

**UNIVERSITY OF MARYLAND
HEARING AND SPEECH CLINIC**
College Park, MD 20742
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Speech Fluency Evaluation

Name:	Date of Birth:
Address:	Age:
	Gender:
Telephone:	Graduate Clinician: Melissa D. Stockbridge, M.Sc.
Date of Evaluation: June XX, 2014	Clinical Supervisor: Vivian Sisskin, M.S., CCC- SLP, BCS-F

Reason for referral

X, a XX year-old male, was evaluated for speech disfluency at the University of Maryland Hearing and Speech Clinic on June 25, 2014 following concerns about his disfluency affecting his professional advancement and specifically his work in stand-up comedy. He received encouragement from family members to seek support. X never has been evaluated or treated for speech disfluency.

Pertinent history

Information about X's early developmental, medical, and communication history was obtained through interview during the evaluation. X reported typical developmental milestones according to age-appropriate norms, with an early emergence of reading ability (3-4 years old). His medical history is significant for a tongue surgery when X was 7 years old (additional information about this procedure was not provided). He received speech and language services during elementary school to address an articulation disorder. X currently has no developmental or other medical diagnoses, and is taking no medications.

X reported having experienced speech disfluency his entire life, with a relatively steady profile of severity over time. He has no known family history of disfluency or other speech-language disorders. X reported that his fluency improves when he can plan his speech in advance, and when he can remain calm and slow his speaking rate when speaking. He identified repetition of sounds and words as examples of disfluency in his speech, and stated that these become more frequent when he is excited or nervous.

X described the effect of his speech on his social and academic participation. During elementary school, X reported little difficulty with academic participation due to the advanced nature of his reading skills. However, during middle school, he reported participating less and having more social difficulty as a result of his speech. Today, he reported that he is not extroverted, but feels comfortable communicating, particularly with family and friends. He noted that, while familiar listeners are able to understand him well, he is concerned about the effect his disfluency has on unfamiliar listeners and first impressions. While he acknowledges his disfluency personally, he

reports not disclosing his difficulty with speech. He described his disfluency as a moderate concern in his life, with a fair level of motivation to improve his speech.

X is a busy sophomore at the University of Maryland, majoring in biology and working for Campus Recreation Services. He performs with a stand-up comedy organization on campus. He reported modest formal knowledge about disfluency and stuttering, and came to the evaluation seeking information on prevention and control of his disfluency.

Assessment Results

Test Behavior

X was cooperative and friendly throughout the session. Test results and observations are felt to be an accurate reflection of X’s fluency.

Test Results

Spontaneous speech sample

Total words in sample: 558

Total syllables in sample: 715

Frequency of Disfluency Types

Within-Word Disfluencies (Stuttering-like Disfluencies)	#	% of disfl.	% of sample	Between-Word Disfluencies (Other Disfluencies)	#	Ratio to 100 words
SSR – Sound/Syllable Repetitions	84	76%	16%	PR – Phrase repetition	24	4
WWR – Single syllable whole word repetition	22	20%	4%	INT – Interjection (filler word/phrase)	105	19
A-Sp – Audible sound prolongation	3	3%	<1%	REV – Revision	25	5
BI – Block (marked by signs of effort/strain)	1	<1%	<1%	MWWR – Multisyllabic whole word repetition	0	0
TOTAL	110		20%	TOTAL	154	28%

Additional Speech Sample Measures

Average number of units per repetitions (SSR)	1.1
Average number of units per repetitions (WWR)	1.1
Speech rate (WPM)	111
Average Speech Naturalness Rating (of 2 observers) Scale 1-9	7

Stuttering Severity Instrument – Fourth Edition (SSI-4)

Task	Task Performance	Task Score
Speaking	15% stuttered syllables (SL)	8
Reading	1% stuttered syllables (SL)	2
Duration (average of longest three stuttered events)	4.1 seconds	10
Physical Concomitants		2
Total Score: 22		
Percentile Rank: 41-60		
Severity Rating: Moderate		

Self-assessment measures

Overall Assessment of the Speaker's Experience of Stuttering (OASES)

	A Points	B Items Completed	A/B = Impact Score (Range from least to most severe = 1 to 5)	Rating
Section I: <i>General Information</i>	56	17	3.3	Moderate/Severe
Section II: <i>Your Reactions to Stuttering</i>	71	30	2.4	Moderate
Section III: <i>Communication in Daily Situations</i>	51	24	2.1	Mild/Moderate
Section IV: <i>Quality of Life</i>	43	25	1.7	Mild/Moderate
Overall (Total)	221	96	2.3	Moderate

Locus of Control Behavioral Scale (LOC)

Items	Total Score (0 = Strongly Disagree to 5 = Strongly Agree)
Internal control items (Item #: 1, 5, 7, 8, 13, 15, 16)	13/7 = 1.9
External control items (Item #: 2, 3, 4, 6, 9, 10, 11, 12, 14, 17)	21/10 = 2.1

Client's Perception of Severity

	Raw Score (client ranking)	Mean (1 = Mild/One/Bottom to 5 = Very Severe/Every/Top)
Frequency and length of communication difficulties	2	Moderate

Number of speech situations in which communication difficulties are a problem	3-4	About half of the time to Most situations
Importance of communication difficulties in list of personal problems	3	In the middle
Average Rating: 2.8		

Personal Report of Communication Apprehension (PRCA-24)

Area	Score	Interpretation
Group Discussion	20	High
Interpersonal	16	Average
Meetings	19	Average
Public Speaking	16	Average
Total	71	Average

Skill Areas

Fluency

X’s fluency was assessed using both direct and self-reported measures. The following fluency measures are based on a 7:20 minute sample of X’s spontaneous speech containing 558 intended words. Stuttering-like disfluencies (SLDs) are most often associated with a disorder of stuttering. SLDs were noted on approximately 20% of intended words in the spontaneous speech sample. X’s oral reading was marked by 3% disfluency. X’s speech was characterized most frequently by sound and syllable repetitions. Single syllable whole word repetitions were less common. Prolongations and blocks were present, but rare in the sample. . On average, X made a single repetition of each sound or word, rarely making more than one throughout the sample.

Other disfluencies (ODs) include phrase repetitions, sentence revisions, and interjections. While ODs are found in the speech of typical speakers, they may reflect efforts to avoid stuttering-like disfluencies. Interjections were the most common OD found in X’s speech sample at a rate of 19 per 100 words. Phrase repetitions and sentence revisions were present, but at a much lower rate.

Severity

The Stuttering Severity Instrument – Fourth Edition (SSI-4) measures the frequency and duration of disfluencies in spontaneous speech and oral reading. It also includes physical concomitant behaviors that often accompany disfluency (e.g., loss of eye contact, tension, hand movements) in the severity measure. Frequency is measured examining the percent of stuttered syllables out of the total number of syllables in the sample. Duration is calculated using the average of the longest three disfluent events in the sample. Physical concomitants are rated by the two observing clinicians and averaged. On the SSI-4, X received a total score of 26, which corresponds to a percentile ranking of 41-60 and is characterized as “moderately” disfluent. During the spontaneous speech and oral reading samples, secondary behaviors were uncommon, but included hand tapping and blinking. X’s speech naturalness was rated a 7 on a scale of 1-9

(one being the most natural, nine being the least natural) as judged by two independent raters. Inconsistent “mumbling” or imprecise articulation likely affected this naturalness rating during speech. It was not clear whether this was related to disfluency or an independent speech characteristic.

Speech rate

During a 4-minute spontaneous language sample, X’s average rate of speech was 111 intended words per minute. The average rate of speech for adult speakers is 270 words per minutes. This suggests that the presence of disfluencies may affect speaking efficiency.

Self-assessment

X completed four separate measures of self-assessment during the evaluation. The Overall Assessment of the Speaker’s Experience of Stuttering (OASES) was administered to assess X’s attitudes and knowledge related to stuttering. X received an overall impact score of 2.3, indicating that his stuttering has a “moderate” impact on his daily communication and quality of life. Individual subtests showed that X’s overall feelings about stuttering (Section I) and reactions to his own stuttering (Section II) were associated with the highest impact on his life. X reported knowing *very little* about stuttering, and having relatively *neutral to somewhat negative* feelings about his own speech. Communication in daily situations was *difficult* under time constraints or in front of large groups, but otherwise was *not very difficult* or *not difficult at all*. While X reported that his speech had *a little* negative influence on his quality of life overall, he reported *no effect* on close relationships, overall outlook and enthusiasm for life.

The Locus of Control Behavioral Scale (LOC) was used to assess X’s perception of factors within his control (internal locus) and factors that he has no control over (external locus). B’s scores for internal (1.9) and external (2.1) locus of control were fairly similar, with a slightly higher score in external control items. This would indicate that X does not have a strong tendency either way in terms of how much control he has over events in his life.

The Client’s Perception of Severity (CPS) is a three-question survey of stuttering impact. It was collected in order to assess X’s perception of the disfluency problem. The CPS uses a 1-5 scale, where 1 indicates the least impact and 5 indicates the most impact. X’s average perception of severity of his stuttering across questions was a 2.8 out of 5. This indicates an overall moderate perceived severity.

Finally, the Personal Report of Communication Apprehension (PRCA-24) is a 24-item instrument used to assess X’s feelings about communicating with other people. The PRCA-24 uses a 1-5 scale, where 1 indicates strong agreement with the statement and 5 indicates strong disagreement. The responses are then used to calculate scores in four areas of communication interaction: group discussions, interpersonal communication, meetings, and public speaking. Overall, X’s communication apprehension is average. X reported average levels of communication apprehension in interpersonal communications, meetings, and public speaking, with high apprehension in group discussion contexts.

Summary and Impressions

X's speech fluency was assessed using standardized and non-standardized measures based on direct observation and self-report. The type, frequency, and duration of disfluencies, and presence of concomitant behaviors (e.g., loss of eye contact) indicate a moderate stuttering disorder. This severity level is corroborated by X's self-reported life impact.. He reported that stuttering was in the middle of a hypothetical list of his life concerns, and that he initiated the evaluation because he wanted information on preventing and controlling disfluency. According to self-report, X's stuttering severity has remained relatively constant over the course of his life, and is not significantly affected by lifestyle changes. He reported a renewed interest in receiving help due to his performance as a stand-up comedian.

Recommendations

It is recommended that X receive speech therapy to improve speech fluency and confidence as a communicator. Group therapy for stuttering would be a good fit for X, as this will provide support needed for change. X was provided with information about speech therapy services at the University of Maryland Hearing and Speech Clinic for the Fall, 2014 semester. He was also provided with resources to explore on his own:

- The Stuttering Homepage <http://www.mnsu.edu/comdis/kuster/>
- National Stuttering Association <http://www.westutter.org/>
- The Stuttering Foundation <http://www.stutteringhelp.org/>

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Appendix I: Speech sample transcript
Diagnostic transcript Interview

Um (INT) I reme- (SSR-1) (PR-1) eh (INT) ah (INT) I remember a- (SSR-1) at some point during elementary it (REV) uh (INT) the school (REV), eh (INT) ah (INT) it was like (INT) a pro- (SSR-1) uh (INT) uh (INT) problem on a couple specific letters. I don't remember exactly wha- (SSR-1) uh (INT) what kind, so (INT) i- (SSR-1) it (REV) uh (INT) so (INT) I know in scho- (SSR-1) (PR-1) uh (INT) in school I did see (WWR-1) uh (INT) see someone occasionally to le- (SSR-1) and (REV) for pronunciation and stuff. (words: 35; syllables: 59) 17:48 – 18:15 :27

I just say its uh (INT) a slight s- (SSR-1) stutter. (words: 7; syllables: 8)

Yeah, I just don't know what else to call it. (words: 10; syllables: 10)

Yeah, I re- (SSR-1) Yeah, I re- (SSR-1) (PR-2) I read in cl- (SSR-1) (PR-1) uh (INT) in class. It was easier when (WWR-1) uh (INT) when I was younger because, since I learned to re- (SSR-1) read before most of my class m- (SSR-1) mates, I was at a more advanced reading l- (SSR-1) level, so the words were just simpler. But (WWR-1) eh (INT) eh (INT) but then a-a- (SSR-2) as I got to, I want to say (INT), mi-mi- (SSR-2) uh (INT) middle sch- (SSR-1) school, the gap wasn't as large. So (INT), I would come across so- (SSR-1) uh (INT) some words that were unfamiliar, and I would kind of (INT) trip up on those. (words: 69; syllables: 82) 18:50 – 19:21 :31

Um (INT), ye-ye- (SSR-2) um (INT), yeah, I didn't kn- (SSR-1) know. Its like after your (REV) It was somewhere in (WWR-1) i- (SSR-1) in middle s- (SSR-1) (PR-1) in middle school. I just started volunteering le- (SSR-1) uh (INT) less and not wanting to re- (SSR-1) uh (INT) read as much 'cause I did n- (SSR-1) (PR-1) I did notice that when I sli- (SSR-1) slipped up, um (INT) pe- (SSR-1) uh (INT) um (INT) people were giggling, and (WWR-1) uh (INT) an- (SSR-1) and it just made me feel uncomfortable. (words: 41; syllables: 56) 19:29 – 19:59 :30

Pretty much. I m- (SSR-1) (PR-1) I mean (INT), I'm not the kind of that can just walk up to a stranger and start a conversation, but I ca- (SSR-1) (PR-1) uh (INT) but I can talk to pe- (SSR-1) (PR-1) uh (INT) to people I kn- (SSR-1) know and (PR-1) I- (SSR-1) I know and if (PR-1) and i- (SSR-1) if I do end up talking to a stranger, I can generally h- (SSR-1) hold conversation fairly well. (words: 43; syllables: 58) 20:07 – 20:24 :17

I mean (INT) (PR-1), I-I- (SSR-2) I mean (INT) I acknowledge it, but i-i- (SSR-2) (PR-1) uh (INT) but I don't really go out and te- (SSR-1) (REV) and really tell people about it. (words: 14; syllables: 19)

Um (INT), pr- (REV) I don't thi- (REV) I wouldn't say I think about it on a daily basis or in every conversation, but I definitely do th-th- (SSR-2) um (INT) think about it, e- (SSR-1) especially now that I'm d- (SSR-1) uh (INT) doing stand-up comedy and i- (SSR-1) so (INT) it's like (INT) when I'm go- (REV) eh (INT) when I'm going over my se- (SSR-1) (PR-1) my sets and I notice I- (WWR-1) I stutter or slip up a (WWR-1) a bit, I an- (SSR-1) (REV) i- (SSR-1) it d- (SSR-1) (REV) uh (INT) I do keep track of it in m- (SSR-1) (PR-1) in my mind. (words: 55; syllables: 78) 20:48 – 21:16 :28

Um^(INT), I might ha-^(SSR-1)_(PR-1) I might have seen him 'cause I know there's someone in Off the^(BL) Wall who ha-^(REV) who does have a s-^(SSR-1) stutter, and he's really good about it. He actually makes it part of his act. (words: 33; syllables: 39)

I don't remember his name. (words: 5; syllables: 7)

Ye-^(SSR-1) Yeah I know. (words: 3; syllables: 3)

I feel the^(WWR-1) the w-^(SSR-1) worst th-^(SSR-1) uh^(INT) thing about it is pr-^(SSR-1) uh^(INT) probably th-^(SSR-1) ah^(INT) uh^(INT) that makes me fe-^(SSR-1) it-^(REV) feel that I'm not coming o-^(SSR-1) off how I want to be. (words: 23; syllables: 28)

It^(WWR-1) it^(REV) because^(REV) I feel like when I stutter I become se-^(SSR-1) uh^(INT) self-conscious a-^(SSR-1) about it. So^(INT), while I^(WWR-1) I^(REV) so^(INT) I don't know how much uh^(INT) people I talk to re-^(SSR-1) uh^(INT) recognize it or think about it a lot, but I thinks to me^(REV) it sticks out t-^(SSR-1) uh^(INT) to me beca-^(SSR-1) uh^(INT) uh^(INT) because it makes me f-^(SSR-1) eh^(INT) feel that I'm giving off a different vibe or not conveying wha-^(SSR-1) eh^(INT) what I want to convey. (words: 52; syllables: 67) 22:42 – 23:10 :28

Uh^(INT), uh^(INT), I don't know. Like^(INT), I'm just not sure how o-^(SSR-1) often people I talk to l-^(SSR-1) uh^(INT) like^(INT) it sticks out to them as much a-a-^(SSR-2) as to me. So^(INT) i-^(SSR-1)_(PR-1) so^(INT) its like^(INT) I'll n-^(SSR-1) notice s^(A-SP) it a-^(SSR-1) and I'm not sure if^(WWR-1) i-i-^(SSR-2) if they're just paying attention to uh^(INT) to what I'm talking about or they're a-^(SSR-1) also thinking like^(INT) "oh, he^(WWR-1) -e^(A-SP)_(PR-1) oh, he stutters a bit." It^(REV) uh^(INT) and how much it really distracts. (words: 55; syllables: 68) 23:14 – 23:40 :26

Um^(INT) I^(WWR-1) II^(A-SP) mean^(INT) I know^(PR-1) uh^(INT) I know wi-i-^(SSR-2) like^(INT) with m-^(SSR-1) my^(REV) with people like^(INT) ah^(INT) I talk to m-^(SSR-1) more like^(INT) th-e-^(SSR-2) they know me, but II^(WWR-2) I'm just kind of concerned with first impressions. (words: 20; syllables: 24)

Um^(INT) well^(INT) eh^(INT) eh^(INT) well^(INT) today I think it's the fact that pe-^(SSR-1) uh^(INT) people I talk to are more mature. They don-^(SSR-1)_(PR-1) eh^(INT) eh^(INT), you know^(INT), they don't laugh and giggle. Or eh^(INT)_(REV) and^(WWR-1) eh^(INT) and generally they^(WWR-1) eh^(INT) they don't even point i-^(PR-1) they don't even point it out, eh^(INT) whi-^(SSR-1) which, I mean^(INT), is good and bad. I like the fact I'm^(REV) uh^(INT) eh^(INT) that people aren't uh^(INT) laughing at it anymore, but at the sa-^(SSR-1)_(PR-1) uh^(INT) but at the same time, growing up I^(WWR-1) I WOU-^(SSR-1)₁^(REV) I could tell people noticed it because eh^(INT) they did that, but now^(PR-1) um^(INT) uh^(INT) but now it's like^(INT) II^(WWR-2) when I first meet^(WWR-1) eh^(INT) meet someone they won't tell^(WWR-1) uh^(INT) tell me they know^(REV) uh^(INT) i-i-^(SSR-2) if they notice it and if they i-i-i-^(SSR-3) and if they^(PR-2) eh^(INT)_(REV) and if it chan-^(SSR-1)_(REV) a-^(SSR-1) and if they're paying attention to that a^(WWR-1) a lot because they wanna be polite and mature about it. (words: 93; syllables: 109) 24:15 – 25:08 :53

558 words; syllables 715 – 443/4:00 = 110.75 wpm

Reading

Part of the nation's future oil supply may lie within some extraordinary organisms that have been called a "third form of life." A Colorado State University microbiologist reports obtaining pure hydrocarbon that could be converted to gasoline or lubricating oils from several of the organisms. The oily substance is "energy-rich, definitely a lubricant, combustible, and isn't soluble in water," says the researcher, Thomas **eh** ^(INT) Tornabene. And the oil is free of air-polluting sulfur. **This** ^(REV) **uh** ^(INT) The discovery now is only a laboratory phenomenon; any commercial application is some time away. "Right now we are concentrating on the organisms' basic **mech-** ^(SSR-1) mechanisms," Tornabene says. "We have two genetic engineers looking at **th-** ^(SSR-1) them to find ways of getting **th-** ^(SSR-1) them to grow faster and to pump oil faster."

Syllables: 224

Automatic speech

I pledge allegiance to the flag of the United States of America, and to the republic for which it stands, one nation, under God, indivisible with liberty and justice for all.