

1939

The Effect of Distraction on the Frequency of Stuttering

Virginia Barber
State University of Iowa

Copyright © Copyright 1939 by the Iowa Academy of Science, Inc.
Follow this and additional works at: <https://scholarworks.uni.edu/pias>

Recommended Citation

Barber, Virginia (1939) "The Effect of Distraction on the Frequency of Stuttering," *Proceedings of the Iowa Academy of Science*: Vol. 46: No. 1 , Article 95.
Available at: <https://scholarworks.uni.edu/pias/vol46/iss1/95>

This Research is brought to you for free and open access by UNI ScholarWorks. It has been accepted for inclusion in Proceedings of the Iowa Academy of Science by an authorized editor of UNI ScholarWorks. For more information, please contact scholarworks@uni.edu.

THE EFFECT OF DISTRACTION ON THE FREQUENCY OF STUTTERING

VIRGINIA BARBER

It is well known that under certain "distraction" situations stutterers are able to read with greatly increased fluency or even with complete freedom from stuttering. Two investigations of the effect of distraction were made: (1) of chorus reading, and (2) of various rhythms.

CHORUS READING

In the study of chorus reading as a distraction, the subject read, at one sitting, fourteen different standard 500 word passages under a series of fourteen conditions. In the first and last of these situations, the subject read naturally with no experimental distraction operating. The other twelve situations included variations of the factors involved in chorus reading, such as sound pattern, meaningfulness of material, personal factor, and amount of support. In four situations the subject's reading was accompanied by other persons reading the same passage. In the next three situations, the co-operating readers read a meaningful passage different from that read by the subject. In the two following situations, nonsense syllables were read as the subject read meaningful material. The next three situations involved, respectively, a normal speaker phonating "ah," a record of the same, and unpatterned mechanical noise as accompaniment to the subject's reading. There was a constant audience situation, there being present throughout all of the readings the same normal speaker, the same two stutterer-observers, and the experimenter.

The results of the chorus reading study show that there was a significant reduction in frequency of stuttering in all of the distraction situations except one (in which one other stutterer read nonsense syllables while the subject read meaningful material). All of the four situations involving the reading of the same passage with the subject were significantly more effective in reducing the frequency of stuttering than were any of the other distraction situations of the series. It also appears that, of those four situations, the one involving the cooperation of two other stutterers and a normal speaker is more effective than that in which

only the normal speaker read with the subject. The results indicate a significant difference in favor of a normal speaker reading nonsense syllables as opposed to another stutterer reading such material as accompaniment to the subject's reading.

RHYTHM

In the study of rhythm as a distraction, the subject read under fifteen conditions. Three of these were control situations in which there was no experimental distraction operating. The remaining twelve involved synchronizing the oral reading with: (1) bodily rhythms (walking, tapping the foot, the arm swing, and the hand-wrist swing), (2) speech rhythms (sing-song inflection, and accent on every third word), and (3) rhythmic sensory stimulation (visual, auditory, and tactile). Only the subject and the experimenter were present during these readings. Therefore, a short auxiliary study was made to determine whether certain of the distractions would operate as effectively in an audience as when only the experimenter was present.

The results of the main study on rhythms revealed that all of the distraction situations were effective — that is, all brought about a significant reduction in frequency of stuttering. One of the speech rhythms (accenting every third word) was strikingly less effective than any of the other distractions which were used. The hand-wrist swing (one of the bodily rhythms) was found to be significantly less effective as a distraction than any of the following: walking with one syllable read per step, the arm swing on each syllable, rhythmical auditory stimulation (the metronome — at either 92 mm. or 184 mm.), and rhythmical tactile stimulation. Significant differences were also found in favor of walking with one syllable read per step and reading with the metronome (92 mm.) as against walking with one word read per step.

The results of the auxiliary study revealed no significant differences between the effectiveness of either of the distractions investigated in an audience situation as opposed to the condition in the main experiment with the experimenter as the only observer.

DEPARTMENT OF PSYCHOLOGY,
STATE UNIVERSITY OF IOWA,
IOWA CITY, IOWA.