

CORRELATION BETWEEN THE WRITTEN AND VERBAL PERFORMANCE OF PUNJABI SPEAKING LEARNERS IN THE AREA OF ENGLISH DIPHTHONGS

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ABSTRACT

Language primarily means speech and there are many important features of speech. Pronunciation is one of them since it serves the main purpose of using spoken aspect of language: communication. This means, a message must be accurate in terms of pronunciation to maintain its communicative function. Correct pronunciation relies on correct articulation of speech sounds of one's mother tongue. It means learning of any foreign language too heavily depends on the learning of its phonological features. Considering the varying nature of languages spoken around the globe, we can easily realize that the problems posed by these languages are also of different nature. English has its own hosts of pronunciation problems to pose for its foreign learners which cause a great deal of difficulty for them. These problems are segmental as well as suprasegmental in nature. The present study was carried out to find out correlation between the written and verbal performance of Pakistani learners in the area of pronunciation with regard to English diphthongs or double vowels. The study sample (N=79) comprised Punjabi speaking Pakistani learners of English studying at Diploma Level in National University of Modern Languages Islamabad, Pakistan. The data were collected by the means of two tests: one for written performance and the other for verbal performance. Pearson Product Moment Formula was used for finding the degree of correlation between the written and the verbal performance of the study sample. The analysis of the data showed moderate relationship in the area of English diphthongs which shows that the written and verbal performance of the study sample did not match up quite closely in this area. It is suggested that these sounds should be taught more carefully. A number of effective classroom activities can be exploited for better teaching of English double vowels.

Key words: phoneme, diphthongs, correlation, Punjabi

INTRODUCTION

Pronunciation is the most important aspect of language. This is how people send and receive an oral linguistic message and this is how they successfully carry out day to day communication. Pronunciation is a global linguistic phenomenon but it is language specific. In other words, each language has its own pronunciation related rules no matter how strange they sound or seem to an unfamiliar ear. English language is not an exception in this regard. This means learning English without paying attention to its pronunciation aspect

makes the whole exercise useless since it does not serve the main purpose of learning the language. In other words, communication cannot take place without right perception on the part of the listener that heavily depends on correct pronunciation on the part of the speaker. What contribute significantly to the correct pronunciation are the vowel sounds since they play very crucial role in making up the semantic get up of words in general. In case of English they become even more crucial due to its vocalic nature as well as the so-called non-phonetic nature of its

orthography. If taught the art of phonemic transcription, most foreign learners perform quite well in it but the same degree of precision is not shown in their verbal performance. Pakistani learners of English are not an exception to this. Their performance in written transcription and verbal manifestation of the language also vary. With this idea in mind the researchers formed the following research question.

Research question

What is the degree of correlation between the written performance and the verbal performance of Punjabi speaking learners of English in the area of English diphthongs?

Objectives

The researchers undertook the study with the aim to find out:

The degree of correlation between the written performance and the verbal performance of Punjabi speaking learners of English in the area of English diphthongs

The most difficult English diphthong /s/ with regard to articulation

The most difficult English diphthong /s/ with regard to phonemic transcription

Significance of the study

Phonemic transcription is an art which shows that the performer is able to recognize the phonemes of a language and he can also attempt them correctly. Unluckily, this is just one side of the picture which shows impressive performance on the part of the learner in most cases. The other side that goes untested is the verbal side. Considering the immense importance of what relationship the written performance has with its verbal counterpart, the present study is surely significant. Besides, the study also proves that teaching of English phonemic transcription by English language teachers

is not a futile exercise and that it helps learners in improving their pronunciation.

Delimitation

The present study was delimited to the department of English, National University of Modern Languages (hereafter called NUML), Islamabad and it was conducted at Diploma level only. The reason for selecting the population and the study sample from NUML was very simple. Firstly, it is a place where phonemic transcription is taught in a detailed manner for the whole semester. Secondly, it is an approachable place for a researcher for gathering data from male as well as female students. Thirdly, it is a place where it is possible to find and select a reasonable size and research sample without any threat or trouble.

LITERATURE REVIEW

Vowels and their Importance in English Phonology

Vowels are very important speech sounds which are responsible for meaning making by joining consonant sounds. Their mighty role played in all world languages cannot be denied since ignoring them simply means ignoring words semantically. Since they stand in contrast with consonant sounds, they have their own unique articulatory nature. According to Trask and Scotwell (2007, p.321) a vowel is a human speech sound which is produced without any obstruction or blockage of the airstream. Another important feature that vowels share is voicing (Kaye, 1989; Crystal, 1995; Barber, 1972; Collins & Mees, 2003; 1968; Giegerich, 1992; Ladefoged, 2001). Voicing means vibration of the vocal cords.

The problem with the vowel sounds in terms of articulation is that they are hard to learn and teach since they lack precision with regard to place and manner of

articulation. According to O'Grady, Dobrovolsky & Katamba (1996, p.37), vowel articulations are not easy since the vocal tract does not experience any narrowing that is the hallmark of consonant sounds.

Though they are difficult to articulate, vowels are central speech sounds in a language due to the role played by them with regard to correctness of articulation of all segmental and suprasegmental aspects of a language. For example, due to their role as the prosodic head of what is called the syllable (Keating 1996, p.101), vowels always capture the nucleus in a syllable. They are also in charge of varying intonation patterns and lexical as well as sentence stress.

Considering their mighty importance, one can easily realize that their role cannot be overlooked in any language. Moreover, their importance increases manifold where they put on deceptive role. English is one such example where orthographic patterns behave abnormally mainly due to the inconsistent role played by vowel sounds. Furthermore, why they assume such an importance in a non-phonetic language like English is primarily because of their richness. Their rich presence in the language naturally allots them rich roles to play. As a result, a language that is already irregular orthographically as well as stress-timed in suprasegmental terms turns out to be an absolutely mind-boggling language, especially for foreign learners of it. Vocalic deception manifested by English can be observed in case of sound values where the same vowel letter or the same vocalic combination assumes different sounds in different orthographic contexts. Without any exaggeration, English is replete with such instances where a letter does not produce what it is supposed to produce phonologically. For example, 'ea'

and 'ough' combinations are pronounced utterly differently in different contexts.

Besides playing very powerful role in the area of lexical stress and orthography, English vowel sounds appear to be ubiquitous in the language and they seem to be the phonological blood that runs through the veins along the whole body of the language. One gets amazed to see how abundantly they are responsible for engineering and crafting a whole gamut of what is termed as the fluency devices in the language. These fluency devices are generally put under the categories of weak forms (where the version of a word other than the standard one is pronounced: {Crystal, 1995}), assimilation (where sounds are influenced by the very neighbourhood {Valentine, 2001}), elision (the loss of a phonological material {Pascoe, Stackhouse, and Wells, (2006)}), linking /r/, intrusive /r/ and so on.

Talking about the exact number of vowel sounds in the standard British English called RP (Received Pronunciation), they are 20 major vowel sounds (excluding 5 triphthongs). These 20 sounds are further broken up into 12 monophthongs or pure vowels and 08 diphthongs or double vowels. These eight English diphthongs are high frequency sounds in the language. Since their production is uninterrupted and it is the hallmark of a diphthong, the tongue must smoothly glide from one place towards another for the sake of correct articulation of a diphthong. A diphthong is a long vowel sound and it is represented with a double symbol. It means that there are two vowel qualities in a diphthong. In English, the first part of a diphthong is much longer and louder than the second, Crystal (1995, p.239). Saussure (1966, p.61) explains it in more technical but apt terms by stating that "a diphthong is an implosive link" where the

second sound is relatively open, producing a specific “acoustical impression”.

The production of a diphthong is quite different from that of a monophthong in terms of activity of the tongue inside the vocal cavity. In the articulation of a diphthong there is a glide from one sound to the other without any phonological break or jerk (Crystal, 1992; 1995; Ladefoged, 2001; MacMahon, 2002; Odden, 2005). Diphthongs are called glides since there is no noticeable change to the lip position or the body of the tongue (Barber, 1972; Bussmann, 1998; Collins & Mees, 2003).

A diphthong, according to Crystal (2008, p. 146), is a vowel sound on the basis of its manner of articulation. It is a vowel sound where there is a single (perceptual) change in quality during the production of a syllable, as in English “beer, time, loud”. Like monophthongs, the use of diphthongs by the native speakers is very frequent. Therefore, the foreign learners of English must be very careful in the production of a diphthong because any fumble may push the articulation towards the domain of its phonetically close monophthong. In other words, if a diphthong is produced without the required glide, it will change into a monophthong. According to Crystal (2008, p.146), the process of monophthongisation means “change in vowel quality from a diphthong to a monophthong”.

The rich blend of monophthongs and diphthongs in English phonology makes it very difficult for its foreign learners. Pakistani learners of English are also troubled by these sounds since some of these sounds are new to them. Abbas (2011, p.15) substantiates it by saying that vowels are comparatively more difficult to learn for Pakistani learners. Hashmi (2011, p.3) validates this claim by asserting that the English language is more difficult with reference to vowel sounds. Pakistani

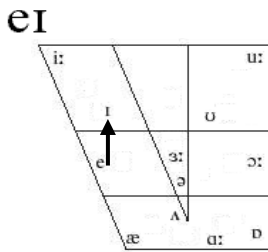
learners of English treat the English diphthongs as per their own phonological ease. For example, some English diphthongs get monophthongised due to the non-native treatment of them. Abbas (2011) talks about the difficulty posed by the English diphthongs by stating that diphthongs are complex sounds and Pakistani learners are unable to articulate them properly, especially the centering diphthongs. Anwer’s (2007) findings of Punjabi learners of English also support what Abbas claims. He states that Punjabi speakers commit many articulatory mistakes in the production of English diphthongs.

Another study carried out by Khan (2009) reveals some interesting facts about the Pashto speaking students in the area of English diphthongs. Khan claims that the learners of English with Pashto background cannot pronounce the English diphthong /ei/ (p.80) ...are unable to cope up with /uə/ (p.130)...they find it impossible to articulate /boy/ (p.91)...find it hard to pronounce /eə/ (p.93) and so on.

It is easier to study vowels with the help of the quadrilateral which is a standard reference point for finding the precise location of a sound. It stands for the empty shape inside the vocal cavity and also indicates the different heights assumed by the different parts of the tongue (Jones, 1976; Gimson, 1975, 1994; Connor, 1982; Kreidler, 2004; McCully, 2009; Roach, 2009).

The following vowel trapezium shows how an English diphthong glides from one place to the other.

Fig.1. English Diphthongs, Daniel Jones, An outline of English Phonetics, Cambridge University Press. 1976.



RESEARCH METHODOLOGY

The current study is correlational in nature since it seeks to answer the question as to what is the degree of correlation between the written transcription and the verbal pronunciation of Punjabi speaking learners of English in the area of English diphthongs. According to Mertens (2009, p.152), it is true that correlational research can be used to draw comparisons between groups, it mainly focuses on yielding an estimate of the volume or degree of the relationship that exists between two variables. According to Weiten (2010, p.44), the association that exists between two or more variables is called a correlation.

The researchers selected all the Punjabi speaking boys (12) and girls (30) out of the total population (500). In order to collect the data, they developed two tests (annex A & B). One of them was used to collect the written data whereas the other was used to collect the verbal data in the form of recordings. The written performance and the recordings were carefully evaluated and marked. The scores were then correlated with the help of Pearson Product Moment Formula. It is also called the co-efficient of simple correlation or total correlation. The simple linear correlation co-efficient for *an n pair of observations(X)* is provided below:

$$r = \frac{n \sum xy - \sum x \sum y}{\sqrt{n \sum x^2 - (\sum x)^2} \sqrt{n \sum y^2 - (\sum y)^2}}$$

In the formula above, *n* stands for the number of study sample whereas *x* and *y* denote two different variables which are written and verbal performance in case of the present study.

Data analysis

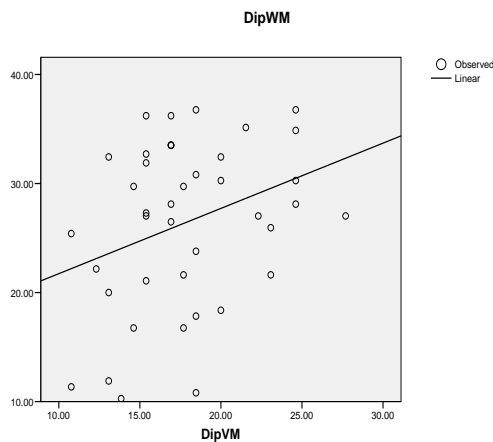
Table 1: Correlation between Written and Verbal Performance for English Diphthongs by Punjabi Speaking Male Members

T		DipWM	DipVM
Dip WM	Pearson Correlation	1	.319(*)
	Sig. (2-tailed)		.042
	N	41	41
Dip V M	Pearson Correlation	.319(*)	1
	Sig. (2-tailed)	.042	
	N	41	41

* Correlation is significant at the 0.05 level (2-tailed).

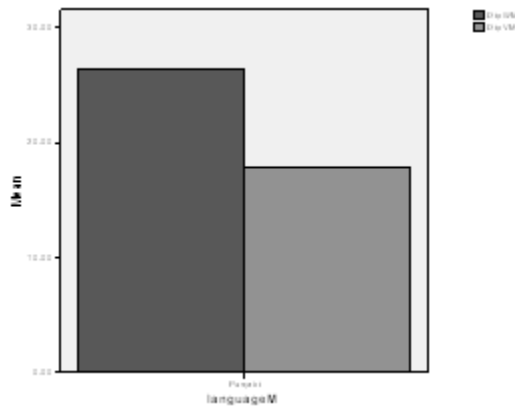
Table 1 indicates correlation coefficient i.e. $r = 0.319$ between written and verbal performance in the area of English diphthongs by Punjabi speaking male members of the sample (N 41). As shown in the table, correlation coefficient (value) was found statistically significant at $p=0.042$ i.e. 95% chance of relationship between the scores for verbal and written performance in the area of English diphthongs.

Plot 1: Scatterplot showing Correlation between Written and Verbal Performance for English Diphthongs by Punjabi Speaking Male Members



The plot indicates correlation between written and verbal performance in the area of English diphthongs by Punjabi speaking male members of the sample (N 41). Plot shows medium relationship between written and verbal scores.

Figure 2: Comparison between the Written and Verbal Scores of Diphthongs by Male Members with Punjabi Language Background



The figure 2 shows the performance by the male members with Punjabi background in the area of English diphthongs. The bar on the left side shows the performance in the written test and the bar on the right side of the figure indicates the score in the verbal test for the English diphthongs. Comparing both the bars, we can easily see the difference in the written and verbal score, the former being higher and better.

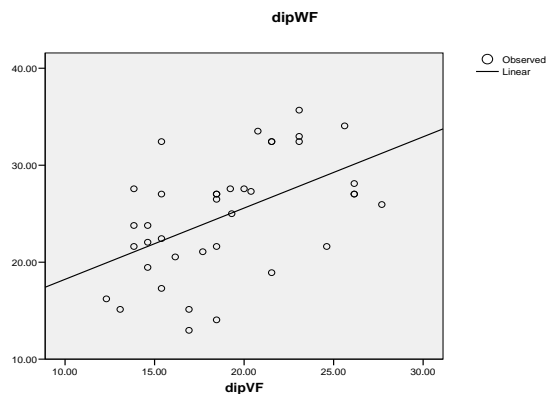
Table 2: Correlation between Written and Verbal Tests for English Diphthongs by Punjabi Speaking Females

		dipWF	dipVF
dipW	Pearson	1	.515(**)
F	Correlation		.001
	Sig. (2-tailed)		
	N	38	38
dipV	Pearson	.515(*	1
F	Correlation	*)	
	Sig. (2-tailed)	.001	
	N	38	38

**Correlation is significant at the 0.01 level (2-tailed).

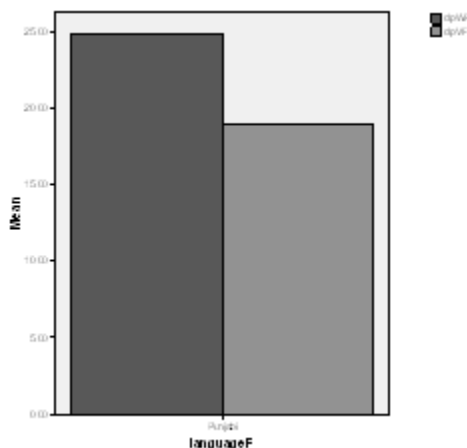
Table 2 indicates correlation coefficient i.e. $r = 0.515$ between written and verbal performance in the area of English diphthongs by Punjabi speaking female members of the sample (N 38). As shown in the table, correlation coefficient (value) was found statistically significant at $p=0.001$ i.e. 99% chance of relationship between the scores for verbal and written performance in the area of English diphthongs.

Plot 2: Scatterplot showing Correlation between Written and Verbal Tests for English Diphthongs by Punjabi Speaking Females



The plot indicates correlation between written and verbal performance in the area of English diphthongs by Punjabi speaking female members of the sample (N 38). Plot shows medium relationship between written and verbal scores.

Figure 3: Comparison between the Written and Verbal Scores for Diphthongs by the Female Members with Punjabi Language Background



The bar on the left side shows the performance in the written test for the diphthongs. Comparing it with the right bar, it is apparent that the female members with Punjabi background performed better in written test for diphthongs.

RESULTS

1. As far as the male members of the study sample are concerned, they performed better in the written test as compared with the verbal test. The result shows medium relationship ($r = r = 0.319$) between written and verbal scores of the male members of the sample.
2. Similarly, the female members performed better in the written test. $r = 0.515$ shows medium relationship between written and verbal scores.
3. The first English diphthong was generally pronounced without any glide so it sounded more like the cardinal vowel No. 2/ e / which is a

monophthong. The words in the verbal test were pronounced on the patterns of Punjabi sound system.

4. The third diphthong was also mispronounced by these members. It was treated in two different wrong manners. Many members of the language pronounced it with an addition of the English semi vowel / w / thus pronouncing the words 'boy', 'enjoying' and 'boiled' as follows: / bwɔ ɪ /, / ɪ ndʒ wɔ ɪŋ / and / bwɔ ɪld / .Close analysis of these words shows that this diphthong was not easily pronounceable for these members without appending the semivowel initially. Many others changed this diphthong into a different sound by changing the first element / ɔ / into a more open sound, something closer to the English broad / a / .
5. / eə / was almost inaudible in the whole test and the whole sample changed it into either ash/ æ / or the cardinal vowel No. 2/ e / with a very short phonological material appended to it ,even shorter than the English schwa/ ə /
6. So the words in questions No.3 and 4 were pronounced in the following manners: 'parents'/pærənts/ or/perənts /, 'rarely'/rerli/, 'their'/ðeə /, 'pair'/peə /and 'shared'/ʃ eə / .The / e/ mentioned above should not be taken for the English monophthong No. 3 that has the same shape. It is the cardinal vowel No. 2.The schwa in the superscript in the word shows reduced sound since this is how the Punjabi members of the sample articulated it by reducing its actual length.
7. / ʊə / also showed articulatory inconvenience on the part of the members and they went for the transformation in the form of either monophthongisation or segmentation or

linearization in some words of the test. So, the words ‘tourist’, ‘moored’, ‘rural’, and ‘surely’ were pronounced in the following fashion: / tu:rist / instead of / tuərist /, / mu:rd / instead of / muəd /, / ru: rəl / instead of / ruərəl / and / ʃɔ: li / instead of / ʃ uəli /. Interestingly, the last word was not pronounced with / u: /. The sound used in this word was quite close to the cardinal vowel No. 7 shown with the help of / o /.

8. The second last diphthong was as inaudible as the first one. In its production, the required glide was dropped and it was monophthongated into the cardinal vowel No. 7 / o /, a rounded sound very commonly found in Punjabi words, for example, ‘khol’(open), ‘bol’(speak) and ‘pona’(a quarter).

DISCUSSION

The present study was conducted with an aim to find out the correlation between the written transcription and the verbal pronunciation of Pakistani learners of English with Punjabi background. The performance put up by the sample members in both the tests shows that verbal pronunciation improves with improvement in the written transcription. This indicates that there is a positive correlation between the both though it was found out that Punjabi learners of English face a number of difficulties in articulating some of the English diphthongs mainly due to the gliding nature as well as the unique articulatory configuration of these sounds. So, these members of the study sample managed the articulation of most of these sounds with help of either monophthongisation or segmentation or linearization. In the written test, most members confused these difficult diphthongs with the monophthongs that

appeared to them having some articulatory affinity to these sounds. Problems found in the articulation of English diphthongs in the present study validate the findings of Anwer (2007), Khan (2009) and Hashmi (2011).

CONCLUSION

The detailed analysis of the data shows that diphthongs are generally difficult sounds for Punjabi speaking learners mainly in terms of articulation though they confuse these sounds in the phonemic transcription too. What makes these sounds hard to cope with for the Punjabi learners of it is their gliding nature. The study sample on the whole scored higher in the written performance as compared with the verbal performance. Most members of the sample committed mistakes in verbal performance as well as in written performance in the area of English diphthongs.

RECOMMENDATIONS AND SUGGESTIONS

Based on the findings of the research, the researchers have put forward the following suggestions and recommendations:

Since vowels are difficult to learn due to their inherent articulatory nature, special care should be taken to teach and learn them. They are a sensitive case since a learner has to tackle them from different articulatory angles like height, length, area inside the vocal tract and rounding. Disturbing any one of them may change the whole phonemic get-up of the sound. For example, changing the rounded vowel No. 6 / ɔ: / into an unrounded one will result in the emergence of the low back vowel of English, i.e. / ɑ: /. In such a situation, the word, for example, ‘form’ will become ‘farm’ which is an entirely different word. Therefore, the following recommendations and suggestions will

surely be helpful for the teachers, learners, and researchers.

The English sounds that are not found in the sound systems of Pakistani languages should be given extra attention. Students should be given more verbal as well as written practice of such sounds. This can be done with the help of minimal pair drills. Such a practice can be extended with the help of minimal sets if there are more such words available, for example, 'ship', 'sheep', 'sharp', 'shop' and 'shape'.

Since the reduction and elongation of sounds in different phonological environments does not take place in the regional languages of Pakistan, Pakistani learners are badly trapped by this feature of English. The teachers of English should address this issue too though this type of reduction or lengthening does not change the semantic characteristic of the word in most cases. This can be done with the help of audio-visual aids which clearly show the articulatory and auditory differences. For example, students can be asked to appreciate the difference of length in words like 'shade and shake', 'ride and rite', 'bade and bait' where the first member of each pair is longer in length than its counterpart due to voice/voiceless contrast.

1. The first English diphthong, / eɪ /, should be taught with the help of minimal pairs and minimal set so that learners grow proficient, both in writing and speech, in differentiating between this sound and the monophthongs that they confuse with it.
2. Since / ɔɪ / is also a difficult sound, it should be taught very carefully. Learners should be enabled to judge the tongue twisting articulatory route chosen by this sound demanded by its first element which is the altered shape

of / ɔ : /.Learners should be given a great deal of verbal and written practice to understand it.

3. /ɪə /, / eə /and / ʊ ə/ are difficult sound due to their unique articulatory nature. Therefore, they should be taught more carefully. This can be done by first segmenting them and then by rejoining them with the help of glide. They can also be made easy with the help of minimal pairs, e.g. "peer, pair, poor" etc.
4. The second last English diphthongs, / əʊ /,has to be tackled carefully since it gets monophthongated by foreign learners of English. It should be taught with the help of minimal pairs .A great deal of attention is also required to its articulatory route so that students get to know its physical characteristics inside the vocal tract. Vowel quadrilateral which shows the right place and the related features of a vowel sound is a very useful teaching aid in this regard.
5. Classroom teaching is a very crucial factor in the teaching of vowel sounds. A great deal of written and verbal practice ensures better performance by the students. Some of the very useful classroom teaching activities are 'change the given text into phonemic alphabet', 'change the given phonemic text into normal English spelling', 'fill in the blanks phonemically', 'multiple choice questions', 'phonetics poems', 'jingles', 'cartoons', 'loud reading', 'pronouncing words in chorus for stress', 'pronouncing the members of a minimal set', 'comparison between English and local sounds'.
6. On the whole, the teaching of vowel sounds can be made easier if it is carried out with the help of audio-visual aids which include white board, flash cards, charts and diagrams,

videos, classroom activities and exercises.

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