

<b>An Investigation of Adolescent Opinions on Stuttering</b>		
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- I. Attitudes toward stuttering
  - A. Frequently replicated research findings: “stuttering stereotype”
    1. Belief that stutterers are shy, nervous, introverted, fearful, weak, etc.
    2. Belief that stuttering reflects psychological difficulties
    3. Uncertainty about cause
    4. Inaccurate information about the nature of stuttering
    5. Evident in virtually all populations and ages studied
  - B. Little published information available on changing public attitudes toward stuttering
    1. After watching a video of stuttering video attitudes of adolescents more negative than before the video (McGee, Kalinowski & Stuart, 1996)
    2. After a graduate course in fluency disorders, students’ attitudes changed in positive directions, but most changes were not statistically significant (Reichel & St. Louis, 2004)
    3. Conventional wisdom that attitudes hard to change
- II. Purpose
  - A. To determine the extent to which a live presentation about stuttering by a stutterer would change attitudes of high school students
- III. Questionnaire
  - A. Experimental version of Public Opinion Survey of Human Attributes (POSHA-E) modified for study
    1. Overall questionnaire shortened
    2. 80 items on questionnaire
      - a. E.g., People who stutter...can lead normal lives: 1-9 scale or ? for “Unsure”
- IV. Method
  - A. Arrangements made to speak to three high school health classes by T.F. (first author having moderate-severe stuttering)
  - B. IRB-approved parent consent / child assent forms developed and given to teacher to send home with students
  - C. Those returning forms given POSHA-E by teacher
    1. Respondents: 39 of 70 high school students in 3 classes filled out POSHA-E’s
      - a. 10 freshmen, 27 sophomores and 2 juniors
      - b. Mean age = 15.6 yr
      - c. 36% male; 64% female
        - (1) Not consistently analyzed because most girls from an honors class
  - D. Next day in class
    1. T.F. presented talk on stuttering for about 45 min
    2. Talk immediately followed by filling out another POSHA-E and open-ended questions
    3. Finished with oral question-answer session
    4. Respondents rated the speaker on 1-9 scale
  - E. Presentation included
    1. Facts about stuttering
    2. T.F.’s personal experiences and stories about stuttering

3. Some of T.F.'s coping mechanisms for stuttering
  4. T.F.'s personal insights about stuttering
  5. Presentation delivered conversationally in a positive manner
    - a. Mean rating = 8.2 (Mode = 9; Range = 5 - 9)
- F. Data converted from 1 - 9 mean score to -100 to +100 scale
1. -100 = 1 (Lowest rating); 0 = 5 (Neutral rating); +100 = 9 (Highest rating)
  2. T-test of pre- and post-test scores applied
    - a. Significant differences accepted when  $p < .005$  (Bonferroni Correction)

## V. Results

- A. 8 individual items statistically significant (\* below)
- B. Changes from pre- to post-talk
  1.  $\geq 50\%$  of total responses for each item changed for 23 of 80 POSHA-E items
    - a. 15 (65%) in "expected" ("positive" or "correct") direction
      - (1) E.g., of responses for "amount known about stuttering," 65% increased, 19% decreased, 16% same
    - b. 4 (17%) in "unexpected" ("negative" or "incorrect") direction
      - (1) E.g., of responses for "I'd mention to a PWS that it's okay to stutter," 54% increased, 30% increased, 15% same
    - c. 4 (17%) in "no prediction" direction that could not be deemed "positive" or "negative"
      - (1) E.g., of responses for "knowledge comes from TV/radio/films," 21% increased, 53% decreased, 26% same
  2. Amount of change from pre- to post-talk
    - a. "Expected" responses about 8% less likely to be the same pre and post compared to "unexpected" or "no prediction"
    - b. Virtually no differences for  $\pm 1$  and  $\pm 2$  changes
    - c. "Expected" responses 3 - 5% higher for  $\pm 3$  changes
    - d. Rare larger  $\pm 4$  to  $\pm 8$  changes no different for "expected" and "unexpected," but both greater than "no prediction"
- C. General section: comparing stuttering with other "anchor" attributes
  1. Overweight viewed more negatively than stuttering
  2. Knew least about stuttering
  3. Knowledge of stuttering increased after talk\*
- D. Source of knowledge
  1. Pre: TV/radio/films and school teachers highest
  2. Post: Personal experience from other stutterers\* (T.F.) highest
- E. Causes of stuttering
  1. More sure before talk than after talk about any potential causes
  2. Greatest reductions for causes of nervousness\*, emotional abuse\* and physical abuse\* after talk
  3. Virus or disease not as low as would be expected—reflects ignorance of stuttering
  4. Imitation lowest both pre and post—correct but unlikely due to accurate knowledge
- F. Reported reactions if talking to a stutterer
  1. Good news
    - a. Highest ratings for waiting patiently
    - b. Low(est) ratings for making a joke, laughing, imitating
  2. Semi-good news
    - a. Not sure if they would do nothing or say it's OK to stutter
  3. Not so good news
    - a. Some would look away, fill in words, tell the person to "relax" or "slow down"
    - b. Talk had virtually no effect on these reported reactions for total group, but...

4. Sex effects (but confounded by class)
  - a. Girls (and/or honors class) almost never reported negative reactions; boys reported some
  - b. Boys changed more than girls for several items
- G. Likelihood to socialize with a stutterer
  1. All high school students more likely to talk to or be friends with than to date or marry a stutterer
  2. Sex effects
    - a. Girls' responses 1-2 units more positive than boys but unaffected by talk
    - b. Boys' responses more negative but about 1/2 unit more positive after talk
- H. Concern if someone stuttered
  1. Least to most: neighbor, religious leader, doctor, sibling, self
    - a. Girls 2 units more concerned about self
  2. Slight reduction in concern after talk
- I. Reported emotions talking to stutterer
  1. Highest scores for comfortable/relaxed but still neutral
    - a. Did not change after talk
  2. Similar means for curiosity and pity for boys and girls (1<sup>1/2</sup> units more positive)
    - a. Higher scores for curiosity\* after talk but no change for pity
- J. Beliefs about stuttering
  1. After talk, lower ratings for nervous\*, shy/fearful and disability\*
  2. For most life activities involving school, job, raising family, etc., scores high but slightly worse after talk
  3. Sex effects
    - a. Girls originally more positive, but after talk, consistently less positive
    - b. Boys more positive after talk
- K. Open-ended questions and question-answer segments
  1. Qualitative data not summarized here
  2. One very surprising finding: 2/3 of students in all three classes thought T.F. was faking his stuttering

## VI. Implications

- A. A talk by a person who stutters can affect attitudes toward stuttering of high school students
- B. Most changes small but in the direction of more accurate understanding of stuttering and greater empathy, acceptance, and positive regard toward a stutterer
- C. POSHA-E has promise to measure changes in attitudes of adolescents
- D. Further research needed to isolate potential effects of...
  1. Sex: Boys vs girls
  2. Students' academic interest/achievement
  3. Content of talk
  4. Type of delivery, e.g., live vs. TV

## References

- McGee, L., Kalinowski, J. & Stuart, A., 1996. Effect of a videotape documentary on high school students' perceptions of a high school male who stutters. *Journal of Speech-Language Pathology and Audiology*, 20, 240–246.
- Reichel, I., & St. Louis, K. O. (2004). Effects of emotional intelligence training in graduate fluency disorders courses. In A. Packman, A. Meltzer, & H. F. M. Peters (Eds.). *Proceedings of the 4th World Congress on Fluency Disorders*. (pp. 474-481). Nijmegen, The Netherlands: Nijmegen University Press.