


HEALTH PROFESSIONAL'S PERCEPTION OF DOMINANT PERSONALITY TRAITS OF STAMMERERS

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ABSTRACT

Background and Aim: Allied health professionals play an important role in therapy of stammering. So, this study was to assess the perception of health professionals regarding different dominant personality traits of stammerers as they devise the therapy and counselling techniques accordingly.

Methodology: This observational study was conducted at the department of Developmental and Behavioral Pediatrics; Children Hospital Lahore. The 25 bipolar semantic differential scales developed by Woods and William, was used in this study. A total of 100 health professionals were given the questionnaire. The health professionals involved in this study were Speech and Language Pathologists, Dev. Pediatricians, Occupational Therapists, Physiotherapists, Clinical Psychologists, Special Educationist and Nurses.

Results: Sample size of this study was 100. Percentage of females was greater than males (88% vs 12%). Results showed that majority of the participants perceive stammerers as nervous, shy, cooperative, friendly, talkative, sensitive, anxious, fearful, perfectionist, intelligent, emotional, aggressive, self-conscious, self-pitying, guarded, introvert.

Conclusion: In this study many health professionals considered that there are many negative personality traits that are dominant among stammerers that had to be addressed seriously. Along with negative traits, there are some positive dominant traits of stammerers according health professionals' perception.

Keywords: *Stammerers, dysphemia, perception, stuttering, dominant personality traits, bipolar semantic differential scale.*

Introduction

Stammering also knowns as Stuttering, and dysphemia, is a spectrum of diseases with multiple clinical manifestations such as frequent out of control repetitions of words and prolongation and blocks as well as speech problems¹. There are some other factors like cognition and language issues that co-relate in these people who stammer².

The prevalence rate of stuttering ranges from 0.9% to 5.6%, depending on the age³. According to DSM-5, there are certain criteria that must be met:

1. Issues in the normal fluency and time patterning of speech that are not appropriate for the person's age and language skills, consistent over time, and are representative by more frequent and marked occurrences of one (or more) of the following⁴.

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2. Syllable and Sound repetitions.
3. Prolongations of sounds and consonants as well as vowels.
4. Words with the pause (e.g., broken words).
5. Audible or silent blocking (filled or unfilled pauses in speech).
6. Circumlocutions (word substitutions to avoid problematic words).
7. Words produced with a physical exertion.
8. Monosyllabic whole-word repetitions (e.g., "I-I-I-I see him")⁵.
9. The disturbances cause stress about speaking and produce ineffective communication, social participation, or academic or professional performance, individually or in any combination.
10. Symptoms presented is in the early developmental period.
11. An unattributable to a motor-speech or sensory deficit, disturbed fluency associated with neurological injury (e.g., stroke, tumor, trauma), or any other medical problem and is not better explained by another mental disorder⁶.

There are three types of stuttering based on their causes i-e

- Developmental Stuttering
- Acquired or Neurogenic Stuttering
- Psychogenic Stuttering

Developmental stuttering occurs in early years of life and continuing in at least 20% of affected children. The mean onset of stuttering is 30 months. It starts to develop in children while they are still learning speech and language skills; presents as a disfluency in the timing, patterning, and rhythm of speech⁷. Acquired organic or neurological stuttering occurs suddenly as a result of trauma to the brain that is caused, for example, by stroke, auto accident, projectile wound, brain disease, or intake of drugs⁸. Usually, this type of fluency problem is not associated with past history of stuttering. Psychogenic stuttering is rare and reportedly occurs as a result an emotionally or psychological traumatic experience⁹.

Expert health care professionals may be able to perform real- time analysis of this disturbed fluency counts, using charts and forms that are prepared on the basis of clinic- specific methods.¹⁰ Analysis of the forms can also be completed later on by reviewing recorded speech samples obtained during the evaluation. It includes sound production, receptive and expressive language development, pragmatic language, voice, hearing, and oral-motor function/structure¹¹. Some formal assessment measures for stuttering are:

- Stuttering Severity Instrument-4 (SSI-4)
- 25 Bipolar Semantic Differential Scale
- Test of Childhood Stuttering (TOCS)
- Modified Scale of Communication Attitudes (S-24)
- Communication Inventory
- Overall Assessment of the Speaker's Experience of Stuttering-Teenager (OASES-T).

Generally, treatment approaches will depend most importantly on the age of individual who stutters; varying methods are used for young children who are just developing problem than for adolescents and adults who had have fluency problems¹².

Types of treatment available for stuttering are:

- Fluency shaping therapy
- Stuttering modification therapy
- Integration of fluency shaping and stuttering modification therapies
- Electronic devices

- Parent directed intervention

Biological and environmental factors have played more role in making a personality that can be explained all the behaviors, cognition and emotions. Personality, a specific way of thinking, feeling, and behaving. Personality covers moods, attitudes, and opinions and is most clearly expressed in social interactions with other people. Both inherent and acquired behavioral characteristics, that distinguish one person from another and that can be observed in in people's relations to the environment and to the social group¹³.

Young Adults who are facing this stuttering problem are often subject to negative perceptions and biasness. When the traits were compared people with stammering were labeled as more depressed, obedient and not secure in their personality and demand more attention in daily activities¹⁴. These negative social impressions are spread, across cultures, and affect children, adolescents, and adults. These social impressions of children who stutter are present among a diverse range of listeners, including teachers, and students¹⁵. Negative behaviors towards speech and communication were seen in young persons than their peers. These negative behaviors imposed a very profound effects on the intellect and learning abilities of the persons who stammers. These individuals faced a more societal pressure because of the communication issues¹⁶.

Perceptions about speaking and behaviors of the people wo stammers were evaluated in this study¹⁷. Social and intellectual abilities were evaluated in the study and discuss the negative impressions among stammerers¹⁸. when speaking abilities evaluated professionals give remarks those persons who stammerers were more used blocks word gap and more confused speech and the rate and fluency was disturbed¹⁹. health professionals observe the stammerers and evaluate the dominant type traits and that were categorized as more confused, more conscious, less speaking abilities as compared to normal person²⁰. Persons who stammerer also showed fewer intellectual abilities, more introverted and less socially interactive²¹.

Speech perception is the process by which spoken language is heard, interpreted, and understood. The rationale of the study was how the listeners or the health professional manage to perceive words across a wide range of conditions, as the sound of a word can vary widely according to words that surround it and the tempo of the speech, as well as, the physical characteristics, accent, tone, and mood of the speaker.

This study was designed to assess the perception of health professionals regarding different personality traits of stammerers.

Methodology

Materials and Method

An observational study was conducted in children hospital Lahore. Total sample size was 100 health professionals. Consecutive sampling technique was used. The 25 bipolar scales were used in this study. The scale was constructed by selecting 25 traits which speech clinicians had used most frequently to describe stutterers. The personality traits used were paired with the opposite chosen from dictionary to generate 25 assigned questions with nearly equal interval between traits. The traits were captioned using Likert scale.

Inclusive Criteria

Health professionals (i.e. Developmental Pediatrician, Speech and Language Pathologists, Occupational Therapist, Clinical Psychologists, Special Educationists, Nurses) who have experience with stammerers.

- Both males and female genders are included.

Exclusive Criteria

Health Professionals whose working experience is less than 3 years will be excluded.

Data Collection Procedure

25-item questionnaire was given to every participant. Health professionals received the assigned questionnaire for assessing the dominant personality traits among stammerers.

Results

An observational study was conducted to find out the health professional's perception of dominant personality traits of stammerers. The questionnaire was randomly filled by the 100 health professionals of different hospitals. Results show that among 100 participants, 46% fell in the age between 20-25 years, 33% in 26-30 years, 6% in 31-35 years and 15% were above 36 years.

Sr. No	Age Groups	Frequency	Percent
1	20 to 25 years	46	46
2	26 to 30 years	33	33
3	31 to 35 years	6	6
4	36 above	15	15
	Total	100	100

Table 01: Descriptive statistics for age of participants.

Out of 100 participants, 88% were female and 12% males. According to profession, 18% were SLPs, 16% Special Educationists and 2% were nurses. The number of participants in physiotherapy and occupational therapy profession were equal 15% of each. 34% of participants belonged to the Clinical psychologists and Dev. Pediatricians.

Personality Traits	Very much	Quite a bit	Slightly	Neutral	Slightly	Quite a bit	Very much	Total
Nervous vs Calm	26	33	23	2	8	6	2	100
Shy vs Bold	16	41	21	9	9	2	2	100
Cooperative vs non-Cooperative	22	25	20	15	8	5	5	100
Friendly vs Unfriendly	19	25	21	15	8	8	4	100
Talkative vs Reticent	6	15	21	18	12	19	9	100
Tense vs Relaxed	23	30	23	9	5	4	6	100
Sensitive vs Insensitive	34	36	16	3	3	4	4	100
Anxious vs Composed	23	40	21	1	4	7	4	100
Withdrawn vs Outgoing	10	27	23	17	15	4	4	100
Quiet vs Loud	10	32	20	13	11	7	7	100
Fearful vs Fearless	6	32	24	23	5	4	6	100
Perfectionist vs Careless	7	23	15	23	16	16	0	100
Intelligent vs Dull	20	24	16	32	4	2	2	100
Avoiding vs Approaching	17	24	31	10	8	6	4	100
Afraid vs Confident	16	23	29	14	8	6	4	100
Emotional vs Bland	29	26	26	10	6	1	2	100
Introvert vs Extrovert	18	32	21	15	5	4	5	100
Aggressive vs Passive	12	20	24	19	8	7	10	100
Daring vs Hesitant	3	13	19	20	12	18	15	100
Secure vs Insecure	3	10	14	24	18	20	11	100
Self-Conscious vs Self-Assured	23	27	24	13	4	7	2	100
Self-Satisfied vs Self-Pitying	5	14	15	19	15	22	10	100
Loner vs Joiner	11	26	28	16	8	8	3	100
Self-Derogatory vs Bragger	8	20	27	33	6	4	2	100
Guarded vs Open	11	20	28	21	10	6	4	100

Table 02: Frequency table showing the health professional's perception of dominant personality traits of stammerers.

Results show the frequency of personality traits of each 25 bipolar semantic differential scales of stammerers according to the perception of the health professionals. Seven-point Likert scale is used to present each pair of traits. The opposite traits interval was nearly equal and were captioned as neutral being in middle and very much, slightly and quite a bit on either side.

Discussion

The observational study was conducted to assess the perception of health professionals regarding different personality traits of stammerers in the period of six months after the approval of synopsis. The data was collected from 100 health professionals. Among health professionals, Developmental Pediatrician, Speech and Language Pathologists,

Occupational Therapist, Clinical Psychologists, Special Educationists and Nurses were included from developmental pediatrics department in Children Hospital and the school of Child Health Lahore. The 25 bipolar semantic differential scales were used in this study. This scale was customized by adding 25 personality traits which used most to elaborate the nature of stammerers.

The majority of the respondents of this study were aged below 30 years i.e 79% and 21% of these belonged to the age group above 30 years in which mostly were females (88%) and 12% were males.

Thirty four percent of the sample had obtained from clinical psychologist and developmental pediatricians, 18% from SLPs, 16% from Special Educationists. The number of participants in physiotherapy and occupational therapy profession were equal 15% of each.

In this study, participants were asked about dominant personality traits among stammerers. According to the health professional's perception of stammerers, 82% were reported as nervous and 16% calm and 2% showed neutrality in this trait. When respondents asked about the shyness results showed that 78% were shy and 13% were bold.

67% were reported as cooperative and 18% non-cooperative, 76% were reported as tense and 15% relaxed, 86% were reported as sensitive and 11% insensitive, 84% were reported as anxious and 15% composed, 60% were reported as withdrawn and 23% outgoing, 60% were reported as intelligent and 8% dull and 32% showed normal caliber, 35% were reported as daring and 45% hesitant, 62% were reported as fearful and 15% fearless and 23% showed neutrality in this trait, 45% were reported as perfectionist and 32% careless and 23% showed neutral in this trait, 34% were reported as self-satisfied and 47% were self-pitying. These findings matched to the findings of the study,²² according to which the persons who stammer was more conscious, nervous and had more social anxiety and face more social isolation and communication problems as related to behavioral issues.

This study indicated that 60% stammerers were intelligent and 32% were of normal caliber; and 45% were reported as perfectionists as compare to careless. According to another study in which the cognitive statements about stammerers were rated positively as compared to behavioral statements^{23,24}. In present study, 65% of stammerers were reported as friendly and 20% were unfriendly.

Next trait comparison was based on their talkative behavior 42% were reported as talkative and 40% reticent and 18% showed neutrality in this trait, 72% were reported as avoiding and 18% approaching, 68% were reported as afraid and 18% confident.

When health professionals were asked about the emotional sensitivity, 81% were reported as emotional and 9% bland, 56% were reported as aggressive and 25% passive, 27% were reported as secure and 49% were insecure, 74% were reported as self-conscious and 13% were self-assured. 71% were reported as introvert and 14% extrovert, 65% were reported as loner and 19% were joiner and 16% showed neutrality in this trait, 59% were reported as guarded and 20% were open and 21% showed normal behaviors in this trait. According to another study dominant personality traits are introverted, underconfident and stressed among stammerers similar to the current study²⁵.

Conclusion

The perception of health professionals regarding dominant personality traits among stammerers plays a paramount role in managing the behaviors of stammerers under different situations. Many health professionals considered that there are many negative traits that are dominant among stammerers that had to be addressed seriously. The present study also highlighted the issues regarding the factors that affect psychological well-being and social participation of stammerers. Along with negative personality traits, there are some positive dominant personality traits of stammerers according health professionals' perception.

AUTHORS' CONTRIBUTION:

The following authors have made substantial contributions to the manuscript as under:

Conception or Design: Amna Shahid, Ayesha Shahid

Acquisition, Analysis or Interpretation of Data: Amna Shahid, Ayesha Shahid

Manuscript Writing & Approval: Amna Shahid, Ayesha Shahid

All authors acknowledge their accountability for all facets of the research, ensuring that any concerns regarding the accuracy or integrity of the work are duly investigated and resolved.

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References

1. Anderson JD, Ofoe LC. The role of executive function in developmental stuttering. In *Seminars in speech and language* 2019 Aug (Vol. 40, No. 04, pp. 305-319). Thieme Medical Publishers.
2. Nippold MA. Stuttering and language ability in children: Questioning the connection. (2012)
3. Khatoon M, Mumtaz N, Saqulain G. Prevalence of stammering among internally displaced population in North Waziristan Agency. *Eastern Mediterranean Health Journal*. 2020 Aug 1;26(8).
4. Neumann K, Euler HA, Bosshardt HG, Cook S, Sandrieser P, Sommer M. The pathogenesis, assessment and treatment of speech fluency disorders. *Deutsches Ärzteblatt International*. 2017 Jun;114(22-23):383.
5. Nnamani A, Akabogu J, Otu MS, Ukoha E, Uloh-Bethels AC, Omile JC, Obiezu MN, Dike AE, Ike CV, Iyekekpolo OM. Cognitive behaviour language therapy for speech anxiety among stuttering school adolescents. *Journal of International Medical Research*. 2019 Jul;47(7):3109-14.
6. SheikhBahaei S, Maguire GA. Scientists, society, and stuttering. *International Journal of Clinical Practice*. 2020 Nov;74(11):e13678.
7. Onslow M, Kelly EM. Temperament and early stuttering intervention: Two perspectives. *Journal of fluency disorders*. 2020 Jun 1;64:105765.

8. Constantino CD, Eichorn N, Buder EH, Beck JG, Manning WH. The speaker's experience of stuttering: Measuring spontaneity. *Journal of Speech, Language, and Hearing Research*. 2020 Apr 27;63(4):983-1001.
9. Busan P. Developmental stuttering and the role of the supplementary motor cortex. *Journal of fluency disorders*. 2020 Jun 1;64:105763.
10. Croft RL, Byrd CT. Self-Compassion and Quality of Life in Adults Who Stutter. *American Journal of Speech-Language Pathology*. 2020 Nov 12;29(4):2097-108.
11. Kelly EM, Singer CM, Henderson JK, Shaw KO. Stuttering Practice Self-Assessment by School Speech-Language Practitioners. *Language, Speech, and Hearing Services in Schools*. 2020 Oct 2;51(4):1156-71.
12. Boyle MP. Psychological correlates of biological and non-biological explanations for stuttering. *International journal of speech-language pathology*. 2020 Jul 3;22(4):435-43.
13. Boyle MP. Understanding perceptions of stuttering among school-based speech–language pathologists: An application of attribution theory. *Journal of Communication Disorders*. 2014 Nov 1;52:143-55.
14. Pellowski MW, Conture EG. Characteristics of speech disfluency and stuttering behaviors in 3-and 4-year-old children. 2002
15. Boyle MP. Personal perceptions and perceived public opinion about stuttering in the United States: Implications for anti-stigma campaigns. *American Journal of Speech-Language Pathology*. 2017 Aug 15;26(3):921-38.
16. Amick LJ, Chang SE, Wade J, McAuley JD. Social and Cognitive Impressions of Adults Who Do and Do Not Stutter Based on Listeners' Perceptions of Read-Speech Samples. *Frontiers in psychology*. 2017 Jul 11;8:1148.
17. Hughes CD, Gabel RM, Palasik ST. Examining the Relationship Between Perceptions of a Known Person Who Stutters and Attitudes Toward Stuttering. *Canadian Journal of Speech-Language Pathology & Audiology*. 2017 Jul 1;41(3).
18. Walker R, Mayo R, St. Louis KO. Attitudes of college career counselors towards stuttering and people who stutter. *Perspectives of the ASHA Special Interest Groups*. 2016 Mar 31;1(4):44-53.
19. Arnold HS, Li J. Associations between beliefs about and reactions toward people who stutter. *Journal of Fluency Disorders*. 2016 Mar 1;47:27-37.
20. Boyle MP. Psychological characteristics and perceptions of stuttering of adults who stutter with and without support group experience. *Journal of fluency disorders*. 2013 Dec 1;38(4):368-81.
21. Bothe AK, Davidow JH, Bramlett RE, Ingham RJ. Stuttering treatment research 1970–2005: I. Systematic review incorporating trial quality assessment of behavioral, cognitive, and related approaches.
22. Louis KO. Male versus female attitudes toward stuttering. *Journal of communication disorders*. 2012 May 1;45(3):246-53.
23. Daniels DE, Panico J, Sudholt J. Perceptions of university instructors toward students who stutter: A quantitative and qualitative approach.
24. *Journal of Communication Disorders*. 2011 Nov 1;44(6):631-9.
25. Von Tiling J. Listener perceptions of stuttering, prolonged speech, and verbal avoidance behaviors. *Journal of communication disorders*. 2011 Mar 1;44(2):161-72.
26. Allard ER, Williams DF. Listeners' perceptions of speech and language disorders. *Journal of communication disorders*. 2008 Mar 1;41(2):108-23.

