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Research Article

The Effects of Self-Disclosure on Male and Female Perceptions of Individuals Who Stutter

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Purpose: The purpose of this study was to examine the influence of self-disclosure on observers' perceptions of persons who stutter.
Method: Participants (N = 173) were randomly assigned to view 2 of 4 possible videos (i.e., male self-disclosure, male no self-disclosure, female self-disclosure, and female no self-disclosure). After viewing both videos, participants completed a survey assessing their perceptions of the speakers.
Results: Controlling for observer and speaker gender, listeners were more likely to select speakers who self-disclosed their stuttering as more friendly, outgoing, and confident compared with speakers who did not self-disclose. Observers were more likely to select speakers who did not self-disclose as unfriendly and shy compared with speakers who used a self-disclosure statement. Controlling for self-disclosure and observer gender, observers were less likely to choose the female speaker as friendlier, outgoing, and confident compared with the male speaker. Observers also were more likely to select the female speaker as unfriendly, shy, unintelligent, and insecure compared with the male speaker and were more likely to report that they were more distracted when viewing the videos.
Conclusion: Results lend support to the effectiveness of self-disclosure as a technique that persons who stutter can use to positively influence the perceptions of listeners.

Approximately 55 million people stutter worldwide. Stuttering is often misrepresented in the media in inaccurate and often offensive ways. Johnson (2008) outlined a number of instances where stuttering is portrayed in movies and television as a means to depict characters who are nervous, possess weak temperaments, or are unheroic or villainous. Contrary to portrayals in the popular media, stuttering is not a psychological disorder; rather, it is a neurophysiological disorder with a genetic predisposition (e.g., Ambrose, Yairi, & Cox, 1993; Dworzynski, Remington, Rijsdijk, Howell, & Plomin, 2007). Pervasive ignorance regarding the underlying nature of stuttering has contributed to marked stigmatization and discrimination (e.g., Boyle, 2013). People who stutter are frequently stereotyped as excessively nervous, anxious, and unintelligent. The origin of the stuttering stereotype has been attributed to how persons who do not stutter feel when they are having moments of disfluency and to how the listener feels when he or she is interacting with a person who stutters (MacKinnon, Hall, & MacIntyre, 2007). Specifically, people who are fluent report feeling nervous during moments of disfluency. Typically fluent speakers also report feelings of discomfort and anxiety when listening to someone who stutters. A recent review has demonstrated that atypical nervousness and/or anxiety are not causal contributors to stuttering (Alm, 2014). Nevertheless, the perspectives of persons who do not stutter during their disfluent speech production and/or when observing a person who stutters when speaking have perpetuated the stuttering stereotype.

Persons who do not stutter describe a tendency to be more disfluent when they are nervous, anxious, and/or intellectually inadequate regarding the topic they are attempting to verbally navigate. Researchers have also suggested that the misperception of stuttering may relate to generalized discomfort the listener feels during a verbal exchange with a person who stutters (White & Collins, 1984; Woods & Williams, 1976). That is, the listener is projecting his or her own feelings of discomfort onto the speaker as a causal contributor of the person's speech disfluencies. Thus, it is plausible that uninformed nonstuttering listeners assume that if people who stutter are highly disfluent, they must also be highly nervous, anxious, or inept. However, there are significant data to suggest that nervousness, trait anxiety, and low intelligence are not etiological markers of stuttering (Alm, 2014). Nevertheless, the stereotype threat persists. Research has provided evidence that these negative perceptions persist across a variety of populations, including vocational rehabilitation counselors (Hurst & Cooper, 1983),

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parents (Crowe & Cooper, 1977), speech-language pathologists (Lass, Ruscello, Pannbacker, Schmitt, & Everly-Myers, 1989; Silverman, 1982; Turnbaugh, Guitar, & Hoffman, 1979; Woods & Williams, 1971; Yairi & Williams, 1970), and school-age children (Franck, Jackson, Pimentel, & Greenwood, 2003).

Of particular relevance to the present study wherein the participants were college age, both professors and college students have also demonstrated perspectives that reflect stuttering-specific stereotypes. Dorsey and Guenther (2000) administered a survey to professors and college students that required they rate either an average college student or a college student who stutters on 16 different nonneutral personality traits, such as *nervous, passive, self-conscious,* and *reticent*. They found that professors rated the hypothetical student who stutters significantly more negatively on 11 traits, and college students rated the hypothetical student who stutters significantly more negatively on five traits.

Lass et al. (1992) asked 103 primary and secondary school teachers to list as many adjectives they could think of to describe both hypothetical male and female children and adults who stutter. The most frequently reported traits, regardless of the gender and age of the hypothetical person who stutters, were *shy, nervous,* and *insecure*. Ruscello, Lass, Schmitt, and Pannbacker (1994) replicated the Lass et al. study with 82 special educators. They found that for all four hypothetical persons who stutter, the most frequently reported adjectives were *shy, nervous, quiet, anxious,* and *withdrawn.* Similar to the design of the present study, both Lass et al. and Ruscello et al. utilized male and female speakers who stutter, and their results demonstrated that listeners hold negative stereotypes about people who stutter, regardless of the gender of the person who stutters.

Taken together, these results demonstrate that persons who stutter are significantly vulnerable to stereotype threat. Steele and Aronson (1995) defined *stereotype threat* as the danger of pervasive negative misperceptions about a particular group that leads individual members of that group to not reach their potential. To minimize the negative and inaccurate perceptions toward persons who stutter, speech-language pathologists have encouraged their adolescent and adult clients who stutter to self-disclose the fact that they stutter when engaging with new communication partners. Self-disclosure has been suggested as a strategy for persons who associate with groups at risk for stigmatization, with the outcomes indicating that disclosing to others leads to self-empowerment and decreases vulnerability to the stereotype threat (e.g., Corrigan, Kosyluk, & Rüsch, 2013; Corrigan & Rao, 2012). Although empirical evidence is needed, self-disclosure should presumably provide the same benefits to persons who stutter. Persons who stutter may also use self-disclosure as a way to positively influence the perceptions of their listeners (e.g., Collins & Blood, 1990; Sheehan, 1975; Van Riper, 1982).

There are data that suggest use of self-disclosure can positively influence listener perception of persons who stutter. Collins and Blood (1990) had 84 female undergraduate college students view videos of interviews with two male speakers who stuttered (one with a mild stutter and one with a severe stutter). In half of the videos, the male speaker acknowledged his stuttering at the end of the interview by stating that he "had been a stutterer all his life, was enrolled in therapy trying to work on his fluency, and did not mind if some people discussed the topic because he knew it made some people uncomfortable" (Collins & Blood, 1990, p. 76). The researchers found that when the speaker self-acknowledged his stuttering, the listeners rated him significantly more favorably on traits of intelligence, personality, and appearance. The researchers also found that persons who stutter severely are likely to benefit more from self-disclosure than are persons with mild stutters. These findings provide evidence-based support for the use of self-disclosure as a tool to counteract listeners' stereotypes of persons who stutter. Results also emphasize that self-disclosing might be especially effective for people who stutter severely (and who may be more vulnerable to stereotyping).

In a follow-up study, Healey, Gabel, Daniels, and Kawai (2007) asked observers to rate a male speaker who stuttered and did or did not self-disclose his stuttering during an interview-style video. The speaker self-disclosed by stating "I should let you know that was kind of tough for me in spots. I stutter and I appreciate you bearing with me" or using the statement "But before I start, I should let you know that I stutter so this might be hard in spots, so bear with me" (Healey et al., 2007, pp. 55–56). Raters scored the speaker's video on personality traits using a Likert scale and described the speaker using open-ended comments. Results did not reveal overall differences in Likert scale ratings of the speaker when he did or did not self-disclose. However, the observers did not have the opportunity to compare observations. Instead, they either viewed the male speaker self-disclose or viewed a video in which he did not self-disclose. Nevertheless, videos that contained a self-disclosure statement at the beginning of the dialogue received more positive listener comments than those in which self-disclosure was presented at the end. This finding indicates that when self-disclosure is utilized, there may be more benefit to self-disclosing at the beginning of a communication interaction, which is consistent with findings from other studies (Lincoln & Bricker-Katz, 2008).

Lee and Manning (2010) attempted to extend past findings and explain contradictions by completing two distinct experiments. In the first experiment, the participants viewed one of the following: (a) a condition where the speaker stuttered and self-disclosed; (b) a condition where the speaker stuttered but did not self-disclose; (c) a condition where the speaker stuttered and used stuttering modification; or (d) a condition where the speaker stuttered, self-disclosed, and used stuttering modification. In the second experiment, participants were provided with direct comparisons of a speaker who stuttered and self-disclosed versus a speaker who stuttered but did not self-disclose. The authors found significant findings in the listener perceptions only for the experiment that provided a direct comparison of the speaker self-disclosing versus the speaker not self-disclosing.

The condition in which the male speaker self-disclosed was rated moderately more favorably than the condition with no self-disclosure. Given that the listeners needed a comparison between no self-disclosure and self-disclosure to elicit significantly different perspectives regarding the speaker, the authors argued that the use of self-disclosure does not appear to be a practical strategy—at least, not when the end goal is to shift listener perception. Lee and Manning further stated that perhaps the speaker is the one who receives the most benefit because the act of acknowledging stuttering indicates acceptance and understanding.

Although these studies have furthered our understanding of the value of self-disclosure in regard to stuttering, additional research is warranted. The self-disclosure studies completed to date have utilized only male speakers who stutter. Research indicates that negative perceptions and stereotypes exist in response to both male and female persons who stutter (Lass et al., 1992; Ruscello et al., 1994), but it is yet to be determined whether this positive influence of self-disclosure is subject to gender bias. Such exploration is critical given the data to suggest that women who present with a disability may be at unique risk for discrimination because of the stereotype threat associated with their gender coupled with that of their disability (e.g., Coleman, Brunell, & Haugen, 2015). Women with disabilities are presumed to be more vulnerable to prejudice than men with disabilities, and the type of disability they present with differentially influences the degree of discrimination they face. Specifically, women with intellectual disabilities evoke more negative responses than do women with physical disabilities, with people rating the former as less competent and stating that they prefer greater distance from them. No such differences in preference were found between men with intellectual and men with physical disabilities. Thus, these findings further demonstrate that the discrimination women face is distinctly different from that of men and that there are unique outcomes depending on the woman's type of disability.

Another consideration with regard to past research is that the stimulus recordings used consisted of the speaker who stutters either conversing with an on-screen person who does not stutter or being introduced by a person who does not stutter. In some cases, the on-screen listener has been described as sitting "motionless and expressionless" (Healey et al., 2007). Thus, it is possible that listeners' perceptions may be influenced by the reactions of the on-screen listener or conversational partner and that a study using individual stimulus recordings of a person who stutters talking directly to the observer of the stimulus tape may yield findings different from those of previous investigations.

The wording of the self-disclosure statement also may affect how listeners perceive the speaker who stutters. Healey et al. (2007) stated that the self-disclosure statement might have appeared to be more of an apology for stuttering than an act of revealing it (e.g., "I appreciate you bearing with me"). The apologetic nature of this statement may have compromised the potential positive influence of the speaker's self-disclosure on listeners' perceptions. In the present study, we used a nonapologetic neutral statement to counteract this possibility. Lee and Manning (2010) found significant effects of self-disclosure on listeners' perceptions only when the listeners were exposed to both the self-disclosure and no self-disclosure conditions. This finding demonstrates that further exploration is needed with regard to what happens when listeners have a comparison specific to self-disclosure in addition to gender. It may be that simply having two viewings in which the speaker self-discloses in one but not the other is not enough to determine differences. Rather, having other comparisons that differ by gender and disclosure and that incorporate foils (e.g., female speaker who self-discloses versus male speaker who self-discloses, female speaker who self-discloses versus male speaker who does not self-disclose, female speaker who does not-self disclose versus female speaker who does not self-disclose, or female speaker who self-discloses versus female speaker who does not self-disclose) may provide more insight into the influence of observer perception on self-disclosure.

The primary purpose of this study was to examine whether observers' perceptions of a person who stutters differ depending on whether the person self-discloses before initiating a monologue that she or he is a person who stutters. The secondary purpose was to determine whether observer perceptions are subject to gender bias. Based on findings that negative stereotypes occur in response to both male and female persons who stutter, it is important to account for potential influence of gender bias by utilizing both male and female speakers who stutter. Given that previous research has indicated that apologetic self-disclosure statements might not impact listener perceptions as positively as a simple informative statement, we chose to use an informative but not apologetic disclosure statement in the present study. Additionally, the present investigation utilized stimulus recordings in which the speaker who stutters is looking and speaking directly to the person viewing the video as opposed to speaking to another person on screen. For this study, an attempt was made to recruit a large number of participants to ensure a reliable examination of the effects of self-disclosure with respect to all possible comparisons and gender. We hypothesized that self-disclosing directly to the observer in an informative but nonapologetic manner at the beginning of a monologue results in significantly higher positive listener perceptions than not self-disclosing. We further hypothesized that gender bias is present only when the person who stutters does not self-disclose.

Method

Participants viewed two of four video recordings: (a) male speaker who self-discloses, (b) male speaker who does not self-disclose, (c) female speaker who self-discloses, and (d) female speaker who does not self-disclose. Participants were required to complete a survey questionnaire immediately following the viewings. Participants were then provided with a debriefing form that comprehensively explained the purpose of the study to enhance the their

understanding of stuttering and also the practical implications and potential benefits of self-disclosure.

Stimuli

Speakers

The male adult who stuttered in the video was 21 years old and reported onset of stuttering in childhood. He self-reported that he had been enrolled in speech therapy for 7 months prior to the filming and was highly familiar with the technique of voluntary stuttering. The female adult who stuttered in the video was 24 years old, also reported onset of stuttering in childhood, and had a history of speech therapy for several years during elementary school. She also attended an intensive stuttering modification treatment program as an adult and self-reported that she felt competent in her use of voluntary stuttering. Both individuals were native English speakers and had been living in Texas for at least 5 years. Neither individual presented with regional accents. Both speakers demonstrated normal articulation, voice quality, resonance, nasality, speech rate, and speech loudness as judged by a certified speech-language pathologist.

Recording Equipment

Stimulus tapes for the study were recorded by a radio-television-film student at the University of Texas–Austin who had advanced editing and production skills and who had access to state-of-the-art filming equipment. The camera used in filming the stimulus tapes was a Canon 5D Mark II with a Canon EF 24- to 70-mm lens. Sound equipment consisted of an Edirol R-4 Pro four-channel recorder and a Rode NTG-3 shotgun microphone. The digital videos were edited using Final Cut Pro 7.0 software on a 2010 Mac Pro (with two 2.26-gHz Quad-Core Intel Xenon processors, 12 GB 1066-mHz DDR3 ram, and ATI Radeon HD 4870 512 MB graphics card; MacOS X 10.6.7 operating system). The videos were then downloaded onto a DVD to allow for participant viewing on a desktop computer.

Setting

The male and female speakers were filmed individually, sitting in the same beige rocking chair in the same room looking directly at the camera. The chair was placed in front of a white wall with a partially occluded window to the left for lighting.

Passage Reading

Both speakers were videorecorded while reading a modified version of the Rainbow Passage (Fairbanks, 1960). The script of the passage, excluding the disclosure statement, was adapted with the following voluntary stuttering-like disfluencies inserted and typed in red for the speaker to easily distinguish: single sound repetitions (7.8%), audible sound prolongations (10.8%), and inaudible sound prolongations (5.4%); the total percentage of stuttering-like disfluencies per number of words was 24%. Both speakers reviewed and practiced reading the passages several times prior to filming. At the beginning of the recording, each speaker greeted the observer, introduced themselves by their first name, and stated they would be reading a passage about rainbows. Each speaker then recited the following self-disclosure statement: "Just so you know, I sometimes stutter, so you might hear me repeat some words/sounds/phrases." After producing this statement, the speakers went on to read the modified Rainbow Passage script. The speakers' speech rates were perceptually judged by the authors to be within the normal range for adults.

To create the video that did not have a self-disclosure recording, the self-disclosure statement was simply edited out to allow the recordings to be identical with the exception of the presence or absence of the statement. That is, advanced film editing software ensured that for each speaker, both the self-disclosure and no self-disclosure videos were identical in every way except for the presence of the self-disclosure statement.

Filming

Each speaker was filmed from the shoulders up, alone on the set, and facing the observer. The speakers were filmed reciting the passage with the self-disclosure statement. Both speakers reviewed the passages several times prior to filming for familiarization. Thus, during the filming of the passage reading, the speakers only periodically looked down at an angle to review the script. The speakers were directed to insert voluntary stuttering-like disfluencies (of type and duration or iteration noted in the modified passage), but there was slight variation due to natural stuttering moments that also occurred. Postproduction analysis of the films showed that the percentages for types of stuttering-like disfluencies were similar between the male and female stimulus videos (see Table 1).

Additionally, the speakers presented with slight variations in the type and frequency of secondary behaviors that co-occurred during disfluent moments. To quantify the speakers' secondary behaviors, eight trained undergraduate research assistants analyzed the stimulus videos using the physical concomitants section of *The Stuttering Severity Instrument for Adults and Children* (Riley, 2009). Each speaker was rated on a scale of 0 to 5 (0 = *none,* 1 = *not noticeable unless looking for it,* 2 = *barely noticeable to casual observer,* 3 = *distracting,* 4 = *very distracting,* 5 = *severe and painful looking*) for the following behaviors: (a) distracting sounds, (b) facial grimaces, (c) head movements, and (d) movements

Table 1. Percentage of stuttering-like disfluencies produced during video stimuli for the male and female speakers.

Disfluency	Male	Female
Single-sound repetitions (SSR)	7.10	7.3
Whole word repetitions (WWR)	0.05	0
Audible sound prolongations (ASP)	10.4	11.1
Inaudible sound prolongations/ blocks (ISP)	4.9	5.6
Total stuttering-like disfluencies of total words in passage	23	24

of the extremities. Scores for the four physical concomitant types were then summed to arrive at a total score and averaged across raters. For the male speaker, the average total physical concomitants score was 3.8. For the female speaker, the average total physical concomitants score was 2.5.

Survey

The survey consisted of two parts. Part I included 10 questions to assess the observer's perception of the speakers' personality traits. Each question was followed by three possible answer choices. Survey questions related to the following personality traits: friendly, outgoing, intelligent, confident, more distracted, unfriendly, unintelligent, insecure, less distracted, and shy. For example, the survey asked, *In which tape did you think the speaker appeared more confident? (Answer choices: Tape 1, Tape 2, No difference)*. Part II consisted of 13 subjective open-ended questions to gather additional knowledge about the participant's personal experience with persons who stutter. For example, the survey asked, *Have you ever personally known someone who stutters?* Part II also included designated space where participants were asked to freely write comments regarding the speaker in tape 1 and tape 2 and the speaker's communication in tape 1 and tape 2. A section where participants were permitted to write any additional comments was provided at the end of the survey. The complete survey can be found in the Appendix.

Participants

The University of Texas Institutional Review Board approved this study, and informed consent was obtained for all participants. Participants were recruited from this university and the surrounding area via distribution of recruitment fliers and by word of mouth. All participants were native English speakers, were at least 18 years of age, and self-reported normal (or corrected-to-normal) vision and hearing. A total of 173 adults (18–35 years; M = 24.2 years; N = 87 men) participated in this study. Eighty-two percent of participants (142 of 173) reported that they had encountered someone who stutters in their lifetime. Of those 142 participants, 100 reported that they personally knew someone who stutters, with 0.5–20 years (M = 3.34 years) reported as the length of time that they had known the person(s). Thirty-two of the 173 participants reported that they have had some type of formal experience with stuttering, and 97 participants reported that they have had informal experience with stuttering. Thirty-nine of the 173 participants reported that they had stuttered in their lifetime, with 22 of the 39 reporting that they currently stutter. Participants who reported that they stutter reported that they had stuttered for 1–15 years (M = 1.65 years). Only four of the 39 participants who self-reported that they stutter also reported that they self-disclose about their stuttering to listeners. Participants were initially provided with a vague purpose of the study and were debriefed with extensive details of the study following their completion of the survey to avoid providing any source of bias prior to completion of the questionnaire.

Procedure

Participants met with a trained research assistant at the University of Texas in one of the rooms available within the speech and hearing clinic. The participant was informed that he or she would be viewing two short videos and would then be asked to complete a short survey regarding the speakers in each video. Each participant viewed two of the four videos while sitting at an iMac or Dell desktop computer and listened to the sound through circumaural headphones adjusted to the participant's hearing comfort level. Headphones ensured that participants heard the audio clearly and reduced interference from any general background noise. Video orders were systematically randomized such that every possible pairing of the videos was administered. For example, one observer may have watched the pairing of male self-disclosure with male no self-disclosure, whereas another may have watched the pairing of male self-disclosure with female self-disclosure. After the participant finished viewing both videos assigned to them, the research assistant asked the participant to read the directions of the survey carefully and answer the questions to the best of their ability. The researcher sat outside of the clinic room, allowing the participant to complete the survey in the privacy of the room. Most participants completed the survey within 15 min. Following survey completion and submission to the research assistant, the participant received a debriefing form, which provided explicit details about the specific purpose of the study. Any questions the participants had regarding the study were answered during this time.

Data Coding and Analysis

Participant responses to each of the survey questions were coded in a Microsoft Excel spreadsheet and then copied into IBM SPSS Statistics version 23 software for statistical analysis. For each participant, two rows were created in the spreadsheet to indicate the order of the videos that each participant viewed, whether or not the video(s) contained a self-disclosure statement, and the gender of the speaker in each video. Participant responses to survey questions were coded in separate columns for each variable (e.g., friendly or outgoing). When the participant indicated a preference of one speaker over the other, responses were coded with a 0 and 1 across the two rows, where 0 = the nonpreferred speaker and 1 = the preferred speaker. Participant responses were coded as 2 across both rows if the participant selected "no difference" between speakers. Written responses to part II of the survey were typed verbatim and then coded as either being a positive comment or a negative comment corresponding to each of the videos the participant viewed.

Quantitative responses to part I and part II of the survey were analyzed using a generalized estimating equation (GEE) to predict the odds of preference for one video

over another based on the values of the predictors. The use of the GEE allowed for analysis of responses provided in the fractional factorial design of the study in which participants watched only two of the four videos. Predictors in this study were gender of the speaker, gender of the listener, presence of self-disclosure statement, and prior experience with stuttering. Statistical analyses were run using the SPSS software. Free responses to the final open-ended questions of part II of the survey were descriptively analyzed.

Results

Detailed information regarding the observers' choices for personality traits based on presence of self-disclosure and the gender of the speaker is presented in Table 2.

Friendlier

Observers were 60% less likely to select the speakers who self-disclosed as friendlier compared with speakers who did not self-disclose, regardless of speaker and observer gender (odds ratio [OR] = 0.396, Wald $\chi^2 = 5.466$, df = 1, $p = .019$). Observers also were 76.5% less likely to choose female speakers as friendlier compared with male speakers, controlling for self-disclosure and observer gender (OR = 0.235, Wald $\chi^2 = 14.187$, df = 1, $p < .000$).

Outgoing

Regardless of speaker or listener gender, observers were 62.6% less likely to select the speaker who did not self-disclose as outgoing compared with a speaker who did self-disclose (OR = 0.374, Wald $\chi^2 = 8.810$, df = 1, $p = .003$). Observers were 88% less likely to choose female speakers as outgoing compared with male speakers, controlling for self-disclosure and observer gender (OR = 0.120, Wald $\chi^2 = 36.751$, df = 1, $p < .000$).

Intelligent

Observers were 74.3% less likely to select female speakers as intelligent compared with male speakers, controlling for self-disclosure and observer gender (OR = 0.257, Wald $\chi^2 = 9.609$, df = 1, $p = .002$). There was no significant difference in selecting a speaker as intelligent on the basis of self-disclosure, while controlling for observer and speaker gender (Wald $\chi^2 = 1.240$, df = 1, $p = .265$).

Confident

Regardless of speaker and observer gender, observers were 55.7% less likely to select speakers who did not self-disclose as confident compared with speakers who did self-disclose (OR = 0.443, Wald $\chi^2 = 7.662$, df = 1, $p = .006$). Observers were 78.4% less likely to select female speakers as confident over male speakers, controlling for self-disclosure and observer gender (OR = 0.216, Wald $\chi^2 = 25.489$, df = 1, $p < .000$).

More Distracted

Observers were 86% more likely to report they were more distracted when viewing the female speaker as compared with the male speakers, when controlling for self-disclosure and observer gender (OR = 1.865, Wald $\chi^2 = 4.990$, df = 1, $p = .025$). There was no significant difference in observers selecting when they were more distracted on

Table 2. Observers' choices for personality traits based on presence of self-disclosure and gender of the speaker.

Dependent variable	Predictor	Wald χ^2	*p*	OR	95% Wald confidence interval for OR	
					Lower limit	Upper limit
Friendlier	Self-disclosure	5.466	.019*	0.396	0.182	0.861
	Gender	14.187	.000*	0.235	0.110	0.499
Outgoing	Self-disclosure	8.810	.003*	0.374	0.195	0.716
	Gender	36.721	.000*	0.120	0.061	0.238
Intelligent	Self-disclosure	1.240	.265	0.610	0.255	1.457
	Gender	9.609	.002*	0.257	0.109	0.607
Confident	Self-disclosure	7.662	.006*	0.443	0.249	0.788
	Gender	25.489	.000*	0.216	0.119	0.391
More distracted	Self-disclosure	0.030	.861	1.047	0.625	1.754
	Gender	4.990	.025	1.865	1.079	3.222
Unfriendly	Self-disclosure	7.582	.006*	3.526	1.438	8.647
	Gender	19.704	.000*	7.415	3.061	17.961
Shy	Self-disclosure	4.321	.038*	1.875	1.037	3.392
	Gender	26.379	.000*	5.554	2.887	10.684
Unintelligent	Self-disclosure	0.173	.678	1.228	0.466	3.241
	Gender	11.184	.001*	6.604	2.041	15.390
Insecure	Self-disclosure	3.777	.052	1.766	0.995	3.133
	Gender	16.751	.000*	3.708	1.908	6.946
Less distracted	Self-disclosure	0.002	.961	1.013	0.602	1.703
	Gender	4.070	.044*	0.559	0.318	0.984

*$p < .05$.

the basis of use of a self-disclosure statement, while controlling for observer and speaker gender (Wald $\chi^2 = 0.030$, df = 1, $p = .861$).

Unfriendly

Observers were 352.6% more likely to select the speaker who did not self-disclose as unfriendly compared with the speaker who did, controlling for observer and speaker gender (OR = 3.526, Wald $\chi^2 = 7.582$, df = 1, $p = .006$). Observers were 741.5% more likely to select the female speaker as unfriendly compared with the male speaker, when controlling for self-disclosure and observer gender (OR = 7.415, Wald $\chi^2 = 19.704$, df = 1, $p < .000$).

Shy

Observers were 555.4% more likely to select the female speaker as shy compared with the male speaker, when controlling for self-disclosure and observer gender (OR = 5.554, Wald $\chi^2 = 26.379$, df = 1, $p < .000$). Observers were 187.5% more likely to select the speaker who did not self-disclose as shy compared with the speaker who did, controlling for observer and speaker gender (OR = 1.875, Wald $\chi^2 = 4.321$, df = 1, $p = .038$).

Unintelligent

Observers were 560.4% more likely to choose the female speaker as unintelligent compared with the male speaker, regardless of self-disclosure and observer gender (OR = 6.604, Wald $\chi^2 = 11.184$, df = 1, $p = .001$). There was no significant difference in the observers' selection of which speaker was perceived as unintelligent on the basis of the presence or absence of a self-disclosure statement, while controlling for observer and speaker gender (Wald $\chi^2 = 0.173$, df = 1, $p = .678$).

Insecure

Observers were 370.8% more likely to select the female speaker as insecure compared with the male speaker, while controlling for self-disclosure and observer gender (OR = 3.708, Wald $\chi^2 = 16.751$, df = 1, $p < .000$). There was no significant difference in observers selecting which speaker was insecure based on use of a self-disclosure statement, while controlling for observer and speaker gender (Wald $\chi^2 = 3.78$, df = 1, $p = .052$).

Less Distracting

Observers were 44.1% less likely to choose female speakers as less distracting compared with male speakers, while controlling for self-disclosure and observer gender (OR = 0.559, Wald $\chi^2 = 4.070$, df = 1, $p = .044$). There was no significant difference in the observer's selection of which speaker was perceived as less distracting on the basis of the presence or absence of a self-disclosure statement, while controlling for observer and speaker gender (Wald $\chi^2 = 0.002$, df = 1, $p = .961$).

Influence of Prior Experience With Stuttering

Prior exposure to stuttering and self-report of stuttering did not significantly contribute to observers' perceptions of self-disclosure. GEE analyses revealed that the respondents who reported personally knowing a person who stutters or having previous formal or informal experience with stuttering were no more likely to rate the speaker who self-disclosed as friendlier (Wald $\chi^2 = 1.887$, df = 1, $p = .169$), more outgoing (Wald $\chi^2 = 2.093$, df = 1, $p = .148$), more intelligent (Wald $\chi^2 = 0.079$, df = 1, $p = .778$), more confident (Wald $\chi^2 = 3.45$, df = 1, $p = .063$), or less distracting (Wald $\chi^2 = 0.006$, df = 1, $p = .936$) than the participants who did not have prior experience with stuttering.

Qualitative Results

All participants provided written observations about the videos in Part II of the survey. The average length of responses was 9.5 words per open-ended question. Free responses were qualitatively analyzed to further understand the quantitative responses of participants' shared experiences of watching and listening to a person who stutters. Thus, participants' answers to questions about their experience observing a person who stutters either self-disclose or not were transcribed and coded.

Although free responses varied, the majority of participants (72%) reported that their perceptions of the speakers when they self-disclosed were positive. That is, participants reported that the speaker was more confident (70% of responses), intelligent (57% of responses), polite (52% of responses), more at ease, and not ashamed compared with the speaker who did not self-disclose. Sixty-five percent of responses related to observers' perceptions of the speakers who did not use self-disclosure statements were negative comments such as shy, timid, hard to follow, ashamed, and awkward. Some participants (40%) provided comments related to their discomfort and embarrassment such as, "I felt embarrassed while watching this" when the speaker did not use a self-disclosure statement. Participants also reported that their perceptions of the speaker's communication were that the speaker presented with "fewer repetitions" and "less stuttering" when the speaker self-disclosed his or her stuttering. Participants also reported that when speakers did not use a self-disclosure statement, the speakers' communication was "difficult" and they appeared to "stutter more frequently."

In summary, observers were significantly less likely to select speakers who did not use a self-disclosure statement as friendlier, outgoing, and confident compared with speakers who used a self-disclosure statement, controlling for observer and speaker gender. Observers were significantly more likely to select speakers who did not self-disclose as unfriendly and shy compared with speakers who used a self-disclosure statement, when controlling for observer and

speaker gender. Observers also were significantly less likely to choose the female speaker as friendlier, outgoing, confident, and less distracting compared with the male speaker, controlling for self-disclosure and observer gender. Likewise, observers were significantly more likely to select the female speaker as more distracting, unfriendly, shy, unintelligent, and insecure compared with the male speaker. Previous experience with stuttering did not significantly contribute to an observer's selection of a speaker who used or did not use a self-disclosure statement.

Discussion

The purpose of this study was to examine observers' perceptions of male and female persons who stutter when these speakers did or did not self-disclose about their stuttering. It was hypothesized that self-disclosing in an informative, nonapologetic manner at the beginning of a monologue results in significantly higher positive perceptions than does not self-disclosing and that gender bias is present only when the person who stutters does not self-disclose.

Influence of Self-Disclosure

Quantitative results from this study indicate that observers perceived positive differences in the personality traits (e.g., friendly, outgoing, and confident) of a speaker who stutters when he or she used a self-disclosure statement, controlling for observer and speaker gender. Participants also qualitatively reported a perceived difference in the amount of stuttering between speakers who used a self-disclosure statement compared with speakers who did not. Although there were no differences in the actual percentage of syllables stuttered by the speakers, observers reported that the monologues preceded by a self-disclosure statement sounded as though the speaker "stuttered less" or presented with "fewer repetitions" and "less trouble talking." Thus, the use of self-disclosure may reduce observer focus on the behavior of stuttering and allow for more focus on the content of the speaker's message.

Previous research has demonstrated mixed results about the effects of self-disclosure on a listener's perceptions of speakers who stutter. In congruence with the present study's findings, Collins and Blood (1990) found that listeners rated speakers who stutter and who self-disclosed about their stuttering more favorably on traits of intelligence, personality, and appearance. In contrast to the present results, Healey et al. (2007) did not find a difference in observers' ratings of a male speaker who stuttered regardless of whether he self-disclosed. The present study findings differ from those of Healey et al. in using a self-disclosure statement that was written to be nonapologetic and neutral, whereas the self-disclosure statement used by Healey et al. could be viewed as apologetic (e.g., "bear with me …"). Thus, perhaps observers respond more positively to speakers who use a neutral, nonapologetic self-disclosure statement such as the one used in the present investigation. Lee and Manning (2010) found that listeners rated speakers who self-disclosed more positively than speakers who did not self-disclose only when the listeners had the opportunity to directly compare the two conditions. In the present investigation, participants were also significantly more likely to rate speakers positively when they used a self-disclosure statement than when they did not. Additional variables, such as gender and personal preference, may have also affected observers' perceptions in the present study of persons who stutter.

Influence of Gender

Observers were more likely to rate male speakers who stutter as having certain positive character traits (i.e., friendlier, outgoing, confident, and less distracting) compared with female speakers who stutter, regardless of the presence of self-disclosure statements. Thus, our hypothesis that gender bias is present only when the person who stutters does not self-disclose was not supported. This preference toward characterizing males as more outgoing, attractive, and intelligent compared with females has been documented across multiple disciplines (e.g., Browne, 1999; Goldberg, 1993; Johnson, Murphy, Zewdie, & Reichard, 2008). These findings also confirm the findings of Coleman et al. (2015) that women who present with a disability are at greater risk for discrimination than are men. Therefore, female speakers who stutter might receive more benefit from using a self-disclosure statement than might male speakers who stutter, but the nature of the statement also may play a critical role. Byrd, Croft, Gkalitsiou, and McGill (2016) found that use of a neutral self-disclosure statement versus either no self-disclosure or an apologetic self-disclosure statement significantly increased listeners' perceptions of both male and female speakers who stuttered.

Another critical consideration with regard to the female speaker who stutters is the possibility that the listener may perceive her as having an intellectual disability. One of the more common stereotypes of stuttering is that the person who stutters has low intelligence. Coleman et al. (2015) found that the female gender role and the disability being intellectual rather than physical evoked the most negative responses from participants. Perhaps instead of simply using a neutral self-disclosure statement, female speakers who stutter should be advised to self-disclose in a manner that clarifies to the listener that their stuttering is not a reflection of their intellect. Future research should explore this possibility in an effort to help our female clients who stutter navigate the dual discrimination they will likely face.

In addition to gender biases, differences in personal preference may have also contributed to observers' preference of the male speaker in the present study. It is possible that the bias toward the male speaker was due to personal preference in viewing that was not related to gender (e.g., attractiveness or vocal quality). To more conclusively determine whether gender plays a significant role in the perceptions of listeners, future studies should employ multiple speakers of both genders.

Impact of Previous Interactions With Persons Who Stutter

Previous research has indicated that having had personal interactions with a person who stutters may influence a listener's perception of a speaker who stutters (Daniels, Panico, & Sudholt, 2011). The findings from the present study do not support this claim; previous experience of personal interaction with stuttering had no significant effect on participants' responses. Therefore, adults who stutter should consider using a self-disclosure statement regardless of whether the listener has had previous exposure to stuttering. Clinicians may have clients share with them that they do not feel it is important to disclose to certain people they have met when that person has had a friend, family member, previous employer, etc., who stutters. In response, the clinician should stress that although the person may know someone who stutters, that does not mean that self-disclosing to that particular person is no longer important. Rather than basing their decision to self-disclose on whether the listener possibly knows someone else who stutters, the speaker who stutters should decide whether disclosing to that person would be of benefit with regard to a few key considerations.

Clinical Utility of Self-Disclosure

Clients should be advised that self-disclosure is a strategy to help the listener view the speaker who stutters more positively and to help themselves feel more comfortable. However, self-disclosure is not a strategy that persons who stutter should be required to use with every person they meet. Rather, they should learn to use self-disclosure as a tool in times when they feel that they are most likely to avoid speaking, in situations in which they are at significant risk of listeners making ignorant assumptions about their speech, and as a means to promote self-advocacy. This strategy should be recommended but not forced and, if used, should be used with sensitivity to the client's communication hierarchy, because for most clients there will be certain people who will be easier to self-disclose to than others.

The manner in which the client self-discloses also has a significant impact on listener perceptions. Byrd et al. (2016) recently found that the use of a nonapologetic, neutral self-disclosure statement such as "Hi. My name is Christine. I am a person who stutters. You may hear me repeat or prolong sounds and syllables as I speak. If there is anything I say that you do not understand, please do not hesitate to let me know and I will be happy to say it again" results in significantly more positive perceptions than use of an apologetic statement such as "Hi. My name is Christine. I am a person who stutters. Please bear with me as speaking has always been difficult for me." However, as Byrd et al. also reported, clinicians should be aware that when asked to write a self-disclosure statement, clients almost always write one that is apologetic in nature. They have to be instructed with regard to revising their statement to be more neutral and why that is critical to the positive effects of self-disclosure.

Additional research is needed with regard to the clinical utility of self-disclosure. Our clinical anecdotal data demonstrate significant benefit, but further examination of the client and listener perspective in terms of both perceptions and physiological responses is needed to better understand the potential benefits of self-disclosure. The relationship between the use of self-disclosure and the impact of stuttering on overall quality of life and the communication attitude of the person who stutters is also important to explore. The present study focused on adults, as have previous studies, but future studies should examine the use of self-disclosure by school-age children and adolescents who stutter.

Additional Considerations

The present study design was constructed to differ from that of other studies of listeners' perceptions of persons who stutter. Using two questions to explore each personality characteristic (e.g., friendly vs. unfriendly) was not done as a validity check but rather to distinctly explore listeners' negative and positive perceptions of the personality characteristics of people who stutter. The bipolar adjective scale (1 = *unfriendly*; 5 = *friendly*) used in past research can potentially be viewed as subjective and relative to the participant's internal friendliness scale, but asking participants to select one video over the other or indicate no difference places the variables on the same internal scale. The wording of the response choices (i.e., *Tape 1, Tape 2, No difference*) in the current survey was written such that the participants would not be forced to indicate a preference of one video or speaker over the other but would have the opportunity to state that they did not perceive a difference between the two videos or speakers.

In the present study, participants viewed one of 12 possible video combinations (e.g., male self-disclosure plus female self-disclosure). Therefore, some participants viewed two videos that contained a self-disclosure statement, other participants watched two videos that did not have a self-disclosure statement, and other participants watched a video that contained a self-disclosure statement and one that did not contain a self-disclosure statement. In this case, selecting the *no difference* response between the two speakers was provided as a verification of the absence of differences.

Although the results of the present study have important clinical implications for speech-language pathologists and their clients who stutter, these findings should be interpreted with consideration of the limitations. First, there are inherent differences between viewing a video and interacting with a person who stutters in a face-to-face setting. The most critical difference is the lack of interaction both verbally and nonverbally. The observation is passive when watching a video but certainly would be active when standing in front of someone and sharing a communicative exchange. Second, the passage readings were designed to be

neutral but may have been so neutral that they detracted from the participant paying careful attention to differences between the two videos. Future studies should shift from this sterile video format to analysis of real-time use of self-disclosure and how it influences listeners' perceptions during authentic exchanges.

Conclusion

Results from the present study suggest that observers' perceptions of persons who stutter were positively affected by the use of a self-disclosure statement. Observers were more likely to rate both male and female speakers who stutter positively and to make more positive comments about the speaker when a self-disclosure statement was present than when it was not. The use of self-disclosure also was affected by gender bias. Observers were more likely to rate male speakers more positively than female speakers, regardless of the whether there was a self-disclosure statement. Taken together, these results encourage the use of self-disclosure for adults who stutter as a clinical tool to positively influence the perceptions of listeners. Results further suggest that female speakers who stutter may be uniquely vulnerable to being perceived negatively given their membership in a stigmatized gender group coupled with the stigmatization of stuttering.

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References

Alm, P. A. (2014). Stuttering in relation to anxiety, temperament, and personality: Review and analysis with focus on causality. *Journal of Fluency Disorders, 40,* 5–21.

Ambrose, N. G., Yairi, E., & Cox, N. (1993). Genetic aspects of early childhood stuttering. *Journal of Speech, Language, and Hearing Research, 36,* 701–706.

Boyle, M. (2013). Assessment of stigma associated with stuttering: Development and evaluation of the self-stigma of stuttering scale (4S). *Journal of Speech, Language, and Hearing Research, 56,* 1517–1529.

Browne, K. (1999). *Divided labours: An evolutionary view of women at work*. New Haven, CT: Yale University Press.

Byrd, C. T., Croft, R., Gkalitsiou, Z., & McGill, M. (2016). *Self-disclosure in clinical practice with persons who stutter: Is it ok to say I'm sorry?* Manuscript submitted for publication.

Coleman, J. M., Brunell, A. B., & Haugen, I. M. (2015). Multiple forms of prejudice: How gender and disability stereotypes influence judgments of disabled women and men. *Current Psychology, 34,* 177–189.

Collins, C. R., & Blood, G. W. (1990). Acknowledgment and severity of stuttering as factors influencing nonstutterers' perceptions of stutterers. *Journal of Speech and Hearing Disorders, 55,* 75–81.

Corrigan, P. W., Kosyluk, K. A., & Rüsch, N. (2013). Reducing self-stigma by coming out proud. *American Journal of Public Health, 103,* 794–800.

Corrigan, P. W., & Rao, D. (2012). On the self-stigma of mental illness: Stages, disclosure, and strategies for change. *Canadian Journal of Psychiatry, 57,* 464–469.

Crowe, T. A., & Cooper, E. B. (1977). Parental attitudes toward and knowledge of stuttering. *Journal of Communications Disorders, 10,* 343–357.

Daniels, D. E., Panico, J., & Sudholt, J. (2011). Perceptions of university instructors toward students who stutter: A quantitative and qualitative approach. *Journal of Communication Disorders, 44,* 631–639.

Dorsey, M., & Guenther, R. K. (2000). Attitudes of professors and students toward college students who stutter. *Journal of Fluency Disorders, 25,* 77–83.

Dworzynski, K., Remington, A., Rijsdijk, R., Howell, P., & Plomin, R. (2007). Genetic etiology in cases of recovered and persistent stuttering in an unselected, longitudinal sample of young twins. *American Journal of Speech-Language Pathology, 16,* 169–178.

Fairbanks, G. (1960). *Voice and articulation drillbook* (2nd ed.). New York, NY: Harper & Row.

Franck, A. L., Jackson, R. A., Pimentel, J. T., & Greenwood, G. S. (2003). School-age-children's perceptions of a person who stutters. *Journal of Fluency Disorders, 28,* 1–15.

Goldberg, S. (1993). *Why men rule: A theory of male dominance*. Chicago, IL: Open Court.

Healey, E. C., Gabel, R. M., Daniels, D. E., & Kawai, N. (2007). The effects of self-disclosure and non self-disclosure of stuttering on listeners' perceptions of a person who stutters. *Journal of Fluency Disorders, 32,* 51–69.

Hurst, M. A., & Cooper, E. B. (1983). Vocational rehabilitation counselors' attitudes toward stuttering. *Journal of Fluency Disorders, 8,* 13–27.

Johnson, J. K. (2008). The visualization of the twisted tongue: Portrayals of stuttering in film, television, and comic books. *Journal of Popular Culture, 41,* 245–261.

Johnson, S. K., Murphy, S. E., Zewdie, S., & Reichard, R. J. (2008). The strong, sensitive type: Effects of gender stereotypes and leadership prototypes on the evaluation of male and female leaders. *Organizational Behavior and Human Decision Processes, 106,* 39–60.

Lass, N. J., Ruscello, D. M., Pannbacker, M. D., Schmitt, J. F., & Everly-Myers, D. S. (1989). Speech-language pathologists' perceptions of child and adult female and male stutterers. *Journal of Fluency Disorders, 14,* 127–134.

Lass, N. J., Ruscello, D. M., Schmitt, J. F., Pannbacker, M. D., Orlando, M. B., Dean, K. A., . . . Bradshaw, K. H. (1992). Teachers' perceptions of stutterers. *Language, Speech, and Hearing Services in Schools, 23,* 78–81.

Lee, K., & Manning, W. (2010). Listener responses according to stuttering self- acknowledgment and modification. *Journal of Fluency Disorders, 35,* 110–122.

Lincoln, M., & Bricker-Katz, G. (2008). Self-disclosure of stuttering at the beginning of interactions may improve listeners' perceptions of people who stutter. *Evidence-Based Communication Assessment and Intervention, 2,* 87–89.

MacKinnon, S. P., Hall, S., & MacIntyre, P. D. (2007). Origins of the stuttering stereotype: Stereotype formation through anchoring-adjustment. *Journal of Fluency Disorders, 32,* 297–309.

Riley, G. (2009). *The stuttering severity instrument for adults and children* (4th ed.). Austin, TX: PRO-ED.

Ruscello, D. M., Lass, N. J., Schmitt, J. F., & Pannbacker, M. D. (1994). Special educators' perceptions of stutterers. *Journal of Fluency Disorders, 19,* 125–132.

Sheehan, J. B. (1975). Conflict theory and avoidance-reduction therapy. In J. Eisenson (Ed.), *Stuttering: A second symposium* (pp. 97–98). New York: Harper & Row.

Silverman, E. M. (1982). Speech-language clinicians' and university students' impressions of women and girls who stutter. *Journal of Fluency Disorders, 7,* 469–478.

Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69,* 797–811.

Turnbaugh, K. R., Guitar, B. E., & Hoffman, P. R. (1979). Speech clinicians' attribution of personality traits as a function of stuttering severity. *Journal of Speech and Hearing Research, 22,* 37–45.

Van Riper, C. (1982). *The nature of stuttering*. Englewood Cliffs, NJ: Prentice Hall.

White, P. A., & Collins, S. R. (1984). Stereotype formation by inference: A possible explanation for the "stutterer" stereotype. *Journal of Speech and Hearing Research, 27,* 567–570.

Woods, C. L., & Williams, D. E. (1971). Speech clinicians' conceptions of boys and men who stutter. *Journal of Speech and Hearing Disorders, 36,* 225–234.

Woods, C. L., & Williams, D. E. (1976). Traits attributed to stuttering and normally fluent males. *Journal of Speech and Hearing Research, 19,* 267–278.

Yairi, E., & Williams, D. E. (1970). Speech clinicians' stereotypes of elementary-school boys who stutter. *Journal of Communication Disorders, 3,* 161–170.

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Survey Used for Data Collection

Part I

For each of the following questions please circle the choice (*Tape 1, Tape 2*, or *No difference*) you feel is the best answer.
Tape 1 refers to the first video clip you viewed.
Tape 2 refers to the second video clip you viewed.

1. In which tape do you think the speaker appears friendlier?
   Tape 1 Tape 2 No difference
2. In which tape do you think the speaker appears more outgoing?
   Tape 1 Tape 2 No difference
3. In which tape do you think the speaker appears more intelligent?
   Tape 1 Tape 2 No difference
4. In which tape do you think the speaker appears more confident?
   Tape 1 Tape 2 No difference
5. In which tape did you feel more distracted while trying to listen to the monologue?
   Tape 1 Tape 2 No difference
6. In which tape do you think the speaker appears more unfriendly?
   Tape 1 Tape 2 No difference
7. In which tape do you think the speaker appears more shy?
   Tape 1 Tape 2 No difference
8. In which tape do you think the speaker appears more unintelligent?
   Tape 1 Tape 2 No difference
9. In which tape do you think the speaker appears more insecure?
   Tape 1 Tape 2 No difference
10. In which tape did you feel less distracted while trying to listen to the monologue?
    Tape 1 Tape 2 No difference

Part II

For each of the following questions, please provide a written answer to the best of your ability.

1. Have you ever encountered someone who stutters?
2. Have you ever personally known someone who stutters (other than yourself)?
3. If you answered **yes** to question 2, how long have you known this person (years)?
4. If you answered **yes** to question 2, how well do you know this person?

   Not well at all 1—2—3—4—5—6—7 *Very well*

5. Have you ever stuttered?
6. If you answered **yes** to question 5, do you still stutter?
7. If you answered **yes** to question 5, how long have you stuttered?
8. If you answered **yes** to question 5, do you ever self-disclose about your stuttering? (Example of self-disclosure: *Just so you know I sometimes stutter, so you might hear me repeat some words or sounds*).
9. Have you ever had any formal experiences with stuttering (e.g., taking a class about stuttering)? Please describe.
10. Have you ever had any informal experiences with stuttering (e.g., reading a book about stuttering; watching a movie about stuttering, such as *The King's Speech*)? Please describe.
11. Please provide 1–3 comments about your perceptions of **the speaker** in each tape in the boxes provided:

Tape 1	Tape 2

12. Please provide 1–3 comments about your perceptions of **the speaker's communication** in each tape in the boxes provided:

Tape 1	Tape 2

13. If you have any additional comments, please feel free to write them in the space below (you may continue on to the back of this page if you need more space).