

Impact of Phonological Instructions in the Enhancement of ESL Learners' Pronunciation

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Abstract

The present research aims to analyze the impact of phonological instructions in the enhancement of ESL learners' pronunciation. It's generally assumed that, the learners who are taught phonological instructions perform better in pronunciation than the students who are not taught phonological instructions. The selected sample was the college level ESL students. The sample was divided into two equal groups named as control-group and experimental-group. The experimental-group was trained through phonological instructions by multiple video recordings and classroom lessons while control-group was trained through the traditional instructions. A pronunciation test was taken as pretest and posttest and composed statistics were evaluated through SPSS latest version with the application of independent sample t-test and paired sample t-test. The acquired results disclosed that there was significant difference in the mean scores of the both groups. The performance of the students of experimental-group was better than traditional group in posttest results. This research is valuable for both ESL teachers and learners because it has evidenced that the usage phonological instruction method is better to solve the pronunciation difficulties in ESL teaching and learning space.

Keywords: *ESL learners, Phonological instructions, Pronunciation, experimental research.*

Introduction

Language enables human beings to transfer his ideologies to other human beings; and for good communication it is essential to pronounce the words in correct way. The status of English language is very high in the Pakistan being the official language and the language of technology and advance level education (Abbas, 2016;

Rasheed et al., 2021). The term pronunciation refers to the production and utterance of any sound, word, phrase or sentence; it means pronunciation is related to speaking skill. Pronunciation is defined as the way through which a specific sound or word can be spoken. As mentioned by Broughton et al. (2002) and cited in the research work of Muklas (2017) that pronunciation is the part and parcel of oral communication and it has two stages, first is the receptive stage and second is productive stage. Receptive is related to the listening ability and productive is related to the production and speaking and while studying a language which is new for the learners' pronunciation, must have the first place in learning process and more emphasis should be on the correct and intelligible pronunciation, stress, rhythm and intonation patterns (Shakir et al., 2012, Yousaf et al., 2021). Many language learners do not put themselves into a strong practice and careful efforts to target language pronunciation (Yangklang, 2013; Abbas et al., 2016). Researchers in this research study selected the problems which ESL learners face in the pronunciation at post graduate level English. Pronunciation has more aspects which are important while learning pronunciation (Ye & Young, 2005). Here researchers selected only two aspects of the pronunciation which are stress and intonation patterns. There are further divisions in the field of stress and intonation, so researcher will include the functions of stress and intonation patterns as word stress, sentence stress and rising/falling intonation patterns (Tergujeff, 2012; Ullah et al., 2020). This research work is experimental in nature, as experimental research includes variables and cause and effect relationship among variables. And the present research work based on dependent and independent variables and cause and effect relationship among dependent and independent variables.

Objectives of the Research

The purpose of this research work is basically to analyze the impact of phonological instructions on the ESL learners' pronunciation. This research work is an experimental research work and through this experimental work researchers will provide the evidence from the collected data about the effect of phonological instructions. This study revolves round this very stated objective either the phonological instructions have positive influence on the ESL learners' pronunciation or not.

Research Question

1. Which style of instruction (Phonological instruction or traditional style) has more impact to perform better in pronunciation?

Statement of the Problem

The statement of the problem is brief summary of the research problem, usually enclosed within one paragraph; its purpose is to identify the concerned issue. Research problem emerge from research gap, which can emerge from many possible resources, comprising new frontiers, new contexts, or deviations within the current works. In Pakistani context English is used as second language, so majority of the people face problems and difficulties while pronouncing English words correctly. ESL students face various complications linked to pronunciation in ESL classrooms. The researchers attempt to find the proper solutions of these difficulties of ESL

students' pronunciation at college level. What approaches can be employed to solve these complications.

Research Limitations

The present research has contributed in the field of ESL learners' pronunciation through phonological instructions but nothing is perfect in this world, so is the case here and this research work also has few limitations. The first limitation in this research work is the limitation of time. The allocated time for such type of research was very short; had it been more time allocated, there could have been better result achieved. If these techniques were given extended period of time the instructions could have affected the other skills of language also. The present research was conducted only on college level; had this research been conducted on the ESL students of a college level. The population is limited to the college level students of Lahore, and sample size is limited to fifty ESL students. Moreover research is also limited only to the experimental method.

Significance of the Research

The present research study is significant for both the ESL teachers and ESL learners at the college level because this research is not only emphasizing the pronunciation difficulties but after directing the experiments it will offer the solutions of these complications. The results of the present research will be valuable for the educators' instructors and syllabus creators and they can comprise the phonological instructions in the educational trainings and syllabus to get better consequences in pronunciation viewpoint. The present research is valuable for the upcoming researchers who want to do research in the field of phonology.

Literature Review

Literature review is a clear overview of the sources in an organizational pattern and its purpose is to estimate earlier works related to current topic. Pronunciation has always been a great tool to understand the communication. While speaking, pronunciation is considered the key element to comprehend the communication. Kayaoğlu et al.(2013) pointed that there are numerous research articles and research studies which are done on the importance of pronunciation some researchers focused on the theoretical grounds of pronunciation as conducted by Blanche (2004) few others researchers did research work on pronunciation teachings with technology as done by Levis (2007) and some other researchers dig out the different instructional techniques for teaching pronunciation well and the example is the work of Saran and Seferoglu (2010). According to Kesercioğlu and Aycan (2015) intonation pattern plays four vital functions first it is semantic function due to intonation differences a sentence can be explained differently. Second is attitudinal function of intonation, intonation usually describes the feelings, attitude and context of the sentence. Third is grammatical function of intonation means intonation plays the same role in speaking as punctuation plays in the written text. And the fourth function of intonation is accentual function; intonation gives effect of prominence on stressed syllables and especially for placing the tonic stress. Stress and intonation patterns are considered as the key to comprehend the main idea (Jones, 1997).

Comprehensible and intelligible pronunciation is not only the part of speaking but pronunciation is considered important while reading a text in the

classroom being the student or the teacher so; comprehensible pronunciation is the basic part of learning a language.

According to Field (2005) that a second language learner needs no more than an intelligible pronunciation, there is debate over the years to define the comprehensibility and intelligibility in pronunciation. Different writers define differently of these two terms and the fact that these are the crucial while discussing a pronunciation phenomenon. Some theorists used comprehensibility and intelligibility as the synonymous terms but actually these two terms are not equal in their meaning there is little difference. As mentioned by Derwing and Munro (1997) and quoted by Field (2005) "Intelligibility is measured by the ability of judges to transcribe the actual words of an utterance, comprehensibility by an overall rating of how easy it is to understand a given speaker." Intelligible pronunciation is considered the basic element for ESL learners' communication skill.

Poor pronunciation emerges the ill feeling and fear about language learning process among the ESL learners and this initial fear provides the base for non-native speakers to be reluctant and hesitate even at their higher education. AL-Dilaimy (2012) also discusses the problems in pronunciation of ESL learners' classroom and these problems based on production perception and intonation patterns. Unfortunately in the countries which do not have the English language as their native or first language as in Pakistan, India and Bangla Dash ESL and EFL learners have had poor pronunciation due to the lack of practice and phonological awareness. These are some research works conducted on this topic in different contexts but there is no single research conducted in the Pakistani context. To fill this research gap the researchers conducted present research.

This research work is also related to the phonological instructions for the enhancement of ESL learners' pronunciation in district Lahore. It is usual in Pakistani educational context that students are not given the phonological awareness at the school level and even at the advanced level students receive the very typical and little knowledge about target language phonetic and phonology. That's the reason that students after getting the master's degree in English language remain unable to pronounce even a single sentence with appropriate pronunciation. The researchers decided to conduct research to solve this problem and also fill this gap by using following material and methods.

Previous Related Studies

Bourjan (2003) conducted the study on Thai students who were facing numerous difficulties while pronouncing English words. The students were facing the stress placement and intonation problems while speaking English. Another study on the stress and intonation problems is reported by Bourjan (2003) and this study is related to students of first year English class of Rajabhat University also faced the similar problems in pronunciation as the Thai students face and the crucial mutual point among their pronunciation related difficulties were the problems of stress and intonation patterns accuracy. It is crystal clear that ESL/EFL learners face the pronunciation and more commonly face the stress and intonation related problems. Gilakjani (2011) suggests that there are multiple problems and difficulties in ESL/

EFL learners' pronunciation so there is need to develop additional material which can improve the ESL/EFL learners' pronunciation.

Pennington and Ellis (2000) conducted a study on the production and perception. The first part of their research work is based on the identification of sentences on the bases of four intonation features. The results of their study based on the pretest show that students had no idea about the intonation features; they just gave the importance of lexical and grammatical features of the sentences. In the supra segmental features they performed poorly even at the advanced education level. The study is based on intermediate ESL learner level. At the second stage of the research researchers gave the knowledge of the intonation feature through different techniques and their results show that students can learn only the contrastive stress but can't improve other prosodic features.

Another research is conducted on the sentence stress patterns by another researcher Hahn (2002) who did an experimental study and used three types of sentence stress as the stress on choice or contrast, stress on statements and stress on the "you" pronoun as the shifting stress as the sentence changes. The above study was also conducted on the university level students and they were taught with the stress patterns. Unlike the previous mentioned research which was conducted by Pennington and Ellis (2000) it showed different results. After learning the sentence stress patterns students not only showed the significant difference on the production but there was significant difference and improvement in their fluency and perception also.

Gordon et al. (2012) conducted experimental research which is based on three groups of ten ESL learners in each. One group is taught with suprasegmental based instructions, second group is taught with segmental based instructional technique. Third group is taught with no specific instructions but just with common classroom instructions which are the part of usual routine teaching. At the end results show that the only group which gave the best performance in the post test and delayed posttest is the group which is taught by the suprasegmental instructions.

Abbasi et al. (2017) pointed that Pakistani ESL learners get very little chance to acquire the knowledge and awareness about English phonological system that's the reason they are very poor in pronouncing these sounds while speaking and this less phonological knowledge spoils their personality in front of the audience. Phonological awareness and proper time and instructions can solve these pronunciation and stress and intonation problems. There are relevant research studies which prove that proper time and proper knowledge about phonology can cater and solve approximately all pronunciation related problems and ESL learners can achieve the intelligible and comprehensible pronunciation.

The present research will now fill the gap and the researcher is going to provide the solution of this difference with the knowledge and practice of phonology. Another related Pakistani researcher study is done by Nadeem (2016) on the stress patterns. It is well structured research work which is done on the stress patterns and the result of this study is based on the stress patterns of Pakistani Standard English variety. The above mentioned research is not related to phonological instructions and collected data is based on PTV news reports. Therefore, it is not in any way related to ESL learners.

There is one important research which is related to the intonation patterns of Urdu ESL learners' pronunciation. This research is conducted by Jabeen (2010) and it is an analysis of the influence of Urdu language on the English intonation patterns.

The overall construction of this research work is good but there is one flaw which provides logic for the present research work and that is, the selected sample is based on just three students. And with such a little sample size the findings cannot be generalized. The important thing which is observed in the conducted research work in Pakistani setting is that there is no single experimental research design. There is just comparison and analysis based research works so far. So, the present research work will fill the gaps which are the limitations of above mentioned research works.

Research Methodology

The present research work is designed to analyze the impact of phonological instruction on ESL students' pronunciation at college level. This research is based on quantitative research paradigm. Quantitative research paradigm is one of three research basic research paradigms. It deals with the quantifiable numerical data with computational, mathematical or statistical techniques.

Research population can be referred as an entire group of peoples, things, or objects from which research sample is drawn. In this research work the population is the college level ESL students at district Lahore. For this experimental research sample size of 50 students was selected by using purposive sampling. These students were divided in two equal groups

In this research experiment there are two groups, one is control-group and the second is experimental group. Both the groups were trained with different teaching techniques. Experimental-group received the treatment based on the phonological instructions about stress and intonation patterns. These instructions were based on stress and intonation rules learning with practice of these rules in the classroom setting, while the control group was taught with the same traditional methods of teaching, based on mere definitions learning and few transcription rules learning. Experimental research method used in this research work, is based on the quantitative research design. Pretest and Posttest two group designs is considered true experimental design.

In this experimental research data was collected before the treatment through pretest from experimental and control group. Data was collected after treatment through posttest from control group and experimental group.

Data was analyzed by using the SPSS software, it is a Statistical Package of Social Sciences and commonly abbreviated as SPSS. The analyzed data was presented in tables and graphs in numerical form.

Demographic Statistics

The demographic statistics for the present study comprises, gender, age, location, social class, and marks in English, usage of electronic media.

Table 1**Demographic Information of the Present Study**

Electronic media		English marks		Location		Age		Gender	
Yes	No	A	B	Urban	Rural	Mini	Max	Female	Male
25	25	25	25	25	25	16	20	25	25

The above table number one is showing the demographic information of the fifty research participants. Their gender contains equally on twenty-five male and twenty-five female; their ages were between 16 to 20 years; their location twenty-five belongs to urban and twenty-five belongs to the rural areas. At the time of admission grade of twenty-five students was A, and rest of twenty-five students was B; similarly, the half frequency used electronic media while other half never used electronic media.

Data Analysis**Table 2****Pretest of Control and Experimental Group for Pronunciation**

Group	N	M	SD	SEM
Control Pre-test	25	182.2963	12.23430	2.35449
Experimental Pre-test	25	177.5357	10.40827	1.96698

Table number two shows the control-group and experimental-group sample size, mean scores, standard deviation and standard error. It shows that total sample size is 50 and control-group contains the 25 ESL learners and experimental-group also contains on the 25 ESL learners. Mean scores of control group is 182.2963 and of experimental-group is 177.5357 and standard deviation of control-group is 12.23430 and of experimental group is 10.40827. All these values show that both the groups are almost indistinguishable statistical way.

Table 3**Independent Sample T Test of the Pretest of Control and Experimental Group Pronunciation**

Levene's Test for Equality of Variances			t-test for equality of means						
	F	Sig	t	df	Sig. 2 tailed	MD	SED	95%CI	
Equal variances assumed	.549	.462	1.556	53	.126	4.76058	3.05891	1.37481	10.89597
Equal variances not assumed			1.552	51.024	.127	4.76058	3.06800	1.39862	10.91978

Table number three explains the Levine's test of equality which explains the equality of variance. According to the Levine's test it is assumed that the standard deviations should have the same values. In the case of this research there is slight difference in the SD values but the value is not significant in pretests of both the groups so, in this case both the groups are similar because both the groups show no significant. In the Levine's test F value is = to .549 which is greater than the $p < 0.05$. In this test of equality the most important values are the t-value and the p-value. In the present research table two shows that the t-value of both the groups is equal which is 1.556 and 1.552 with the df which represent the degree of freedom which is in this case is 53 and it shows that the difference is not significant because both the values are higher than the $p < 0.05$. And p value which shows the significance is .126 and .127 which is greater than the $p < 0.05$. Mean scores of control-group is 182.2963 and of experimental-group is 177.5357 and mean difference in table three is 4.7 with standard error 3.05 and confidence interval which is the last value is the 1.37 - 10.89 and this is statistically insignificant.

Table 4**Group Statistics of the Post-Test of Control and Experimental Group**

Group	N	M	SD	SEM
Control post-test	25	184.0000	11.92605	2.29517
Experimental post-test	25	379.6429	20.27992	3.83254

Table number four describes the control group and experimental group posttests statistics which shows that control group N is 25 and experimental group N is 25. Mean scores of control group posttest is 184.000 and experimental group M= 379.642 which show the significant difference between the posttests scores of control and experimental group. And the standard deviation of control group is 11.296 with standard error = 2.295 while the standard deviation of experimental-group posttest is 20.279 with standard error = 3.832. The difference of mean and standard deviation values of the both groups shows that there is significant difference between the posttest scores of control-group and experimental group.

Table 5**Independent Sample T-Test of the Post Test of Control and Experimental Group**

Levine's Test for Equality of Variances	t-test for equality of means								
	F	Sig	t	df	Sig. 2 tailed	MD	SED	95%CI	
Equal variances assumed	12.548	.001	-43.403	53	.000	-195.64286	4.50764	-204.68403	-186.60168
Equal variances not assumed			-43.795	43.967	.000	195.64286	4.46724	-204.64617	-186.63954

Table number five give details that the independent sample t-test of the posttest of control and experimental group. It explains the t-test for equality of means

and Levine's test for equality of variance. Table also shows that F value which is 12.548 with significance level 0.01. It shows that there the result is important because $0.01 < 0.05$ which is the significance standard. In the same way t-value is 43.303 with 53 degree of freedom which shows the significant difference p-value $0.000 < 0.005$ the difference is significant. MD is the 195.6 with SD 4.50 and this explains the difference of the sample. Regarding to confidence interval $CI = 204.6-186.6$ which shows the significant difference of control and experimental group means scores.

The revealed results showed that the results of t-test for equality of means and Levine's test for equality of variances show the significant difference between the mean gain scores of control group posttest and experimental group posttest. The values of mean and standard deviations show that there is significant difference between two groups. The findings which are drawn from table 4 shows that the hypothesis is accepted which was based on the point that ESL learners who are taught phonological instructions perform better in pronunciation than the students who are not taught phonological instructions. Because the results of both the tests show the significant difference between the scores of control and experimental group posttests and it can be said that the difference was due to the intervention of phonological treatment and manipulation of dependent variable.

Aydin (2013) described the results of the research and provided evidence that clear phonological guidelines enhance the ESL pronunciation. In the same way the findings of the present research met with the findings of Roohani (2013) research who claimed that instructions about pronunciation features given through integrative approach improve the ESL/EFL suprasegmentals as stress, intonation and rhythm. He described that it is crucial to provide the practice in a communicative discourse rather than the mere phonemic level recognition.

Discussion of the Findings

In the educational system Pakistan, specifically in the government sector it is a usual practice to neglect the ESL learners' pronunciations. ESL learners usually indulge in the tedious ways of learning which are not effective in the way that even after studying the English as a compulsory subject throughout the sixteen years of education, students are not able to pronounce a single sentence properly. Poor pronunciation is not only the problem of students who are poor in the academic achievements but poor pronunciation is equally the problem of brilliant and efficient students as well. Even at the university level the students are in the practice of learning the definition and the theoretical based learning about the second language acquisition theories. There is no practice involved in the whole teaching learning process. Even in the Pakistani educational policies it is recommended that theory and practice both are equally important for learning but there is no actual activity available in the ESL learning classrooms. According to National curriculum (2000), theory with practice is effective and it should be given the equal importance. In this research work researchers suggested that the ESL learners should practice phonological instructions. The results of this research work showed the significant difference due to the intervention of independent variable which was the phonological instructions.

Conclusion

This research is constructed to evaluate the impact of phonological instructions on the ESL learners' pronunciation. Pronunciation is considered vital for the communication. In Pakistani context English had the status of second language and students used to learn English throughout their whole academic career. In spite of that status, English pronunciation is a neglected field in Pakistani educational system and English learners process was just based on the grammar and vocabulary learning practice. The present research was an endeavor to solve the pronunciation related problems by giving the phonological awareness and by using the intuitive, imitative and integrated teaching techniques to provide the pleasant learning environment. Henceforth, it was proved that phonological awareness positively influenced the ESL students' pronunciation.

Recommendations

Researchers suggested that the future researchers should do research work in the field of phonology as there is little work done in the field of phonology in the Pakistani context. This research is based on college ESL learners and researchers suggest the future researchers to do research on the different level ESL learners by focusing the different causal variables. This type of research can be done in the different fields of learning and in different faculties. Such research can also be done conveniently in the faculties of science and mathematics with different dependent and independent variables. Researchers suggest that the future researchers, by keeping in mind all the above limitations of this research, can conduct new research on the pronunciation related stress and intonation problems and can include different forms of sentences. It is suggested by the researchers to the future researchers in the ESL/EFL field they can conduct research to analyze the impact of phonology on the overall academic achievements and considering the variables as confidence etc.

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