

Screening of Phonological Processes in Pre-School Bilingual Children

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ABSTRACT

Phonological screening was done in preschool bilinguals as it was observed that there is a tendency of least and less efficient performance in spoken English as compare to written. So this screening was done among the preschoolers as it was their school's rule to communicate in English during school hours. This study was conducted to screen out phonological processes among preschool bilingual children .A cross sectional study was done. Sample of 300 participants were taken. Phonological awareness screening tool Q-PAS was used. In which phonological awareness process i.e. rhyme production, rhyme awareness, word awareness, syllable awareness, sound awareness at initial medial and final position and deletion tasks etc. later on, when whole data was gathered. Cross tab analysis was done through SPSS. All of the variable were explained according to age of participant and class i.e. grades in which students were studying. Their responses were categorized in poor, fair and excellent criteria. The calculated results showed that in the manner of spoken students are unaware of many phonological processes. At the ends, as result it was figured out that bilingual preschoolers tried well but their results showed that they have errors in phonological processes i.e. rhyme production, sound blending, sound segmentation, sounds identification at different positions of word.

Keywords: preschoolers, bilinguals, phonological awareness, screening, Q-PAS

1. INTRODUCTION

Phonology is concerned with the sound structure of words and utterances within individual languages, it is not about to only

learn sounds phonological.

processes means how different sounds are blend together, and the ways in which the sound structure of the ‘same’ element varies as a function of the other sounds in its context (Anderson, S. R. (2001). Monolingual children develop phonological awareness in one language, bilingual children in two or more languages. It has been found that an increase in vocabulary size in the first language and second language may lead to better phonological development, and that lexical skills may be transferred from first language to second (Metsala & Walley, 1998). Between three and seven years of age, children experience a rapid development of executive functions and information processing skills.(Anderson, 2002).Phonological processes has long been considered essential for language development and learning to read. (Anthony & Francis, 2005; Melby-Lervåg et al., 2012). Phonological learning is the ability to recognize, discriminate and manipulate speech sounds in a language. The development of phonological awareness starts in the early years, when children hear words, imitate sounds and learn word meanings (Vloedgraven & Verhoeven, 2007).The acquisition of knowledge about language is a systematic and scientific process. The role of science spread and brought changes in different fields, and in the same way, the study of acquiring language also evolved, and systematic, scientific procedures was developed to study language (Jokhio,2012). Some error patterns in speech, also known as phonological processes (PPs), are typical in the language acquisition and occur when the child tries to adapt his/her speech to adult speech. These patterns of sound errors that typically developing children use to simplify speech as they are learning to talk. They do this because they lack the ability to appropriately join their articulators i.e. their lips, tongue, teeth, palate and jaw for clear speech.As vocabulary size increases, children's ability to specifically represent phonological details in the mental lexicon.(Van Goch et al.,2014).Teaching and learning behaviours may vary culture to culture when it comes to our culture this behaviour is observed that teachers themselves are needed to get information first regarding phonemes and sound pattern before teaching to children.In bilingual children, it is important to identify and screen for literacy skills in both bilingual languages for early intervention. However, given the lack of literacy screening tools , educators and speech-language pathologists (SLPs) often only assess early literacy skills and reading abilities in English or compare bilingual children to monolingual English speaking norms. This can lead to ineffective assessment of reading difficulties in children who speak a second language. Assessing bilingual children in both spoken languages enables educators to conclude if oral language and reading difficulties are due to cognitive, attentional or language-related issues or differences in language skillfulness. This study will continue to contribute in both phenomenon as phonological processes will be screened of bilingual’s preschoolers. As children of age range 4 to 6 are prone to acquire their phonological process and this is the specific age where their learn how to join sounds to make words and sentences. Any confusion or lacking lies at this stage may lead to severe

2. MATERIALS AND METHODS

STUDY DESIGN

The study used was cross sectional study design.

SETTINGS

Data was collected from different schools of Lahore in which oxford or cambridge curriculum is taught.

DURATION OF STUDY

study was accomplished in the time period of three months.

SAMPLE SIZE

The sample size was 300 students in which male and female both are included.

TARGET POPULATION

Preschool bilingual children

SAMPLE SELECTION

Inclusion Criteria

Age range between 4 to 7 years

Both male and female students are included

Exclusion Criteria

Students above the age of 7 or less than 4 years

DATA COLLECTION PROCEDURE

The study was conducted after taking approval from Riphah International Islamic University Lahore Pakistan. Informed consent was taken from all the schools where participants were taken. A screening tool was used to measure the phonological errors of participants. For data analysis SPSS was used. Cross tabs analysis was used to figure out the frequencies of

respondents.

DATA COLLECTION TOOLS (Performa/ Questionnaire)

Data was collected through QPAS (Quick Phonological Awareness Screening to screen out phonological errors of participants.

DATA ANALYSIS

Data was analyzed by using SPSS statistical software to conclude the results.

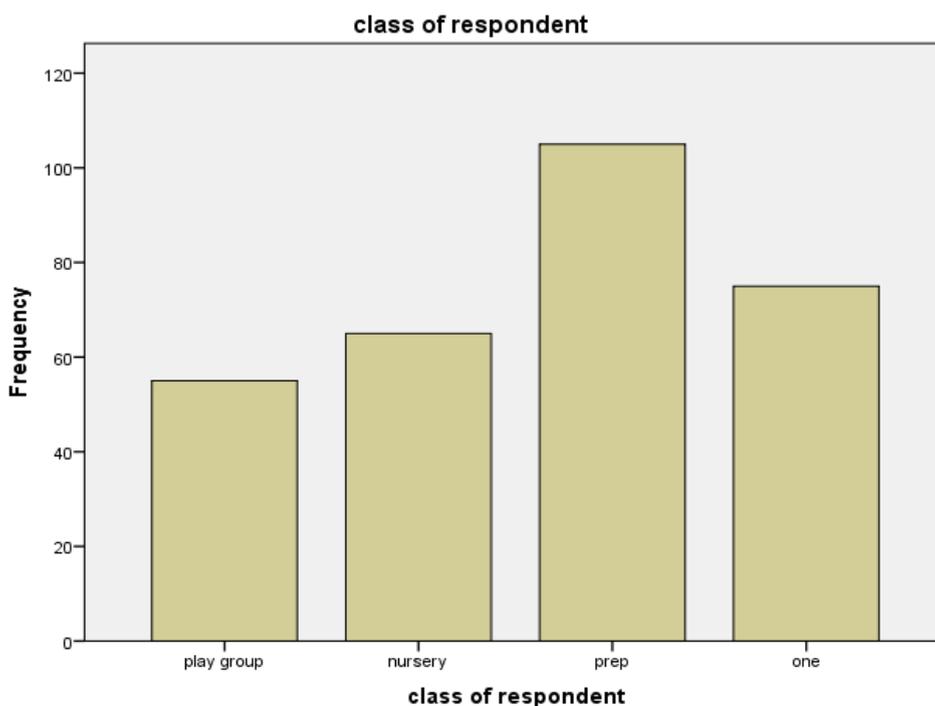
3. RESULTS

Now there are following concerned phonological awareness skills which will be described one by one according to age of participants and then according to class of participants and by the end it will be clear that students of different age ranges and different classes are either poor, fair or excellent in various phonological skills rhyming recognition, rhyme production, word awareness, syllable awareness, initial sound identification, final sound identification, sound segmentation, sound blending, medial sound identification and deletion task. Now all of the above mentioned phonological awareness skills are discussed below with respect to age and class of participants. Tasks were enjoyable for every participant. They actually took part as having a game but as according to instruction only on correct answers numbering will be done. In every task there were 5 total marks except for deletion task i.e. last question it has different numbering range so those who scored 1/5 were marked as “poor” those who scored 2/5 or 3/5 were marked as “fair” and those who marked 4/5 or 5/5 were marked as “excellent” .

Class of participants

Table A

Class of participants	Frequency	Percent
Play group	55	18.1
Nursery	65	21.4
Prep	105	34.5
One	75	24.7
Total	300	98.7



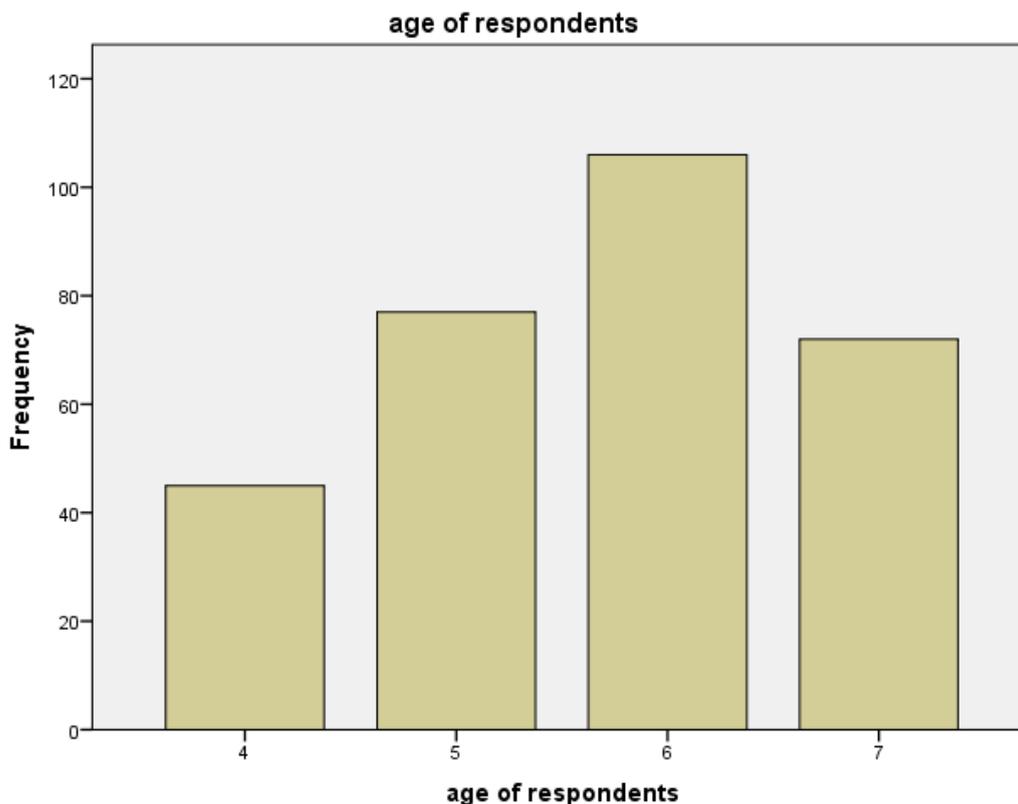
Statistical analyses of collected data has been done. As per given Table A it is showing that students of four classes were considered as sample. Total number of sample was 300. In which play group, nursery, prep and one class were included. Data was gathered from 4 different school of Lahore.

The number of students from play group was 55 which are almost 18.1% of total population. Similarly if other are viewed then students from class nursery were 65 which is almost 21.4 % of all population and students from class one were 75 in number which is almost 24.7 % of whole population. Students from class prep were 105 which is almost 34.7 % of population which depicts that student from prep were more in number as compare to other classes. It was do so because most of the schools were having Montessori classes in several sections. In play group admissions tend to continue from start till the end of year. In nursery class there are also admission processes round the year because parents effort to prepare the child for play group and demands from institution to get admission in nursery i.e. skipping play group. So in most schools class prep were having students of different social backgrounds and were more in number than other montessori classes.

Age of respondents

Table B

Age of participants	Frequency	Percent
4	45	14.8
5	77	25.3
6	106	34.9
7	72	23.7
Total	300	98.7



As it was mentioned before in methods that students as sample were taken under specific age range. So it was taken in much care that every participant must tell their age. Age range was specified from 4 to 7 years. So as per statistics students of age 4 years were 45 which is 14.8 % of total population and from the whole population i.e. 300 students. Participants of age 5 years were 77 in number which is 25.3% of whole population. Students of age 6 years were 106 in number which is almost

34.9 % of whole population this is much as compare to others because there were students of age range 6 to 7 mostly of age 6 who were student of class prep. If age of 7 years is considered then there are 72 participants of 7 years which is almost 23.7 % of whole population.

Age of respondents * tell me if these words rhyme (can-man) (to-up)now tell me if these rhyme Cross tabulation

Table A1

Age respondents	poor	fair	excellent	Total
4	1	21	23	45
5	4	47	26	77
6	6	54	46	106
7	4	40	28	72

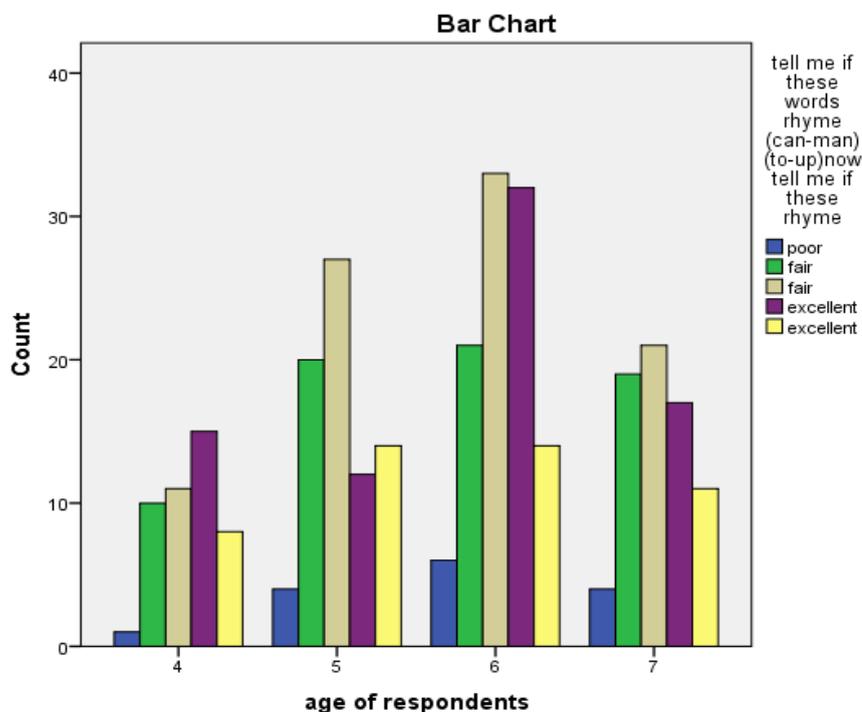


Table A1 showing that the, participants with 4 years of age were 45 in number and among those only 1 participant was poor means he scored 1/5 in rhyme recognition another 21 were fair i.e. they scored as 2/5 and 3/5 means their performance was not sufficient enough but still they tried to create a good margin. Remaining 23 were excellent means they scored 4/5 and 5/5 in rhyme recognition. Participant with the age of 5 years scored as 4 at poor level means they scored 1/5, 47 performed as fair means they scored as 2/5 or 3/5 and 26 showed excellent performance means they scored as 4/5 or 5/5. Participants with the age of 6 years scored as 6 at poor level means they scored as 1/5, 54 were at fair level means they scored as 2/5 or 3/5 and 46 did the excellent job in given task i.e. they scored 4/5 or 5/5. Participants with the age of 7 years scored as 4 at poor level means they got 1/5, 40 showed their performance at fair level means they scored as 2/5 or 3/5 and 28 presented excellent result means they scored 4/5 or 5/5.

Age of respondent* tell me a word that rhyme with pat (nonsense words are ok) tell me a word that rhymes

Table A2

Age of respondents	Poor	Fair	Excellent	Total
4	9	15	21	45
5	13	44	19	77
6	18	58	30	106
7	6	40	26	72

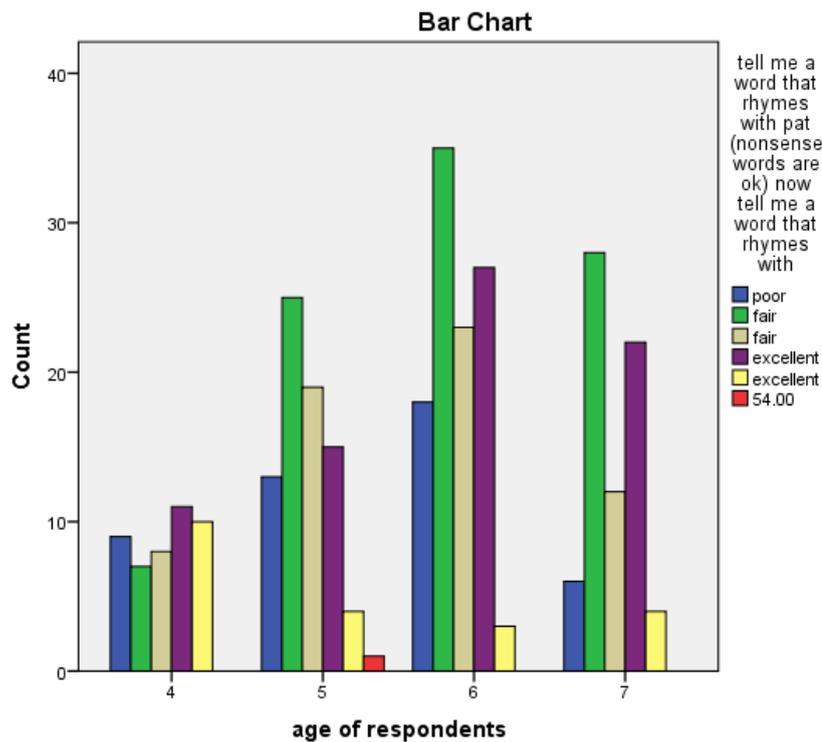


Table A2 showing that the next task was somehow similar and advanced than the previous one. Now participants were asked to produce rhyme on their own they were given a word spoken by researcher then they were asked to speak words rhyme with it similarly 5 words were spoken by researcher one by one. So according to statistics participants with the age of 4 years who are collectively 45 in number, 9 performed as “poor” i.e. they scored 1/5, 15 performed as “fair” means they scored 2/5 or 3/5 and 21 performed as “excellent” means they scored as 4/5 or 5/5. Participants with the age of 5 years showed results as 13 at poor level means they scored as 1/5, 44 did the task at fair level means they scored as 2/5 or 3/5 and 19 showed the excellent result means they scored as 4/5 or 5/5. Participants with the age of 6 years 18 performed at poor level with score of 1/5, 58 performed at fair level with scores of 2/5 or 3/5 ,30 performed at excellent level with scores of 4/5 or 5/5. Participants with the age of 7 years 6 performed at poor level as they scored as 1/5, 40 performed at fair level with scores of 2/5 or 3/5 while 26 performed at excellent level with scores of 4/5 or 5/5.

Age of respondents*listen to each sentence and now say the sentence again and now count and tell me that how many words are in these sentences cross tabulation

Table A3

Age of respondents	Poor	Fair	Excellent	Total
4	2	18	25	45

5	6	34	37	77
6	10	30	66	106
7	3	18	51	72

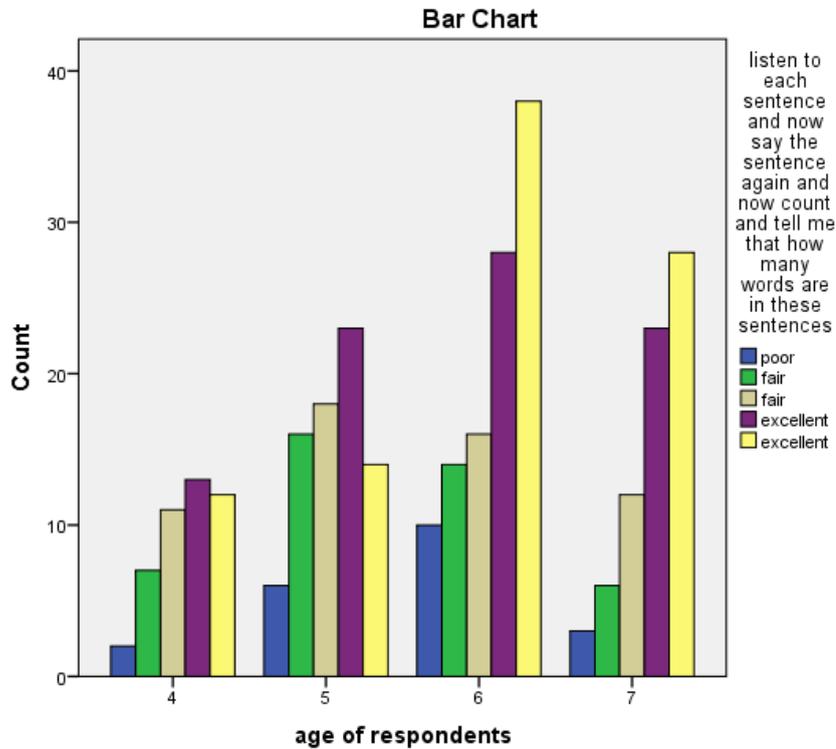


Table A3 showing that, in question no 3 participants were asked to count the words in a line spoken by researcher. Those sentences were not so lengthy maximum number of words in a sentence was 5 not more then it. So participants with the 4 years scored as poor performance by 2 participants i.e. they got 1/5 , fair performance by 18 participants they scored 2/5 or 3/5 and remaining 25 performed as excellent with the scores of 4/5 or 5/5. Participants with the age of 5 years scored as 6 performed as poor i.e. their score was 1/5, 34 performed as fair with score of 2/5 or 3/5 and 37 were excellent in the given task because their score was 4/5 or 5/5.If it comes to participants with 6 years of age then 10 were at poor level with the score of 1/5, 30 were at fair level with scores of 2/3 or 3/5 and 66 were at excellent level in given task as they scored either 4/5 or 5/5. The participants with the age 7 years performed as 3 at poor as they scored 1/5, 18 at fair level as they scored 2/5 or 3/5 and 51 as excellent because their score was 4/5 or 5/5.

Age of respondents*listen for each word part you hear in the word "computer". Now claps the words parts with me cross tabulation.

Table A4

Age of respondents	Poor	Fair	Excellent	Total
4	21	24	0	45
5	27	49	13	77
6	30	74	2	106
7	15	57	0	72

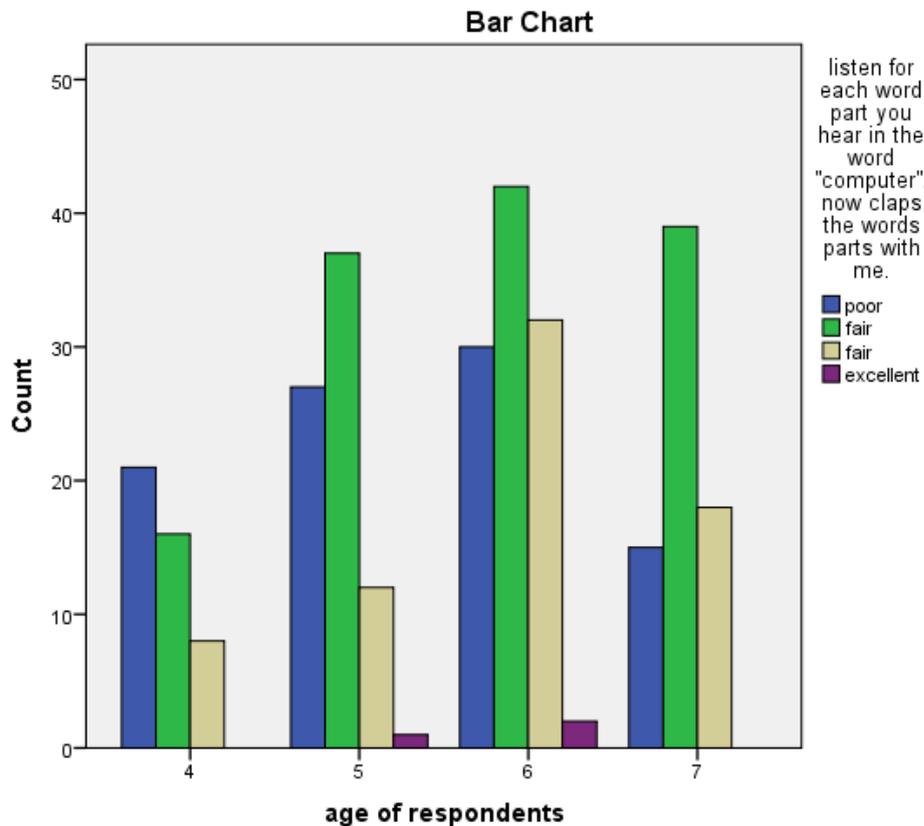


Table A4 showing that, at this stage situation got little tricky. Now participants were asked to count the word parts i.e. count syllables in given words .At this position participants remains unable to achieve remarkable success. As according to statistics, among the participants with the age of 4 years 21 performed as poor as their score was 1/5, 24 remained fair with the score of 2/5 or 3/5 in their job but no one was able to perform to get excellent score as 4/5 or 5/5. Same as participants with the age of 5 years tried their best but they couldn't get enough good scores, among the 77 participants with the age of 5 years 27 scored poor with scores of 1/5, 49 scored fair with scores of 2/5 or 3/5 and only 13 scored as excellent with scores of 4/5 or 5/5. If it comes to participants with the age of 6 years, who were actually the largest portion of population i.e. 106 participants, 30 scored as poor i.e. they got score as 1/5, 74 were fair in performance with the scores of 2/5 or 3/5 and only 2 got excellent with scores of 4/5 or 5/5. Participants with the age of 7 years were 72 in number 15 scored as poor as their score was 1/5 and 57 got as fair with the scores of 2/5 or 3/5 in their test scores but no one could achieve excellent remarks with scores of 4/5 or 5/5.

Age of respondents* tell me the first sound you hear in soup /sss/ is the beginning sound . now tell me the first sound in given words cross tabulation

Table A5

Age of respondents	Poor	Fair	Excellent	Total
4	4	27	14	45
5	2	42	11	77
6	1	27	78	106
7	0	22	50	72

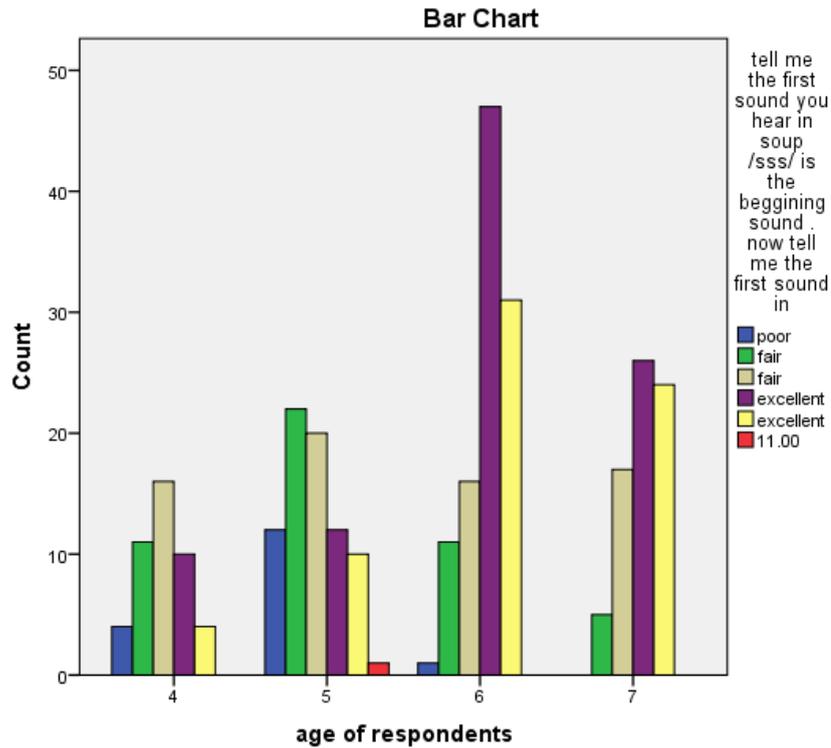


Table A5 showing that, in continuation of previous concepts now participants were asked to judge the Initial sounds provided by researcher. It should be remembered at every task and question that before the conduction trials was given to students. So in the matter of initial sound identification students with the age of 4 years performed as 4 students poorly with score of 1/5, 27 remained fair with scores of 2/5 or 3/5 and 14 achieve excellent in given task with scores of 4/5 or 5/5. Students with the age of 5 years scored as 2 students were poor with score of 1/5 in performance, 42 were at fair scale with scores of 2/5 or 3/5 and 11 were excellent in given job with scores of 4/5 or 5/5. Among the 106 students with the age of 6 years only one was unable to score good i.e. he got 1/5 whereas 27 did the task as fair with the scores of 2/5 or 3/5 and 78 got excellence with the scores of 4/5 or 5/5. At 7 years where much of learning is done by students so, students with the age of 7 year's score was also appropriate to the age as no one was poor in performance rather 22 scored as fair with marks of 2/5 or 3/5 and 50 were able to get excellent with the scores of 4/5 or 5/5.

Age of respondents* tell me the last sound you hear in soup /ppp/ is the last sound. Now tell me the last sound in given word cross tabulation.

Table A6

Age of respondents	Poor	Fair	Excellent	Total
4	6	16	23	45
5	19	42	17	77
6	21	48	37	106
7	9	32	31	72

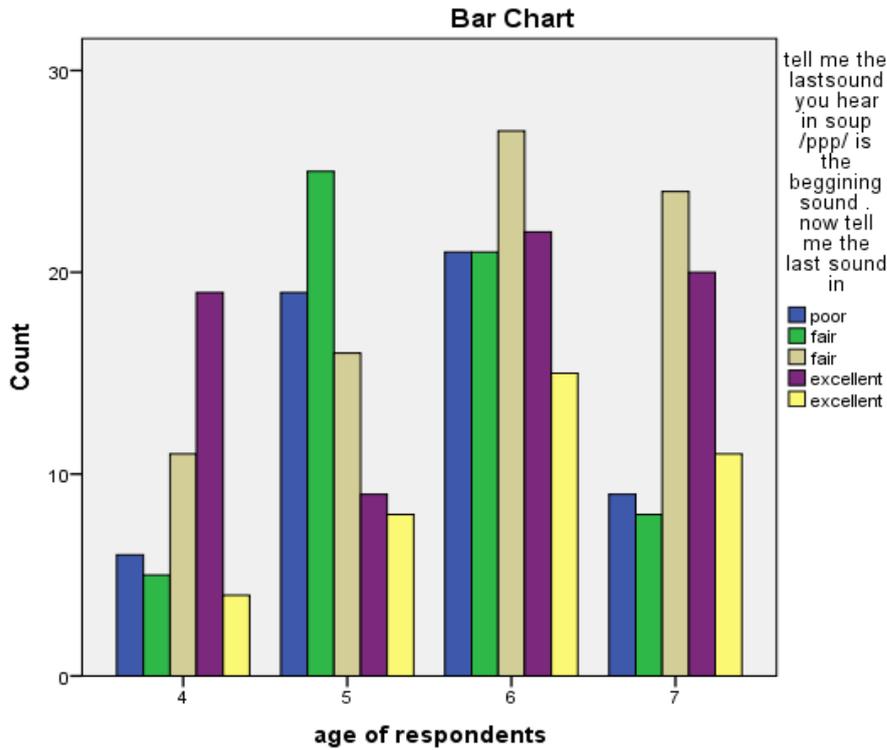


Table A6 showing that, after assessment of initial sounds it comes to final sounds identification, students were asked to tell what is the last sound in given and spoken word you think. So their responses were as, the students with the age of 4 years tried enough and 6 students performed poorly while coring 1/5, 16 performed fairly with scores of 2/5 or 3/5 and 23 were excellent in given task with scores of 4/5 or 5/5. Participants with the age of 5 years scored as 19 at poor rating as their score was 1/5, 42 at fair rating as their scores were 2/5 or 3/5 and 17 were at excellent rate with scores of 4/5 or 5/5. Students with the age of 6 years 21 performed at poor level with scores of 1/5, 28 performed at fair level with the scores of 2/5 or 3/5, 37 performed at excellent level with the scores of 4/5 or 5/5. Students with the age of 7 years 9 performed at poor level with score of 1/5, 32 performed at fair level with scores of 2/5 or 3/5, 31 performed at excellent level with the scores of 4/5 or 5/5.

Age of respondents* how many sounds you hear in word cat. now tell me how many words are in these words cross tabulation

Table A7

Age of respondents	Poor	Fair	Excellent	Total
4	8	35	2	45
5	28	48	1	77
6	35	65	6	106
7	17	53	2	72

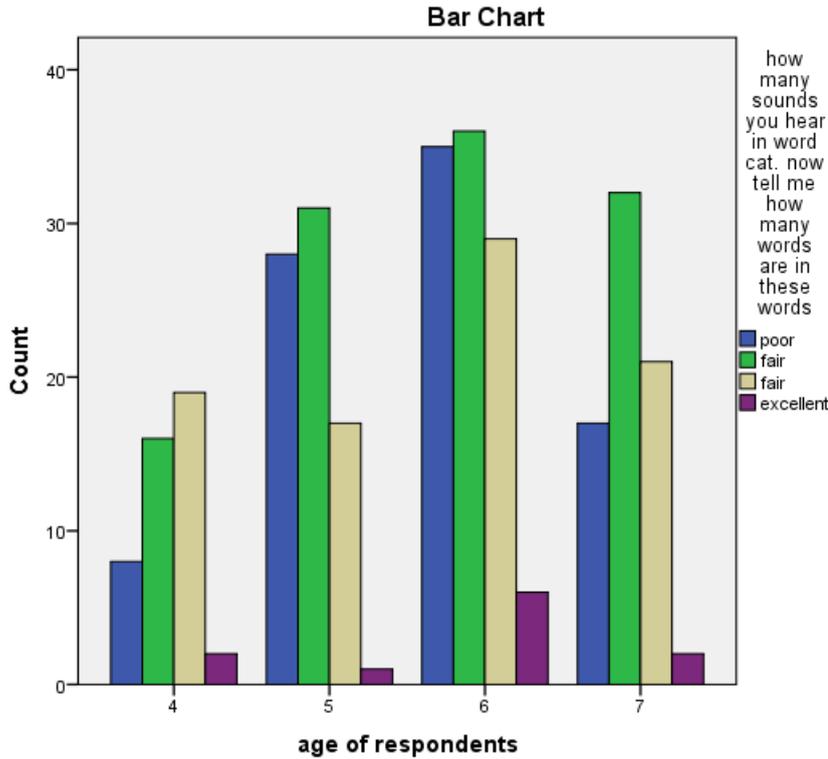


Table A7 showing that, by the passage of test question, there was increased level of difficulty. At next level from a single word, participants were asked to differentiate that how many sounds are there. So respondents with the age of 4 years scored as 8 at poor level with the score of 1/5, 35 were fair with the scores of 2/5 or 3/5 and only 2 got the excellent level with the scores of 4/5 or 5/5. Respondents with the age of 5 years did their level best to achieve good score but it was not taught regularly so 28 students performed poorly with the score of 1/5, 48 students were fair with the scores of 2/5 or 3/5 in given task and only one did the excellent job with the score of 4/5 or 5/5. Among the 106 students with the age of 6 years 35 remained poor in performance with the score of 1/5, 65 scored as fair with the marks of 2/5 or 3/5 and 6 were excellent in their performance with the scores of 4/5 or 5/5. Students with age of 7 years of age 17 performed at poor level with scores of 1/5, 53 performed at fair level with the scores of 2/5 or 3/5, 2 performed at excellent level with the scores of 4/5 or 5/5.

Age of respondents*listen to the sound and tell me what word is this /uh/, /s/. The word is us .Now tell me what this word is..... cross tabulation

Table A8

Age respondents of	Poor	Fair	Excellent	Total
4	10	31	4	45
5	19	55	3	77
6	36	64	6	106
7	25	38	8	72

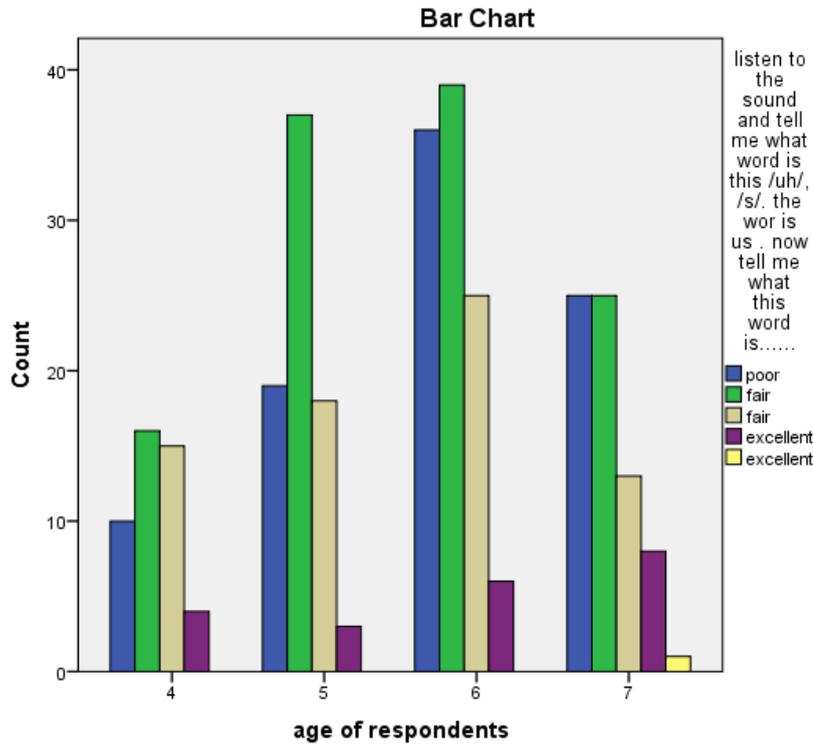


Table A8 showing that, now reverse of previous task was assigned. At this level respondents were asked to listen the sounds and figure out what could be the appropriate word those sounds are forming. As this was a difficult task but for proper understanding trials were given when the assessment was done. Respondents with the age of 4 years performed as 10 as poorly as their scores were 1/5, 31 fairly with the scores of 2/5 or 3/5 and only 4 got the excellence with scores of 4/5 or 5/5. Respondents with the age of 5 years tried well 3 of them got excellence with scores of 4/5 or 5/5, 55 did at fair level with scores of 2/5 or 3/5 and 19 performed poorly as the score was 1/5. Students with the age of 6 years old participated actively but it was hard to score good only 6 did the task at excellent level as their score was either 4/5 or 5/5, 64 performed fairly with scores of 2/5 or 3/5 and 36 of them scored poorly with the score of 1/5. When it comes to participants of 7 years old then 25 performed at poor level with the score of 1/5, 38 were at fair level with the scores of 2/5 or 3/5 and 8 did the excellent work as their obtained scores were either 4/5 or 5/5.

Age of respondents*tell me the middle sound in soup /oo/ . Now tell me the middle sounds in..... cross tabulation

Table A9

Age of respondents	Poor	Fair	Excellent	Total
4	19	22	3	45
5	38	38	1	77
6	49	57	0	106
7	30	42	0	72

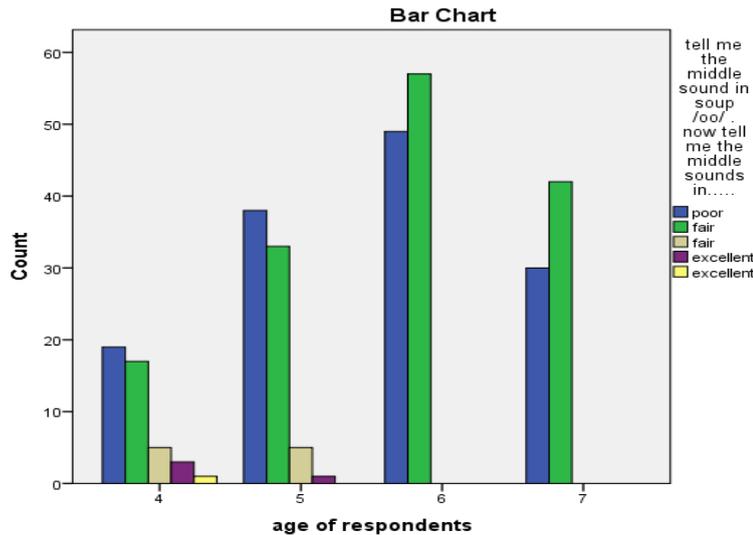


Table A9 showing that, identifying the middle sound from a proper was not an easy thing to do. After demo and trial eve it remained hard for students to score efficiently. Participants with the age of age 4 scored as 19 at poor level with the score of 1/5, 22 at fair level with scores of 2/5 or 3/5 and 3 did the excellent work with the scores of 4/5 or 5/5. Respondents with the age of 5 years scored as 38 at poor level with the scores of 1/5, 38 at fair level with the scores of 2/5 or 3/5 and only 1 participant became able to score at excellent level with the marks of 5/5. Students of age 6 scored as 49 at poor level with score of 1/5, 57 at fair level with scores of 2/5 or 3/5 and no one became able to score high i.e. at excellent level. Students with the age of 7 years 30 performed at poor level with the scores of 1/5, 42 performed at fair level with scores of 2/5 or 3/5 and no one could perform at excellent level.

Age of respondents* i am going to ask you to say a word and then say it again without one of its parts . Say cowboy but dont say cow. Discontinue testing after 6 consecutive errors.

Table A10

Age of respondents	Poor	Fair	Excellent	Total
4	5	26	14	45
5	7	53	17	77
6	0	55	51	106
7	0	30	42	72

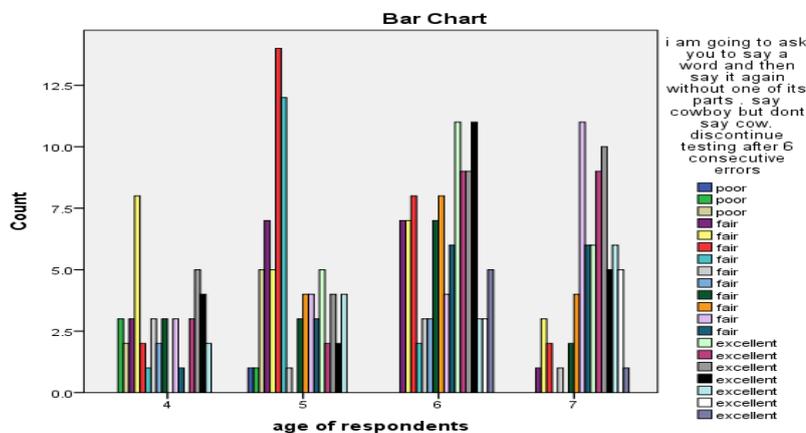


Table A10 showing that, while concluding the provided tasks at the last question was really interesting students were asked to speak half of the listened word whether the first half or second half and in the same way trials and then instructions were given. Students found this section of whole work really exciting and the rule was researcher will stop speaking words if you are not following instructions and if the participant is giving 6 consecutive wrong answers. So at the wind up question the participants with the age 4 scored as 5 with poor performance as their result was between 1 to 4 marks, 26 at fair level as their score was between 5 to 14 and 14 got the excellence as their score was 15 to 21. Respondents with the age of 5 years performed as 7 poorly as their result was between 1 to 4, 53 fairly their score was between 5 to 14 and 17 did the task with excellence as their score was 15 to 21. Participants with the age of 6 years old performed really well their calculated scores are no one was at poor level rather 55 showed performance fairly their score was between 5 to 14 and 51 performed at excellent level as their score was 15 to 21. Students with the age of 7 years of age showed results as no one was at poor level rather 30 were at fair level as their score were between 5 to 14 and remaining 42 scored as excellent with scores between 14 to 21.

During the conduction of result it was observed that in any classroom it was not mandatory for students to be of same age i.e. neither it was compulsory nor all the students of play group were of 4 years old. It was observed that students of play group are between the age of 4 to 5 or to some extent 4 to 5.5 etc. Similarly in other classes also it was as same as described before. So it was decided to analyze the data in both ways with respect to age and with respect to class so that it can be estimated that students of certain class have which type of more issues of phonological awareness. So now all the concerned phonological skills will be discussed with respect to their class i.e. those grades in which they are studying.

If grades of respondents are under consideration then there are four grades under the specified age range and those are play group, nursery, prep and grade one. So now all of the responses and results will be discussed with respect to grade of respondents.

There were 55 students of play group, 65 participants from grade nursery, 105 from grade prep and 75 respondents belongs to grade one. All respondents are not from same school they are from different institutions but they are taught the same curriculum so their class wise analysis can be done.

Class of respondents* tell me if these words rhyme (can-man) (to-up)now tell me if these rhyme cross tabulation

Table B1

Class of respondents	Poor	Fair	Excellent	Total
Play	2	34	19	55
Nursery	4	39	22	65
Prep	2	46	57	105
One	7	43	25	75

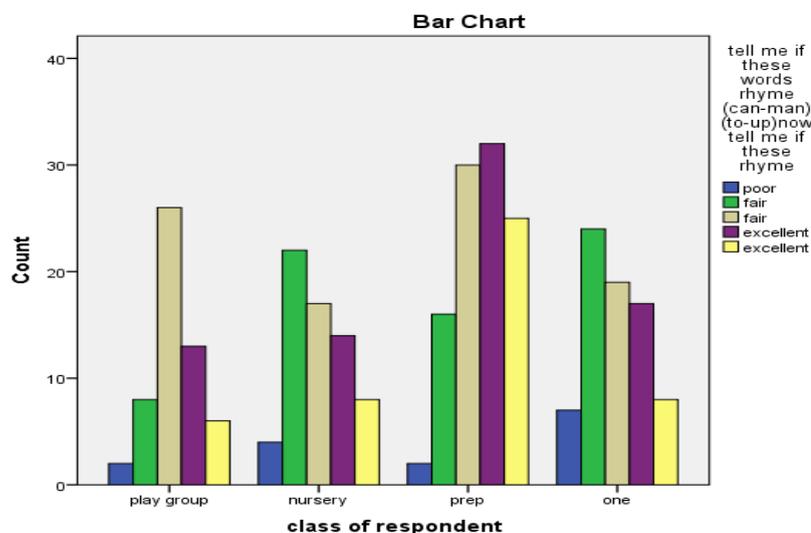


Table B1 showing that ,in rhyme recognition, it was seen that after trials it was little easy for students to judge that either spoken sounds rhymes with each other or may not. So the results showed that among 55 students of play group 2 performed at poor level as their score was 1/5, 34 performed at fair level with scores of 2/5 or 3/5 and 19 performed at excellent level with scores of 4/5 or 5/5. Among 65 students of grade nursery 4 scored at poor level with score of 1/5, 39 performed at fair level with scores of 2/5 or 3/5 while 22 scored at excellent level as their marks were either 4/5 or 5/5. The larger portion of population i.e. 105 from prep grade showed results as 2 at poor level with score of 1/5, 46 at fair level with scores of 2/5 or 3/5 and 57 at excellent level with scores of 4/5 or 5/5.

There were 75 students from grade1 and among those 7 performed poorly as their score was 1/5, 43 performed fairly with scores of 2/5 or 3/5 and 25 got the excellence as their scores were 4/5 or 5/5.

Class of respondents* tell me a word that rhymes with pat (nonsense words are ok) now tell me a word that rhymes with Cross tabulation

Table B2

Class of respondents	Poor	Fair	Excellent	Total
Play	27	20	8	55
Nursery	11	48	6	65
Prep	3	48	53	105
One	5	41	29	75

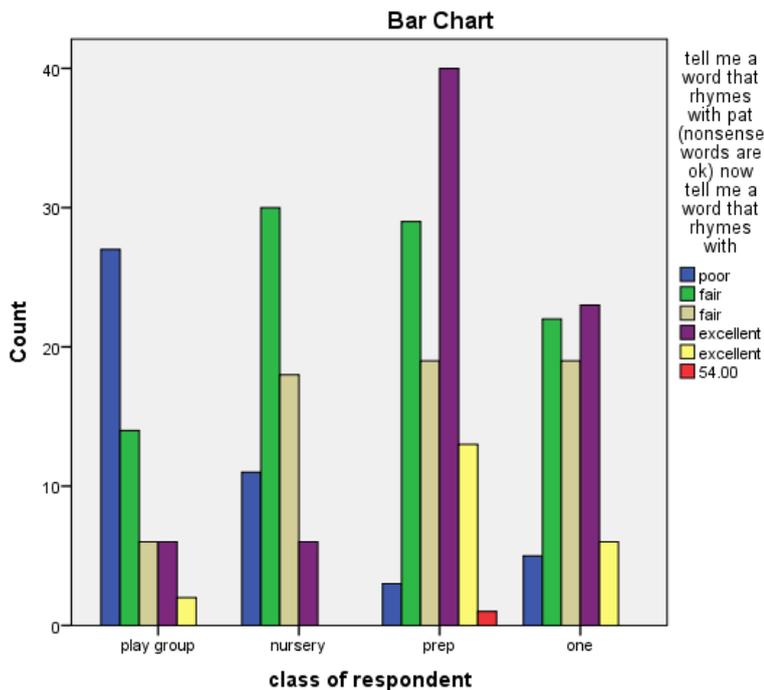


Table B2 showing that,in rhyme production among 55 students of paly group 27 performed poorly, because their score was 1/5, 20 performed fairly with scores of 2/5 or 3/5 and only 8 got the excellence with scores of 4/5 or 5/5. Students of grade nursery showed results as 11 at poor level with score of 1/5, 48 at fair level with score of 2/5 or 3/5 and 6 at excellent level with scores of 4/5 or 5/5 Respondents from grade prep performed as 3 at poor level with score of 1/5, 48 at fair level with scores of 2/5 or 3/5 and 53 got the excellence with scores of 4/5 or 5/5. Students of grade one scored as 5 poorly with score of 1/5, 41 fairly with scores of 2/5 or 3/5 and 29 with excellence with results of 4/5 or 5/5.

Class of respondents * listen to each sentence and now say the sentence again and now count and tell me that how many words are in these sentences cross tabulation

Table B3

Class of respondents	Poor	Fair	Excellent	Total
Play	14	41	0	55
Nursery	6	27	32	65
Prep	1	31	73	105
One	0	1	74	75

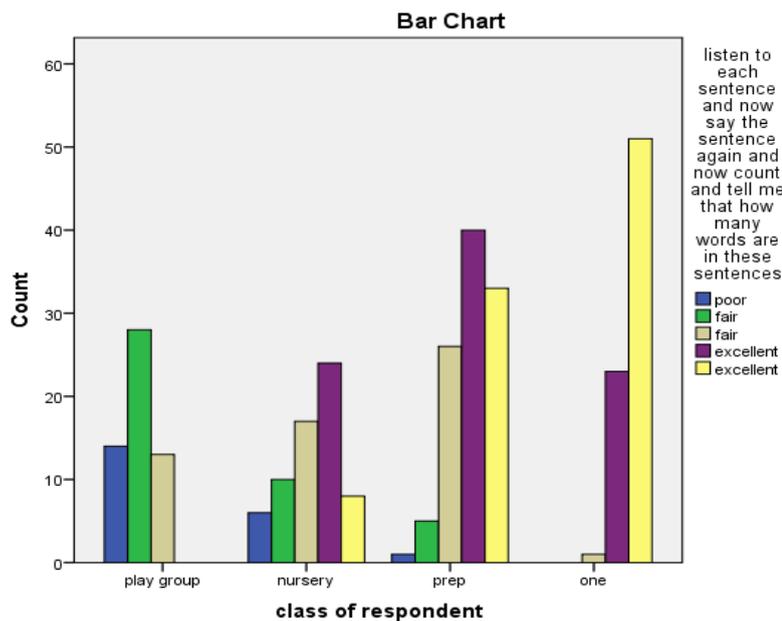


Table B3 showing that ,in case of word awareness where individuals were asked to count the words in given sentence. Play group students performed as 14 at poor level with scores of 1/5 , 41 at fair level with scores of 2/5 or 3/5 and no one was able to achieve excellence. Nursery grade performed as 6 at poor while scoring as 1/5 level 27 participants at fair level with scores of 2/5 or 3/5 and 32 got the excellence with scores of 4/5 or 5/5. If the results of grade prep are observed then only 1 student was at poor level as the score was 1/5, 31were at fair level with scores of 2/5 or 3/5 and 73 scored at excellent level as marks were 4/5 or 5/5. Grade one students performed as no one at poor level,1 participant at fair level and 74were at excellent level with scores of 4/5 or either 5/5.

Class of respondents * listen for each word part you hear in the word "computer". Now claps the words parts with me Cross tabulation

Table B4

Class of respondents	Poor	Fair	Excellent	Total
Play	42	13	0	55
Nursery	9	55	1	65
Prep	29	76	0	105
One	13	60	2	75

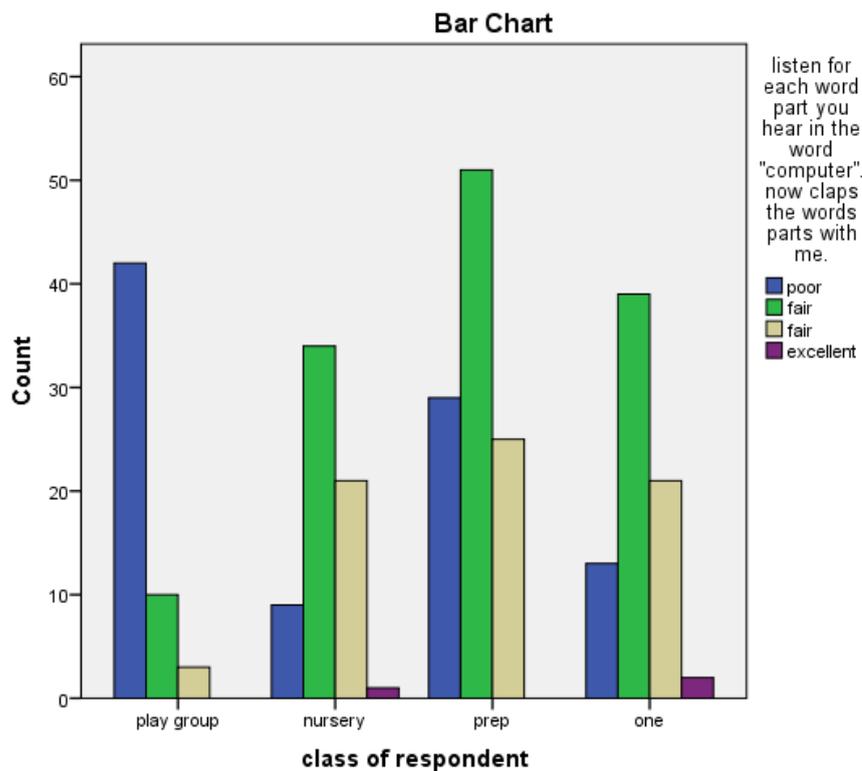


Table B4 showing that, in syllable awareness was the next task so classes showed the results as f play group’s performance overall was not satisfactory 42 students performed at poor level with score of 1/5, 13 students performed at fair level with scores of 2/5 or 3/5 and no one was able to perform at excellent level with scores of 4/5 or 5/5, class nursery showed results as 9 students at poor level with score of 1/5,55 showed performance at fair level with scores of 2/5 or 3/5 ,only 1 participant showed excellent result with scores of 4/5 or 5/5,class prep showed their result as 29 at poor level with score of 1/5, 76 at fair level with scores of 2/5 or 3/5, no one showed excellent results with scores of 4/5 or 5/5, one class showed results as 13 performed at poor level while scoring 1/5 rather 60 showed fair level results with scores of 2/5 or 3/5 and 2 participants showed excellent level result with scores of either 4/5 or 5/5.

Class of respondents* tell me the first sound you hear in soup /sss/ is the beggining sound . Now tell me the first sound in.... cross tabulation

Table B5

Class of respondents	Poor	Fair	Excellent	Total
Play	14	34	0	55
Nursery	3	40	10	65
Prep	0	27	2	105
One	0	17	6	75

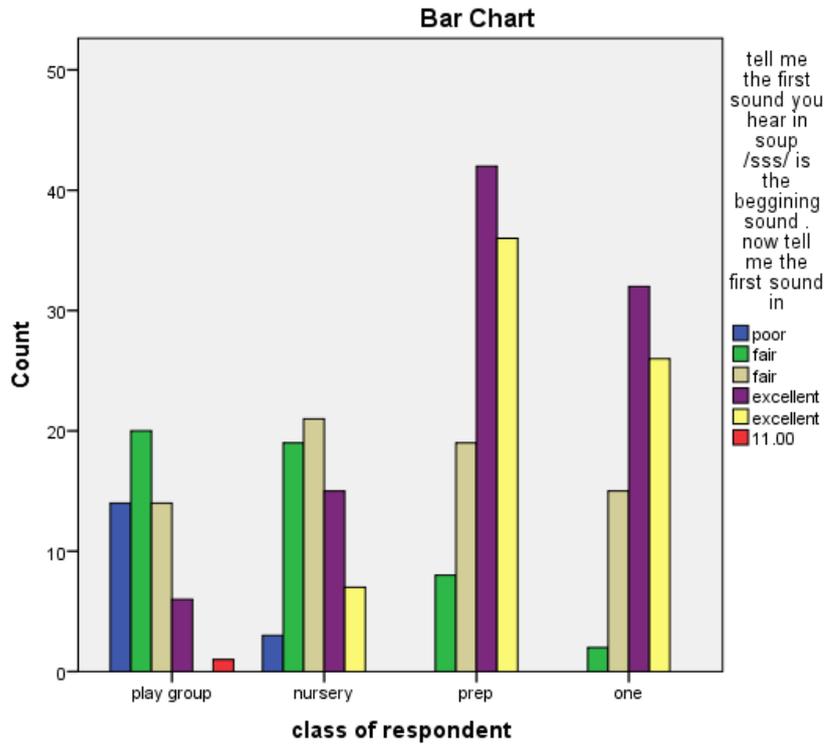


Table B5 showing that,initial sounds identification was the next task so classes showed the results as f play group's performance overall was not satisfactory 14 students performed at poor level with score of 1/5, 34 students performed at fair level with scores of 2/5 or 3/5 and no one could perform at excellent level with scores of 4/5 or 5/5, class nursery showed results as 3 students at poor level with score of 1/5,40 showed performance at fair level with scores of 2/5 or 3/5 ,10 showed excellent result with scores of 4/5 or 5/5,class prep showed their result as no one performed at poor level with score of 1/5, 27 at fair level with scores of 2/5 or 3/5, 2 showed excellent results with scores of 4/5 or 5/5, one class showed results as no one performed at poor level rather 17 showed fair level results with scores of 2/5 or 3/5 and 6 showed excellent level result with scores of either 4/5 or 5/5.

Class of respondents* tell me the last sound you hear in soup /ppp/ is the ending sound . now tell me the last sound in.... cross tabulation

Table B6

Class of respondents	Poor	Fair	Excellent	Total
Play	25	26	4	55
Nursery	21	41	3	65
Prep	9	48	48	105
One	0	22	53	75

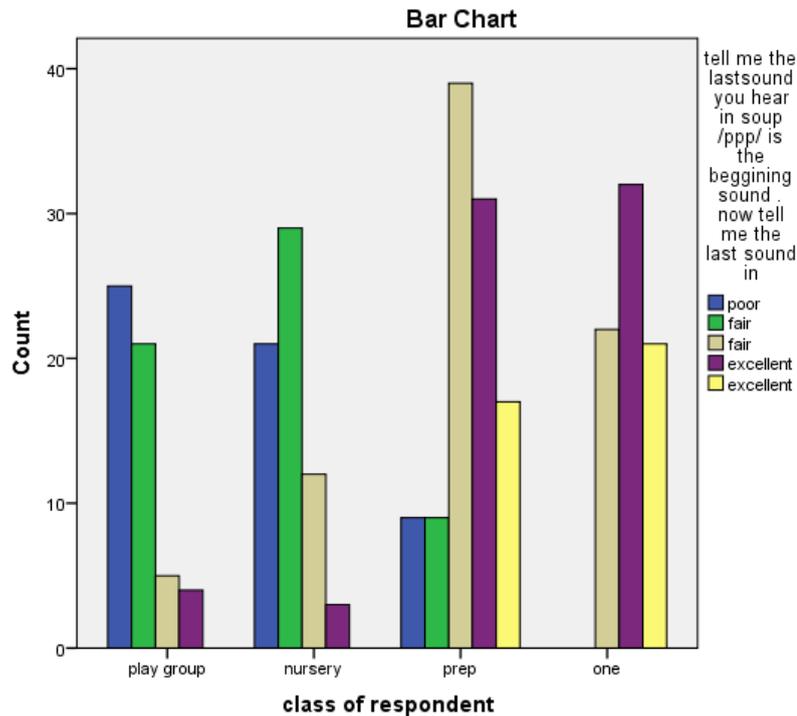


Table B6 showing that, final sounds identification was the next task so classes showed the results as f play group's performance overall was not satisfactory 25 students performed at poor level with score of 1/5, 26 students performed at fair level with scores of 2/5 or 3/5 and remaining 4 students performed at excellent level with scores of 4/5 or 5/5, class nursery showed results as 21 students at poor level with score of 1/5, 41 showed performance at fair level with scores of 2/5 or 3/5, 3 showed excellent result with scores of 4/5 or 5/5, class prep showed their result as 9 at poor level with score of 1/5, 48 at fair level with scores of 2/5 or 3/5, 48 showed excellent results with scores of 4/5 or 5/5, one class showed results as no one performed at poor level rather 22 showed fair level results with scores of 2/5 or 3/5 and 53 showed excellent level result with scores of either 4/5 or 5/5

Class of respondents* how many sounds you hear in word cat. now tell me how many words are in these words cross tabulation

Table B7

Class of respondents	Poor	Fair	Excellent	Total
Play	48	7	0	55
Nursery	20	44	1	65
Prep	20	78	7	105
One	0	72	3	75

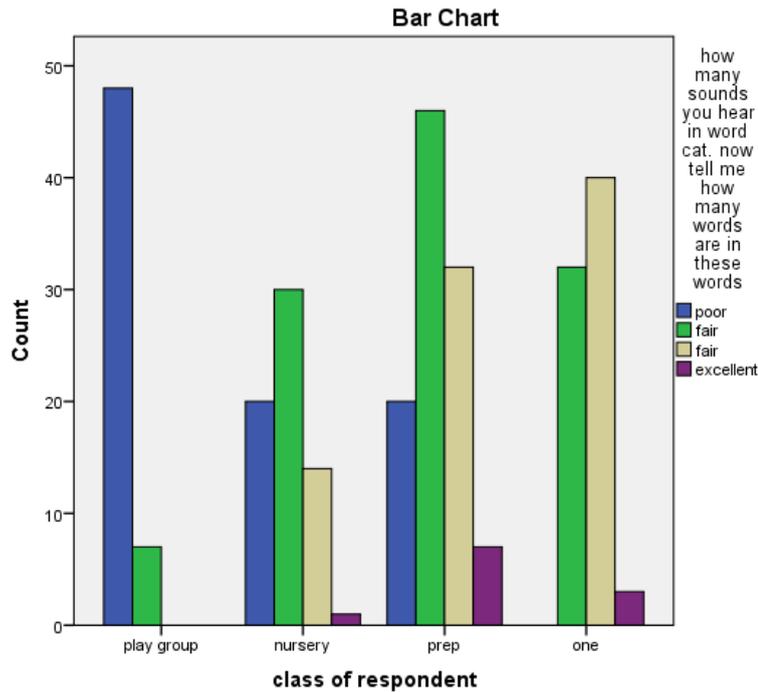


Table B7 showing that, in sound segmentation i.e. in a given word students were asked to tell how many sounds you are listening in a spoken word at a time. So students of play group were not remarkable in the given task as they showed performance as

48 at poor level with the score of 1/5,7 showed performance at fair level with scores of 2/5 or 3/5 and no one could perform at excellent level. If results of class nursery are analyzed then it was observed that 20 students performed at poor level with score of 1/5, 44 performed at fair level with scores of 2/5 or 3/5 and only 1 participant showed performance at excellent level. Class prep showed result as 20 students at poor level with score of 1/5 ,78 students performed at fair level with scores of 2/5 or 3/5 and 7 performed at excellent level with scores of 4/5 or 5/5, one class presented their results as no one was at poor level,72 were fair in the given task with the scores of 2/5 or 3/5 and 3 participants showed results at excellent level with scores of 4/5 or either 5/5.

Class of respondents*Listen to the sound and tell me what word is this /uh/, /s/. the wor is us . now tell me what this word is.....cross tabulation

Table B8

Class of respondents	Poor	Fair	Excellent	Total
Play	32	16	7	55
Nursery	15	50	0	65
Prep	31	70	4	105
One	12	52	10	75

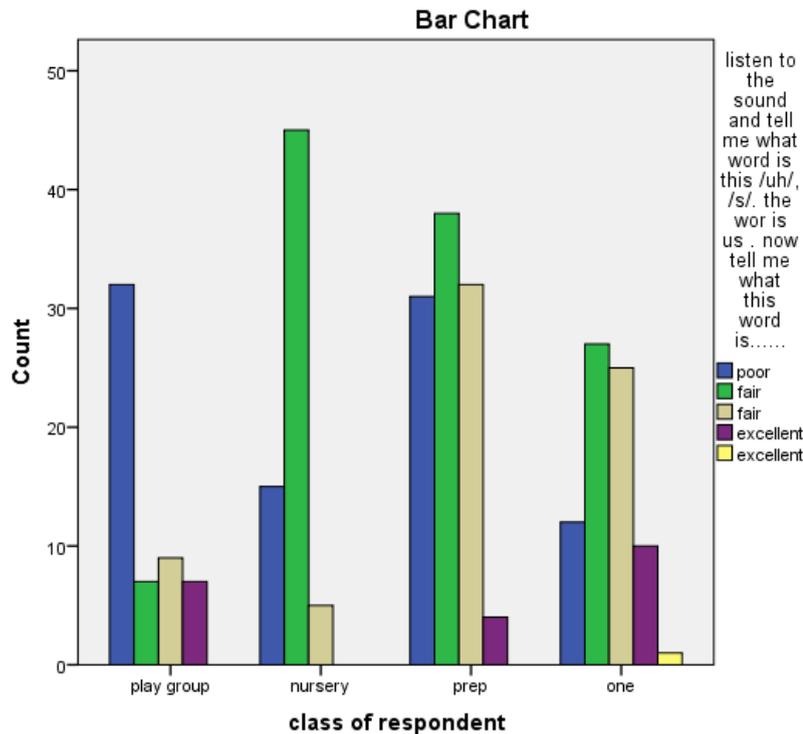


Table B8 showing that, in the task of sound blending, students were provided with sounds and they were asked to respond what word those sounds are making. So participants from play group performed as 32 students at poor level as their score was 1/5, 16 performed at fair level with scores of 2/5 or 3/5, 7 remain distinguished with the scores of 4/5 or 5/5, nursery class performed as 15 students at poor level with score of 1/5, 50 students at fair level with scores of 2/5 or 3/5 and no one performed at excellent level. In prep class 31 students performed at poor level with score of 1/5, 70 performed at fair level with scores of 2/5 or 3/5, 4 remained excellent with scores of 4/5 or 5/5. If one class's results are analyzed then it can be seen that 12 students performed at poor level with score of 1/5, 52 performed at fair level with scores of 2/5 or 3/5 and 10 showed excellent performance with scores of either 4/5 or 5/5.

Class of respondents* tell me the middle sound in "soup" and other given words crosstabulation

Table B9

Class of respondents	Poor	Fair	Excellent	Total
Play	38	17	0	55
Nursery	32	33	0	65
Prep	49	56	0	105
One	17	53	4	75

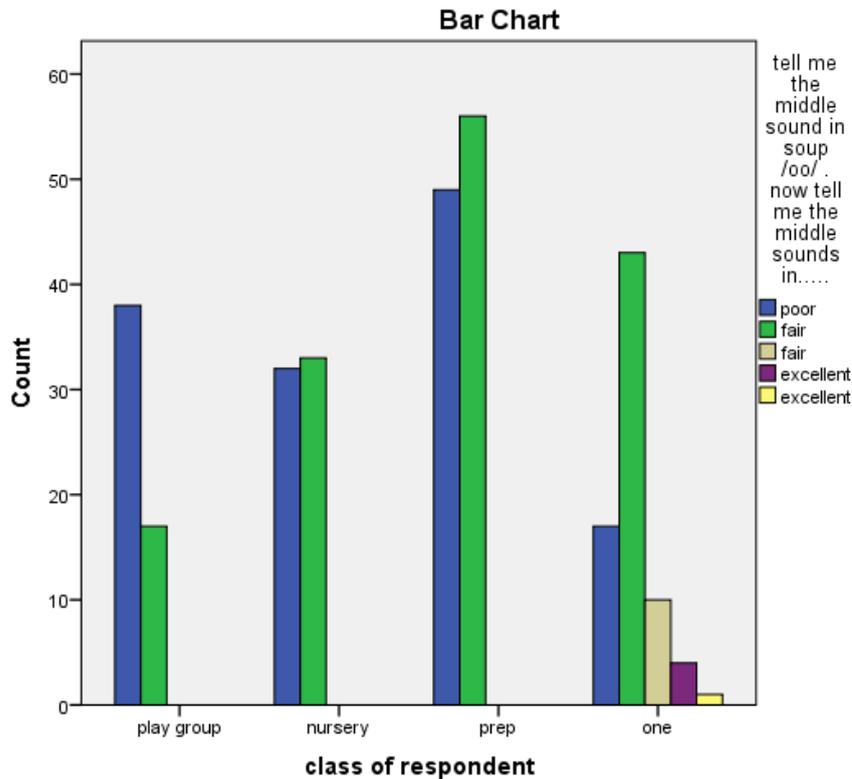


Table B9 showing that, middle sound identification was also a tough task for participants, play group students scored as 38 as poor by getting 1/5, 17 from 55 performed fairly with scores of 2/5 and 3/5 but no one was able to get excellence. Nursery class students were not performed good as well among 65 of them 32 performed as poor with score of 1/5 and 33 were fair with scores of 2/5 or 3/5 in given task but no one scored as excellent. Among 105 participants of prep class 49 marked as performed poorly with score of 1/5 and 56 were fair as they got marks as 2/5 or 3/5 in performance but no one was excellent in task. So collectively it was seen as middle sound identification was a tough task for students. So it should be taken in further consideration.

Class of respondents* i am going to ask you to say a word and then say it again without one of its parts .Say cowboy but don't say cow. Discontinue testing after 6 consecutive errors cross tabulation

Table B10

Class of respondents	Poor	Fair	Excellent	Total
Play	0	55	0	55
Nursery	11	42	12	65
Prep	1	52	44	105
One	0	15	60	75

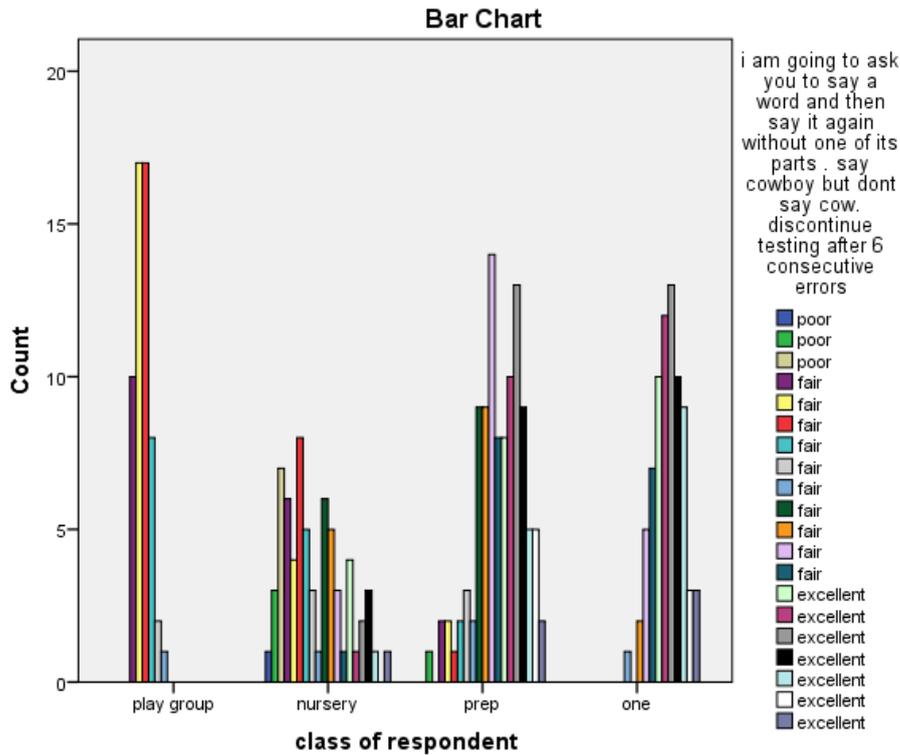


Table B10 showing that ,just like the above mentioned tasks this task created a separate sense of understanding among participants at first just like all the above tasks participants were given trials to how to perform the task. So in the task of deletion participants of play group performed fair collectively as they scored 2/5 or 3/5. No one either scored as poor or as excellent. Students of nursery were 65 in number and among those 11 performed poorly their score was 1/5. 42 performed fairly with scores of 2/5, 3/5 and only 12 have done the task excellently with scores of 4/5 or 5/5.

4. .DISCUSSION

This research was conducted to screen out which type of phonological processes error in preschoolers bilinguals so in the same context materials and methods were designed and later on results were analyzed and now the affecting factors will be discussed. At first, the phenomenon of what is relationship between phonological process and phonological awareness, so according to ASHA Phonological processing is the use of the sounds of one's language i.e., phonemes to process spoken and written language .The broad category of phonological processing includes *phonological awareness, phonological working memory and retrieval*. All three components of phonological processing are important for speech production as well as the development of spoken and written language skills. Phonological awareness is the awareness of the sound structure of a language and the ability to consciously analyze and manipulate this structure via a range of tasks, such as speech sound segmentation and blending at the word, onset-rime, syllable, and phonemic levels. Phonological working memory involves storing phoneme information in a temporary, short-term memory store Phonological retrieval is the ability to recall the phonemes associated with specific graphemes, which can be assessed by rapid naming tasks. So results of the research were showing that students with the age range of 4 to 7 years have clear and vivid difficulty in syllable awareness, sound blending, middle sound identification and sound segmentation. If the separately discussed then play group and nursery showed difficulty at rhyme recognition and rhyme production as compare to other classes. Same as class wise analyses showed that from play group to grade one have difficulty in above mentioned phonological awareness skills but students with the age of 4 and 5 were also having problem in rhyme recognition and rhyme production. So results of the research were showing that students with the age range of 4 to 7 years have clear and vivid difficulty in syllable awareness, sound blending, middle sound identification and sound segmentation. If the separately discussed then play group and nursery showed difficulty at rhyme recognition and rhyme production as compare to other classes. Same as class wise analyses showed that from play group to grade one have difficulty in above mentioned phonological awareness skills but students with the age of 4 and 5 were also having problem in rhyme recognition and rhyme production. During conduction of research there were different factors which were observed as supporting or hindering elements in acquisition of second language in the presence of first and different spoken language. As mentioned in topic that we are measuring phonological errors in population of bilinguals. So bilingualism can be a cause as supporting factor or repressing element in second language acquisition. As according to a study Claire Goriot et al. worked on how much bilingual experience is required to learn better phonological awareness and

whether learning different languages alter the relation between bilingualism and phonological awareness because prior to this work it was believed that bilinguals can learn better phonological processes as compare to monolinguals. So the study was done in cross sectional way where sample was taken as 294 participants within the age range of 4 to 7. The population was consist of both Dutch speaking and Dutch- English speaking and they were studying in monolingual Dutch school where English was taught as a subject. So their phonological awareness skills like rhyming, phoneme blending, onset phoneme identification and phoneme deletion were assessed. In the results small significant effects of bilingualism were found on onset of phoneme. Further, the effect disappear i.e. showed no effect when the concerned phonological awareness skills became a part of participant's memory. So this study suggested that in order to learn two languages simultaneously it is not compulsory to be proficient in both languages and in the presence of one language other language can be learned.

Medeiros et al. conducted a research to verify the influence of bilingualism on development of phonological awareness so this research was actually did while collecting evidence of topic of the relation or influence of bilingualism on phonological awareness so from different databases like Pubmed, Scielo, Eric data was gathered so after a lot of effort data was collected which was exactly matching to the concerned topic eight papers were taken out. From which two were written bu Brazilian authors. Among those eight papers, five were saying that there is a tendency to learn phonological skills better in bilinguals and two of them were reporting that monolinguals can learn better phonological skills other than native language. Studies point out that age can be a factor and predictor of language skills and better phonological skills development with good reading development. So in conclusion it can be said that there are still controversies in regarding the impact of bilingualism on phonological awareness skills learning. another factor which was taken into consideration was parents attitude towards second language learning and it was seen that parents are willing and supportive in the matter of making their child aware of second language in the presence of first and different native language. So a study by Kaechich D, Ghozlane et al. presents their view in the same sense as they did a research on getting parents belief and attitudes toward different language learning as it is seen that parents have their own choices that what different languages their child has to learn so 80 parents were investigated in this regard and their results showed positive support from parents side as they were ready to support any new learning for their child and mostly parents were showing their cooperation with teacher so that their child may learn better. So it can be said that parents' attitude towards different language learning is positive and they want to become a supporting factor when their children are facing any difficulty in learning. Another factor which can be taken into concern that home environments are different as compare to their institutions' environment. Home environments are not supportive in the matter of English speaking so let see what research says about it so Zhang, X., Lau, C & Su,y. et al. conducted research as to figure out relation between home environment and English as a secong language for learning among young Asian children so in this regard it was observed that 22 studies had been published which were meeting the selected matter. So actually a meta analysis was done. The results indicated that various home factors like literacy rate of all members of a house, used language for communication, literacy activities impact a lot on English learning along with it sociocultural aspects. Findings of the study were highlighting the significance of home environment in the development of English as a second language for young Asian children. So it can be said that if the home environment is like a support system for learning and practicing English as a second language then students may learn more proficiently.

Teaching methods will be discussed later on, first it is seen the tendency of shadowing teaching method like students are helped by someone else along with teacher to meet and overcome the difficulty level so in the regard of second language learning whereas the native or spoken language is different as compare to it so what are the role of shadowing techniques of teachings. No doubt it can be felt that helping in different ways can bring positivity in learning. So a 8 weeks study was conducted in which different surveys and interviews were done and data was collected regarding to the people attitude towards language learning in institutions and with shadowing way of teaching too. This study was done by Oanch N et al and results suggests that where parents were finding themselves insufficient then for the sake of children betterment they decided to move with shadow teachers etc. which actually beneficial for students and secondly by the views of those teachers it was also concluded that shadowing techniques contributed to enhancing students' phonological correctness, self-confidence, and fluency in daily communication Now it comes to teaching ways and methods for better phonological awareness skills learning it can be felt that effective teaching ways in which a lot of practice is done as beneficiary for students for learning better phonological awareness skills so let's have a look on a study so a research was conducted by Vaisman EE et al. in their study they investigated and assessed from teachers about their views and time allocated for phonology practice and later on these were assessed too. Firstly teachers were provided with less time for phonology practice and more time for vocabulary teaching and later on teacher reported that if they are provided with more time on phonology practice then there are double chances to create a good phonology and phonemes awareness in students and vocabulary is a thing which can be learn side by side. Secondly teachers suggested that there should be proper ways of providing teacher different trainings through which they may learn about innovative ways of teaching especially in case of second language or foreign language learning. Next thing which can be taken into consideration that individual differences may affect second language learning those students who have better memory skills cannlearn better to get into the given factor let's have a look on literature so Karen Roehr- Brackin K, did a research on individual's aptitude and memory learning skills in second language acquisition. So as data 111 students of 8 to 9 years were taken as sample. Those were actually English speaking and their second language of learning was French so when the analysis was done it was observed that cognitive maturity and

aptitude are the dynamic things those can increase with the passage of time. This is the matter of practice that how much effort and how much practice is done by individual to be fluent enough is second language which is different than the native one even at the age of 8 to 9 years. During the conduction of research it was seen that there is tendency of better English speaking skills where students are instructed to communicate in English means schools were providing them environment to practice English for fluency regardless of the phonological errors etc. and there were other school where only one spoken period was set for practice of English where phonological error were observed more as compare to the prior discussed set ups in the same sense a study by Thompson M. was gone through. He conducted a study to observe which population has better phonological awareness those who are native English speakers or those who are studying English as a second language and not using it on routine basis so it was significantly observed that there were least phonological awareness in those who are not English speaking in their routine life and this study was conducted among the second graders of elementary school students. So it can be said that regardless of age factor and being native or nonnative of concerned second language It depends upon learning and practicing for getting phonological awareness of second language. At last it can be seen and felt that whatever the task is to be followed there always should be motivation in heart and in the case of learning such motivation can be provided by teachers and care givers to the children so that they may achieve their task with interest and can be successful without getting exhausted. Ahmed et al. did a research in the same context and their work was about Children's language development in early childhood is faster and accurate. However, there are many risks involved for children's language learning in early childhood. This study examined factors affecting foreign language learning at early childhood in the context of Pakistan. Data were collected through semi-structured interviews from ten Early Childhood Education teachers from three schools in district Chitral, Khyber Pakhtunkhwa, where early childhood education curriculum has been implemented. The qualitative research design was used, and thematic inductive technique was used for data analysis. The results showed that motivation played a key role in the foreign language acquisition during early childhood.

5. CONCLUSION

In final notes it is concluded that students within age range of 4 to 7 years old while studying between classes of play group till grade one have phonological errors which tend to hinder their abilities to be good enough in speaking English and those measured errors are rhyme recognition, rhyme production, sound blending, sound segmentation, sounds identifications at different level especially middle sound identification and it was also figured out that students don't have awareness of syllables.

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