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A three-year-old's abilities to repeat sentences

Dawn Lambert

A Preliminary Study of Three Year Olds' Abilities to Imitate [illegible]

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Capstone Project

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The main purpose of this study was to determine various pre-norms of three-year-old's abilities to repeat sentences. The study also revealed various overloading strategies that were used by these children. The information that was gathered from this study was useful in formulating future screening procedures for children. It. was 1J also contribute to a more accurate representation of their language abilities.

This study was composed of twelve SUbjects, seven of which were three years old and five who had just turned four. Of these SUbjects, five were female and seven were male. The study was conducted at "Bridge Central Day Care" in Rockford Illinois, a pre-school which was attended by all of the children studied.

Before each child was interv1ewed. permission was obtained from the parents of the children using the letter which can be found in the appendix of this paper. The letter informed the parents of what the study involved, how much time would be required of their children, and why the study was being done. It was also stated that the Director of the Board of their school approved of the study. Upon receiving the signed

forms. the study began.

PPDC:EDUPE

The study was conducted in a quiet, isolated room on the school premises. Each of the twelve children were taken one at a time from their classroom and into the private r >)()IYI . It was here that they were tested using the "Sentence List for Three-Year-Olds", developed by M. Irene Stephens, Ph.D, at Northern Illinois University. This was a sentence repetition task designed to determine some of the pre-norms of a three year old"s abilities to repeat sentences. A tape recorder was used to recora' each child's responses. At the start of each new subject, these words were recorded by the clinician, :'1Thi.~::. is the beginning of (child's name)." Each trial was concluded with, "This is the end of (child's name)." This helped to seperate each subject's responses :i.n order to eliminate the need of using a new t~pr!~' for every subject. The clinician beqan by clearly explaining the directions to the child. Each subject was to repeat exactly what the "teacher" said - like a copy-cat game. After each child was explained the rules, there were a few practice items to make sure they comprehended the task. After each had demonstrated they could follow the directions, the testing began. The sentence list was composed :.f twenty-five sentences ranging from only

three words up to seven words. In this list there were sixteen statements to be repeated and nine questions. Each child was given as much time as they needed to repeat the sentence and was given unscheduled verbal reinforcement. It did not matter if the child repeated the sentences back with errors because it was these errors that the study was focused. A child was only asked to repeat a sentence if it was unclear.

SCORING

The scoring of this test was very simple in that all that was involved was assigning number values to each sentence according to the amount of mistakes that were made. Since there were twenty-five items, there were twenty-five numbers. Each of the numbers were then added at the bottom of the page for a grand total. A zero was given if there were no mistakes made in the sentence. Obviously, the lower the score at the bottom of the page, the less mistakes were made by the subject. One point was given for every word that was given in the wrong tense.

[illegible]

Response: Let him IOD to the store.

One point was also given when there was an added or deleted plural marker.

Actual sentence: Tom hit Sam and it hurt.

Response: Tom hit Sam and it hurts.

Actual sentence: Who wants cake?

Response Who want___ cake?

One point was added for each deleted word and for every extra word that was added.

Actual sentence: The boys were hitting baseballs.

Response: The boys _____ hitting baseballs.

Actual sentence: Why are they doing that?

Response: Why are they ~~~ doing that?

Another point was also given when a child substituted a different word for the one that was given.

Actual sentence: Ann went shopping with me.

Response: Ann went shopping with Y2U.

Three points were given if the child attached a plural ending that made the sentence grammatically incorrect.

Actual sentence: Mommy likes to cook.

Response: MommY:5 likes to cook.

Four points were given if the subject reversed the order of words 1n the sentence.

Actual sentence: Where can he be hiding?

Response: Where b§ £2D be hiding?

Seven points were added if the child was completely unable to repeat the sentence. Seven points were also given if the subject answered a question instead of repeating the question back. Even when the instructions of the test were repeated, they were still unable to repeat the question.

Actual sentence: What is the hammer for?

Response: To pound on nails.

~Now r want you to say exactly what I say. O.K.?"

"U.V."

"What is the hammer for?"

"I said to pound on nails!

Actual sentence: Where can he be hiding?

Response: In the bathtub.

"Now I want you to say exactly what I say, O.K.?"

]1(]. ;< ..

"Where can he be hiding"

"In the closet!"

RESULTS

After all of the subjects were tested all of the errors were calculated on each child's sheet. One week later each child was retested in the exact same way. Tr11's helped to establish test - retest r'~":;li<:\b i 11.t,/ . What was interesting in the results was that the children made m~nY of the same errors in the first and second trials. Below are some examples of errors that occured in both trials.

Actual sentence: Ann went shopping with me.

Response: *8n~* !b§Y went shopping with me.

Actual sentence: Tom hit Sam and **it** hurt.

Response: Tom hit Sam and !b~l hurt§.

It is impossible that these children remember word for

~/~ø r 'y.. r~()\j,} '.. "1 t:! }' \., ...-I~ t..'' ():1 d tH" · i "C'p.:::! thi..:,": "f j. j"" t. t I" i..:::, 1. The fact that many of the errors the subjects made were exactly the same in both trials shows us that these children {-I ~::ty!:":! (j f::! 'r :I.il], "t,1:::: ...!I·t":!~!_!~!; ,.~ndlan'.:.:Ie..cua,des.-that they use - and do not even know it. When looking at each child`s i.nel i. v' i. d!..A"'.].. .....,.. ,""..... i.:. l,~~_. two trials, the errors ranged from one error to forty-two errors.

Subject		'\ 't\~ A	\r'~ 8	DIfferent
5ob'je., G+	1	8 e r ror s	7 errors	\
5ubjec~	2	i:	I	\
.,\b'~ec+	3	3	Y	\
Sub~ec-t	LJ	7	9	l.
5u'o-e.c,t	5	7	S	2
5()b~e,G+	fa	\0	\2..	
5O~jtc .+	7	35	2.'1	~ 8
5ub-jee-*	8	11	fa	1 \
5Ub-jec+	1	36	L\1..	~
≤ o'Djec*	10	2C)	,S"	12
SvbJe6~	)/	10	1o	—
S ub'je.c.+	J2	J2	7	S

When looking at the difference of errors between the two trials, seven of the twelve subjects differed in no more than two errors. The remaining five subjects differed from five errors up to twelve errors. This was quite an unexpected finding. It was hoped that all of the subjects would make about the same number of errors across both trials in order to make the screening valid. This did not occur. What was even more suprising was that even with this wide range of errors, a very high test - retest reliability was found. Using "Pearson's R Coefficient" it was found that R = .888660974 or 89. This shows a substantial correlation between trial A and 8 which is interpreted to mean that this test has a good test - retest reliability. This tells us that the "Sentence List for Three Year-Olds" is a good candidate for use as a sc~ening device for three year olds.

The subjects were given as much time as they needed to repeat the sentence. The children who responded quickly were done in four to five minutes. Subjects who did not catch on or were slow, took up to fifteen to twenty minutes to complete the sentences. There were various overloading strategies that were used by the subjects which showed they were linguistically overloaded. These included rehearsing, shadowing. rapid delivery, and reduction of the sentence. In rehearsing. the subject would repeat the modeled sentence to themselves before repeating the sentence aloud. With

shadowing. the subject would start repeating the sentence before the clinician finished speaking. Rapid delivery was also noticed when the subjects repeated the sentences back at an extremely fast rate. This was done to make sure they repeated it all before they forgot it. The fourth overloading strategy witnessed was reduction of the sentence. Indication of a mild overload occured when the subject left only one or two words out of the sentence.

Actual sentence: Why are they dOing that?

Response: Why are _____ doinq that?

Score=l

A major overload was obvious when many words were deleted from the modeled sentence.

Actual sentence: Dad put some books on the table.

Response: _____ _____ _____ books on the table.

Score=3

Another interesting technique was used by one subject. This included combining the biginning of one word with the ending of another. This blending of words i5 also indicative of linguistic overload.

Actual sentence: Tom hit Sam and it hurt.

Response: Tom hit S ~rl s

Score=4

These techniques are all normal means of compensating for lingiustic overload.

The main weakness of this study was that only twelve subjects were used. If this study were repeated using more subjects, a larger amount ot information could be extracted. Another weakness was even though most of the subjects involved in the study were three years old, there were a tew tour year oids. Although these children had just turned four, this tact may have thrown the results off just a bit. In contrast. there were also strengths to the study. First of all, a tape recorder was used so the examiner was able to listen to each child's responses as many times as necessary in order to accurately record the results. Also the subjects were retested for test-retest reliability. This helped to validate the test results.

In this study, many pre-norms were identified. Various errors which were common in the language of three year olds were witnessed. Some of these included changing the tenses of words, adding unnecessary plural markers, and substitution of words. Some of the subjects were unable to repeat a question. This study also recognized many overloading strategies that were used. These were rehearsing, shadowing, rapid response, and deleting words in the sentence. The most important outcome in the study is in spite of the fact that there was a Wloe range of errors between the two trials, the test-retest reliablity was high. This shows that this

screening procedure is accurate and valid. This sentence list should seriously be considered as a tool to measure the amount of language errors that are common among all children.

DIRECTIONS: We're going to playa talking game. You say just what I say. Let's practice-

(1) "Hello." (Hello.)
(2) "I'm fine, thank you." (I'm fine, thank you.)
(3) "Is it raining?" (Is it raining?)

Good, let's go on.

If the child says (Me, too) to practice item (2), or answers the question in practice item (3), say "Whoops, I caught you. 1emember to say exactly what I say", and repeat the practice item. If the child continues to answer the question, try "Now you ask m~.:'. Get the correct response before proceeding, if possible.

SENTENCE LIST FOR THREE YEAR OLDS

EXAtHNER _____ DATE _____ NAME _____

_____ 1. 1 see you.

_____ 2. Joe ran home.

_____ 3. Who wants cdke?

_____ 4. This isn't mine.

_____ 5. George is sitting down.

____ 6. Is it Cathy's turn?

_____ 7. ' Mommy likes to cook.

_____ 8. It might rain today.

____ 9. Re1ph can te11 a story.

_____ 10. Why are they doing that?

_____ 11. The boys were hitting baseballs.

_____ 12. Ann went shopping with me.

▪ _ _ _ 13. Was she laughing hard?

~ _ _ _ 14. Those shoes are hers.

____ 15. It's not time to go yet.

_____ 16. Didn't Larry choose you?

_____ 17. Odd put sume books on the table.

_ _ _ _ lB. Let him run to the store.

____ .. 19. What is the hammer for?

_____ 20. Tom hit Sam and it hurt.

_____ 21. These choirs aren't clean.

____ 22. Where can he be hiding?

_____ 23. Who will ask a question?

_____ ?·1. Cm we pldy?

25. She ate cookies and candy.

Fan 1991

Dear Parent of ~

In the early years, children learn to talk in many ways and they do it so quickly. We are interested in how well 3 year aIds can repeat sentences. We would like to present a set of sentences to your child on two occasions. Each *time* only requires about S minutes; this is an easy task and children *seem* to enjoy it. You would be helping to increase our knowledge of language cleve1Opmo nt.•

The Director and the Board believe that this is a worthwhile project and, of course, *we* will he reporting our findings after the project is completed.

If you *arc* willin~ to let your child participate, please sign below and include the date. In any case, thank you for considering this matter.

Ulcere_y,

M. Irene Stephens, PhD
Pr ofos sor

Dnwn Lambert
Honors Student

You have permission for _____
to participate in the ~tudy.

lparent's slgnature) tdate)

NO: WE DO NOT WISH TO PARTICIPATE

_____

(parent's signature) (date)

OR SIMPLY DO NOT RETURN THE FORM