	F	41	50	44	45	10.	AzS	F	53	51	43	49
11.	HoK	M	42	49	50	47	11.	MaM	M	48	52	56	52
12.	MaL	F	42	36	39	39	12.	NeN	F	47	40	42	43
13.	SiS	M	41	49	42	44	13.	HaM	M	41	45	49	45
14.	ZoA	F	44	48	43	45	14.	SiM	F	43	40	46	43
15.	SaG	M	33	37	32	34	15.	AkR	M	32	36	40	36
16.	ShS	F	30	41	34	35	16.	ZaS	F	33	40	38	37
Mean			53.37	58.88	56.13	56.43	Mean			56.56	59.13	58.69	58.12
SD			19.23	16.90	16.84	17.53	SD			18.68	17.95	17.40	17.72

Table 8.5. Statistics for eleven quality criteria judged for experimental and control groups in the pre-test of interpreting performance. Means, standard deviations are presented. The three rightmost columns specify the significance (two-tailed) of the difference in gain obtained by the experimental and control groups.

Rating scale		Control group					Experimental group					Gain difference		
		Pre-test		Post-test		Gain	Pre-test		Post-test		Gain	Δ	*t*(30)	*p*
		Mean	SD	Mean	SD		Mean	SD	Mean	SD				
1.	Accuracy	9.8	3.8	11.1	3.3	1.3	10.3	2.9	12.1	3.2	1.8	0.5	1.8	.082
2.	Omissions	8.5	2.6	9.8	2.8	1.3	9.3	3.3	8.2	3.0	−1.1	−2.3	−5.6	< .001
3.	Coherence	5.4	1.8	5.2	1.7	−0.2	4.8	1.6	4.8	1.6	0.0	0.2	0.6	.544
4.	Grammar	4.5	1.4	4.4	1.3	−0.1	4.4	1.2	3.9	1.2	−0.5	−0.4	−1.1	.279
5.	Expression	4.3	1.2	3.9	1.0	−0.4	4.3	1.0	3.8	1.1	−0.5	−0.1	−.5	.649
6.	Word choice	4.4	0.8	4.1	1.0	−0.3	4.5	1.2	3.8	1.2	−0.7	−0.4	−1.5	.145
7.	Terminology	4.1	1.2	4.1	0.9	0.0	4.0	1.2	3.8	1.0	−0.2	−0.2	−0.6	.540
8.	Foreign accent	4.0	0.8	3.8	1.0	−0.2	3.8	0.9	3.4	1.0	−0.4	−0.1	−0.2	.823
9.	Pace	4.0	1.2	3.6	2.0	−0.4	4.6	2.0	4.0	1.9	−0.6	−0.2	−0.5	.621
10.	Voice	4.0	1.5	3.6	2.2	−0.4	3.7	2.2	4.5	2.2	0.8	1.2	2.9	.007
11.	Accentuation	3.6	1.7	3.0	1.6	−0.6	2.6	1.5	5.8	1.4	3.2	3.8	23.1	< .001
Overall rating		56.6	16.5	56.4	17.5	−0.2	56.1	17.5	58.1	17.7	2.0	2.2	0.2	.035

Figure 8.1A (left) plots the relationship between the TOEFL test and pre-test scores of the individual participants, with separate symbols for participants in the experimental group (filled symbols) and in the control group (open symbols). Similarly, Figure 8.1B plots the relationship between the TOEFL test and post-test scores.

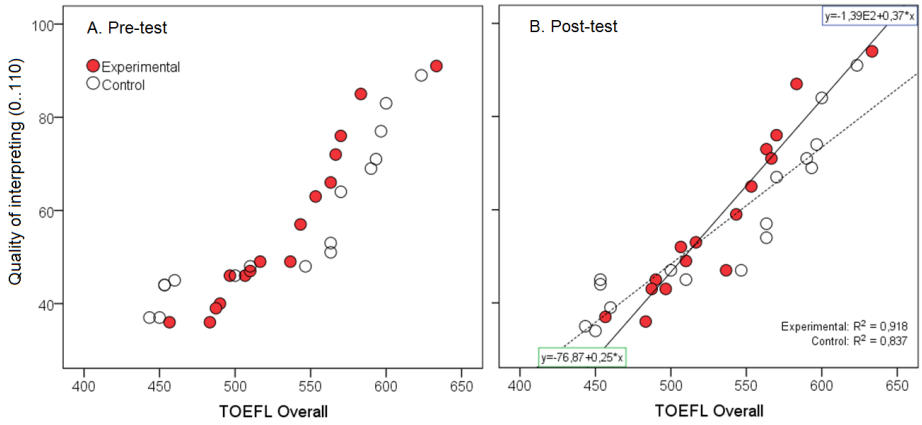

Figure 8.1. Pre-test (left) and post-test (right) interpreting scores of individual students plotted as a function of their TOEFL scores, with separate markers for participants in the experimental group and in the control group.

Figure 8.1 shows quite clearly that the overall TOEFL scores are distributed very much the same way for the experimental and control groups. It is also obvious that the overall TOEFL score makes an excellent prediction of the individual participant's interpreting quality, both in the pre-test and in the post-test, with correlation coefficients better than .9. In spite of this large effect of TOEFL score, there is a smaller but still significant effect of the intervention, i.e., the prosody awareness training raises the post-test score by 2 points, which gain is absent in the control group.

Figure 8.2 illustrates part of the results presented above in Table 8.5. It plots the gain from pre-test to post-test for each quality judgment according to the mean ratings on each of the eleven evaluation criteria judged in the pre-test and post-test separately for the control group (left part of figure) and for the experimental group (right part of figure). The possible ranges for the evaluation criteria differ as indicated in Table 8.1. For instance, Accuracy ratings may range between 0 and 20 points, whereas scores for Grammar and Choice of words may range between 0 and 7 points. The overall rating may range between 0 and 110 points. Visual comparisons should therefore be made only on the basis of the difference in scores between experimental and control groups.

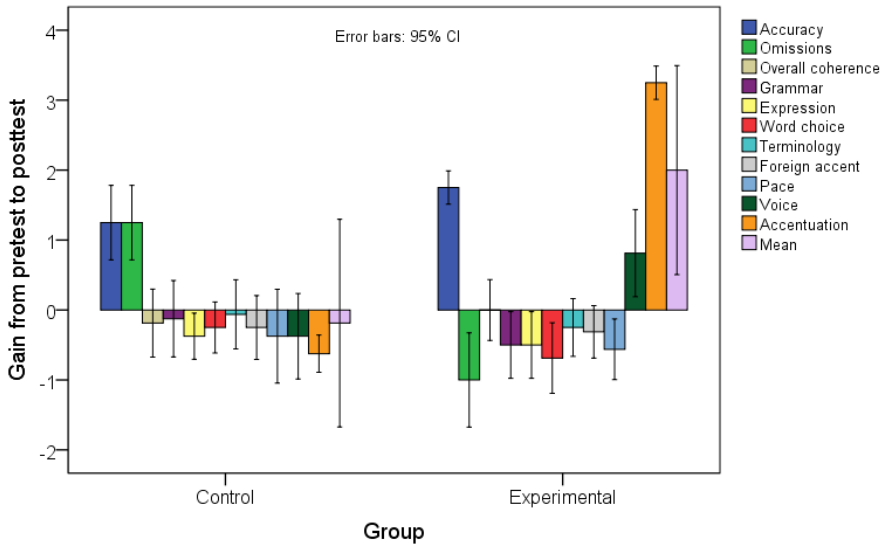

Figure 8.3. Scores obtained on each of eleven rating scales plotted separately for control (left) and experimental (right) group.

8.6 Conclusion

The present study investigated the effect of explicit teaching of prosody on the quality of consecutive interpretation by Farsi-English interpreter trainees. Our results showed that explicit teaching of prosody did have a small but significant positive effect on the overall quality of interpretation for Farsi-English interpreter trainees. Moreover, the results show that the effect of the prosody awareness training was very strong as far as the interpreter's use of accentuation is concerned, i.e., on the scale that should be most sensitive to the intervention. We conclude that the training program influenced the student's actual interpreting performance.

Different studies have shown that instructors do not teach pronunciation explicitly, because they lack the necessary skills or because they give higher priority to other aspects of the foreign language curriculum (e.g., Burgess & Spencer 2000, MacDonald 2003, Murphy 1997). This problem exists in interpreter training programs as well. These programs do not explicitly teach segmental pronunciation rules and prosody of the target language to interpreter trainees. This demands that policy makers reconsider the curriculum of interpreter training. The findings of this study are in line with Pourhosein Gilakjani (2012), who stated that careful preparation and integration of pronunciation teaching is a fundamental issue in developing the communicative skill of EFL learners and an important factor in the comprehensibility of EFL speakers. The results of the study also confirm Schmidt's hypothesis (Schmidt & Frota 1986) that EFL speakers with superior explicit knowledge of phonological structures and patterns of English are generally better intelligible speakers.

In this context we should distinguish between segmental pronunciation and prosody (or: suprasegmental pronunciation). In languages such as English and Farsi segmental information is typically sufficient to resolve any ambiguity as to which lexical item is intended by the speaker, while word prosody is generally not needed to recognize words: the number of minimal stress pairs, i.e., identical sequences of vowels and consonants that are distinct only in the stress pattern, hardly occur in these languages (e.g., Cutler 2005). However, word prosody becomes more important as the segmental information is unreliable, as happens in speech spoken with a foreign accent. Moreover, if the segmental pronunciation is poor, errors in word prosody, such as incorrect word stress placement, may cause a complete breakdown of the word recognition process (Van Heuven 1985, 2008). Sentence prosody (sentence stress, intonation) plays no direct role in the recognition of lexical items but helps the listener process the continuous stream of speech sounds. Prosodic breaks indicate which words should be parsed together to form meaningful chunks of information, while sentence stresses tell the listener which words contain important information. As such, sentence prosody is indispensable in communicating the speaker's intentions (Nooteboom 1997).

In the specific case of teaching English to Iranian interpreter trainees we would advocate teaching the differences between the word stress systems of the two languages, and proving 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.

The pedagogical implications of the present study would pertain to interpreting programs all over the world. 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 to serve as a substitute native speaker. In the EFL teaching situation learners tend to imitate their instructor's pronunciation. Moreover, suprasegmentals cannot be taught just through appropriate exercises in the textbooks; the instructor's production of suprasegmentals plays a major role in this regard. 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. In the EFL situation, learners traditionally consider phonology classes boring and they do not show any interest in them. Since phonetics is the foundation for speaking and listening comprehension (these are two very important skills for interpreters), this current tradition should change. Producers of teaching materials should be in contact with researchers in the field of phonetics, take publications of phonetics into consideration and include contrastive phonetics in the textbooks for interpreting programs.

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