

Group IB

Consisting of the other five children who had been labelled "stutterers" by members of the institution. In the case of these children the judges endorsed the label.

Case 6
Group IB

Date of Birth: 5/27/32

Age: 6

Grade: Kindergarten

Intelligence quotient: 81

Fluency rating at the beginning of the experimental period:
2.8

Fluency rating at the end of the experimental period: 3.4

Handedness test:

| | Beginning of Period | End of Period |
|---|---------------------|---------------|
| Dextrality quotient (Angle Board) | | |
| Kinesthetic | No learning | No learning |
| Visual | No learning | No learning |
| Eyedness (positions) | | |
| Up | L | L |
| Right | L | L |
| Left | L | L |
| Down | L | L |
| Convergence (trials) | | |
| 1 | L | B |
| 2 | L | B |
| 3 | L | B |
| 4 | L | B |
| Dynamometer (average) | | |
| Right hand | 9 | 12.3 |
| Left hand | 8.5 | 12.3 |
| Dextrality quotient | .51 | .50 |
| Spool packing (average in 10 sec.) | | |
| Right hand | 4.8 | 5 |
| Left hand | 4.5 | 5.3 |
| Dextrality quotient | .51 | .48 |

Description of speech given by judges at the beginning of the experimental period:

Judge A.

"Stutterer? No tension or blocks."

Judge B. "

"Talks rapidly after quick breath but appears an articulatory case not a stuttering case. When quick breath is not taken the words are scarcely audible."

Judge C.

"Indistinct articulation."

Judge D.

"Takes a quick breath just before some words. (articulation inferior) Occasional quick repetition are consonant."

Judge E.

"Slight repetitions in speech."

Description of speech given by the judges at the end of the experimental period.

Judge A.

"Very slight hesitancy. Certain breathiness. Not a stutterer, but a potential one."

Judge B.

"Case talked rather rapidly when he talked. He kept his head down while talking. Answered readily the questions put to him. Voice harsh and articulation not too good.

Not stuttering."

Judge C.

"Articulation indistinct. Voice a bit thin and weak. Seemed to enjoy speaking--or at least was not apparently resistant to the instructions. Fluent except for repetitions, and these were quite without effort, strain, reactive embarrassment and were themselves quite fluent.

Non-stutterer."

Judge D.

"Generally quite spontaneous. Repetitions not forced. Seemed to be groping for next word. Not a stutterer."

Judge E.

"He seemed to enjoy the situation. Talked willingly. Uses interjections when he comes to a word he can't get out. Repeats once in a while."

Dictaphone records: At the beginning and at the end of the experimental period.

| | B | E |
|---------------------------------------|------|-------|
| Number of words | 59 | 286 |
| Percent of syllable repetitions | 0 | 0 |
| Percent of word repetition | 0 | 4.82 |
| Percent of phrase repetition | 0 | 2.75 |
| Percent of interjections | 0 | 6.98 |
| Percent of pauses | 1.19 | .69 |
| Total percent of speech interruptions | 1.19 | 15.24 |

Case 7
Group IB

Date of Birth: 9/23/26

Age: 12

Grade: Five

Intelligence quotient: 89

Fluency rating at the beginning of the experimental period:
2.6

Fluency rating at the end of the experimental period: 3.2

Handedness test:

| | Beginning of Period | End of Period |
|---------------------------------------|---------------------|---------------|
| Dextrality quotient (Angle Board) | | |
| Kinesthetic | .59 | .40 |
| Visual | .52 | .49 |
| Eyedness (position) | | |
| Up | L | L |
| Right | L | R |
| Left | L | L |
| Down | L | L |
| Convergence (trials) | | |
| 1 | L | R |
| 2 | L | L |
| 3 | L | L |
| 4 | L | L |
| Dynamometer (average) | | |
| Right hand | 19.5 | 20.3 |
| Left hand | 19.5 | 22.5 |
| Dextrality quotient | .50 | .47 |
| Spool packing (average in 10 sec.) | | |
| Right hand | 5 | 6.3 |
| Left hand | 5 | 6.8 |
| Dextrality quotient | .50 | .48 |

Description of speech given by the judge at the beginning of the experimental period:

Judge A.

"No noticeable blocks in speech. Reading poor. No noticeable tension (stuttering) in reading."

Judge B.

"Doesn't seem to stutter or strain at all. Short of breath. Repeats last word said before getting another breath."

Judge C.

"No repetitions or blocks or tension. A reading difficulty very marked."

Judge D.

"Very little strain apparent. Closes lips and seems to wait for the words to come. Sometimes a sudden gasp for breath to start the word out. Occasionally repeats a word, apparently to correct it."

Judge E.

"I did not observe stuttering in speech, but repetition of first sound in words. Pauses between words in speaking. Speaks very slowly. Hesitates between words."

Description of speech given by the judges at the end of the experimental period:

Judge A.

"Very fluent during reading. Not a stutterer."

Judge B.

"Not stuttering."

Judge C.

"Had a great smile and seemed to enjoy the situation. Was quite responsive. Voice adequate. Articulation a bit indistinct, especially when reading, but fairly good. Non stutterer."

Judge D.

"Speech and reading quite ready. Not shy. Seemed to apologize for his reading ability."

"Not a stutterer."

Judge E.

"Reading disconnected and poor."

Dictaphone Records: At the beginning and at the end of the experimental period.

| | B | E |
|--|-------|------|
| Number of words | 322 | 331 |
| Percent of syllable repetitions | 0.93 | 0.30 |
| Percent word repetitions | 0.93 | 0.90 |
| Percent of phrase repetitions | 0.31 | 0.90 |
| Percent of interjections | 1.81 | 0.90 |
| Percent of pauses | 7.45 | 5.41 |
| Total percent of speech interruptions. | 11.43 | 8.41 |

Case 8
Group I B

Date of birth: 12/22/25

Age: 13

Grade: Six

Intelligence quotient: 91

Fluency rating at the beginning of the experimental period:
2

Fluency rating at the end of the experimental period: 1.8

Handedness test at the beginning and at the end of the experimental period:

| | Beginning of Period | End of Period |
|---------------------------------------|---------------------|---------------|
| Dextrality Quotient (Angle Board) | | |
| Kinesthetic | .50 | .51 |
| Visual | .50 | .51 |
| Eyedness (position) | | |
| Up | R | L |
| Right | L | L |
| Left | R | L |
| Down | R | L |
| Convergence (trials) | | |
| 1 | L | L |
| 2 | L | L |
| 3 | L | L |
| 4 | L | L |
| Dynamometer (average) | | |
| Right Hand | 21 | 16.3 |
| Left Hand | 18 | 15.5 |
| Dextrality quotient | .54 | .51 |
| Spool Packing (average in 10 sec.) | | |
| Right Hand (average) | 6.3 | 6.5 |
| Left Hand (average) | 5.5 | 6.5 |
| Dextrality quotient | .53 | .50 |

Description of speech given by judges at beginning of experimental period:

Judge A.

"Noticeable jaw tension before words. Considerable tension."

Judge B.

"Closes eyes while stuttering. Puckers face. Repeats words and phrases frequently."

Judge C.

"Very noticeable tension in lips, tongue, cheek. Closes eyes. When words do come there is little repetition."

Judge D.

"Much straining about the lips. Closed the eyes. Tightened muscles in neck. Took quick breath through abdomen."

Judge E.

"Lower jaw wiggles up and down. Stops, then the word seems to be pushed out. Blinks eyes. Takes breaths through his nose. Draws in breath."

Description of speech given by the judges at the end of the experimental period.

Judge A.

"Definite stuttering phenomena during reading. (blinking, facial contortions, etc.) Same type of phenomena but not as pronounced during speaking."

"Yes, a stutterer."

Judge B.

"In general his reading appears to give him more frequent stuttering than while speaking informally. When stuttering he blinks his eyes rapidly and moves his body slightly. Eye blink seems more like a tick than a facial contortion. Seemed willing to talk and read."

"Stuttering."

Judge C.

"Stoppages marked by sudden "catches" of breath and sudden release, some strenuous closing of eyes, tightening of face muscles, prolongation of sound, some tendency toward bodily movement during stoppages and a tendency to jerk body at time of breath release."

"Stutterer."

Judge D.

"Reading quite breathy, that is, often expelled breath in trying to start a word. Grimaces included tight compression of eyelids. Spontaneous speech more fluent than when reading. Sometimes exhibited constriction of the throat."

"A stutterer."

Judge E.

"He doesn't seem to mind talking but talks rapidly as if to get the words out before he has trouble. Facial

distortion, repetition, prolongations."

Dictaphone Records: At the beginning and at the end of

the experimental period:

| | B | E |
|--|-------|-------|
| Number of words | 495 | 504 |
| Percent of syllable repetitions | .44 | .99 |
| Percent of word repetitions | 2.82 | 1.19 |
| Percent of phrase repetitions | .22 | .99 |
| Percent of interjections | 3.43 | 1.38 |
| Percent of pauses | 10.90 | 8.73 |
| Total percent of speech inter- ruptions | 17.81 | 13.28 |

Case 9
Group I B

Date of Birth: 7/22/24

Age: 14

Grade: Seventh

Intelligence Quotient: 89

Fluency rating at the beginning of the experimental period:
2.1

Fluency rating at the end of the experimental period: 2.2

Handedness test at the beginning and the end of the experimental period;

| | Beginning of Period | End of Period |
|---|---------------------|---------------|
| Dextrality Quotient (Angle Board) | | |
| Kinesthetic | .60 | .64 |
| Visual | .75 | .70 |
| Eyedness (positions) | | |
| Up | R | R |
| Right | R | R |
| Left | R | R |
| Down | R | R |
| Convergence (trials) | | |
| 1 | R | B |
| 2 | L | B |
| 3 | R | B |
| 4 | R | B |
| Dynamometer | | |
| Right Hand (average) | 27 | 27.5 |
| Left Hand (average) | 26.8 | 25.3 |
| Dextrality quotient | .50 | .52 |
| Spool Packing (average in 10 sec.) | | |
| Right Hand (average) | 6.8 | 5.3 |
| Left Hand (average) | 5.8 | 4.3 |
| Dextrability quotient | .54 | .54 |

Description of speech given by the judges at the beginning of the experimental period:

Judge A.

"Noticeable blocks at beginnings of words with marked tension. Chiefly clonic blocks."

Judge B.

"In stuttering Dorothy has fast repetitions of initial sounds with prolongations of first syllables intermingled. Bows or drops head while stuttering."

Judge C.

"Repetitions of consonants, particularly prolonged vowels."

Judge D.

"Relatively little strain shown in face. Drops head lower when straining. Often just stops. Often times repeats first syllable fast or the first word ahead."

Judge E.

"Repetitions on first sound, interjections, conspicuous pauses. Mouth closed. Noticeable flexion in throat."

Description of speech given by the judges at the end of the experimental period:

Judge A.

"Stuttered a great deal while reading. Relatively little when talking."

"Stutterer."

Judge B.

"While reading if she has a break in speech she gives up, then with encouragement she goes on. She repeats words and syllables of words."

Judge C.

"Said didn't want to read. Turned pages aimlessly, then said, "Can I start here?" (One paragraph down from the beginning. Tendency to grin a bit and fidget.) Considerable strain and effort, sudden stops and releases. Some tendency to blink eyes and jerk jaw."

"Stutterer."

Judge D.

"Did not wish to read; apparently felt she would be ridiculed. Her repetitions were very rapid and forced."

"A stutterer."

Judge E.

"She was very uncomfortable in the situation. Much tension while reading and speaking."

Diataphone records: At the beginning and at the end of the period of experimentation, B E

| | | |
|---------------------------------|-------|------|
| Number of words | 411 | 333 |
| Percent of syllable repetitions | 15.57 | 8.71 |
| Percent of word repetitions | 3.65 | 3.30 |

| | B | E |
|---------------------------------------|-------|-------|
| Percent of phrase repetitions | 1.21 | 0 |
| Percent of interjections | 6.32 | 7.81 |
| Percent of pauses | 6.32 | 7.81 |
| Total percent of speech interruptions | 33.07 | 27.63 |

Case 10
Group IB

Date of Birth: 1/14/24

Age: 15

Grade: 8

Intelligence quotient: 84

Fluency rating at the beginning of the experimental period:
3.6

Fluency rating at the end of the experimental period: 3.4

Handedness test:

| | Beginning of Period | End of Period |
|---------------------------------------|---------------------|---------------|
| Dextrality quotient (Angle Board) | | |
| Kinesthetic | .57 | .52 |
| Visual | .56 | .51 |
| Eyedness (positions) | | |
| Up | R | R |
| Right | R | R |
| Left | R | L |
| Down | R | L |
| Convergence (trials) | | |
| 1 | R | B |
| 2 | R | B |
| 3 | L | B |
| 4 | R | B |
| Dynamometer (average) | | |
| Right hand | 32.5 | 35 |
| Left hand | 31.3 | 29.5 |
| Dextrality quotient | .51 | .54 |
| Spool packing (average in 10 sec.) | | |
| Right hand | 5.8 | 5.8 |
| Left hand | 5.3 | 6.3 |
| Dextrality quotient | .52 | .47 |

Description of speech given by the judges at the beginning of the experimental period:

Judge A.

"Occasional repetition of whole phrases. No tension noticeable."

Judge B.

"Didn't seem to stutter."

Judge C.

"'Uh' inserted when he speaks. Articulation very poor."

Judge D.

"No stuttering apparent. Tendency to go back and repeat phrases but no tension."

Judge E.

"No stuttering observed."

Description of speech given by the judges after the experimental period:

Judge A.

"Slight articulatory disorder. Not a stutterer."

Judge B.

"Willing to talk. Offered information, not asked for. Seemed to have no trouble. Not a stutterer."

Judge J.

"Good poise. Quite responsive. Voice adequate. Articulation fair to good. Non-stutterer."

Judge D.

"Not a stutterer."

Judge E,

"Speech adequate, Talked freely and seemed to enjoy the situation."

Distaphone records; At the beginning and end of the experimental period.

| | B | E |
|---------------------------------------|------|------|
| Number of words | 525 | 661 |
| Percent of syllable repetitions | .95 | .15 |
| Percent of word repetitions | 1.33 | .61 |
| Percent of phrase repetitions | .38 | 0 |
| Percent of interjections | .38 | .45 |
| Percent of pauses | .77 | 1.21 |
| Total percent of speech interruptions | 3.81 | 2.42 |

SUMMARY OF CASES IN GROUP IB

These were the cases with regard to whom the judges endorsed the label "stuttering".

Case Number 6.

Considering all of the data obtained at the beginning, during, and at the end of the experimental period, this subject showed an increase in speech fluency as rated and a marked increase in the percent of speech interruptions. This increase in speech interruptions might be due to the fact that at the beginning of the period, the child was frightened by the dictaphone and consequently would speak very little. An adequate sample of his speech was therefore not obtained at that time.

Case Number 7.

This subject showed an increase in speech fluency as rated and a decrease in the percent of speech interruptions.

Case Number 8.

This subject showed a slight decrease in fluency and a decrease in the percent of speech interruptions.

Case Number 9.

This subject showed an increase in speech fluency as rated and a decrease in the percent of speech interruptions.

Case Number 10.

This case showed a slight decrease in speech fluency and a decrease in the percent of speech interruptions.

Group IIA

Consisting of six normal speakers with varying degrees of fluency. To each child in this group the judges attached the label "stutterer."

Description of speech given by the judges at the beginning of the experimental period:

Judge A.

"Speech adequate."

Judge B.

"A number of repetitions in speech."

Judge C.

"A normal speaker."

Judge D.

"A good bit of repetition of syllables."

Judge E.

"Repetition in speech."

Description of speech given by the judges at the end of the experimental period:

Judge A.

"Very, very unwilling to talk. Not a stutterer."

Judge B.

"A very shy child. Seemed not too anxious to talk before the group. Finally told the story of the three bears. Not a stutterer."

Judge C.

"Quite unresponsive to questioning. Said not over six or seven words in first four or five minutes and scarcely more after that. Moved arms and legs about a good deal, putting hands behind head, behind chair, etc. Voice intensity low--quite low--sometimes practically a whisper. Articulation quite indistinct, partly due to low intensity."

Case 11
Group IIA

Date of Birth: 8/10/32

Age: 5

Grade: First

Intelligence quotient: 93

Fluency rating at the beginning of the experimental period:
2.6

Fluency rating at the end of the experimental period: 2

Handedness test:

| | Beginning of Period | End of Period |
|---------------------------------------|---------------------|---------------|
| Dextrality quotient (Angle Board) | | |
| Kinesthetic | No learning | No learning |
| Visual | No learning | No learning |
| Eyedness (positions) | | |
| Up | R | R |
| Right | R | R |
| Left | R | R |
| Down | R | R |
| Convergence (trials) | | |
| 1 | L | B |
| 2 | L | B |
| 3 | L | B |
| 4 | L | B |
| Dynamometer (average) | | |
| Right hand | 8.3 | 9 |
| Left hand | 8.8 | 6.5 |
| Dextrality quotient | .49 | .58 |
| Spool packing (average in 10 sec.) | | |
| Right hand | 4.3 | 4.5 |
| Left hand | 4.3 | 4.8 |
| Dextrality quotient | .50 | .48 |

usually told three bears in low voice and short phrases with long pauses. On what she did say there was apparently no stuttering. Non-stutterer, but an extremely un facile speaker."

Judge D.

"Almost impossible to get her to talk. Seemed very shy and answered mostly with single words. Had to be teased and bribed to tell the story of the three bears.

Not a stutterer."

Judge E.

"Very difficult to get her to talk."

Dictaphone records: At the beginning and end of the experimental period:

| | B | E |
|---------------------------------------|-------|-------|
| Number of words | 172 | 287 |
| Percent of syllable repetition | 5.23 | .72 |
| Percent of word repetition | 1.75 | 2.87 |
| Percent of phrase repetition | .58 | .70 |
| Percent of interjections | .58 | 1.74 |
| Percent of pauses | 3.49 | 9.06 |
| Total percent of speech interruptions | 11.63 | 14.39 |

Case Number 11 was one of the six normal speakers that the judges labelled a stutterer.

On January 19, the first interview was held. At this time I asked her if she knew anyone who stuttered. She said that she did.

Then I had her tell me the story of the three bears. She repeated the word "she" three times and I called her attention to it and told her that that was stuttering.

I told her to stop when she repeated words and take

a deep breath, or to stop and begin again and try to say them just once.

The next time she repeated, I stopped her and she reacted immediately. From then on when she had a repetition she stopped, put her hand to her mouth and gasped. Then she laughed and tried to do it over again. She became conscious of her difficulty immediately. She noticed her own mistakes and she began to cut her words off precisely.

Before she left I asked her what she was going to do when she stuttered. She said, "Say them over, then I won't stutter anymore."

During a ten minute interval, she had twenty five speech interruptions.

On February 22, I asked her what she was doing to improve her stuttering and she said, "Talk so I don't stutter. Try not to. Start over."

It was very difficult to get her to speak although she spoke very freely the month before. She spoke slowly and very distinctly, saying one word at a time.

I asked her why she didn't want to talk. She didn't answer. Then I asked her if she was afraid of something. She nodded her head.

"What are you afraid of?"

After some time she said, "Afraid I might stutter."

She reacted to every repetition by stopping and

ing her head. She looked down practically all of the time. She seemed inhibited and she didn't smile.

If she "stuttered" she stopped talking altogether and it took a great deal of effort to get her started again. She seemed embarrassed to be with me but she said she wasn't afraid of me.

Her teacher said, "I stopped her when she repeated at first, but now she stops herself and doesn't say anything."

During an interval of ten minutes she had ten speech interruptions, but, of course, she spoke only a few words.

On March 6 we first discussed what she had been doing to improve her stuttering. She remembered the "therapy"-- stopping and beginning over, taking a deep breath, etc.

She spoke very slowly, cutting her words off.

When she repeated, I stopped her and asked her what she did and she replied, "Stuttered."

I asked her to tell me a story, but she made no attempt to begin, so I said, "Can't you remember the story? Don't you want to talk?"

She said, "I don't want to talk."

She seemed more willing to talk this time than she had the time before.

When she repeated a word she stopped, gasped slightly and smiled or else looked down.

During a ten minute interval she had only five interruptions in speech, speaking very little.

On March 23, she reported that both her matron and her teacher had been making her say her words over when she stuttered.

Her speech was characterized by short phrases such as "went out doors", "put on sweater", "got on hobby horse", "went fast".

She began to tell me the story of Peter Rabbit in following manner: "There is the.... there is the..."

She looked up and smiled and then she slid down in her chair.

I asked her what the trouble was and she said, "Afraid I might stutter."

In this conference during a ten minute interval she had ten speech interruptions.

Case 11 and I met for fifty minutes on April 10. At this time her speech was hesitant and jerky. Her responses consisted of one word or short phrases. She knew exactly whenever she repeated or prolonged a word or sound. She was extremely careful of her speech even to the point of choosing her words. For example, in one instance she started to say red and then changed it to pink. I asked her why she did it and after some time she said that she was afraid she would stutter on red.

During this period she had twenty speech interruptions which consisted of repetitions, prolongations and silent intervals.

On April 24, she told me a story in the following manner:

"There's a jar. There's a fox. Got a coat on. There's a tree. Little girl. An here's some flowers. An there's a fence. Tea pot. Flower bowl."

Her speech was disconnected and her words were said very carefully and slowly.

During the first interviews her speech interruptions consisted primarily of repetitions, but at the time of this interview she had a number of prolongations, such as, "hhhand" and "ssshes". Her speech also contained pauses between sentences. Part of her speech was unvocalized.

By this time she knew the word she "stuttered" on and several times she told me about interruptions I hadn't heard.

During this period of fifty minutes she had forty speech interruptions.

The interview on May 2 was very similar to the one on April 24. Her responses were even shorter, many of her words were unvocalized and it was extremely difficult to get her to speak. She seemed to feel that her "stuttering" was worse.

She knew several stories perfectly but I was unable to get her to tell any of them. She did say several rhymes and these she said very rapidly from beginning to end without stopping.

During this period she had thirty-five speech

interruptions and the only different stuttering phenomenon that she added was interjections.

On May 10, she seemed more willingly to talk to me, but she had much more bodily activity than she had had before. She would say a short phrase then stop, and wiggle, and sigh and then she would repeat the sentence.

I asked her to tell me about her brothers and sisters and she talked rather continuously about them for about a minute. During this time she had a number of repetitions such as ga ga got.

During this conference she had twenty-five speech interruptions.

In the conference of May 17, nothing new occurred. We followed the same procedure of asking questions and telling stories. Her speech was the same as it had been the week before.

During the conference she had twenty-five speech interruptions.

I told her teacher and matron that she was definitely beginning to stutter and pointed out to them the number of repetitions she had in her speech. They readily agreed with me and they were the only ones who cooperated at all in following the instructions I gave them. I told them to:

1. Stop her when she repeated a word and have her say it over.
2. Have her take a deep breath when she seems to have trouble.

Her matron told me at the end of the experimental period: "When she stutters I have her stop and say it over and nine times out of ten she say it right, but I can't get her to speak continuously...Oh, no, she never does."