

IMPACT OF AUTHORITY ON STUTTERING¹

JOSEPH SHEEHAN

University of California, Los Angeles

ROBERT HADLEY

California State College, Los Angeles

AND EDWARD GOULD

University of California, Los Angeles

To study the effect of role demand, 32 adult stutterers read matched passages to authority listeners and to peer listeners. Authority listeners were PhD faculty members introduced by title, and peer listeners were fellow college students introduced by 1st name. The authority listeners elicited a significantly greater frequency of stuttering, and adaptation to authority figures was more difficult. Results were interpreted in terms of a "status gap" hypothesis, and stuttering is viewed as a species of self-role conflict. The findings are in accordance with predictions from role theory.

Like most societies, ours is structured on authority. Those occupying positions of power or status are likely to loom as imposing and as potentially threatening to those in lesser positions.

Similarly, communication upward through authority channels may be a more difficult and hazardous process than communication downward or on a peer level (Hyman, 1942; Sarbin, 1943, 1954). It has been observed clinically (Fenichel, 1945; Sheehan, 1953, 1958a, 1958b, 1964) that stutterers seem particularly sensitive to the authority variable. There are stutterers who can speak fluently to friends or to subordinates, but who can hardly utter a word when speaking to the boss.

Previous studies have shown a relationship between penalty and stuttering (Frick, 1951; Porter, 1939; Van Riper, 1937). Since more penalty would be attached to performing poorly in the presence of authority figures, the authority listener should be expected to elicit more stuttering. Either increased status on the part of the listener or decreased status on the part of the speaker might be hypothesized to increase stuttering (Sheehan, 1958c, 1958d, *in press*).

This study was designed to investigate the influence of authority on stuttering by com-

paring the relative difficulty of speaking to authority figures as contrasted to social equals.

METHOD

Subjects (Ss) read aloud, five times in succession, each of two passages. Each passage was read to a different listener. The Ss thus served as their own controls.

The study involved a double-sampling problem. To permit generalization of results to speaker-listener relationships, it was necessary to obtain samples of both the speaker population and the listener population. Moreover, both "authority" listeners and "peer" listeners were sampled so that differences obtained could be attributed to the authority dimension, rather than to personality differences between individual listeners.

Speaker Subjects

The Ss were 32 adult stutterers (27 male, 5 female) enrolled in speech-therapy groups at the University of California, Los Angeles. They ranged in age from 16 to 52, with a median age of 25.

Listener Subjects

Two kinds of listeners were employed: 11 "authority listeners" and 9 "peer listeners." Authority listeners were males ranging in age from 29 to 53 with PhD degrees in psychology. They were dressed in a suit or a sport jacket and tie, and were introduced by the title "Doctor" followed by the surname (e.g., "Doctor Jones"). Peer listeners were male college students between the ages of 20 and 29, dressed in sport shirts without jacket or tie, and they were introduced by first name or nickname and surname (e.g., "Tom Brown"). These differences in listener characteristics define the "authority" dimension for purposes of this study.

¹Preliminary reports of this study have been presented at meetings of the American Psychological Association and of the American Speech and Hearing Association.

Partial support was provided through the Faculty Research Committee, UCLA. The consultation of John Seward on design is gratefully acknowledged.

Passages

The reading passages were two 200-word prose selections which a previous investigation (Sheehan, 1951) had shown to be closely matched in their tendency to elicit stuttering. One passage dealt with the making of iron, the other with views on heredity.

Procedure

Two kinds of listeners and two passages were presented to each *S*. It was thus necessary to assign to each *S* a passage sequence and a listener sequence. For instance, an *S* might read the "heredity" passage to an authority listener first, and then read the "iron" passage to a peer listener. Listener sequences were counterbalanced, that is, it was decided beforehand that half of the *Ss* were to read to the authority listener first, and the other half read to the peer listener first. Within this restriction, *Ss* were assigned at random to listener sequences.

A passage sequence was assigned independently at random to each *S*, without prior restriction as to the number of *Ss* to receive each sequence. Passage sequences were not counterbalanced. The specific listeners within the "authority" and "peer" categories were assigned at random without restriction.

Experimentation took place on the same evenings as *Ss*' regular therapy sessions. The *Ss* were withdrawn one at a time from the therapy group to participate. Upon entering the experimental situation, each *S* was introduced to the listener, who recorded *S*'s name, age, and education (highest grade completed), and who then read aloud to him the following instructions:

You are to read this passage aloud, five times in succession. Read the passage through in the way that is most natural for you at this time. Do not fake any stuttering and do not use any special techniques to handle any blocks you may have. Just read the passage through as you naturally would.

The listener then presented *S* with a mimeographed copy of the passage, and recorded stutterings by underlining each stuttered word on his own copies. At the same time, the experimenter (*E*) underlined *S*'s stutterings on identical copies of the passage in an observation room equipped with an audio system. The *E* was the same for all *Ss* and his records exclusively were used in the statistical analysis. The observing *E* whose judgments were used throughout had previously obtained high reliabilities in independent checks with the other two authors. Evidence for the reliability of this method has been reported elsewhere (Johnson & Knott, 1937; Sheehan, 1951; Sheehan & Voas, 1957; Tuthill, 1946).

After a period of time ranging from 40 to 90 minutes, *S* was again withdrawn from the group, introduced to his second listener, and put through the same procedure.

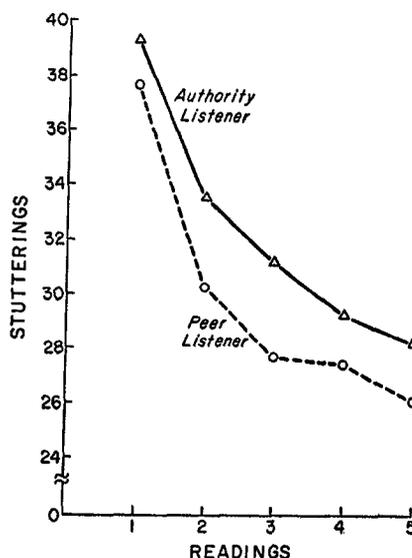


FIG. 1. Mean frequency of stuttering to authority listeners and to peer listeners over five successive readings of two 200-word passages.

Design

The data were analyzed according to a Type IV Design (Lindquist, 1953) expanded to include a third within-*Ss* dimension. The within-*Ss* main effects were "Listeners" (authority listener versus peer listener), "Orders" (first versus second session); and "Trials" (the five successive readings from the same passage). The between-*Ss* main effect was "Severity." Prior to the analysis of the data, *Ss* within each treatment sequence were dichotomized at the median according to the total amount of stuttering produced during the entire experiment. These dichotomies were classified as "severe" and "mild" stutterers. This separation was carried out to permit examination of possible interactions with the severity variable. Although determination of severity prior to assignment of *Ss* to treatment sequences would have been preferable, this procedure was not administratively possible. It may be argued that thus artificially reducing the between-*Ss* error variance renders the test of the Listeners \times Orders interaction invalid. However, the fact that the obtained *F* was less than 1.00 indicates that any such spurious inflation did not affect the conclusions.

RESULTS

As indicated by the difference in height between the curves in Figure 1, more stuttering occurred in the presence of an authority listener than in the presence of a peer listener. This difference is significant at the .05 level.

TABLE 1
ANALYSIS-OF-VARIANCE COMPONENTS

Source	<i>SS</i>	<i>df</i>	<i>MS</i>	Error term	<i>F</i>	<i>p</i>
Between subjects						
Listeners × Orders	1106.3	1	1106.3	b	<1	—
Listeners × Orders × Severity	25.9	1	25.9	b	<1	—
Error (b)	122361.4	28	4370.1	—	—	—
Within subjects						
Listeners	492.5	1	492.5	w1	4.2	.05
Trials	5190.9	4	1297.5	w2	37.2	.001
Listeners × Trials	52.9	4	13.2	w3	3.3	.05
Listeners × Severity	193.8	1	193.8	w1	1.6	.05
Listeners × Trials	30.7	4	7.7	w3	1.9	.05
Listeners × Orders × Trials	28.1	4	7.0	w3	1.8	.05
Listeners × Trials × Orders × Severity	24.8	4	6.0	w3	1.6	.05
Error (w1) Listeners × Subjects	3300.5	28	117.9	—	—	—
Error (w2) Trials × Subjects	3824.3	112	34.1	—	—	—
Error (w3) Listeners × Trials × Subjects	447.1	112	4.0	—	—	—

Note.—Omitted from the table because of little relevance to the present report are the following components: Severity, Total Between, Orders, Orders × Trials, Trials × Severity, Orders × Severity, Orders × Trials × Severity, and Total Within. Of these, Severity, Orders × Trials, and Trials × Severity were significant beyond the .05 level. A complete table will be furnished by the authors on request.

A second major finding is a significant difference (.05 level) in the course of adaptation when speaking to authority listeners as compared to peers.

As may be seen in Figure 1, the "peer-listener" curve shows the initially steep and rapidly diminishing slope characteristic of previously found "control" adaptation curves (Sheehan, 1951; Sheehan & Voas, 1957). The "authority-listener" curve, on the other hand, is initially less steep, and flattens out somewhat more slowly, showing approximately the same overall decrease as the "peer-listener" curve. Severe stutterers do not differ significantly from mild stutterers in the extent to which they are affected by the authority variable either in (a) the course of adaptation or (b) the total amount of stuttering produced.

The adaptation effect itself was highly significant ($p < .001$), in conformity with many previous findings (e.g., Johnson & Knott, 1937; Van Riper & Hull, 1955) that stuttering decreases with successive readings of the same passage.

The Listeners × Orders and Listeners × Orders × Severity interactions yielded *F* ratios less than 1, indicating that for both severe and mild stutterers the total amount

of stuttering produced in the entire experiment is independent of which listener comes first.

All higher-order interactions involving both listeners and trials are nonsignificant, suggesting that the effect of the listener variable on adaptation does not depend upon the severity of the stutterer or which listener is presented first.

Individual differences in the extent to which the authority variable affects the total amount of stuttering are significantly greater ($p < .01$) than are individual differences in the shape of adaptation curves.

DISCUSSION

The two chief findings of this study are that stutterers have more difficulty speaking to authority listeners, and that they have more trouble adapting to them over time. Both the initial frequency of stuttering and the rate of decline in frequency appear to be at least in part a function of the authority variable.

When combined with the findings of Bardrick and Sheehan (1956) on the effect on stuttering frequency of emotionally loaded material which poses a threat to the stutterer's self-esteem, these findings provide support for

a "status gap" hypothesis. Stuttering appears to vary as a function of the perceived status of the self, the speaker, and the significant other, the listener (Sheehan, in press). The lower the self-esteem of the speaker, or the more authority-laden the status of the listener, the more stuttering. A clear implication for therapy with stutterers is that among major goals would be change in the self-concept and change in relation to others—goals perhaps common to nearly all but the most mechanically oriented psychotherapies.

The finding regarding individual differences implies that some stutterers are more heavily affected by authority in their tendency to stutter than are others. Perhaps future investigators should explore differences in personality dimensions or in life histories between persons who stutter more frequently in the presence of authority figures and those who do not.

The course of stuttering adaptation appears to be influenced by the status of the listener. The stutterers had more difficulty becoming accustomed to the "authority" listeners than to the "peer" listeners, apparently remaining anxious longer with authority listeners. This result is consistent with the findings of Frick (1951), Porter (1939), and Van Riper (1937), that stuttering frequency increases with increased penalty in the speaking situation. An authority figure typically has much more potentiality as a source of penalty than a peer figure.

REFERENCES

- BARDRICK, R. A., & SHEEHAN, J. G. Emotional loading as a source of conflict in stuttering. *American Psychologist*, 1956, 11, 391. Also in J. G. Sheehan (Ed.), *Stuttering: A symposium*. New York: Harper, 1958. Pp. 138-140.
- FENICHEL, O. *The psychoanalytic theory of neurosis*. New York: Norton, 1945.
- FRICK, J. V. An exploratory study of the effect of punishment (electric shock) upon stuttering behavior. Unpublished doctoral dissertation, University of Iowa, 1951.
- HYMAN, H. H. The psychology of status. *Archives of Psychology*, 1942, 269, 94.
- JOHNSON, W., & KNOTT, J. Studies in the psychology of stuttering. Distribution of moments of stuttering in successive readings of the same material. *Journal of Speech Disorders*, 1937, 2, 17-19.
- LINDQUIST, E. F. *Design and analysis of experiments in psychology and education*. Boston: Houghton Mifflin, 1953.
- PORTER, H. V. K. Studies in the psychology of stuttering: Stuttering phenomena related to size and personnel of audience. *Journal of Speech Disorders*, 1939, 4, 323-333.
- SARBIN, T. R. The concept of role taking. *Sociometry*, 1943, 6, 273-385.
- SARBIN, T. R. Role theory. In G. Lindzey (Ed.), *Handbook of social psychology*. Cambridge, Mass.: Addison-Wesley, 1954. Pp. 223-258.
- SHEEHAN, J. G. The modification of stuttering through nonreinforcement. *Journal of Abnormal and Social Psychology*, 1951, 46, 51-63.
- SHEEHAN, J. G. Conflict theory of stuttering. In J. Eisenson (Ed.), *Stuttering: A symposium*. New York: Harper, 1958. Pp. 121-166. (a)
- SHEEHAN, J. G. Status as a factor in stuttering. Paper read at the American Speech and Hearing Association, New York City, November 1958. (b)
- SHEEHAN, J. G. Stuttering treated as a conflict of role. Paper read at the American Speech and Hearing Association, New York City, November 1958. (c)
- SHEEHAN, J. G. Theory and treatment of stuttering as an approach-avoidance conflict. *Journal of Psychology*, 1953, 36, 27-49. Reprinted in C. Reed, I. Alexander, & S. S. Tomkins (Eds.), *Psychopathology: A source book*. Harvard: Harvard University Press, 1958. Pp. 303-325. Reissued in Science Editions, Wiley paperbacks, 1964. Pp. 303-325. (d)
- SHEEHAN, J. G. The effect of role commitment on stuttering. Paper read at Ninth World Congress of the International Society for Rehabilitation of the Disabled, Copenhagen, Denmark, June 1963.
- SHEEHAN, J. G. Stuttering as a self-role conflict. In J. G. Sheehan (Ed.), *Stuttering: Research and therapy*. New York: Harper & Row, in press.
- SHEEHAN, J. G., & VOAS, R. B. Stuttering as conflict: I. Comparison of therapy techniques involving approach and avoidance. *Journal of Speech and Hearing Disorders*, 1957, 22, 714-723.
- TUTHILL, C. E. A quantitative study of extensional meaning with special reference to stuttering. *Speech Monographs*, 1946, 13, 81-98.
- VAN RIPER, C. The effect of penalty upon frequency of stuttering spasms. *Journal of General Psychology*, 1937, 50, 193-195.
- VAN RIPER, C., & HULL, C. J. The quantitative measurement of the effect of certain situations on stuttering. In W. Johnson (Ed.), *Stuttering in children and adults*. Minnesota: University of Minnesota Press, 1955. Pp. 199-206.

(Received March 11, 1966)