Experiments in Deaf Cognition

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Introduction

<u>Phonology</u> - Use of sound to encode meaning in a spoken language

• <u>Functional Equivalence Hypothesis</u> - Deaf children's phonological development is qualitatively similar, albeit quantitatively delayed, in comparison to hearing children.

RHYME TEST

 To test the subject's ability to identify a rhyming word with varying distracters

• The cues were pictorial and instructions were given to arrive at the correct word

RHYME TEST: Results

Subject	1	2	3	4	5	6	7	8	9	10	11	A STATISTICS
Age	10	8	12	12	11	11	12	13	14	14	14	
Correct /Total	2/3	4/4	3/3	5/5	2/7	1/8	3/8	8/8	3/8	8/8	8/8	the state of the
% Correct	66.7	100	100	100	28.6	12.5	37.5	100	37.5	100	100	Mr. W. W.

Average: 71.2

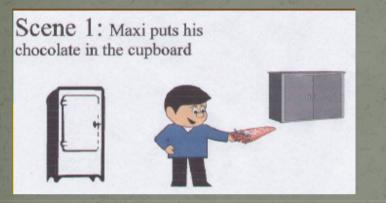
Analysis

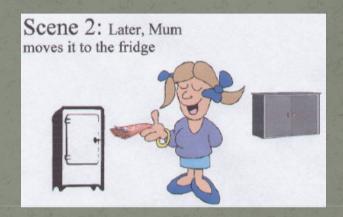
 There is indeed a strong indication of a phonological representation of words

 Possible reason could be that since a comprehensive teaching methodology is employed with emphasis on picking up word sounds through lip movements, a phonological representation is created

 Younger students with a limited vocabulary performed poorly even if one of the words was written

Theory of Mind Test-1 (Unexpected Location Test)

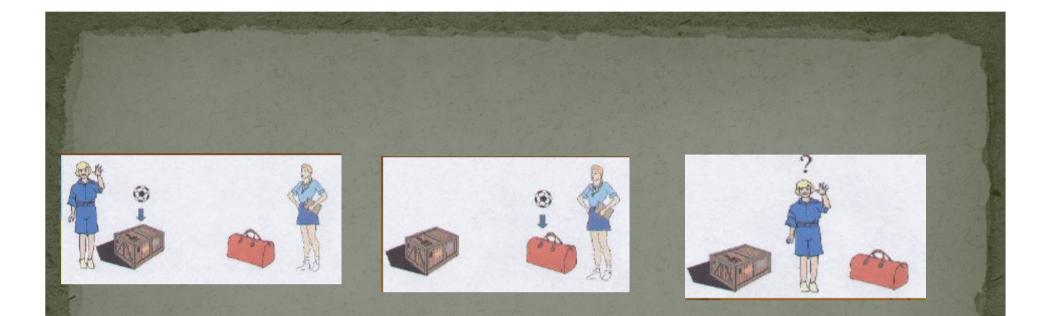




1. "Where will the boy look for his chocolate?"

1. "Where did the boy keep the chocolate?"

2. "Where did his mother keep the chocolate?"



- 1. "Where will Manu look for his chocolate?"
- 1. "Where did Manu keep the chocolate?"
- 2. "Where did Tanu keep the chocolate?"

Analysis

• 3/11 could answer correctly.

- The children had difficulty in understanding because a possible communication gap.
- Acting out the experiments did help in aiding sometimes.

 Weaving a vivid story with relatable characters and objects was most successful but the results were unreliable as the stories were give-away.

Theory of Mind Test-2 (False-Belief Test)

• Showed a lock inside a soap cover. They were shown that there is a lock but not a soap inside.

 Asked what would an independent observer say was in the soap cover

• 7/11 students answered correctly

Theory of Mind Test-3 Emotion Recognition Test

 Asked what would be the emotion (happy or sad) of a boy if he were to go to a movie.

• Further asked about his emotion if he found the cinema was closed.

• 9/11 answered correctly

Conclusion

• The communication gap proved a hindrance making few tests unsuccessful.

• There appears to be an impaired theory of mind but the experiment is not yet conclusive.