

## AWARENESS OF STUTTERING AMONG PROSPECTIVE TEACHERS OF MYSORE

**\*Jocine Gloria Chandrabose, \*\*Kenneth O. St. Louis, \*\*\*Pushpavathi M. & \*\*\*\*Shabina Raof**

### Abstract

*The study is an attempt to explore the awareness and attitude of prospective teachers towards stuttering in Mysore city, conducted as a part of International Stuttering Awareness Day. As stuttering exists worldwide, among different cultures it is essential to pay considerable attention in identifying and comparing attitudes, knowledge and beliefs of different cultural groups. Attitudes of 64 educators toward stuttering were studied using the questionnaire developed with few statements adapted from POSHA (consisting of eight domains such as nature, concern, attitude, causes, treatment, awareness, characteristics and occurrence of stuttering). Results indicated that their awareness on stuttering is less on some domains but also reflected positive attitude on some domains. Some of the results of this study are similar to those of other comparable studies conducted in other countries and cultures including Belgium, Brazil, Shanghai and China suggesting that most of the community has poor knowledge on stuttering. Public ignorance may be one of the factors of the mental and emotional complexities of stuttering (Blood, 1999). The results of the present study indicate that there is a need for SLPs to provide teachers with more information about stuttering. Hence, this study also helps SLP to understand the environment of PWS which play a significant role in the onset and maintenance of stuttering.*

### **Key words: Stuttering, prospective teachers**

Stuttering is a communication disorder that disrupts the smooth, forward flow of speech but it also creates negative emotions and reactions by both the speaker and listener (Guitar, 2006). People who stutter (PWS) experience disruptions in their speech fluency as well as adverse affective, cognitive and behavioural reactions that stem from these disruptions (Bennett, 2006). The negative feelings that a person who stutters, experiences related to speaking are usually compounded by negative reactions expressed by listeners and the anticipation of negative reactions (Hulit & Wirtz, 1994; Silverman, 1996; Yaruss & Quesal, 2004). Thus, "stuttering is apparently as much a disorder of communication as it is of speech; the receiver (listener) is at least as important as the sender (person who stutters) in the

interchange" (Van Riper, 1982).

Listener reactions to stuttering have been considered important for many decades. Johnson (1934) surveyed PWS and found that stuttering in front of a close friend or family member was perceived as less embarrassing than stuttering in front of strangers. Johnson (1934) concluded that listener reactions influence PWS in a variety of ways and that listeners should make PWS feel as comfortable as possible by acting and speaking so that the stuturer will feel secure in one's presence and will feel that he is being accepted as an individual, and will feel that he has nothing to lose by stuttering. Classroom teachers, speech clinicians, parents and society in general should apply this knowledge at every opportunity. This suggests that there are

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*\*Speech Language Pathologist- Grade 1, Department of Clinical Services, All India Institute of Speech & Hearing (AIISH), Manasagangothri, Mysore-6, email: g\_chandrabose@hotmail.com, \*\*Department of Speech Pathology and Audiology, 805 Allen Hall, West Virginia University, Morgantown, WV 26506-6122, email:kstlouis@wvu.edu, \*\*\*Reader and Head, Department of Speech Language Pathology, AIISH, Mysore, email:pushpa19@yahoo.co.in, \*\*\*\*Itinerant Speech Therapist, Department of Clinical Services, AIISH, Mysore, email: shabinaraof@gmail.com*

appropriate and beneficial communication strategies that listeners should employ in their interactions with PWS. Yet, awareness of stuttering among teachers is a topic that has received little attention in the speech pathology literature. The non-professionals awareness, attitude towards stuttering has not been subjected to systematic investigation.

### **Importance of teachers' attitudes**

Teachers carry a large share of the responsibility for the educational development of children. This responsibility is perhaps even greater when children with a disability are concerned. Teachers have an important part to play in the educational development of CWS (Children with stuttering) and their beliefs and attitudes can significantly affect the management of CWS in the classroom, as well as their progression (Lass et al., 1992; Stewart & Turnbull, 2007). In addition, the behaviour of teachers can influence the attitudes and actions of school children and in turn have impact on the self-image and peer relationships of children who stutter (Turner & Helms, 1995). It is, then, particularly worrying to find that the majority of teachers have negative perceptions of people who stutter (PWS) and typically associate negative personality traits with PWS (Lass et al., 1992; Dorsey & Guenther, 2000).

### **Procedures for measuring attitudes, knowledge and beliefs about stuttering**

In the early years quite a number of surveys have also been used to elicit knowledge, attitudes and beliefs. These include the Parental Attitudes toward Stuttering Inventory (PATs; Crowe & Cooper, 1977), The Alabama Stuttering Knowledge Test (ASK; Crowe & Cooper, 1977) and the Clinicians Attitude toward Stuttering Inventory (CATS; Cooper, 1975). The scope of these surveys varies with topics ranging from studying parental attitudes and knowledge of stuttering, to sampling a variety of professional views regarding the nature of stuttering, its treatment and Speech Language Pathologists' (SLPs') competence and effectiveness in working with the disorder.

Emerick (1960) explored the relationship between elementary school teachers' ability to count or tally instances of stuttering and their attitudes toward stuttering. The Iowa Scale of Attitude toward Stuttering was administered to 21 male and 127

female teachers. A speech stimulus consisting of a 3.5 minute audiotaped recording of a male who stutters was made (the types and amount of disfluencies were not disclosed by the author). Participants were instructed to keep a count of the amount of stuttering they heard as the speech sample was played. The order in which participants completed the attitude scale or heard the speech sample varied. Participants who had a more tolerant attitude toward stuttering tend to observe more disfluencies. This trend applied most particularly to those teachers who had taken at least one course in speech pathology as compared to teachers with no formal training. Thus the author suggested that training in speech pathology might result in more tolerant attitudes toward stuttering while at the same time decreasing tolerance for speech nonfluencies (e.g., typically occurring disfluencies that are not generally considered to be core stuttering behaviors).

Crowe and Walton (1981) studied attitudes of 100 elementary school teachers toward stuttering using the Teachers Attitudes toward Stuttering Inventory and results indicated that significant positive correlations existed between teacher attitudes and knowledge of stuttering.

Yeakle and Cooper (1986) discussed attitudes of 521 teachers in the Tuscaloosa, Alabama City School (82% of the teacher population) toward stuttering were assessed using the Teachers' Perceptions of Stuttering Inventory (TPSI). Results indicated that a significant number of teachers hold unsubstantiated beliefs concerning the etiology of stuttering and the personality characteristics of stutters. Teachers having experience with stutters or having had course work in speech disorders indicated more realistic attitudes toward stutters and expressed more demanding attitudes toward stutters in the classroom situation.

A series of studies conducted by Lass, Ruscello, and colleagues (Lass et al., 1992, 1994; Ruscello, Lass, Schmitt, and Pannbaker, 1994) involved elementary and secondary school teachers, school administrators, and special education teachers were asked to provide adjectives that describe four hypothetical people who stutter, including a female child, male child, female adult and male adult.

Elementary and secondary school teachers provided a total of 287 adjectives to describe PWS of which 66.9% were negative in nature, 20.2% were positive and 12.9% were neutral (Lass et. al., 1992).

A replication of this study by Silverman and Marik (1993) found similar results. School administrators provided a total of 197 adjectives to describe PWS of which 72.6% were negative in nature, 19.8% were positive and 7.6% were neutral (Lass et. al., 1994). Special educators provided a total of 241 adjectives to describe PWS of which 67.2% were negative in nature, 17.4% were positive and 15.4% were neutral (Ruscello et. al., 1994). Thus, professionals involved in education are likely to provide adjectives that are primarily negative in tone, suggesting that educators, like SLPs, may be more tolerant of PWS (Lass et al., 1989). Thus, with few exceptions (e.g., Silverman & Paynter, 1990), it appears that educators and administrators in school and university settings hold negative attitudes toward PWS. Even when educators report knowing students who stutter (e.g., Crowe & Walton, 1981; Lass et al., 1992), the negative stereotype of PWS persists. It is not well understood how teachers' perceptions of PWS influence their behavior toward students who stutter in the classroom. More research is needed that provides a more in-depth exploration of teachers' attitudes toward PWS and correlates teachers' attitudes with their behavior toward students who stutter in their classrooms.

Despite the availability of stuttering information through leaflets and websites it does not appear from the literature that teachers' opinions have been sought regarding the precise information they would find helpful. In 1999, a Task Force consisting of research and policy-oriented SLPs, people who stutter and an epidemiologist (Ken St. Louis, Bobbie Lubker, Scott Yaruss, Jaan Pill, and Charles Diggs, respectively) convened to develop the first prototype of a questionnaire to measure attitudes toward stuttering known as the Public Opinion Survey of Human Attributes (POSHA-E). The Public Opinion Survey of Human Attributes (POSHA-E) by St. Louis (2005) is perhaps one of the most well developed scales which is designed to measure the attitudes, knowledge and beliefs toward stuttering among the general public in different cultural groups. The

POSHA-E has been translated into and administered in several languages in various countries around the world (St. Louis, Andrade, Georgieva, & Troudt, 2005) and also considerable attention has been paid to the validity, reliability and standardization of the instrument. The inventory is unique in that it is designed to elicit attitudes toward stuttering and other human attribute and reduce response bias by not stating specifically that stuttering (or any of the other attributes) is the targeted attribute.

Since 1999, the POSHA-E has been revised three times. Like most other measures of attitudes, the POSHA-E samples a variety of beliefs, reactions, behaviors, and emotions that would identify societal ignorance, stigma, and/or discrimination (e.g., Blood et al., 2003; Gabel, Blood, Tellis & Althouse, 2004; Hult & Wertz, 1994; Klein & Hood, 2004). These survey questions have been asked to more than 1,200 adult respondents in 27 nonprobability (nonrandom) pilot study samples in 11 countries (Brazil, Bulgaria, Cameroon, Canada, Denmark, Nepal, Nicaragua, Macedonia, South Africa, Turkey, and the U.S.). Respondents completed questionnaires in either English or one of six other languages (Bulgarian, Macedonian, Portuguese, Turkish, French, and Spanish).

The lack of awareness in teachers about PWS appears to be reflected in the findings by Crichton-Smith, Wright, and Stackhouse (2003). They reported that a large majority of SLPs in UK expressed the view that teachers do not have sufficient knowledge to manage CWS at school.

Studies have been attempted by (Abdalla & Saddah, 2009) to survey attitudes, knowledge and beliefs of Arab teachers in Kuwait and results revealed teachers in Kuwait require awareness and information about stuttering and how to deal with PWS. 60% of teachers responded that they feel uncomfortable when confronted with a PWS. Also, over 50% of the teachers responded that they would fill in words for the PWS.

The research focusing on the attitudes of the prospective teachers are limited. Therefore, to understand their attitudes, knowledge and beliefs about stuttering this study has been initiated involving prospective teachers in Mysore.

### **Purpose of the study**

As stuttering exists worldwide, (Bloodstein & Ratner, 2008) among different cultures it is essential to pay considerable attention in identifying and comparing attitudes, knowledge and beliefs of different cultural groups. Blood, Blood, Tellis and Gabet (2003) reported that PWS live in an environment in which general public have negative attitude / stereotype attitude towards PWS or the disorder. Various studies have been conducted to assess the awareness of public towards PWS and the stuttering disorder. These studies have considered wide range of subjects which included store clerks (Mc Donald & Frick, 1954), college students (Silverman, 1982), public school teachers (Horsley & Fitzgibbon, 1987), vocational rehabilitation counsellor and employers (Hurst & Cooper 1983a), speech language pathologist (Lass et al., 1989) and general public. Even though the different groups were considered the findings are consistent related to the attitude towards PWS. Hence this study attempts to fill this void by exploring knowledge and beliefs about stuttering in teachers in the Indian scenario. This study explores the attitude of prospective teachers towards stuttering.

### **Objectives of the Study**

- To estimate the awareness of teachers on domains such as nature, concern, attitude and cause of stuttering
- To estimate the awareness of teachers on domains, such as, occurrence, characteristics, knowledge and treatment of stuttering.

### **Method**

#### **Subjects**

Subjects consisted of 64 participants (39 females and 25 males in the age range of 19 to 22 years) studying for diploma in education. The study was conducted as a part of orientation program on International Stuttering Awareness Day. The participants were fluent in Kannada and had the knowledge of reading and writing in Kannada.

#### **Questionnaire**

A questionnaire was developed by a qualified speech language pathologist having experience in assessment and management of fluency disorder.

The questionnaire was developed in Kannada language. Few items were adapted from POSHA (St. Louis, 2005) and the same was translated to Kannada. The questionnaire consisted of eight domains such as nature, concern, attitude, cause, occurrence, characteristics, knowledge and treatment of stuttering. Each domain had ten statements. Each statement had three options (yes, no, I don't know). Participants responded to each statement by marking any one option.

### **Data Collection**

The participants were given questionnaire and were briefed about the marking for each statement. Participants were told to ask for clarification if any and to be filled by each participant. The data was collected prior to the orientation program on stuttering.

### **Statistical Analysis**

The data from the questionnaire of the 64 participants were coded on the basis of the scale 0 to 3 and entered into an SPSS database. The responses were analysed separately for each domains. Data was analysed using SPSS (version 10 and 16). The response for each domain was analysed from percentage of subjects.

### **Results & Discussion**

#### **a) To estimate the awareness of teachers on domains such as nature, concern, attitude and causes of stuttering**

Figures 1 and 2 depict the responses of subjects for domain on nature and concern of stuttering. Among the domain on nature of stuttering, 9.4% of participants believed that person with stuttering hide their speech problem, 23.4% responded that IQ is less in PWS, 89.1% of them felt that PWS usually have fear, 81.3% felt that they are shy in nature, 78.1% felt that they blame themselves for their problem, 71.9% felt that they can have friends and 60.9% responded that they can lead normal life. 51.6% felt that they have capacity to carry out all the activities while 67.2% felt that they have inferiority complex and 65.6% felt that they prefer to stay alone. The participants had a positive attitude on aspects like PWS do not hide their speech problem, have normal IQ and can lead normal life. But they also responded that PWS are shy, have inferiority complex

and prefer to stay alone.

The second domain aimed to find the participants concern towards stuttering. In general, 60% to 82% of the participants responded that they have concern towards anyone affected with stuttering. These participants showed more concern to family members compared to neighbors and doctors. But, 20% of the participants responded that they are not concerned and 15% of the participants did not answer.

Figs. 3 and 4 depict the participants' response towards attitude and causes of stuttering. The analysis of third domain indicated that the participants had positive attitude on PWS such as 60.9% of the participants responded that they behave normally with PWS, 93.8% of them responded that they help them by providing the word when they struggle 92.2% of them responded that they help them to speak slowly and 84.4% of them responded that they give them support and encourage them while speaking and 42.2% ignore the stuttering problem. However the negative attitude was very less as 10 to 15% responded on issues like they lose patience (10.9%), make fun of PWS (9.4%), avoid speaking to PWS (12.5%) and do not give them opportunity to speak (14.2%). 42.2% of them also expressed sympathy towards the problem.

Figure 4 depicts that a relatively high percentage of teachers believe that stuttering is caused by problem related to the tongue (82.8%) and a genetic inheritance (68.8%). Approximately 7-15% of the participants responded that they do attribute the causative factor to the influence of black magic/ghost or a curse by god. 56.3% of the participants felt that stuttering is caused due to accidents and pressure from the environment (40.6%). A few participants responded that they think that a virus/ bacteria (37.5%) or lack of blood supply (62.5%) and due to imitation (53.1%) can cause stuttering while 5% of the subjects were not aware that if it's caused by any causative agents listed in the questionnaire.

**b) To estimate the awareness of teachers on domains, such as, occurrence, characteristics, treatment and knowledge of stuttering**

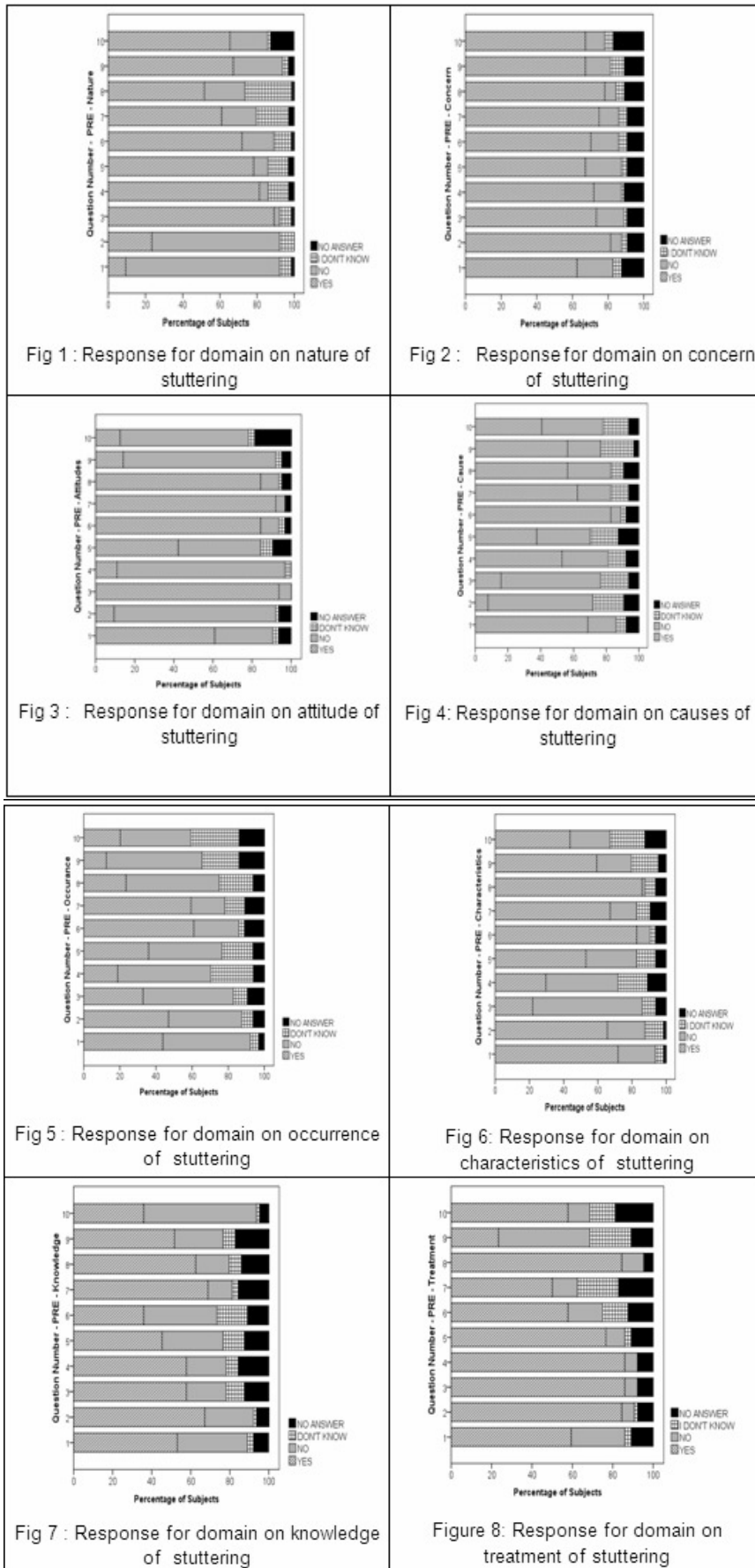
Figure 5 and 6 depicts the response of the

participants towards occurrence and characteristics of stuttering. The domain on occurrence of stuttering had statements related to the age of onset of stuttering and variation across gender. The participants responded that stuttering is seen during developmental period (60.9%), puberty (59.4%), only in adults (46.9%), only in children (43.8%) and 32.8% responded that it is seen only in geriatrics (32.8%). Among the differences across gender, 35.9% reported more in males while 18.8% felt more in females. 21.9% responded that it is seen in some specific races and 12.5% felt that it is a season specific. These results indicate that the majority of the participants were much aware of stuttering.

The domain on characteristics of stuttering also revealed interesting facts. 71.9% of participants felt that the PWS have stuttering in some situations, 65.6% felt that it is specific to individuals, 82.8% felt that they try to avoid the difficult words, 85.9% had secondaries, sweating, fast rate of speech (63.1%) and use synonyms (67.2%). But awareness was less on problems faced by PWS on difficulty with specific words (21.9%), less problem with family members and friends (29.7%). Participants also felt that PWS have fewer problems while reading (59.4%) and singing (43.8%).

The participants' response on domains regarding the knowledge and treatment options is depicted in Figure 7 and 8. The domain on knowledge aimed at knowing the source of awareness of stuttering. 67.2% responded that their awareness of this problem comes from family members, friends, famous personality who stutter (67.8%), school (68.8%), doctors and nurse (62.5%), mass media (57.8%), cinema (51.6%), personal experience (53.1%) and news papers (45.3 %).

The awareness regarding the treatment options were familiar to participants which are reflected in their response. 85.9% of the participants had felt that PWS are treated by doctors, speech language pathologists (84.4%), teachers (85.9%), psychologists (76.6%), spiritual leaders (57.8%), physiotherapists (50%) and family members of PWS (84.4%). 23.4% of them felt that stuttering cannot be cured and 57.6% of them felt that it is cured gradually.



Even though research and mass media has paid considerable attention towards educating public about stuttering and the extensive review which has proved that PWS are normal, reasonably well adjusted and has a normal capacity on all dimensions the stereotype behaviour of the public still persists. The present study is an attempt to explore the awareness and attitude of prospective teachers towards stuttering in Mysore city. This study is conducted as a part of International Stuttering Awareness Day highlighting the eight domains of stuttering. In general, the results indicated that their awareness on stuttering is less on some domains but also reflected positive attitude on some. The present study did not reveal only negative attitude on all domains.

Since the different studies conducted in this line have used different questionnaires, comparing the present study in each domain with other studies was not been attempted. But in general since few of the statements were similar an attempt is made to compare with the earlier studies. Some of the results of this study is similar to those of other comparable studies conducted in other countries and cultures including Belgium, Brazil, Shanghai and China (Bebout & Arthur, 1992; De Britto Perira et al., 2008; Mayo et al., 2004), as well as Bulgaria, Cameroon, Canada, Denmark, Nepal, South Africa, Turkey and US (St. Louis et al., 2005). These studies suggest that most of the community has poor knowledge on stuttering. Public ignorance may be one of the factors of the mental and emotional complexities of stuttering (Blood, 1999). Klompas and Ross (2004) suggested that there is a need for SLPs to provide teachers with more information about stuttering.

The literature also indicates that the clients families as well as the client's community towards the cause, effects and management of speech language disorders is important to the speech language pathologists work and vital to the therapeutic process (Bebout & Arthur, 1992). Therefore further studies looking into the validity, reliability, number quality, relevance and comprehensiveness of the attitude statements in some of these inventories are necessary. It is the responsibility of all the speech language pathologists to utilize all the opportunity to convey the information related to stuttering disorder and to help in building

the positive attitude and acceptance of PWS and stuttering disorder. The positive attitude of the public helps PWS to combat their disorder and improve their quality of life.

Lass et al. (1992) recommended that teachers should receive training prior to practice and as part of their continuing professional education development (CPD) to increase their awareness of stuttering. In particular Lass et al., (1992) suggested teachers should learn to see CWS as whole people and not just in terms of their stuttering behaviour. A number of programs to train teachers specifically about stuttering and to encourage joint working between teachers and SLPs are suggested (Bennett, 2003; Gottwald & Hall, 2003; Stewart & Turnbull, 2007). There is a lack of evidence concerning feedback from teachers attending these training programs and no detail about the effectiveness of the training in terms of improving teachers' knowledge of stuttering and fostering links between the teacher and the clinician.

### Conclusion

The result of the present study adds to the established results of the previous studies and explores the attitudes of prospective teachers of Mysore. This warrants the SLP to develop more systematic programs towards creating awareness on stuttering in various culture and communities. The programs should be conducted in all possible environments in which PWS spends most of their time (School, college, office, hospitals, public places like shop, bus stand). It is also important for speech language pathologists to have knowledge about teacher's awareness on stuttering, as teachers play an important role in identification and management of PWS. This study also helps SLP to understand the environment of PWS which play a significant role in the onset and maintenance of stuttering.

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