

THE EFFECTS OF PARENT EDUCATION ON CHILDREN'S FLUENCY

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Abstract

Thirteen Australian parents of stuttering children participated in a parent education program based on Thomas Gordon's Parent Effectiveness Training program. Tape recordings of parent-child conversations were made before and after the parent participated in the parent education program. The conversations were analyzed in terms of the

amount of verbalization of the stuttering child with each parent and the level of fluency of a stuttering child with each parent. An analysis of the results showed the stuttering children to significantly ($p < .0473$) increase the number of words used when talking with their mother and significantly ($p < .0218$) decrease their percentage of stuttering when speaking with their father.

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Approximately 6% of the Australian population suffers from some form of speech pathology (cited in "Speech Pathology in Australia", 1975). Unfortunately, there has been slow progress in the development of treatment programs for speech disorders (Rieber & Wollock, 1977). In fact, Wingate (1977), the eminent theoretician, was bold enough to pose the question, "Do the various theories facilitate the treatment of speech pathology?" Webster (1977) appeared to have answered that question by stating that "There is no evidence to indicate that therapies derived from theory are any more powerful in producing positive results than those that were derived prior to the age of theory" (p. 65).

Murphy (1977) argued that the interpersonal dimension is a neglected component in stuttering therapy. Murphy advocated that clinicians could use creative processes and significant others (i.e., parents) to indirectly treat speech pathology. The study by Nystul and Muszynska (1976) which used art therapy and counselling strategies to indirectly treat a speech disorder provided support for Murphy's position.

Parent education would seem to be another possible form of indirectly treating speech disorders. Robbins (1964) for example noted that a large percentage of stutterers were excessively sensitive to

criticism. He therefore suggested that "parents of such children need to be especially alert to hypersensitivity and should take pains to avoid corporal punishment, punitive verbalization, or fault finding concerning their levels of accomplishments" (p. 179).

Research

Research on the effects of parent education has basically been restricted to investigating attitudinal changes in the parent. For example, Barrett (1975) and Freeman (1975) both evaluated the effects of an Adlerian Mother Study Group on parental attitudes as measured by the Attitude Toward the Freedom of Children Scale II (Shaw & Wright, 1967) and parents' child-rearing practices as measured by the Child Rearing Practice Scale (Freeman, 1971). Both studies reported that mothers who attended the Adlerian Mother Study Groups became less restrictive and authoritarian in their child-rearing attitudes, and they also changed their child-rearing practices (e.g., mothers decreased their use of spankings, as reported by Freeman, 1975). A more recent study by Fears (1976) continued to support the effects of Adlerian Parent Study Groups by suggesting that parents who participated in a study group perceived positive changes in their children's behavior as a result of implementing Adlerian methods in the home.

There are several unpublished studies reported in Gordon's (1976) **Summary of Research of Effectiveness Training Program** that showed the Parent Effectiveness Training (PET) Program of Gordon (1970) to have an effect on both the attitudes of parents and children. Stearn (1970), for example, reported an increase in children's self-esteem as measured by Coopersmith's Self-Esteem Inventory (1967), after their parents attended a PET course. Another study by Peterson (1973) using the Parent Attitude Research Instrument (Schaefer & Bell, 1958) found that after PET, parents became:

- a. more able to accept the child's right to different views;
- b. more unhappy with punitive control;
- c. more willing to compromise;
- d. more willing to encourage verbalization;
- e. more willing to admit family differences of opinion.

The parents' children also had changed attitudes, including an increased sense of freedom of communication and of movement with their parents.

In most of the research on Parent Education, the focus has been on parent-child attitude change with limited attention to actual behavior change in children. The purpose of the present paper, therefore, is to evaluate the effects of an Australian Parent Education program on amount of verbalization of a stuttering child with each parent, and level of fluency of a stuttering child with each parent.

Method

Subjects

The samples in this study were:

1. Stuttering children who:
 - a. were from 4-13 years of age;
 - b. were of at least average intelligence;
 - c. spoke English as a mother tongue;
 - d. were white Australian Caucasians.

2. Parents of stuttering children who contacted a suburban Brisbane Child Guidance Clinic and were:

- a. aged between 28 and 50 years;
- b. were white Australian Caucasians;
- c. were resident in the Western Suburbs of Brisbane;
- d. were in the middle socio-economic range.

All subjects were unpaid.

There were 13 fathers, 14 mothers and 14 children who fell within the established parameters. They were partitioned in the following fashion:

	Experimental Group	Control Group
Mothers	N — 7	N — 7
Fathers	N — 6	N — 7
Children	N — 7	N — 7

Procedure

Parents of stuttering children who contacted a suburban Brisbane child guidance clinic were approached and asked whether they would like to participate in a Parent Education group for parents of stutterers. It was explained that the groups were experimental, but that the nature of the program might be of relevance to stuttering children. To the control group of parents of stuttering children who were not involved in the Parent Education program, it was explained that, for research purposes, which might have implications for the treatment of stuttering, their participation as a non-treatment control group would be appreciated. Parental consent allowing the results of the findings to be used as data for a research project was obtained. It was explained that information acquired would be confidential, and that names would not be used in the report. All participants were informed that the results would be made available to them when the study was completed.

The actual involvement of subjects in the experiment was as follows:

1. Experimental parents were required to attend at least 3 out of the 4 parent education meetings based primarily on the principles used in Parent Effectiveness Training (Gordon, 1970) and also the principles relating to the encouragement process found within the Adlerian book **Children the Challenge** (Dreikurs & Soltz, 1964). The Parent Education groups were conducted one night a week for 3 hours over a 4-week period. They were also required to be recorded speaking with their stuttering child immediately before starting the parent education program and during the week following the last group meeting. Recordings were made of the mother and child alone and also the father and child alone.

2. Control parents were only required to be recorded speaking with their stuttering child twice over a 4-week interval. Again, the mother and child were tape recorded alone and also the father and child were recorded alone.

Definition of Terms

Parent Effectiveness Training (PET). Most of the PET program is based on communication skills derived from Client Centered Therapy (Rogers, 1951). A summary of the principles of PET is as follows:

- a. The parents attempt to broaden their level of acceptance with their children and demonstrate or communicate this acceptance to their children.
- b. The parents attempt to become aware of accepting and non-accepting feelings and communicate these feelings to their children.
- c. The parents attempt to avoid using power to resolve conflicts with their children, but instead solve pro-

blems by a 'no-lose' or consensus method.

Stuttering was defined in this study as any prolongation, blocking or repetition of a word, perceived by trained observers in a tape-recorded segment of speech. Children were tape-recorded in their homes speaking separately with each parent. Three-minute segments of each interaction, taken 30 seconds after the commencement of the recording, were analyzed by a team of six trained scorers, each of whom concentrated on a separate element of the interaction. Two independent scorers noted the number of stutters, regardless of severity, so that each word could only be rated with a maximum of one stutter. The mean of the two ratings was taken as the measure of stuttering. Correlation between the raters was a Pearson r of .98.

Parent-child verbal interaction was established as the comparative amount of speech spoken by a child and by his parents in a tape-recorded segment of parent-child conversation. The parents of the stuttering children were asked to engage their children in conversation for the purposes of recording the amount of their stuttering. All children were used to being tape-recorded. The same 3-minute segment as above was analyzed in terms of:

- a. the time for which the child spoke;
- b. the time for which the parent spoke;
- c. the total number of words spoken by the child.

Two scorers noted the number of words, and separate scorers noted the time for which parents or child spoke.

Results

The following null hypothesis was tested by 't' test statistical procedures at the .05 p level of significance. The t -test involved a direct comparison of experimental parent-child dyads (i.e., parents that attended the parent education

course) and control parent-child dyads (i.e., parents that did not attend the parent education course).

Null Hypothesis

A parent education program based on the principles of Parent Effectiveness Training has no effect on the child's verbal interaction with his parents in terms of the time the child speaks, number of words the child speaks, and percentage of words stuttered.

Results

The null hypothesis was rejected. The percentage of stuttering a child used when speaking with his father decreased following a parent education program ($t = 3.2914$, $df(6)$, $p < .0218$).

A second main effect emerged showing children whose parents attended a parent education program to make a significant increase in the number of words used when speaking with their mother ($t = 2.4696$, $df(6)$, $p < .0473$). The control children (stuttering children whose parents did not attend a parent education program) did not change their verbal interaction with their parents after a 4-week period in terms of time the child spoke, number of words the child spoke, and percentage of words stuttered.

Discussion and Summary

The results presented within this paper show a parent education program based on the principles of PET to be a meaningful intervention agent with stuttering children. These results are not so surprising if one conceptualizes speech pathology as a disorder resulting from restrictive parent-child communication. Since PET's main goal is to teach parents to become effective communicators, it would seem that stuttering children could benefit from their parents attending such a course.

Such an hypothesis was supported by the findings of this study which showed stuttering children to decrease their level of stuttering when talking with their fathers and increase the amount of words they used when talking to their mothers.

Additional research could also be conducted to evaluate the effectiveness of the new Parent Education Program — **Systematic Training for Effective Parenting** by Dinkmeyer and McKay (1976) on parent-child communication processes.

References

- Barrett, R. D. Adlerian mother study groups: An evaluation. *Journal of Individual Psychology*, 1975, 30, 179-182.
- Coopersmith, S. *The antecedents of self-esteem*. San Francisco: Freeman, 1967.
- Dinkmeyer, D., & McKay, G. *Systematic training for effective parenting*. Circle Pines, Minnesota: American Guidance Service Inc., 1976.
- Dreikurs, R., & Soltz, V. *Children the challenge*. New York: Hawthorn Books Inc., 1964.
- Fears, S.L. Adlerian parent study groups. *The School Counselor*, 1976, May, 320-330.
- Freeman, C. W. *Adlerian mother study groups and traditional mother discussion groups: A comparison of effectiveness*. Unpublished doctoral dissertation, University of Oregon, 1971.
- Freeman, C. W. Adlerian mother study groups: Effects on attitudes and behavior. *Journal of Individual Psychology*, 1975, 31, 37-50.
- Gordon, T. G. *P.E.T. parent effectiveness training: The tested new way to raise responsible children*. New York: Wyden, 1970.
- Gordon, T. G. *Summary of research of effectiveness training programmes*. Effectiveness Training, 531 Stevens Avenue, Solana Beach, California, 1976.
- Government publication. *Speech Pathology in Australia: A guide for the medical, clinical and educational disciplines*. Department of Health, 1975. (Available from A.A.S.H., 253 Hampton Street, Hampton, Vic. 3188).
- Larson, R. S. Can parent classes effect family communication?

The School Counselor, 1972, March.

Murphy, A. T. Authenticity and creativity in stuttering theory and therapy. **Journal of Communication Disorders**, 1977, 10, 25-36.

Nystul, M. S., & Muszynska, E. Adlerian treatment of a classical case of stuttering. **Journal of Individual Psychology**, 1976, 32, 194-202.

Peterson, B. **Parent effectiveness training and change in parental attitudes**. Unpublished Ph.D. dissertation, University of Santa Clara, California, 1973.

Rieber, R. W., & Wollock, J. The historical roots of the theory and therapy of stuttering. **Journal of Communication Disorders**, 1977, 10, 3-24.

Robins, S. 1000 stutterers: A personal report of clinical experience and research with recommendations for therapy. **Journal of Speech and Hearing Disorders**, 1964, 29 178-186.

Rogers, C. **Client centered therapy**. Boston: Houghton Mifflin, 1951.

Schaefer, E. S., & Bell, R. Q. Development of a parental attitude research instrument. **Child Development**, 1958, 29, 339-361.

Schulderman, S., & Schulderman, E. A Methodological study of a revised maternal attitude research instrument (Mothers' PARI Q4). **The Journal of Psychology**, 1977, 95, 77-86.

Shaw, M., & Wright, J. **Scales for the measurement of attitudes**. New York: McGraw Hill, 1967.

Stearn, M. **The relationship of PET to parental attitudes, parent behavior and child self-esteem**. Unpublished Ph.D. dissertation, The United States International University, 1970.

Webster, R. L. Concept and theory in stuttering: An insufficiency of empiricism. **Journal of Communication Disorders**, 1977, 10, 65-72.

Wingate, M. E. The relationship of theory to therapy of stuttering. **Journal of Communication Disorders**, 1977, 10, 37-44.



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