CLINICAL COMMENTARY

Self-Perceptions of speech language pathologists-in-training before and after pseudostuttering experiences on the telephone

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Abstract

Purpose: This survey investigated the effect of ‘pseudostuttering‘ experiences on self-perceptions of 29 female, graduate students enrolled in a graduate seminar in stuttering while in a programme of study to become professional speech language pathologists.

Method: Perceptions of self prior to, and immediately after, participation in five scripted telephone calls that contained pseudostuttering were measured via a 25-item semantic differential scale.

Results: Participants perceived themselves as significantly more (p < 0.002) withdrawn, tense, avoiding, afraid, introverted, nervous, self-conscious, anxious, quiet, inflexible, fearful, shy, careless, hesitant, uncooperative, dull, passive, unpleasant, insecure, unfriendly, guarded, and reticent after their pseudostuttering telephone call experiences.

Conclusions: Findings suggest that the pseudostuttering experiences have an impact on self-perceptions and that the experience of ‘adopting the disability of a person who stutters’ may provide insight as to the social and emotional impact of communicative failure. It is suggested that pseudostuttering exercises may be a valuable teaching tool for the graduate students, especially for those who do not stutter.

Introduction

‘Pseudostuttering’ is defined as ‘the deliberate production, by any speaker, of overt dysfluencies that resembles stuttering …’ (p. 98).1 The pseudostuttering experience is often used by those that treat the disorder of stuttering.1–4 Pseudostuttering in the treatment of stuttering has three purposes: to help the person who stutters identify the overt core and ancillary behaviours that are constituents of the stuttering phenomena (e.g., repetitions, prolongations, facial contortions, and head-jerking), to provide a series of desensitization experiences which puts the oft-reported ‘phobic’ stuttering experience into a different perspective, and to demonstrate that stuttering is comprised of both volitional and non-volitional components.5

In addition to the aforementioned purposes, the practice of pseudostuttering also has a long history as a teaching tool for speech language pathologists-in-training.1–4,6 A multidimensional rationale for its use in training includes: an efficient and effective way to illustrate the nature and difficulty of stuttering in environments where communicative failure bears some social responsibility with its attendant costs (e.g., being laughed at, uncomfortable stares, and deriving negative social attention for aberrant behaviour). In other words, some training institutions feel the best way to understand stuttering is to ‘embrace the disorder’ for short periods of time and to use the ruse of ‘pretending’ to be a person who stutters. Stuttering, unlike many other disorders, is relatively easy to emulate and the disorder bears no other signature behaviours other than stuttering itself, that would reveal the fallacious nature of the pseudostuttering act. The use of pseudostuttering has been recommended for speech language pathologists and people who stutter to understand, empathize and to test the reasonable and unreasonable expectations...
for fluency, and modeling stuttering for the sake of analysis by the client. It has been suggested that pseudostuttering be used to help improve the speech language pathologist's understanding of the attitudes toward stuttering population and their attendant skills in dealing with the disorder. Several researchers have indicated its use for desensitization in the stuttering population, transfer and maintenance; and in the training of prospective speech language pathologists. The practice of having speech language pathologists-in-training experience stuttering via pseudostuttering exercises has been in existence since the mid 1930's and it continues to be in use.

Several authors have reported that reluctance, anxiety, and resistance to pseudostuttering among normal speakers is common. Ratings of self-perception of 'inner' and 'outer' 'beauty' before and after pseudostuttering assignments of 55 students were examined by Klinger. A significant lowering of perceptions of inner and outer 'beauty' after pseudostuttering experiences was reported. Students were instructed in the act of pseudostuttering and asked to initiate a series of pseudostuttering interactions off-campus. This assignment was completed without supervision or monitoring. From changes noted in inner and outer beauty, the author inferred that the pseudostuttering experience was capable of lowering self-image and producing empathy for people who stutter. However, Klinger failed to identify the possible origin of this effect and to specify how changes in beauty translated into possible changes in perceptions of character traits or perceptions of self.

Given the above findings, the oft-stated student apprehensions about the pseudostuttering assignments, and on the basis of anecdotal evidence, one may expect some change in self-perceptions of normal speakers and people who stutter due to pseudostuttering experiences. If these pseudostuttering exercises are to be employed with any knowledge of benefit, it seems essential to empirically demonstrate if any change occurs as a result of these exercises. If changes do occur, then we need to determine the pattern of that change in self-perceptions as a result of pseudostuttering exercises. However, no empirical evidence of the effects of these exercises on the short- and long-term self-perceptions and perceptions towards people who stutter is currently available. This study examined the immediate effect of pseudostuttering experience during scripted telephone calls on the self-perception of speech language pathologists-in-training. Telephone calls were used to make the experience somewhat distant as compared to a face-to-face experience, which participants have shown resistance to enter into.

If the pseudostuttering experience is as powerful as anecdotally, and otherwise reported, one would expect a substantial shift in self-perceptions, which would indicate the cognitive/affective power of stuttering (be it of the artificial kind or be it real.) However, if the act of stuttering itself is not a genesis of these percepts, then no shift should occur.

**Methods**

**Participants**

Twenty-nine graduate female students, enrolled in a graduate course in Stuttering and other Fluency Disorders and in training to become professional speech language pathologists at East Carolina University, served as participants in this study. Their mean age was 23.5 years (SD = 1.5). All participants were volunteers and reported normal speech, language, and hearing. An all female sample is considered appropriate since over 95.2% of practicing speech language pathologists are females. In addition, rater gender has not been found to be a significant factor.

**Materials**

A scale of 25 traits consisted of adjectives which speech language pathologists most frequently used to describe people who stutter. These words were paired with antonyms to form a bipolar dimension with a 7-point Likert scale. Numerous researchers have employed this scale and it has been used to survey self-perceptions and stereotypes towards people who stutter and others as well as to quantify the effect of a specific experience (watching a video tape) in normally speaking people on their perceptions towards selves and people who stutter. This 25 item semantic differential survey was administered to examine the self-perceptions of the participants in this experiment.

Forty telephone call scripts were used in this experiment. Twenty-one scripts for telephone calls were developed and used along with nineteen available scripts. See Appendix A for the telephone scripts.

**Procedure**

University and Medical Center's Institutional Review Board at East Carolina University, Greenville, NC, approved this experimental study. The first author conducted all testing. Participants individually met with the experimenter, in a quiet laboratory setting to participate in this experiment. All participants were volunteers, and written informed consents were obtained from the

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participants before beginning the experiment. The 25-item scale was administered prior to and following the pseudostuttering telephone calls. All participants were instructed to evaluate how they felt about themselves at the present time. See Appendix B for instruction. Participants were instructed that they would be making five scripted telephone calls to local businesses while voluntarily stuttering during their conversation.

Stuttering was operationally defined for all participants as ‘Part-word or whole word, repetitions and/or prolongations and/or postural fixations or blocks’. These defined behaviours were demonstrated for each participant individually by the first author, an experienced speech language pathologist, and all participants were given an opportunity to rehearse each of the defined stuttering behaviours for several minutes before making the telephone calls. Participants were provided with an opportunity to ask questions and clarify if they had any doubts. The individual participant’s ability to produce stuttering like behaviour was not a concern since it is shown that listeners do not differentiate between real stuttering and pseudostuttering.24 However, all telephone conversations were audio recorded, and 30 telephone calls (20%) were randomly selected and analysed for number of syllables stuttered by the participants. The mean number of syllables stuttered were found to be 23.3% (range 12 – 46%). It has been shown that speech language pathologists rate all levels of stuttering severity negatively as compared to normals.16 Participants were instructed not to deviate from the script but they were allowed to ad lib briefly to keep the conversation as natural as possible. Specific instructions as to where exactly to pseudostutter in the given script were not given to participants. Telephone scripts were randomly selected from the list of scripts and telephone numbers of target businesses were randomly chosen from the Yellow Pages in the local telephone book. Five scripted telephone calls were made successively in presence of the experimenter and upon completion of the calls, the participants were asked to rate their self-perceptions during and immediately after these telephone calls.

RESULTS

Figure 1 illustrates the mean and standard error values for the 25 items on semantic differential for the pre- and post- pseudostuttering telephone calls of all the participants. Wilcoxon matched pairs sign ranks tests were conducted to explore differences between Likert scores of all the 25 attributes in the semantic differential scale for the pre- and post-pseudostuttering telephone call ratings of self perceptions. Comparison of the pre- and post-telephone call ratings of self-perceptions were of specific interest. Table 1 shows the results of the Wilcoxon matched pairs sign rank tests for the 25 items revealing that significant difference existed for 22 items ($p < 0.05$).

Discussion

The principal finding of this study is that a negative self-perception emerged following the experimental condition of a series of pseudostuttering telephone calls in speech language pathologists-in-training. Specifically, the results showed a significant shift in 22 of the 25 scales ($p < 0.05$). After the telephone calls, speech language pathologists-in-training were signifi-
Table 1  Summary table for Wilcoxon matched pairs sign rank tests between pre- and post-pseudostuttering telephone calls for each scale item.

<table>
<thead>
<tr>
<th>Pairs</th>
<th>Statistics</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Withdrawn – Outgoing</td>
<td>4.12(b)</td>
</tr>
<tr>
<td>*Tense – Relaxed</td>
<td>3.79(b)</td>
</tr>
<tr>
<td>*Avoiding – Approaching</td>
<td>3.54(b)</td>
</tr>
<tr>
<td>*Afraid – Confident</td>
<td>3.18(b)</td>
</tr>
<tr>
<td>*Introverted – Extroverted</td>
<td>3.64(b)</td>
</tr>
<tr>
<td>*Nervous – Calm</td>
<td>3.34(b)</td>
</tr>
<tr>
<td>*Self-conscious – Self-assured</td>
<td>3.30(b)</td>
</tr>
<tr>
<td>*Anxious – Composed</td>
<td>3.18(b)</td>
</tr>
<tr>
<td>*Quiet – Loud</td>
<td>3.93(b)</td>
</tr>
<tr>
<td>*Inflexible – Flexible</td>
<td>3.44(b)</td>
</tr>
<tr>
<td>*Fearful – Fearless</td>
<td>2.66(b)</td>
</tr>
<tr>
<td>*Shy – Bold</td>
<td>2.70(b)</td>
</tr>
<tr>
<td>Sincere – Insincere</td>
<td>0.35(b)</td>
</tr>
<tr>
<td>Bragging – Self-derogatory</td>
<td>0.16(b)</td>
</tr>
<tr>
<td>Emotional – Bland</td>
<td>0.11(b)</td>
</tr>
<tr>
<td>*Perfectionistic – Careless</td>
<td>2.33(b)</td>
</tr>
<tr>
<td>*During – Hesitant</td>
<td>2.94(b)</td>
</tr>
<tr>
<td>*Cooperative – Uncooperative</td>
<td>2.95(b)</td>
</tr>
<tr>
<td>*Intelligent – Dull</td>
<td>3.82(b)</td>
</tr>
<tr>
<td>*Aggressive – Passive</td>
<td>3.80(b)</td>
</tr>
<tr>
<td>*Pleasant – Unpleasant</td>
<td>3.49(b)</td>
</tr>
<tr>
<td>*Secure – Insecure</td>
<td>3.45(b)</td>
</tr>
<tr>
<td>*Friendly – Unfriendly</td>
<td>4.05(b)</td>
</tr>
<tr>
<td>*Open – Guarded</td>
<td>4.27(b)</td>
</tr>
<tr>
<td>*Talkative – Reticent</td>
<td>4.12(b)</td>
</tr>
</tbody>
</table>

(Note: *considered significant at \(p < 0.05\), a = based on negative ranks, b = based on positive ranks.)

The question as to the value of this commonly employed exercise remains. One can speculate that there can be a positive and a negative outcome. On the positive side, this exercise can provide the students in training with an experience to develop empathy towards people who stutter. They viewed life on life’s terms as a person who stutters does for a short period of time, and it was disconcerting, uncomfortable, and eye opening. This experiential face with stuttering is one that cannot be taught in a didactic fashion, but must be felt viscerally and emotionally and will change how the speech pathologist views the disorder and the person who stutters. On the negative side, a caveat must be expressed that such an experience could confirm the negative stereotype held by the normal speaking population towards people who stutter. 22, 23 which is not substantiated by the personality literature. 26 However, the incongruence between the stereotype and reality of personality changes may finally be just a simple manifestation of the saliency and vividness of the powerful, aberrant, atypical nature of the stuttering moment. Thus, one may have the first empirical inkling into the lack of congruency between what people who stutter feel and what others feel about them. Stuttering, even pretend stuttering, is very powerful.

References

Effect of pseudostuttering on self-perceptions


9 Dry Cleaner: Hello, How much do you charge to dry clean a man’s sport jacket? If I drop it off in the morning, may I pick it up the same day? Are you open on Sundays? Thank You.

10 Video Store: Hello, Can you tell me if you have the movie “Chasing Amy”? What are your membership requirements? Thank You.

11 Bookstore: Hello, I was wondering if you have the new book by John Grisham in stock? Is that hard or soft cover? How much is it? Thank You.

12 Florist: Hello, Can you tell me how much your long-stem roses are per dozen? How much are a dozen carnations? Do you take Mastercard? Thank You.

13 Hair Salon: Hello, How much do you charge for a man’s shampoo, cut, and blow dry? Do I have to make an appointment? Thank You.


15 Toy Store: Hello, Do you carry the ‘Tickle me Elmo’ doll? Do you have them in stock? Can you tell me where your store is located? Thank You.

16 Music Store: Hello, Do you carry CD’s by the band ‘Ben Folds Five’? Do you know if you have all three of their albums in stock? Can you tell me when you close tonight? Thank You.
17 Audio Store: Hello, Does your store sell tube amplifiers? Can you tell me if you sell Polk Audio? What time will you be closing tonight? Thank You.

18 Restaurant: Hello, Do you serve Chicken Parmesan? Can you tell me where you are located? Does your restaurant deliver? Thank You.

19 Shoe Store: Hello, Do you have a big selection of work boots? I wear a size 15; do you have work boots in my size? Do you carry children’s shoes as well? Thank You.

20 Garden Supply: Hello, What is your price for a 10-lb. bag of potting soil? Do you have any geraniums? How late are you open today? Thank You.

21 Bank: Hello, Do you have safety deposit boxes? What sizes do you have? What is the rent for your smallest safety deposit box? Thank You.

22 Library: Hello, What kind of ID do I need to get a library card? Is there a charge for that? What are your hours on the weekend? Thank You.

23 Carpet Cleaner: Hello, What is your charge to steam clean a 12 x 14 room? When could I make an appointment to have that done? Do you take American Express? Thank You.

24 Bowling Alley: Hello, How late are you open tonight? What is your charge per game? How much are your shoe rentals? Thank You.

25 Car Wash: Hello, How much do you charge to wash and wax a compact car? Do I need to make an appointment to have that done? Are you open on Saturdays? Thank You.

26 Golf Store: Hello, Do you carry Titleist DCI irons? Do you have any in stock right now? How late are you open on the weekends? Thank You.

27 Camera: Hello, Do you have one hour photo processing? How much do you charge to develop a roll with 24 exposures? What time do you close today? Thank You.

28 Computer Games: Hello, Do you carry the game “Myst”? Do you have it in stock? Where are you located? Thank You.

29 Pharmacy: Hello, What are your pharmacy hours on the weekend? Can I call in prescriptions ahead of time? Will you be able to file my prescriptions on my insurance for me? Thank You.

30 Vet: Hello, How much do you charge to groom a Standard Poodle? How long will I need to leave my dog to have that done? Are you open on the weekends? Thank You.

31 Church: Hello, What time are your Sunday services? Do you also have Sunday school classes? Is there a nursery available on Sundays? Thank You.

32 Coffee Shop: Hello, How much do you charge for a dozen-glazed doughnuts? Do you also sell sandwiches or bagels? What time do you open in the morning? Thank You.

33 Motel: Hello, I was wondering if you had any vacancies for next Thursday through Sunday? Do I need a credit card to reserve a room? Does your hotel offer free movie channels? Thank You.

34 Camera Store: Hello, I was wondering if you sold lenses for the Canon Eos? Do you also carry lithium batteries that fit this camera? How late are you open tonight? Thank You.

35 Bicycle Store: Hello, I was wondering if you sold Schwinn Bicycles? Does your store carry a large selection of rims? Are you open on Sundays? Thank You.

36 Car Rentals: Hello, What kind of cars does your store rent? How much is the insurance that your store offers if I rent a car? Do your cars come with unlimited mileage? Thank You.

37 Moving Van Rental: Hello, What are the sizes of the moving vans that you carry? How much does your company charge per-mile? Can you tell me how much it costs to rent a hand-truck? Thank You.

38 Pizza Joint: Hello, How many people will a large pizza serve? I was wondering if your restaurant made Chicago Style pizzas? Does your store deliver? Thank You.


40 Electronic Repair Store: Hello, I think my VCR has a tape stuck in it, how much would it cost for you to take a look at it? How long will it take to fix it? Can you tell me when you close tonight? Thank You.

Appendix B

INSTRUCTIONS

The following were the instructions for completing the 25-item scale (Woods & Williams, 1976):

Below you will see some rating scales each with seven points. We would like you to evaluate how you feel about YOURSELF AT THE PRESENT TIME on each of these scales. Please circle the number on the scale that best describes your current feelings about YOURSELF, on each scale.