

THE EFFECT OF EXPLICIT TEACHING PARALINGUISTIC FEATURES ON IRANIAN EFL LEARNERS' PERFORMANCE IN ENGLISH CONVERSATION IN EFL CONTEXT

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ABSTRACT: *The aim was to investigate the extent explicit teaching of paralinguistic cues contributes to developing EFL learners' paralinguistic performance. 72 Persian natives ranging between the age of 16 to and 24 sat for FCE proficiency test. 64 intermediate candidates formed the sample which was randomly divided into four equal groups, three experimental groups and one control group. Sitting for a pretest, the experimental groups received three types of treatments: only audio-visually, only aurally, and combination of the previous treatments plus using cell phones for recording, recasting, repeating the voices as feedback, while the control group received the material conventionally. After ten weeks, they were administered a post-test. Two raters rated their oral performances on the pre- and post-tests. The inter-raters' reliability indices were ($k=0.86$, $k=0.84$), respectively. The statistical tests reveals significant differences in favor of all experimental groups ($P<.005$) particularly of group 3 which support the significance of the treatment.*

KEYWORDS: Non-Verbal Competence, Paralinguistic Features, Technological Devices, Effective Communication

INTRODUCTION

Paralinguistic cues are powerful non-verbal communication elements that have the ability to make even good news sound horrible or bad news more palatable and to make communication credible and authentic or full of confusions. This research has set up its goals aiming to explore the interaction of technology type and language channel or modality in conscious raising of the students towards understanding and learning of the paralinguistic competence. The design of the research takes three treatments to present to students through audio-visual clips downloaded from You Tube, aural mp3 and mp4s downloaded from the Podcasts, and a combinatory module which is comprised of the previous two technologies in addition to mobile's recording, recasting, and repeating feature.

Another objective has been set on the part of teacher about the impact that s/he can leave on students if the teacher uses English all the time during class to convey the intended messages with the help of nonverbal communication. But when can we say that somebody has learned a language? Is it enough to know its vocabulary and grammar? How about reading, writing, listening and speaking skills? What does each skill consist of? Nunan (1999), and Basaraba, (2012) indicate that for most people knowing a language equals the ability to speak it. Lazaraton (2001: 103) explains that "speech is the most basic means of human communication." But is speaking just pronouncing words at the level of segments or something beyond it which is termed as suprasegmental level? Basaraba (2012), Bailey and Savage (1994; as cited in Lazaraton, 2001) all try to provide some reasons why speaking is the most challenging of all four skills. Basaraba tries to refer to some characteristics of spoken language, such as paralinguistic

features, and other features as clustering and using reduced forms and also the existence of colloquial language including slangs and idioms in speech that can make the oral performance easy or difficult. Lazaraton (2001) that for a successful oral communication, the speaker needs to monitor and understand the other speaker and at the same time he has to think about his own role in the communication and produces speech while monitoring its effects on his interlocutor.

Paralanguage features

Having two sides, the segmental aspect of language has been the focal point of attention is, while the paralanguage features which have remained Cinderella part of the issue. Regarding the paralanguage cues, different classifications have been presented, but the most important ones are verbal and non-verbal cues of language. From the verbal part, intonation, stress, pitch and sonority as well as fluency on the one hand and from the nonverbal side gestures and kinesics have been emphasized in the pertinent literature review, on the other. There is a lot of past research concerning intentions, attitudes and emotions, most previous research has focused on the classification of the basic emotions raised from paralanguage cues, such as anger, happiness and sadness (Fernandez et al., 2005; Schuller et al., 2005; Nwe et al., 2003; Neiberg et al., 2006). Other works have dealt with the identification of attitudes and intentions of the speaker. For example, Fujie et al. (2003) have reported about the identification of positive/negative attitudes of the speaker, while Maekawa (2008) has also reported about the classification of paralinguistic items like admiration, suspicion, disappointment and indifference. In Hayashi (1999), paralinguistic items like affirmation, asking again, doubt and hesitation were also considered. In the present work, we consider a variety of paralinguistic cues such as intonation, stress, pitch, sonority, and fluency would be explored with an eye on intentions, attitudes and emotions, rather than limiting our focus to the basic emotions.

Using Technology of the Day

Modern technologies of the day such as You Tube, Podcasts, and mobiles video recording, recasting and repeating features as feedbacks of their voice recorded can all be utilized as devices to facilitate in mastering both verbal and non-verbal paralanguage cues which, in turn, promote intonation, stress, pitch, sonority, and in general fluency. These devices can supply assistance to teachers and to provide students with different learning situations. In effect, these cues are all powerful non-verbal communication elements that have the ability to make even good news sound horrible or bad news more palatable.

The Aim of the Study

The current research was developed under the following objectives which have been set to increase understanding and learning of the language on the students' part through the use of paralinguistic features. Another objective has been set on the part of teacher about the impact that s/he can cause in students if they use English all the time during class to convey the intended messages with the help of nonverbal communication. Three concepts have been analyzed and implemented in the development of this research, [paralinguistic features], [body language and gestures] and finally [kinesthetics]. These concepts will be explored to understand better the theory that will support this research.

Statement of the problem

As Gregersen (2007) puts it nonverbal communication cues termed here as paralinguistic features such as gestures, facial expressions and gaze behavior are so important in second or foreign language communicative competence that if learners are not provided with them, they would fail to convey different messages in an implicit way which plays an important role in making easier the students' understanding and generating motivation in them to try to relate the movements and expressions with the language. Furthermore, Burston (2011) adds that the lack of resources causes limited fluency in English, and learning disabilities. The problem with communicative aspect of language where foreign language learners find themselves entrapped is a big hurdle, so the inability in conversing in English may be addressed to all EFL contexts in general, but here to Iranian EFL context in particular. This study will focus on the effect of paralinguistic features such as prosodic elements on learner's performance in conversation in English in terms of verbal and non-verbal suprasegmental features.

Research Hypotheses

Based on the research questions in researcher's mind, the current study explored the following null hypotheses.

H0₁. Explicit teaching paralinguistic features through videos from the You Tube (only audiovisually) does not affect Iranian learners' performance in English conversations in EFL contexts.

H0₂. Explicit teaching paralinguistic features through Podcasts (only aurally) does not affect Iranian learners' performance in English conversations in EFL contexts.

H0₃. Explicit teaching paralinguistic features through a combination of technological devices (audiovisual, aural, and frequent feedback tasks) through self-video recording by their own mobiles (using RRR technique-recording, recasting, and repeating) does not affect Iranian learners' performance in English conversations in EFL contexts?

H0₄. Gender variable plays no significant function across the three above-stated treatments in performing on paralinguistic features?

Paralinguistic has been dealt with mainly through the contributions made by Crystal (1975), Barr (2003), and Fajlik (2006). The concept of body language has been developed based on the studies made by Gregersen (2007), Patrick (2005), and Ahmed (2012). The concept of gestures and body language also has been treated by Negi (2009). Mont (2013), Saran, et.al, (2008) and Men (2012). Finally the concept of kinesthetic has been explored with the studies made by Sadanobu (2004), Riha and robles (2009).

Indeed, people express meaning not just in what they say but in the way they say it. In effect, the paralinguistic features employed by a speaker provide nuanced meaning, communicate attitudes and convey emotion. But the expression of meaning and conveyance of emotions is relatively the same in emotions but not in meaning (Orton, 2004). In effect, language is the basis of cognitive ability. While linguistic communication has been seen as equal to the transmission of cognitive, referential information, paralinguistic communication has been regarded as the transmission of emotive states (Miller, 2005).

Although linguistically speaking, the segmental phonetic units of human speech make us recognize the difference between the words; paralinguistic features such as emotive qualities are transmitted through prosodic changes and modifications such as kinesics, facial expressions, fundamental frequency, amplitude, and tempo. The semantic distinction between the two aspects of human communication, linguistic and paralinguistic is not that much sharp (Scollon and Scollon (2001).

Liang (2007) believes that further elements of meaning are conveyed by body movements, facial expressions, slight changes in breathing, length of pauses, and degrees of emphasis which are paralinguistic.

Empirical framework

The major goal of foreign language teaching is to develop students' cross-cultural communicative competence (BI, 1999). Hence, both verbal and non-verbal and prosodic communications become yet new elements that one must understand to interact effectively with people from different cultures (Samovar & porter 2003).

In the experiment done by Brunner (2001) on the effect of teaching nonverbal features to learners, she made students attentive to what she told them and they were expecting what it was coming next through singing songs and showed that this routine helped to interiorize new utterances implicitly.

Research by de Bot (1980 &1983) showed that audio-visual feedback is more effective in intonation learning than auditory feedback. Regarding the significance of repetition technique, Brunner (2001) agrees that repetition matters in light of the fact that it can hurry and develop the engagement process. Imitation becomes relevant in the classroom when this is done in a regular basis. Students reacted really well when they had to repeat rhymes related to the body parts, when they were singing and pointing at the different body parts they were focused on what they were doing and were willing to continue with the activity.

As Liang (2007) has shown, that kinesthetically oriented for children are stressful because they do not like to be asked to “look and listen” for long periods of time, since they feel it like a frustration, for they need to use their body all the time to move in the classroom. He adds that kinesthetic students for relieving stress, they do other things in the classroom such as stand up, “sharpen their pencil several times, ask to go to the rest room, or drop things”, if they are sat long periods of time working at a desk, so they should be asked to be monitors of the class, or “to run errands”.

Gromik (2012) ventured to differentiate between spoken words and the meanings they convey ('language') and the other communicative features of human speech, the 'paralanguage,' or the 'language beside’.

METHODOLOGY

Introduction

This chapter explains the methodology of the current research including the participants, instrumentation, design, procedures, data collection, and data analysis of the study. The main purpose is to shed light into the ways in which conscious-raising concerning paralinguistic

features can contribute to Iranian EFL learners' promotion of communicative performance pragmatically.

Participants

72 Persian native speakers with the age range of 16 to 24, studying English at an institute sat for a language proficiency test First Certificate in English (FCE, 2011). 64 (34 females and 30 males) were found at intermediate level having scores within the range of $\pm 1SD$ above and below the mean. The rest fell beyond that scope, the upper-intermediate (6) and elementary (2) were few in number, so they were excluded from the study. The sample was randomly divided into two groups, experimental and control. The gender variable was also included in the current study.

Instrumentation

The instruments included in this research were a proficiency test (FCE, 2011) to decide on the homogeneity of the participants, a pre-test and a post-test in terms of listening and speaking skills in IELTS general program (Cambridge, 2009; Achieve IELTS 1&2, 2008). The materials used were Real Life TV, Rachel's English, Dave Sconda (English Meeting), English with Jennifer, and Amy Walker at home, and each in two files. To analyze the data, first the descriptive statistics were estimated to describe the data. Then an Independent Sample t-test was used to compare the means of the two groups, once across the pre-test and another time across the post-tests. A paired samples t-test was used to compare the participants' performances across pre- and post-tests. The statistical analysis of covariance (ANCOVA) was used to control the effect or interference of the pre-test scores on the post-test scores.

Procedures

To achieve the objectives of the study, all the 72 Persian native speakers studying English at an institute sat for a language proficiency test, (FCE, 2011). Their age ranged from 16 to 24. Out of 72, 64 (34 females and 30 males) subjects, whose scores fell within the range of $\pm 1SD$ above and below the mean were regarded as the intermediate, were assigned as the sample of the study because those whose scores fell beyond that scope, the upper-intermediate and elementary levels, were only 6 and 2 in number, respectively. So this paucity of the number of candidates at elementary and upper-intermediate levels of proficiency made the researcher exclude those at extremes, a delimitation of the study. Then the sample was randomly divided into four equal groups, which were randomly assigned to three experimental groups, A, B, C and one control group, D. All the four groups received the pre-test, which was composed of all the steps included in IELTS exam covering both pencil and paper and oral interview to tap their conversational knowledge status except for reading and writing skills. Three raters rated the participants' performances on the pretest. These raters were two non-natives and one English native speaker. The inter-rater coefficient for the pre-test was estimated through Kappa ($k=.86$), so the mean of the raters' scores was considered as the research data on the pre-test. Then the experimental groups received treatment, while the control groups received no special treatment but conventionally. After 10 weeks receiving treatment, a post-test was administered to the whole participants to find if any change(s) occurred in them particularly in the experiment groups due to the type of treatment they had received. Like the pre-test, for the post-test also, the inter-scoring reliability coefficient was estimated through Kappa ($k=.84$). Then the collected data were run through statistical tests for analysis. Once a paired samples t-test was used on pooled data of the experimental groups to be compared to the data from the control group

another time an ANOVA was used to compare the four group means separately. An ANCOVA test was also used to control the effect or interference of the pre-test scores on the post-test scores. The results of study indicated significant differences in favor of the experimental group, which was taught via technological devices. This could be an indirect suggestion for methodologists and curricula designers to emphasize the role of technological devices on developing the learners' paralinguistic competence. Finally not only the follow-up LSD tests were used to explore the differences among the four groups means differences but also a t-test was used to investigate any potential differences between gender variables.

Data analysis

To explore the homogeneity of the samples, two tests were used: an independent-samples *t*-test to compare the pooled means of the experimental groups and a one-way ANOVA to compare the four sample means distinctly.

Table 4.1 Descriptive Statistics for the Proficiency Test as the homogeneity test

Group	N	Minimum	Maximum	Mean	Std.
Exp.1	16	12.00	14.00	12.2500	1.23759
Exp.2	16	12.00	13.00	12.2875	1.28746
Exp.3	16	12.00	14.00	12.1875	1.20078
Control	16	12.00	13.50	12.2050	1.24642

The data collected from the samples were run through a one-sample *t*-test between the pooled mean scores of the three experimental groups and that of the control group on the proficiency test to ensure more about homogeneity of the samples under study.

Table 4.2 Results of the *t*-Test from the Proficiency Test of Both Groups

Group	N	Mean	Std.	Std. Error Mean	t-obs.	df	Sig. (2-tailed)
Experimental	48	22.5600	2.4100	0.56148	-.213	62	0.829
Control	16	22.1700	2.3900	0.53447			

$P > .05$

The value (-.213) in Table 4.2 proves that there is no significant difference between the pooled effects of three experimental groups in comparison with the control group. To ensure more of the homogeneity of the samples, once again the data on the four distinct groups were put in comparison through a one-way ANOVA test.

Table 4.3 Results of the One-way ANOVA for the four samples for Proficiency Test

Source of Variance	SS	df	MS	F
Between Groups	1.54	3	0.5133	0.1038
Within Groups	296.82	60	4.9411	
Total	298.35			

* $P > .05$

The results shown in Table 4.3 indicated that there was no significant difference between the mean scores of the four groups ($F=.1038$, $P > 0.05$). These findings prove that the four groups in the sample are homogeneous. Then to investigate whether the independent variables have adverse effects on the dependent variable, while they control, reduce, or eliminate the effect of covariate for the ease of estimation, an MANCOVA test was used. This helps the researcher to reduce the variance error which results in increasing the amount of F. Therefore, to compare the experimental and control groups' mean scores in the post test, an ANCOVA was also used to statistically control the effect of pretest scores on post test scores. To take these analyses into account, see the following tables. To have a better picture of the data see Table 4.4.

Table 4.4 Descriptive statistics and central tendencies for the pre-and post-tests

Group	N	Per test		Post test	
		Mean	Std.	Mean	Std.
Experimental 1	16	12.2500	1.23759	16.6250	2.99583
Experimental 2	16	12.2875	1.28746	14.3625	2.08066
Experimental 3	16	12.1875	1.20078	17.5000	2.22111
control	16	12.2050	1.74642	13.7500	1.80739

Table 4.4 shows the descriptive statistics of the data indicating the number of participants in each sample, the means and standard deviations in pre- and post- tests. To analyze equality of error variances and the normality of the data distribution, the Leven's and the Kolmogorov – Smirnov's test were used (See Table 4.5).

Table 4.5 Levene's Test and One-Sample Kolmogorov-Smirnov Test

Test Variable	Levene's Test of Equality of Error Variances				One-Sample Kolmogorov-Smirnov Test	
	F	df1	df2	Sig.	Z	Sig
<i>Pre- test</i>	.108	3	60	.955	.893	1.148
<i>Post- test</i>	.369	3	60	.775	.403	.143

The P-values for pre- and post-test in Table 4.5 were 1.148 and 0.143, respectively which were not significant ($P.>.05$). This indicates that the internal group variances are homogeneous in both pre- and post- tests. The Kolmogorov - Smirnov test was also used to explore the presumed normality of participants' paralinguistic competence in the four groups 1, 2, 3 in pre-and post-tests. The z-value ($z=.893$) in Table 5 indicates how much our samples have got normal cumulative distribution function. These indices allowed the researcher to continue the computation and to use a One-way ANOVA test compare the means of the experimental groups across the three proficiency level.

The one-way ANCOVA was utilized to evaluate whether population means on the dependent variable are the same across the independent variables (levels of the factors), adjusting for differences on the covariate, or more simply stated, whether the adjusted group means differ significantly from each other. Moreover, to control if there were any covariates to affect the study results, the researcher estimated a MANCOVA technique on the post-test means scores, while controlling the pre-test mean score (Table 4.6). There might be a question if these treat-

ments are subcategories of a hyper-category or they are independent ones. The researcher imagined both. If they were considered independent a MANOVA test was used (Table 4.6). If the treatments are considered as subcategories of a higher category, they are regarded just as variant forms of technology, an ANCOVA test was used (4.7). That is the reason why this research requires enormous statistical calculations.

Results of MANCOVA on the post-tests' mean scores controlling the pre-test scores

Dependent Variable	Source	Sum of Squares	df	Mean Square	F	Significance	Eta-squared
Exp. 1	Pre-test	1521.531	8	190.191	5.490	.002	.496
	Group	225.942	3	75.314	1.670	.013	.085
	Error	2425.169	54	44.91			
Exp.2	Pre-test	1498.653	8	187.33	3.329	.050	.330
	Group	553.564	3	184.521	3.279	.052	.154
	Error	3038.547	54	56.269			
Exp3	Pre-test	1884.712	8	235.589	4.176	.000	.853
	Group	2050.064	3	683.354	12.113	.001	.148
	Error	3046.463	54	56.415			

Table 4.6 shows a significant difference between the experimental and control groups in case of experimental group 3 in the post-test ($P < .000$). That is, the F-value for the experiment 1 was ($F=5.490$) which rejects the null hypothesis 1 ($P < .002$). The F-value in experiment 2 was ($F=3.329$, $P < .05$) which rejects the null hypothesis 2. The F-value in experiment 3 was ($F=4.176$) which rejects the null hypothesis 3 ($P < .000$).

Indeed, the significance level was much stronger in experiment 3 than those of 1 and 2, respectively. This means that the treatment in group 3 has been more successful than the other two. Finally, the Eta squared values show the percentage of difference between the groups under study. That is, the changes due to the treatments administered to groups 1, 2, and 3 can be accounted for 49%, 33%, and 85%, respectively.

Table 4.7: Univariate analysis of variance (ANCOVA) on scores in four groups on post-test

	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta ²	Observed Power
<i>Effect post-test</i>	238.306	1	238.306	5.133*	.000	.84	.780
<i>Between group</i>	1323.306	3	441.102	9.501*	.000	.72	1.000
<i>Error</i>	2739.134	59	46.426				
<i>Total</i>	4300.746	63					

$P < .0001^{**}$

The F-value (5.133) in Table 4.7 shows significant differences in the post-test ($P < 0.05$). To pinpoint the differences, a follow-up test was used to determine if respondents differ on the

dependent variable (DV), depending on their treatment types as particular continuous independent variable (IVs) (See Table 4.8).

Table 4.8 Test of Between-Subjects Effects

		N	Mean	Std.	M.D.	df	t	Sig.(2-tailed)
Exp. 1	woman	9	17.3333	2.23607	1.6190	14	1.710	.109
	man	7	15.7143	1.25357				
Exp. 2	woman	9	13.1111	2.75882	.1111	14	.102	.920
	man	7	13.0000	.81650				
Exp. 3	woman	9	17.7778	2.58736	.6349	14	.554	.588
	man	7	17.1429	1.77281				
Cont. group 4	woman	9	13.1111	2.08833	.8254	14	.900	.383
	man	7	12.2857	1.38013				

Table 4.8 show significant differences in means of the experimental groups at various p-values. It also implies that group 3 did much better than groups 1, and 2, while group 1, in turn, performed better than group 2. To see the magnitude of the variances and pinpoint the differences in means of the male experimental samples, follow-up study, LSD test, was done. The results are presented in Table 4.9.

Results for follow up LSD test for the mean differences regardless of sex variable in paralinguistic performances across the four samples in post-tests

Source	Type III Sum Of Squares	df	Mean Square	F	Sig.	Partia Eta Squared
Corrected Model	933.963 ^b	4	233.488	9.845	.000	.960
Intercept	.001	1	.001	.120	.731	.003
Only audio video	23.412	2	11.706	1081.692	.005	.643
Only Aural	12.616	2	6.308	105.512	.025	.477
A combinatory mode	27.341	2	13.670	1139.208	.000	.844
Error	.708	59	.012			
Total	80.765	65				
Corrected Total	81.765	64				

P<.05* P<.000**

Table 4.9 shows the comparative mean differences among the samples at different p-values. That is, the experimental group 3 outperformed the other groups, group 1, group 2, and group 4, hierarchically. It might be claimed these differences could be accounted for the various types of treatments they had received. To see if there is any difference between sex variables, an independent sample t-test was run (Table 4.10).

Table 4.10 Independent-samples t-test between male and female sex variable across the four samples in pre/post

	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta ²	Observed Power
<i>Effect per test</i>	16.095	1	16.095	13.403**	.001	.868	.987
<i>Between group</i>	16.479	3	5.493	4.574*	.012	.794	.825
<i>Error</i>	30.025	25	1.201				
<i>Total</i>	62.599	30					

The results of the Independent Samples T-test shown in Table 4.10 proved that although there were trivial differences between the performances of the male and female participants in the post-test, none of the t-values for the mean differences was shown to be significant at $P < .05$. This implies that there was no significant difference between the effect of the treatment on the male and females performances in the post-test. So the null hypothesis concerning the diverse effects of treatment on gender variable fails to be rejected. However, to see if males performed diversely across different treatments though they showed no significant difference in their performances in comparison to females. To do this, a one-way ANOVA was run and its results are presented in Table 4.11.

Table 4.11 Results of the one-way ANCOVA for males in the four samples

		Mean Difference	Sig.
Group1	Experimental 2	1.926*	.049
	Experimental 3	2.432**	.000
	Control Group	-.422	.654
Group2	Experimental 1	1.646**	.005
	Experimental 3	2.991**	.000
	Control Group	.817	.177
Group3	Experimental 1	2.307**	.004
	Experimental 2	1.234*	.020
	Control Group	1.064*	.051
Group4	Experimental 1	1.344**	.002
	Experimental 2	1.176*	.040
	Experimental 3	2.480**	.000

Table 4.11 shows the F-value ($F=13.403$) for the paralinguistic proficiency of male participants which was significantly different from each other across the four samples particularly in the three experimental groups at $P<.05$. That is, the above-stated F-value across all the four samples particularly in the three experimental groups was statistically significant at $P<.001$; therefore, the null hypothesis indicating that there is no significant difference between the males' mean differences across the four samples in the post test particularly in the experimental groups is rejected at $P<.001$. This proves that male participants were affected variously by the treatments. Moreover, the η^2 in Table 4.11 shows that the amount of shared variance ($\eta^2=.868$) which implies that 86 % of the males' mean differences in the post test accounts for the administered treatment to the experimental groups or as the impact of the independent variables. Furthermore, the observed power indices presented in the table above ($OP=.987$) shows that there existed no error type II and it rejects the probability of any mistakes in verifying or nullifying the null hypothesis. To further follow up the details, an LSD test was used in Table 4.12.

Table 4.12 LSD test to show the males' mean differences across samples in post test

		Mean Dif.	Sig.
Group 1	Experimental 2	1.476*	.040
	Experimental 3	2.294**	.000
	Control Group	-.3972	.548
Group 2	Experimental 1	1.832*	.005
	Experimental 3	2.991**	.000
	Control Group	.817	.177
Group 3	Experimental 1	1.878**	.004
	Experimental 2	1.426*	.040
	Control Group	1.073	.058
Group 4	Experimental 1	1.794**	.004
	Experimental 2	1.416*	.040
	Experimental 3	2.690**	.000

Table 4.12 shows significant differences between experimental groups in comparison to the control group at various significance levels. Of course, this difference was highly in favor of experiment 3, then experiment 1, then experiment 2, respectively. Regarding the control group, it had only a relatively significant difference. To sum up, men outperformed in group 3, 2, and 1, hierarchically.

However, to see if female sex performed diversely across different experimental treatments, a one-way ANOVA was run although the female sex showed no difference in comparison to male sex (See Table 4.13).

Table 4.13 Results of the one-way ANCOVA for females in the four samples

	Type III Sum of Squares	df	Mean Square	F	Sig.	Eta ²	Observed Power
<i>Effect per test</i>	17.014	1	17.014	16.281**	.001	.840	1.000
<i>Between group</i>	16.760	3	5.586	5.345*	.004	.823	.933
<i>Error</i>	30.319	29	1.045				
<i>Total</i>	64.093	34					

p<0.05* p<0.01**

The F-values in Table 4.13 shows that the paralinguistic proficiency of female participants is significantly different from each other across the four samples, but not in comparison to male sex, particularly in the three experimental groups at P<.001. This implies that female participants were affected variously through the treatments given to them. To pinpoint and further follow up the details, an LSD test was used (See Table 4.14).

Table 4.14 Results for the LSD to follow up the mean differences in *females'* paralinguistic proficiencies across the four samples in the post test

		Mean Dif.	Sig.
Group 1	Experimental 2	1.417*	.040
	Experimental 3	2.375**	.000
	Control Group	.878	.111
Group 2	Experimental 1	1.831*	.004
	Experimental 3	2.956**	.000
	Control Group	.248	.599
Group 3	Experimental 1	2.456	.004
	Experimental 2	1.035	.035
	Control Group	.704	.219
Group 4	Experimental 1	1.874**	.004
	Experimental 2	1.416*	.040
	Experimental 3	2.812**	.000

p<0.05* P<.01**

As Table 4.14 shows, female performed differently across different treatment groups. The mean differences for the experimental 3 were significant in all experiments at P<.000; for the experimental 1 was also significant at P<.005. The mean differences for the experimental 2 were also relatively significant at P<.05.

Table 4-15: Paired two-tailed t-test between pretest and post test of the four samples

		N	Mean	Std. Deviation	Mean Dif.	df	t	Sig. (2-tailed)
Exp. 1	pre	16	13.2500	1.43759	-2.3750	15	-	.001
	post		15.6250	1.99583			12.410**	
Exp. 2	pre	16	12.6875	1.88746	-2.275	15	-10.734*	.010
	post		14.9625	2.08066				
Exp. 3	pre	16	13.1875	1.60078	-4.3445	15	-	.000
	post		17.5320	2.22111			15.600**	
Cont. 4	pre	16	12.2500	1.43759	-1.328	15	.675	.057
	post		13.5780	1.47759				

p<.05* p<.01**

Results of the two-tailed T-test in Table 4-15 show that while t-values in the first two experimental groups were significant at $P<.001$ and $P<.01$, respectively; however, the t-value for the experimental group 3 was significant at $P<.000$. But the t-value for the control group was not that much high to be considered significant although it was on the border line. We infer that the three experimental groups were affected significantly by the treatments given to them but differently. We also can infer that the experimental group 3 performed much better than the experimental 1 and 2. This outperformance might be attributed to the type of treatment received. So it can be concluded that the mean scores differences between the pretest and post test were significant in all three experiments. Furthermore, we can infer from the data in Table 4.18 that the mean difference between the pre- and post- test in group 3 was the biggest, and in group 1 was it was bigger than that that in group 2. That is, those under the combinatory treatment were more successful than those under audio-visual treatment, and those under audio-visual treatment, in turn, performed much better than those under aural treatment. Finally, those under conventional treatment performed in the weakest way in comparison even to those under aural one.

DISCUSSION

In this part, the research questions are raised in form of null hypotheses once again. Then, the interpretation of the findings in regard to the central purpose of the study, i.e., investigating the effect of consciousness-raising through explicit teaching the paralinguistic features using three modes of technology including YouTube, Podcast and mobile phones on Iranian EFL learners' speaking skills/abilities in terms of paralinguistic cues such as intonation, pitch, stress, and sonority are presented.

Audio-visual modality

Regarding the mere use of audiovisual channel, the first null hypothesis addressing 'explicit teaching paralinguistic features through videos from the You Tube (only audio-visually) does not affect Iranian learners' performance in English conversations in EFL contexts' is rejected by a simple glance at Table 4.7 which indicates that the mean scores obtained by the participants of experimental group1 on the post treatment interviews were ($M = 16.62$, $SD = 2.99$) were higher than those of control groups' ($M = 12.25$, $SD = 1.23$). Levensene test and one Sample Kolmogorov were also used to analyze the equality of error variances and the normality

of data distribution. However, to see whether this improvement of paralinguistic performance and approaching to an acceptable level of using paralinguistic cues in the final performance of the experimental group1 is noticeable enough to claim that the experimental group 1 outperformed the control group (group 4), the relevant data were run through a one-way multivariate analysis of covariance. The results of this analysis (as they are shown in Table 4.6) revealed that the experimental group 1 outperformed the control group (group 4) on paralinguistic features regarding intonation, stress, pitch, sonority, and fluency. This was proved by the F-value of 5.49 which shows a significant difference at $P < .005$). Indeed, the results of the univariate analysis of variance (Table 4.7) also prove the same difference between the gross mean of the three experimental groups and that of the control group. That is, if the effects of pre treatment scores were controlled, the participants of the experimental groups in their final performance significantly outperformed those of the control group, showing a significant difference between them ($F = 5.13$; $p < 0.005$). As a result the null hypothesis 1 is rejected.

Aural presentation of paralinguistic cues

The first glance at Tables 4.7 and 4.10 indicates that the mean score and the standard deviation of the experimental group 2 in pre- and post- test were (12.28, 1.28 and 14.36, 2.08), respectively. The data in Table 4.8 shows a significant difference between the mean of the experimental groups and that of the control group in the post test ($F = 2.369$, $P < .05$), though in the pretest it does not imply any difference between the experimental and that of the control group ($F = .108$, $P > .05$). To investigate the performance of each group while controlling the effects of pre treatment scores on post treatment ones, another one-way multivariate analysis of covariance (MANCOVA) was conducted (See Table 4.9). According to the results of this analysis, the experimental group had a significantly better pronunciation than the control group ($F = 3.32$) which implies that the means difference between the pre- and post-tests is significant at ($P < .05$). This is, the experimental group2 had a significantly better paralinguistic performance than the control group. Therefore, the null hypothesis2 addressing 'explicit teaching paralinguistic features through Podcasts (only aurally) does not affect Iranian learners' performance in English conversations in EFL contexts' is rejected.

A combinatory module

Judging from the first impression of Table 4.7, it seemed that the experimental group's performance on paralinguistic cues in terms of accuracy in intonation, stress, pitch, sonority, and fluency ($M = 17.5$, $SD = 2.22$) improved to a high degree after the treatment in comparison with the control group's ($M = 12.18$, $SD = 1.20$). To investigate the significance of this improvement and in order to control the effects of pre treatment scores on post treatment scores, a one-way multivariate analysis of covariance (MANCOVA) was conducted. The results indicated that the speaking abilities of participants in the experimental group3 improved significantly regarding accuracy in intonational patterns ($F(1, 37) = 35.16$, $p < 0.001$, see Table 4.7). Therefore, the third null hypothesis' explicit teaching paralinguistic features through a combination of technological devices (audiovisual, aural, and frequent feedback tasks) through self-video recording by their own mobiles (using RRR technique-recording, recasting, and repeating) does not affect Iranian learners' performance in English conversations in EFL contexts" is rejected, too.

Gender variable across and within experimental groups

Judging from the first impression of Table 4.12, it seemed that the experimental groups' performance on paralinguistic cues improved to a high degree after the treatment in comparison with the control groups. As you see, all three experiments mean scores show significant differences in comparison to each other in terms of the three treatment groups 1, 2, and 3 regardless of gender variable. But Table 4.13 shows no significant difference in terms of sex variable although the results of Table 4.14 (one-way ANCOVA) shows males performed differently across the three treatment groups. Furthermore, the results of the follow-up study LSD in Table 4.15 imply that males in experiment 3 outperformed males in experiments 1 and 2. Of course, it also shows that experiment group 1, in turn, outperformed the experiment group 2. Like the results in Table 4.13 which indicate no significant means difference in terms of sex variable, the results of Table 4.16 (one-way ANCOVA) shows females performed differently only across the three treatment groups rather than across gender variable. That is, in comparison to males, the female mean differences were not significant (See Tables 4.13). Therefore, the fourth null hypothesis addressing 'gender variable plays no significant function across the three above-stated treatments in performing on paralinguistic features' was also rejected.

CONCLUSION

This research targeted at shedding light into the extent to which consciousness-raising through different language modalities can contribute to explicit teaching paralinguistic features to promote pragmatic proficiency particularly the paralinguistic domain competence among Iranian EFL learners in their conversation skill. These language modalities were considered as treatments given to the experimental groups in three different ways: using mere audio-video pedagogical materials downloaded from the You Tube, using explicit presentation of the material on explicit teaching paralinguistic cues merely aurally, finally using a combination of audio videos from the You Tube, mp3 and mp4s from Podcasts, and utilizing personal mobiles by students to record both the native voices as well as their own voice to recast and repeat and get feedback on their oral products. The research began with a series of assumptions. One assumption was that applying new technological developments such as YouTube for visual-only clips, Podcasts for audio-only clips, and a mobile phone for video-recording as a combination clip which are all contributive to presenting nonverbal communication of paralinguistic cues. These cues can not only serve as elements of articulation, intonation, pitch, stress, sonority, dynamics, and fluency which themselves, in turn, serve to optimize the performance of the delivery channel of the message but also to convey important meanings in communication. Another assumption was that learners would gain control over their language learning processes and experience more proficiency in the language in question. Like a traveler knowing where he is going, he is sure of his footing and knows what decisions need to be taken along the way, learners watch movies, see what actors do, hear their voices frequently and more particularly they get more familiar with the path ahead, the less hesitation in their steps and the more confidence they possess in what they are doing. This confidence, knowledge, and experience form a portion of the source credibility which makes them be fluid in their conversations and this fluidity of delivery not only affects the message but it also instills confidence in the listener as they experience the confidence and clear direction of the speaker. Further, the listener's receptivity is increased and can see more clearly the direction the speaker is going and comprehension is increased.

Learners practiced following instructions and became more disciplined during the lessons, they demonstrated to be capable of being in interactions behaving accordingly. The results of the statistical analyses, using different statistical tests on the collected data demonstrated that the subjects' speaking sub-skills, including segmental features like pronunciation, and supra-segmental features such as intonation, stress, pitch, stress, and sonority as well as fluency, improved significantly in the experimental groups who underwent three treatments in terms of three different language modalities. Indeed, the findings revealed that the experimental groups outperformed the control group with regard to the sum of scores related to the above-stated segmental and supra-segmental features, FISPS, as their general ability in paralinguistic cues. The results also suggest that speaking skills can be improved through using explicit teaching paralinguistic features through combinatory model- involving the learners in the new lesson presented to them not only audio-visually but also aurally as well as using RRR (recording, recasting, and repeating) technique as a feature of their mobile phone which is normally available to every student.

The most interesting was the finding that those students in experimental 3 undergoing the combinatory model, using YouTube, Podcasts, and the RRR technique by applying their personal mobiles' recording feature to their task, significantly outperformed the other experimental groups- group1 using mere audio-visual videos from the YouTube and group 2 using mere aural technology which was mp3 and mp4 through Podcast. Another important finding was that experimental group 1 also outperformed group 2. However, the control group (group 4) taught conventionally showed mean differences across the pre-and post test but their F values were not that much high to be considered significant. Consequently, the outperformance hierarchy of the four groups under study can be shown as follows: $G3 > G1 > G2 > G4$.

Implications of the Study

Implications for Teachers

To avoid ineffective approaches to teaching speaking ability, findings of this research can shed light into the necessity of applying modern technologies to teaching speaking skills. The findings of the current study may convince teachers to make students apply the most accessible devices almost all of them have, i.e. YouTube, podcast and mobile phone, in order to have more opportunity to receive more real-life samples of language input and to express themselves in less stressful situations.

Teachers can use the method applied in this study to increase their students' autonomy and enjoy working with more independent students who are getting more and more aware of their own abilities. This helps them to have classes more in line with constructivist learning theory. As a result, the learning environment would be more exciting and engaging for learners.

Implications for EFL Learners

The ultimate goal of almost every language learner is to be able to communicate in the target language. However, there are many cases in EFL environments that attending classes and receiving formal instructions will not do good enough. Purposeful homework and extra activities both in providing them with authentic and pedagogical movies and let them share self-feedback taking have always been a tool to engage students more. If these extra activities have a constructivist nature and be related to speaking in the L2, they will be more likely to attract learners' attention and engage them.

Implications for Material Designers

Katchan (2002) refers to technological manifestations such as videos, podcasts and video activities as motivation raising which are more like a break from the traditional textbook-based activities. She believes that even in more challenging video projects, learning could be more enjoyable (ibid.). Knowing these facts as well as all the above mentioned benefits of video recording and using mobile phones, material designers are expected to integrate professionally designed tasks of mobile video recording into more traditional syllabuses. Therefore, more teachers and learners will be engaged in conducting joyful tasks of video recording in order to achieve a wide variety of goals applying mobile devices, especially mobile phones.

Limitations of the Study

The main limitation of this study was the small sample. The participants in the experimental group were. On the other hand, there were only 16 participants in the control group. Another limitation was lack of equal participants in terms of sex variable. finally, this study was limited to the intermediate proficiency level due to paucity of those in elementary, upper-intermediate, and advanced levels.

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