

## **Communication Apprehension, Perceived Social Support and Career Problems in People Diagnosed with Fluency Disorder (Stuttering)**

**<sup>1</sup>Maryam Shafiq\*, <sup>2</sup>Sonia Adil, & <sup>1</sup>Hajra Fareed**

<sup>1</sup>Department of Applied Psychology, Kinnaird College for Women, Lahore, Pakistan

<sup>2</sup>Institute of Applied Psychology, University of the Punjab, Lahore.

The present study aimed at investigating communication apprehension, perceived social support and career problems faced by people who have fluency disorder i.e. Stuttering. A correlational research design was used in this study. A purposive sampling consisting of 80 people diagnosed with stuttering, aged between 18-30 ( $M_{age}$  24.03,  $SD$  4.89) were drawn from hospital in Lahore. The sample size was determined using G-Power sampling technique. Tools used were demographic scale, Personal report of communication apprehension, perceived social support scale, and Career and retention Scale. Data were analyzed by using Pearson Product Moment Correlation and Multiple hierarchal linear regression. Results revealed a significant relationship between communication apprehension, perceived social support, and career problems among people who have fluency disorders (Stuttering). The results indicate a significant positive weak relationship of discussion with career. Moreover, the results also show a significant positive weak relationship of meetings and career with people diagnosed with fluency disorder which are the subscale of communication apprehension scale. The findings of the regression analysis were communication apprehension and perceived social support predicted career problems in people who have fluency disorder. The findings of the research will promote understanding of work place related problems among people who have fluency disorders.

*Keywords:* communication apprehension; perceived social supports; career problems; people who have fluency disorder.

Stuttering is a type of speech disorder in which people cannot speak fluently and have disruptions in their speech fluency, therefore it has multiple subtypes that include prolongations, substitutions, syllable repetitions, avoidance of words, and blocking of sounds such that due to stuttering, people cannot communicate effectively which may also interfere with their career performances (DSM-V, 2013). It is basically a communication disorder that occurs worldwide in almost every country, such that 1% of stammering is found in adults. Therefore, worldwide, around 70 million people who stutter are present. Different research studies stated various prevalence rates for stuttering in young ones. ASHA (2017) reported that 1% of the whole population people are suffering from the stuttering problem. This means out of 100 individuals every 1 person is a stutterer.

In the development and the onset of stuttering, emotions play a significant role. Stuttering gives rise to several negative emotions in an individual such as frustration, fear, and anger. Stuttering involves a vicious cycle: it causes emotional arousal which in turn causes stuttering (Guitar, 2014). People with stuttering disorder also experience anxiety, guilt, avoidance, shy and fear because they have the desire to talk and to remain silent at the same time therefore, they experience approach-avoidance conflict. They feel anxiety which accelerates stuttering during a stressful inquiry for example in the police station, while attending telephone calls, or in an emergency (Lowe et al., 2012). However, in some situations it can also be identified when the child is in a learning phase. It is associated with

---

\*Correspondence concerning this article should be addressed to Prof. Dr. Masha Asad Khan, Kinnaird College for Women, Lahore, Pakistan. Email: masha.khan@kinnaird.edu.pk

poor quality of life in many domains like emotional functioning, vitality, social performances, negative affectivity, significant social anxiety disorder risk, avoidance of work due to perception of requiring high-level communication and vocational skills (O'Brian et al., 2011). In recent research, Guitar (2014) characterized stuttering as a disturbing communication disorder in which speech fluency and speech smoothness are disturbed. Hesitation in an abnormal manner and pausing before speaking is usually related to stuttering. People who are diagnosed with fluency disorder of stuttering do pauses, block, and prolong some sounds especially vowels.

According to recent research, stuttering usually starts in childhood during the age of 30 to 36 months. Initially, stuttering varies from situation to situation and day to day such that it is episodic. As a result, a child may take much time to speak as compared to his or her age fellows. It is believed that identification and treatment at an early stage is a very effective strategy in curing stuttering and other developmental disorders before they become long-term and chronic disabilities. If stuttering persists in puberty, it can become a chronic disability that may interfere in a person's vocational, educational and social life (Bricker-Katz et al., 2013).

An individual with temporary stuttering becomes more apprehensive, frightened, nervous, tense, restless, contemplative, and disturbed than the individual with endless chronic stuttering. It has been stated that, for people who are communicatively disabled, equal opportunities can be restricted for them in two ways (Vrbova et al., 2017). Such that the first one is negative beliefs and attitudes of non-communicatively disabled, and the other is negative perception and believes the disabled individuals hold for them. Therefore, they experience anxiety, social rejection, withdrawal, penalty, and frustration (Parcesepe & Cabassa, 2012). This results in unemployment due to the negative attitudes of both the people who are diagnosed with fluency disorder and the attitudes of society toward People diagnosed with fluency disorder. In any case, half of the total population grows and lives in a multilingual and bilingual community. Up to 70% of the Pakistani population is bilingual or multilingual and the common languages spoken here are: Urdu, Punjabi, Pashto, Sindhi, Balochi English. A large number of people in Pakistan currently want to communicate in the English language, especially in the urban environment, and in the case of young people who have a stutter issue, the impact of stuttering, as well as the progression through time, is extremely confusing and has an impact on psychological and biological improvement. This change consolidates new jobs, new social gatherings, new benefits, and an advantage in creating life. However, reducing the ability to speak fluently can be expressed by stuttering, or the fear of being astonished, an unusual impact at this crucial stage, and negative effects that may be matched by maternity (McAllister et al., 2013).

Fluency disorders or stuttering in our society, culture and race is perceived as a negative issue. It affects people of all ages, regardless of their intelligence or socioeconomic status, although stuttering is not what is normally associated with concepts about disability. Stuttering can also affect job opportunities, others' perceptions, self-image, relationships with friends, and intimate relationships. Stuttering is generally high during interviews, which may also affect the way the organization views the applicant. It can be a common misconception that a stuttering person is less intelligent than a fluent speaker, often causing discrimination and limited life chances. Avoidant behavior and limited interaction with others are often the consequences of social behavior of disfluent people, with a stutter. Social, emotional, and psychological issues can accompany stuttering, mainly due to social perceptions and reactions to stutterers. This research would help people who face problems in their daily life and in their social circle while pursuing careers. It will be beneficial for clinicians and job authorities as to how to deal with such people and on what account people are suffering in

their life because of disfluency and how social, emotional, vocational and psychological, and communication problems can affect those people lines who stutter. It will be a great help for education institutes to take notice of bullying done to people who are diagnosed with fluency disorder that isolates those students from the community and they go through different psychological problems. It will provide a platform to society to consider them as normal human beings because they are also intelligent in their respective fields even though they have a fluency problem.

### **Method**

A correlation study is used to determine if the variable is correlated or not and whether the increase and decrease of one variable is corresponding to the other variables of study (McLeod, 2018). Thus, this study is based on correlational research design. A sample of 80 individuals diagnosed with fluency disorder was included in the study. They were aged between 18-30 years. However, adults who stutter with comorbid conditions, such as other neurodevelopmental disorders, developmental coordination disorder, attention deficit disorder, autism spectrum disorder and people with other psychological and physical problems were excluded (American Psychiatric Association, 2013).

### **Assessment Measures**

After taking the consent form from the participants, a demographic sheet consisting of their personal and professional information required for the research was collected. All the scales were administered in English and there was no language barrier as individuals were well-educated. Then the questionnaires were given to the participants.

#### ***Personal Report of Communication Apprehension (PRCA)***

This scale by McCroskey in 1982 indicates that a person feels a level of anxiety while taking part in different verbal communication settings. The person's score depends on the answers given by him or her, which indicate a general anxiety level. A high score indicates the person shows more anxiety level in verbal communication in various settings. And low scores indicate that person shows less anxiety in verbal communication. According to Cronbach's alpha reliability of this scale is  $> .90$  which is excellent. It is a 5-point Likert scale consisting of 24 items. Scores on the four contexts (groups, meetings, interpersonal conversations, and public speaking) can range from a low of 6 to a high of 30. Any score above 18 indicates some degree of apprehension.

#### ***Career and Retention Scale (CRS)***

This scale helps to measure career problems faced by people who are diagnosed with a fluency disorder. It consists of 12 items that indicate the stutterer's level of difficulty for career advancement. A high score means more career problems faced by the stutterer. According to Cronbach's alpha reliability of this scale is  $> .78$  which is adequate. It is a 5-point Likert scale.

#### ***The Multidimensional Scale of Perceived Social Support (MPSS)***

The scale developed by Zimmet et al. in 1995 measures the level of support an individual perceives to be getting from his family, friends and significant others. The scale consists of three subsets each consisting of 12 items. The response was taken on a 5-point Likert Scale. The reliability of the scale was excellent i.e., alpha value of  $.91$  which is excellent.

### Procedure

Firstly, the institutional permission for conducting the research was taken. Then the permission to use the original version of the measures that is a PRCA, MPSS and CRA was taken from the authors via email. The 80 participants through purposive sampling were selected from Hospital settings and a survey was conducted in hospital and clinic settings to determine the inclusion and exclusion criteria such that the age range of both male and female for career advancement of people who are diagnosed with fluency disorder. The participants were selected who did not have other physical problems, or psychological problems and comorbid conditions which were ruled out by hospital faculty. Before the administration of the questionnaire, permission was taken from the heads of institutes of the institutes i.e., Fatima Memorial Hospital, Lahore General Hospital, Combine military hospital, Govt. college for the training of deaf. Participants were debriefed about the aim and objective of the current study and their consent to participate in the study was taken first. Participants were also informed about their willingness to participate in the research and their right to withdraw from the research at any time if they think that their confidentiality is being breached was instructed to them. Participants were informed that their confidentiality will be maintained and their identity will not be revealed. To protect participants against unwanted problems their consent was taken from participants and they were informed about the right to withdraw. The answers were kept confidential and were only used to investigate this specific purpose.

### Result

**Table 1**

*Shows the descriptive and frequency analysis of demographic variables.*

Variables	f (%)	M(SD)
Age		24.03(4.80)
Qualification		
10 years of qualification		
Matric	3(3.8)	
12 years of qualification		
Intermediate	20(25.0)	
14 years of qualification		
Diploma	3(3.8)	
16 years of qualification		
BS	8(10.0)	
Engineering	15(18.8)	
BE'D	8(10.0)	
BBA	2(2.5)	
CA	4(5.0)	
DOP	1(1.3)	
17 years of qualification		
MBBS	3(3.8)	
18 years of qualification		
Masters	12(15.0)	
Drop Out	1(1.3)	
Nature of problem		
Stuttering	80(100)	
Gender		
Male	76(95.0)	

Female	4(5.0)	
Socio economic status		
Upper	5(6.3)	
Middle	71(88.8)	
Lower	4(5.0)	
Number of siblings		3.99(2.34)
Psychological or other problem		
Yes	26(32.5)	
No	54(67.5)	

**Table 2**

*Shows the Mean (M), Standard Deviation (SD), Correlation (r), and Significance Value (p) of Communication Apprehension, Perceived Social Support, and Career Problems of People diagnosed with fluency disorder (N=80).*

Variables	1	2	3	4	5	6	7	8	9
1. DSC	-	.62***	.64***	.61***	.25*	.16	.29	.26**	.22*
2. MTG		-	.75***	.75***	.28**	.11	.22*	.24*	.29***
3. IPC			-	.78***	.17	.21	.35**	.26**	.21
4. PS				-	.28*	.21	.36**	.32**	.12
5. FAM					-	.55***	.68***	.85***	-.02
6. OTRS						-	.71***	.87***	.15
7. FRNDS							-	.90***	.23
8. TOTAL								-	.06
9. CAREER									-
M	38.16	39.70	39.13	39.17	4.76	4.78	4.41	4.55	3.73
SD	6.27	5.96	5.46	6.27	1.72	1.86	1.55	1.49	.76

*Note.* DSC = discussion, MTG = Meetings, IPC= Interpersonal communication, PS=public speaking, FAM= family, OTRS= others, FRNDS=friends, M=mean, SD= standard deviation. \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < 0.001$ .

The result indicates a significant positive weak relationship of discussion with career. this means that high stuttering during discussion affects more career performances. Results also show a significant positive weak relationship of meetings and career with People diagnosed with fluency disorder. This means that high stuttering at the time of meetings leads to more career problems.

**Table 3**

*Multiple Hierarchal Regression for Predictors of Career Problems*

Predictors	Career Problems	
	$\Delta R^2$	$\beta$
<b>Model 1</b>	.31***	
Group discussion		.015
Meetings		0.47*
Interpersonal conversation		-0.01
Public speaking		-0.30
<b>Model 2</b>	0.05	
Friends		-0.021
Subscales		0.29
Family		-0.07
Total $R^2$	0.18	

In the first model for career problems of people who are diagnosed with fluency disorder (Stuttering), communication apprehension was added and the significant regression equation was found  $R^2=.13$ ,  $F(4, 75)= 2.70$ ,  $P=.037$ . In the model two perceived social support was added along with the effect of communication apprehension, the regression equation was still found significant  $R^2=.18$ ,  $F(3, 72) = 2.22$ ,  $P=.042$ .

When the effect of model 1 was subtracted from model two the regression equation found significant  $\Delta R^2=0.126$ ,  $F(4, 75)=2.69$ ,  $P=0.037$ . among predictors meetings subscale of communication apprehension emerged as a significant positive predictor of career problems in people who are diagnosed with a fluency disorder. This means that in meetings, people have more stuttering problems which may negatively influence their careers.

### Discussion

Participants' perceptions regarding their competence and feelings are usually challenged by disfluency at the workplace. The pressure is built up to be fluent at the workplace for functional reasons such as communicating fluently without any interruption while making calls, speaking or presenting at meetings, and to hold daily conversations with customers and clients. Participants believed that they were doing well in their jobs and were competent as compared to their workmates, but their self-efficacy sense was intervened by perceiving how well they were speaking on the day of the meeting when they had to engage and to present in front of several people, therefore their belief of competence was shaken when they stuttered during these meetings.

It usually becomes obvious to other workers that a person has difficulty speaking fluently when a participant stutters in a meeting. Whereas in reaction to their stuttering a negative stereotype that 'stuttering reveals a problem' is formed by the people who are attending the meeting. People usually have a problem in speaking fluently when they feared that people misperceive their mental health status, competence, and their intelligence at work.

Many participants expressed that they were negatively perceived at meetings and work when they stuttered while presenting anything. Therefore, participant work-life is influenced by stigmatizing attitudes of their colleagues at a workplace which can be either perceived self-stigma or anticipated or real public stigma. Clinically it gives importance to the psychological treatment for people who are diagnosed with a fluency disorder.

It is common to find those entire career choices and work harmed people who are diagnosed with a fluency disorder. Hurst and Cooper (2010) found in a survey about employers' attitudes towards stuttering that employers have associated negative attitudes with people who are diagnosed with a fluency disorder.

Therefore in one survey, 44% agreed that people who are diagnosed with fluency disorder should find a job that demands fewer speaking tasks, 30% agreed that job performances are interfered with by disfluency, 85% agreed that employability is reduced by stuttering whereas according to 9% that stutterers should be given the job when two applicants are qualified equally for the same give situation therefore according to authors stuttering is an occupational handicap for people diagnosed with fluency disorder.

A questionnaire was used by Hayhow et al. (2002) to study the stuttering impact on the lives of people who are diagnosed with a fluency disorder. In questionnaires participants chose those jobs which involved fewer telephone tasks, giving presentations at meetings because they believed that due to stuttering they could never get a promotion. According to people they were always discriminated against for promotion due to stuttering. The researchers found that 12% of the participants believed that stuttering has no negative effect on their occupations.

It was shown by many studies, that challenges are faced at the workplace by people who are diagnosed with fluency disorder because people perceive people diagnosed with fluency disorder as less competent, less promotable, and handicapped vocationally (Hurst & Cooper, 2010) in doing verbal tasks at a job like giving presentations in meetings compared to people who do not stutter (Silverman & Paynter, 2010), and they are usually assessed by their bosses negatively. They are also discriminated in their jobs.

The workplace appears to be a challenging environment for people who are diagnosed with fluency disorder which was shown by investigations done on workplace and stuttering experience. The general public's expectation from people diagnosed with fluency disorder to be fluent has been a major cause of discomfort for people who cannot speak fluently (Klein & Hood, 2004; Logan & O'Connor, 2012), and to engage in pressured unpredictable and sustained vocal communication also bring stress and discomfort for People diagnosed with fluency disorder such that communication on the telephone or at meetings become problematic at workplace environment for such people.

An investigation by Crichton-Smith' (2002) on 14 people who have disfluency issue showed that people diagnosed with fluency disorder believe that disfluency has limited their opportunities to grow in their careers, which has lessened their self-esteem and education. According to participants, stuttering has a negative impact on their work experiences (Klompas & Ross, 2004).

Vocational stereotypes prevail that people who are diagnosed with fluency disorder are only appropriate for some occupations (Gabel et al., 2004). Therefore, role trap show that people diagnosed with fluency disorder can do less verbal and assertive jobs, therefore it is a perception perceived that people diagnosed with fluency disorder are not appropriate for professions such as teaching, law, or sales (Gabel et al., 2004; Swartz et al., 2009). Moreover, it is observed that people diagnosed with fluency disorder usually go for jobs that demand less verbal tasks and this choice leads to dissatisfaction when they do not find themselves in positions that meet their ambitions.

It has been revealed by research on stuttering at a workplace that it causes a problem for people who are diagnosed with fluency disorder such that according to them their career progression and choices are affected by their fluency issue, therefore it can be true to some extent because some supervisors and employers also consider People diagnosed with fluency disorder are not suitable for some work and occupation roles. After all, for many people, it is important to be unflawed emotionally, verbally, and physically in work performances (Sheane, 2012). In research, participants expressed that they are under pressure at the workplace and they kept on trying to hide and reduce their stuttering from people even though they know that their stuttering is apparent to people.

## **Conclusion**

The findings also show that communication apprehension, perceived social support, and career problems among people who are diagnosed with fluency disorder ie stuttering show a significant relationship. The result indicates a significant positive weak relationship of discussion with career. Moreover, the results also show a significant positive weak relationship of meetings and career of people diagnosed with fluency disorder which are the subscale of communication apprehension scale. Regression analysis shows communication apprehension and perceived social support predicts career problems in people who are diagnosed with fluency disorder. These findings will promote an understanding of problems in people who are diagnosed with fluency disorder.

### Limitations and Suggestions

The present search had certain limitations such as the collection of data was difficult based on the access to the population because the population of people diagnosed with fluency disorder is limited and it was hard to approach them. The participants were reluctant in filling the questionnaires due to their perception that they will be judged negatively. Research studies in the future should assess the attitude differences of people diagnosed with fluency disorder belonging and not belonging to the support group in the workplace about the stuttering effect. Another factor such as the perception of speech therapy's impact on offices needs to be explored fully in further Research studies. Therefore, future Research studies should focus on the impact of stuttering on the quality of life of people diagnosed with fluency disorder.

### Implications

It's important to make the public aware of the real implications and causes of stuttering. This can be done by establishing a support system for people who are diagnosed with fluency disorder so that they can easily prevail over the discrimination and challenges they faced due to stuttering. There are also significant implications for speech-language pathologists regarding these findings that stuttering is taken as a vocational handicap for people who have fluency disorders.

### References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, VA: American Psychiatric Publishing.
- American Speech-Language-Hearing Association. (2007). Scope of practice in speech-language pathology [Scope of Practice]. <http://www.asha.org/policy>
- Bennett, E. M. (2006). *Working with people who stutter: A lifespan approach*. Columbus, OH: Merrill Prentice Hall.
- Blood, G. W., Blood, I. M., Tellis, G., & Gabel, R. (2001). Communication apprehension and self-perceived communication competence in adolescents who stutter. *Journal of Fluency Disorders*, 26(3), 161-178. [http://dx.doi:10.1016/s0094-730x\(01\)00097-3](http://dx.doi:10.1016/s0094-730x(01)00097-3)
- Blood, G. W., & Blood, I. M. (2007). Preliminary study of self-reported experience of physical aggression and bullying of boys who stutter: relation to increased anxiety. *Perceptual and Motor Skills*, 104(3 Pt 2), 1060-1066. <https://doi.org/10.2466/pms.104.4.1060-1066>
- Blood, G., & Blood, I. (2004). Bullying in adolescents who stutter: Communicative competence and self-esteem. *Contemporary Issues in Communication Science and Disorders*, 31, 69-79.
- Boyle, M. P. (2013). Self-Stigma of Stuttering Scale. *PsycTESTS Dataset*. <http://dx.doi:10.1037/t33464-000>
- Bricker-Katz, G., Lincoln, M., & Cumming, S. (2013). Stuttering and work life: An interpretative phenomenological analysis. *Journal of Fluency Disorders*, 38(4), 342-355. <http://dx.doi:10.1016/j.jfludis.2013.08.001>
- Craig, A. (2010). Smooth speech and cognitive behaviour therapy for the treatment of older children and adolescents who stutter. In B. Guitar, & R. McCauley, *Treatment of stuttering: Established and emerging interventions* (pp. 188-214). Baltimore: Lippincott Williams & Wilkins.



- Craig, A., Blumgart, E., & Tran, Y. (2009). The impact of stuttering on the quality of life in adults who stutter. *Journal of Fluency Disorders*, 34(2), 61-71. <http://dx.doi:10.1016/j.jfludis.2009.05.002>
- Craig, A., Blumgart, E., & Tran, Y. (2011). Resilience and stuttering: Factors that protect people from the adversity of chronic stuttering. *Journal of Speech, Language and Hearing Research*, 54(6), 1485–1496.
- Craig, A. (2000). An investigation into the relationship between anxiety and stuttering. *Journal of Speech and Hearing Disorders*, 55, 290–294.
- Craig, A., Hancock, K., Tran, Y., & Craig, M. (2003). Anxiety levels in PWS: A randomised population study. *Journal of Speech, Language and Hearing Research*, 46, 1197–1206.
- Craig, A. (2003). Clinical psychology and neurological disability: *psychological therapies for stuttering*. *Psychologist*, 7, 93–103.
- Gravetter, F. J., & Wallnau, L. B. (2017). *Statistics for the behavioral sciences*. Boston, MA: Cengage Learning.
- Guitar, B. (2014). *Stuttering: An integrated approach to its nature and treatment*. Philadelphia: Wolters Kluwer Health/Lippincott Williams & Wilkins.
- Hoff, A. L., Kendall, P. C., and Langley, A., et al. (2017) Developmental Differences in Functioning in Youth with Social Phobia. *Journal of Clinical Child and Adolescent Psychology*, 46(5), 686-694.
- Lowe, R., Guastella, A. J., Chen, N. T., Menzies, R. G., Packman, A., O'Brian, S., and Onslow, M. (2012) Avoidance of Eye Gaze by Adults Who Stutter. *Journal of Fluency Disorders*, 37(4), 263-274.
- McAllister, J., Collier, J., & Shepstone, L. (2013). The impact of adolescent stuttering and other speech problems on psychological wellbeing in adulthood: Evidence from a birth cohort study. *International Journal of Language & Communication Disorders*, 48(4), 458–468. <http://dx.doi.org/10.1111/1460-6984.12021>
- Parcesepe, A., and Cabassa, L. (2012) Public Stigma of Mental Illness in the United States: A Systematic Literature Review. *Administration and Policy in Mental Health and Mental Health Services Research*, 40(5), 384-399
- Silverman, E., & Zimmer, C. H. (2010). Demographic characteristics and treatment experiences of women and men who stutter. *Journal of Fluency Disorders*, 7(2), 273-285. [http://dx.doi:10.1016/0094-730x\(82\)90013-4](http://dx.doi:10.1016/0094-730x(82)90013-4)