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#### RESEARCH ARTICLE

The Comparative Study of Music Song Influence on First Language Acquisition between 3 to 4 Years old Girls and Boys.

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## Abstract

This is a comparative study of music song influence on first language acquisition between 3 to 4 years old girls and boys. The hypotheses of the study consist of 1- The effectiveness music song on the development of language acquisition in a girls' simple words is more than the boys. 2-The effectiveness of music song on development and acquisition of the girls' complex words is more than the boys. According to such hypothesis scientific research started. For this purpose, 6 children (3 girls and 3 boys) as a test group of nursery school were selected randomly. After identification of the test group in terms of age and gender, then some selected poems were presented in rhythmic and music form to the test group for 30-40 minutes every week for six months. So the children were in the situation of getting their 1<sup>st</sup> language input. Every two weeks children had one record that sings songs, one by one. At the end of six months, our nine records had been gathered. These records included simple and complex words which were main data. The results show that the influence of music song on the development and acquisition of the girls' simple words is less than the boys and the girls' complex words are more than the boys.

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#### **Introduction:-**

Language is typically viewed as fundamental to human intelligence. Music, while recognized as a human universal, is often treated as an ancillary ability - one dependent on or derivative of language. We argue that it is more productive from a developmental perspective to describe spoken language as a special type of music. A review of existing studies presents a compelling case that musical hearing and ability are essential to language acquisition. We argue that music learning matches the speed and effort of language acquisition. Just as infants yearn to walk, they have an accelerated drive for language: by age three or four, a child has essentially become competent in his or her native language. While linguistic abilities will continue to be refined, all of the requisite skills for the processing and performing of speech have been acquired (Kuhl, 2004). Music is recognized as a universal feature of human cognition: every healthy human is born with the ability to appreciate it. However, music's role in human development is often viewed as ancillary and slower to mature. Wilson argues that "whereas language acquisition in children is fast and largely autonomous, music is acquired more slowly and depends on substantial teaching and practice. "As a result, he surmises that music appears to be derived from language (Wilson, 2012:p. 283). At its most extreme, Pinker (1997) has described music as "auditory cheesecake, an exquisite confection" without any biological utility. By adulthood, we all have well-developed ideas about music informed by our culture and individual taste. However, though we all feel we know what music is, it has proven remarkably hard to define. Cross and Morley (2008) cite two dictionary definitions of music: "the art of combining sounds of voices or instruments so as to achieve the beauty of form and expression of emotion" and "the art or science of arranging sounds in notes and rhythms to give a desired pattern or effect."Deacon writes: "The structure of a language is under intense selection pressure because, in its reproduction from generation to generation, it must pass through a narrow bottleneck: children's minds." (Deacon, 1997, 110) Language is a compromise between what adults need to say and children's

ability to process and perform what they hear. And, crucially, what infants hear is, by the broad definition above, a form of music. Many educational researchers promote music as a way toenhance vocal comprehension, and children emphasize music's ability to engage children in instruction hear stories read aloud and sing songs that include new vocabulary words. (Miller & Coen 1994.)

A study by Stanford researchers (Gaab et al, 2007) found that musical training improves how the brain processes the spoken word. Specifically, the research found that musical instruction and experience helps the brain improve its ability to distinguish between rapidly changing sounds, referred to as auditory processing. This auditory processing is critical to developing phonemic awareness and to learning successfully.

Another study (Musacchia etal, 2007) demonstrated that playingmusical instruments triggers changes in the brain stem as well as in the brain cortex. Seniorstudy author Nina Kraus explained this finding to mean that music training may enhance reading and speech functions because the brain stem is a pathway for both music and language. Researchers measured theactivity of neurons in the brainof the experimental subjects who had been playing musical instruments since the age of five. They found that musicians' brain stems not only showed increased activity, but also a quicker response to both music and speech sounds.

Stansell (2002:11) enumerates a number of characteristics shared by both capacities of music and language:Activities of melody recognition, contour processing, timbre discrimination, rhythm, tonality, predictions, body movement, tactile involvement, and sound, sight, and form of symbols, with their context in song, phrases, and rule structures are all common in the musical and language learning processes. Falioni (1993: 98) affirms that "many people often remember rhyme, rhythm and/or melody better than ordinary speech", in particular when the information is significant to them.

Melodies, rhythms, timing and measurement of sentences in songs are elements that can help students memorise vocabulary and grammatical structures because "the new structures that may seem isolated or out of context in pattern drills, are seen in a different perspective when they are part of a song" (Falioni, 1993: 101). As children get older, they begin to expand their vocabulary and they start to make connections with words and their meanings. Another way that children can enhance language development can be found through music and ear training.

Forgeard (2008) found that instrumental music training may enhance auditory discrimination, vocabulary, and non-verbal reasoning skills. Forgeard (2008) found that children who received musical training not only outperformed the children in the control group but that the duration of the musical training was important.

### Research method:-

In this research had chosen study environment (nursery school), samples (6 children, 3 girls, and 3 boys) and some different songs that were suitable for children. These songs without instrumental music just as music song and in rhythmic were repeated. It means that nursery school teacher according to her method, sing songs and children listened to their teacher and repeat after her. This process had done for six mounts and every week during 30 to 40 minute these children were at the expose of these music songs. So in this way the samples had exposed to acquisition their mother tongue. On the other hand during these six mounts, every two weeks we had one record from all songs that children had learned. In actually the researcher took records from the children one by one. These children remember, recall and sing songs as they had learned. These records had examined and classified in two parts; simple and complex words .These data for every child and according to hypotheses of research had examined and gave a picture of them in the diagram. According to data collection, we will show that in this research there is a difference between girls and boys language acquisition that affected by music song.

## **Observation & Discussion:-**

The comparative diagram progress and acquisitionof simple word

## Simple Words 100 90 80 70 60 غ 50 40 30 20 10 0 R4 R5 R1 R2 R3 R6 R7 R8 R9

In this diagram rate of growth of subjects in the acquisition of simple words is cleared. The subjects were differentiated by different color. So described them as follow:

Time Record ■ دایاتا ■ صوفیا ■ شمیم ■ هیرید ■ ماتیار ■ حامی

Hami (subject) was cleared by blue color. He was absent in first and  $6^{th}$  records and in the second record there is no progress in simple words for him. But in third and  $4^{th}$  records has 20% and 60% progress respectively. As you can see in diagram Hami' progress in the  $5^{th}$  record fall to 20% but again have improved in  $7^{th}$  record till 40% and continue this procedure to 80% and 100% in records  $8^{th}$  and  $9^{th}$  respectively.

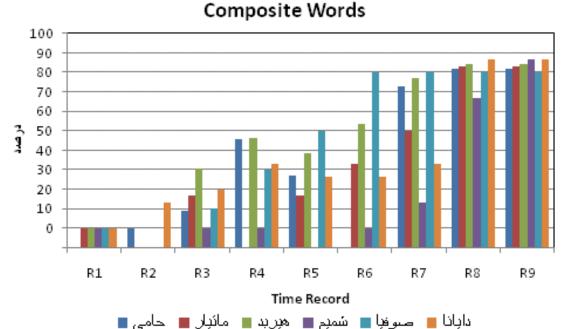
Another subject is Matiyar that he is cleared by red color. He was absent in second and 4<sup>th</sup> records. He has 25% progress in three records of third, 5<sup>th</sup> and 6<sup>th</sup> but in 7<sup>th</sup> has 50% and 8<sup>th</sup> and 9<sup>th</sup> records have 100% progress respectively.

Hirbood who has shown by green color in our diagram and was absent in second records, have any progress in the first record and also his improve in third till 6<sup>th</sup> records were fixed about 18%. But in the 7<sup>th</sup> record has a good result and get at 50% improvement and in 8<sup>th</sup> and 9<sup>th</sup> records gain 100% progress the acquisition of simple words.

Shamim with a characteristic of violet color has been shown. She was absent in second and  $5^{th}$  records. There is no progress till  $6^{th}$  record for her but in the  $7^{th}$  record has noticeable improve simple words, 45% approximately. She has 55% and 100% progress in  $8^{th}$  and  $9^{th}$  records, respectively.

Sophia is another subject that participated in this research and was cleared by sky blue color. She was absent for the second record. There is no progress in first and third records for her but in 4<sup>th</sup> and 5<sup>th</sup> records she has 40% and 60% improvement. From 6<sup>th</sup> record till the last record she had kept her 80% progress in the acquisition of simple words.

Dayana is the last subject that has been shown by orange color and never was absent and no improvement in first three records, but she started her first improvement in 4<sup>th</sup> records with 10%. In 5<sup>th</sup>, 6<sup>th</sup> and 7<sup>th</sup> records continued her progress in 20%, 30%, and 40% respectively. At last her 90% improvement in 8<sup>th</sup> and 9<sup>th</sup> records was noticeable.



The comparative diagramprogress and acquisition of complex words

The above diagram described the progress of subjects in complex words. We will describe the condition of subjects as follow:

Hami with blue color showed in this chart. He was absent in first and 6<sup>th</sup> records and his progress had started in the third record with the lower than 10% progress. In fourth records, he gets at 45% but in 5<sup>th</sup> records came down to 28% till in 7<sup>th</sup> records his improvement get at 73% and in 8<sup>th</sup> and 9<sup>th</sup> records he fixed in 82% of progress and acquisition of complex words.

We have Matiyar here with the characteristic of red color. He was absent in second and  $4^{th}$  records and no seen progress in his first record. But we see that he has 16% improvement in third and  $5^{th}$  records. In the  $6^{th}$  record, his progress is 32% and in  $7^{th}$  one, he received to 50%. At the end of this period means  $8^{th}$  and  $9^{th}$  records he had 82% of progressive in the acquisition of complex words.

Hirbod who we see him with green color in the diagram was absent in second record and no progress in first records for him, but in the third record has 30% of his progress and 56% in the fourth record. As we can see he lose his progress in  $5^{th}$  records to 38% but again shows his improvement in the  $6^{th}$  record with 53% of acquisition. In the  $7^{th}$  record, he has noticeable growth than the before about 78% till in two last records he achieves to 80% progress of acquisition of complex words.

Shamim is clear with violet color in the diagram. She was absent in second and 5<sup>th</sup> records and there aren't progress in third to 6<sup>th</sup> records but we see that in7th record she has 12% improvement and increased it to 65% in the 8<sup>th</sup> record that is so noticeable. At last her growth in 9<sup>th</sup> record get at 87%.

Sophia is another subject in this study with the red color feature. She was absent for the second record. She has started her first progress in the third record with 10% improvement and continued this process in the fourth and  $5^{th}$  records with 30% and 50% advance, respectively. At  $6^{th}$  till  $9^{th}$  records, she has kept 80% of progress the acquisition of complex words.

Dayana is the last one who was present in all records and we know her with orange color. Her growth in first and second records is 12% and 20%, respectively. She is going on in the third record with 20% and 32% in the fourth record but in 5<sup>th</sup> and 6<sup>th</sup> records stay at 26% level and again in 7<sup>th</sup> record continue and get at 32%. Dayana's progress in complex words in 8<sup>th</sup> and 9<sup>th</sup> is 87% which is so remarkable.

### Conclusion:-

In this study, the girls' progressive in the acquisition of simple words were less than the boys. If we considered the last record as the base point we see that the boys achieved to 100% level of progressive in the acquisition of simple words. On the other hand, the girls get at 80% of improvement. In totally at the end of this period, the boys progressive were 100% and the girls progressive were 90%. So mean the difference between girls and boys in the acquisition of simple words was 10 percent, which is meaning full difference. So music song influence on progressive of boys in the acquisition of simple words in this study was more than the girls.

According to results that we have for comparative between girls and boys in the acquisition of complex words, the girls were better than the boys. Total progressive of girls in complex words was 84/6% and on the other hand total progressive, the boys were 83/3%. So mean the difference between girls and boys in the acquisition of complex words were 1/3%. It seems that in this research improvement of the girls in complex words is more than the boys.

According to this research, we can use music song as improvement factor in language acquisition of children. Even we can consider this process in the social, cultural and educational dimension of children's progress as main and fundamental parts of society in particular in that country or society that pay less attention to music song. In this society, if pay more attention to music song, can help and conduct children not only in language acquisition but also in many varied ways which are important for children and their future.

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