# AWARENESS AND ATTITUDES OF SCHOOL TEACHERS TOWARDS CHILDREN WITH STUTTERING

Register No: 05SLP003

A Dissertation Submitted in Part Fulfillment of Final year M.Sc (Speech Language Pathology), University of Mysore, Mysore.

ALL INDIA INSTITUTE OF SPEECH AND HEARING NAIMISHAM CAMPUS, MANASAGANGOTHRI MYSORE-570006 APRIL 2007

# DEDICATED TO JESUS CHRIST MY GOD AND LORD

**CERTIFICATE** 

This is to certify that this dissertation entitled "Awareness and Attitudes of school

teachers towards children with stuttering" is the bonafide work submitted in part

fulfillment for the degree of Master of Science (Speech Language Pathology) of the

student (Registration No. 05SLP003). This has been carried out under the guidance of a

faculty of this institute and has not been submitted earlier to any other University for the

award of any other Diploma or Degree.

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This is to certify that the dissertation entitled "Awareness and Attitudes of school teachers towards children with stuttering" has been prepared under my supervision and guidance. It is also certified that this has not been submitted earlier in any other University for the award of any Diploma or Degree.

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# **DECLARATION**

This is to certify that this dissertation entitled "Awareness and Attitudes of school teachers towards children with stuttering" is the result of my own study under the guidance of Dr. Y.V.Geetha, Professor of speech language sciences, Department of Clinical services, All India Institute of Speech and Hearing, Mysore, and has not been submitted in any other university for the award of any diploma or degree.

Mysore

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#### INTRODUCTION

Communication is the process of exchanging information and ideas. Human communication is the interaction among people and humans can communicate complex ideas and information using language and nonverbal signals. It is the language that makes communication very efficient and effective among people. Language may be defined as a system of symbols and codes used in communication or as a form of social behavior shaped and maintained by a verbal community. Speech is the verbal means of communicating or conveying information. To communicate effectively using speech one should have good voice, pronunciation and fluency skills. An inability to effectively communicate one's ideas may arise because of speech and language disorders.

Fluency, one of the aspects of speech refers to the forward flow of speech. According to Starkweather (1978) fluency is deviant when speech is produced with effort, when speech is more discontinuous than normal, or when the discontinuities are immature, when the rhythm of speech is atypical, or when it is not serving the speaker by making the speech production easier. One of the disorders where fluency becomes deviant is stuttering.

Stuttering is a disorder of childhood, onset of which is mostly during preschool or early school years. This is the period when the child is forced from a secure home environment to a threatening school environment. The child with stuttering problem can become an object of fun, ridicule for the teachers and the peer

group and cause embarrassment. It is suggested by various authors that appropriate handling of this problem during this early school period is very crucial. Without proper acceptance, support and encouragement the child could soon develop a more chronic severe form of the disorder. This would interfere in his overall development in terms of psychological, emotional, educational and personality traits.

Stuttering is a complicated multidimensional communication problem. There is an overt easy to see, easy to hear side of the problem. But there is also a covert side of the problem involving the feelings of the person who stutters, and also the feelings of the family. Wingate (1964) defined stuttering as (a) frequent disruptions in fluency of verbal expression, (b) sometimes accompanied by accessory struggle and tension in speech related and non speech related structures and (c) in the presence of emotional states and excitement (both negative and positive) that may or may not relate to the act of talking. Stuttering is best characterized as a problem that involves a cluster of a particular kind of speech behaviors, feelings, beliefs, self concepts, and social interactions.

Since stuttering occurs in a social context the awareness of stuttering promotes social integration and well being of stutterers. Yet awareness of stuttering is a topic that has received little attention in the speech pathology literature. The purpose of International Stuttering Awareness Day proposed by International Fluency Association in 1998 was to promote awareness and understanding and to show appreciation for people who stutter. What non-professionals know and think about

stuttering has not been subjected to systematic investigation, even though there are a few exceptions (Borsel, Verniers & Bouvry ,1999).

Conversation is one of the most fundamental activities among all other activities of human beings. While most people take this form of interaction for granted, people who stutter often approach it with fear and trepidation. Any breakdown in the communication of the person who stutters calls for the attention of the listener, and mostly it elicits negative reaction from the listener. The listeners' negative attitude remains a threat to individual with stuttering and their problems. If the listeners are aware of the problem of stuttering they may react with a more understanding and in a more positive way.

Ambrose and Yairi (1994) investigated the development of awareness of stuttering in preschool children. They used a pair of similar puppets, one with fluent and other with dysfluent speech. The subjects were 2 groups of children, fluent and stuttering. Each of the groups contained 20 children in the age range of 2 to 5 years. The children were asked to identify the puppet whose speech resembled their own. Children with fluent and dysfluent speech were able to identify their speech with dysfluent and fluent puppet, respectively. This study had the limitation that the age group 2-5 was narrow and also only one dysfluent type, repetition was employed. Borsel, Verniers & Bouvry, (1999) investigated the public awareness of stuttering and reported that knowledge of the disorder was limited, although most respondents in the study were some extent familiar with stuttering.

Attitudes of different groups of listeners towards stuttering have been one of the major areas of study in the field of stuttering research. The literature shows that stutterers are stereotyped as submissive, nonassertive, persons who are tensed, insecure and fearful. The term 'Attitude' is defined as a tendency or predisposition to evaluate an object or symbol of object in certain way .Objects include people, things, events and issues. According to Greenwald (1968), beliefs, feelings and past behavior can determine attitudes. McDavid & Harari (1974) believe that every attitude includes three components: a cognitive component (idea), an affective component (feeling and emotions) and a behavioral component (judgment or action). Since an attitude is a non observable construct, one must measure at least some of the various components or manifestations of attitude in order to infer what the attitude is. If one sees that another's verbal statements of beliefs and feelings about an object are negative and that his or her actions toward the object are also negative, one has a basis for inferring a negative attitude. As this implies attitudes can be measured by examining verbal reports (both spoken and written responses), physiological responses and overt behavior (Holtzman, 1978).

Authors who have reviewed the literature concerning possible differences between people who stutter and who do not stutter have concluded that those who stutter are remarkably similar in most important respects to non-stuttering speakers (Van Riper, 1982; Hulit, 1985). Nevertheless a disturbing number of people, including speech language pathologists, continue to report attitudes toward speakers who stutter that suggests a belief that significant differences exist. These attitudes,

most of which can accurately be characterized as negatively stereotypical are directed towards those who stutter, their parents, and towards treatment.

The attitudes toward stuttering have been measured using different procedures. Some studies have looked at stereotypes of stutterers as an indication of stuttering. Some studies have asked respondents to list adjectives describing a hypothetical stutterer (Ruscello, Lass, Schmitt & Panbacker, 1990). Some authors have used a semantic differential scale with bipolar adjectives or trait pairs (Silverman & Paynter, 1990) where subject had to rate a hypothetical stutterer versus a hypothetical non stutterer on a 5 or 7 point Likert's scale.

Investigators have indicated that the attitudes displayed by the class room teachers towards speech correction are possible catalyst in the identification of, and success in therapy with communicatively disordered students (Lloyd & Ainsworth, 1954; Clausen, 1975). Research findings have also indicated that knowledge of specific communication disorders positively correlates with attitude toward those disorders (Philips, 1976; Crowe & Cooper, 1977).

The teachers play a crucial role in the educational process of children and hence their perceptions are very important to the educational progress of their students According to Bennet (2003), sticking to negative perceptions regarding children who stutter influences the dynamics of the educational environment, placing the child at a disadvantage and possibly limiting the students' potential. Yeakle & Cooper (1986) reported that teachers with "more acceptable views of stuttering" were

ones who had more experience with children who stutter. Therefore increasing teachers' knowledge about stuttering may result in more desirable attitudes toward stuttering. The early school period is a crucial period where stuttering mostly develops. So, according to Bennet (2003), teachers should be made aware of identifying the warning signs of beginning stuttering and also the characteristics of overt and covert stuttering. The awareness and attitudes of teachers have a wide spread influence on every phase of stuttering. Teachers also need to know how children think and feel about their speech difficulties and the role these dimensions play in the child's communication ability and transfer of behavioral gains from treatment.

Teachers of children who stutter may serve key roles in diagnostic, therapy, and transfer processes. Because the teacher sees the child in numerous interactions with peers, under stress and in performance situations, the teacher not only serves as a source of information about the child, but also can potentially provide an atmosphere that is conducive to open speaking and communication. After the completion of stuttering therapy, the child is exposed to the same school situation, which he had been exposed to prior to treatment. Because of these reasons it is very important to find out the awareness and attitudes of teachers, which will lead to the programs for eliminating negative attitudes and lack of awareness. The transfer of therapy activities will be easier if the teacher has a good awareness and understanding regarding the therapy program. Teachers are key representatives of the world outside the family-a world in which the child will learn to participate during school years. According to

Ramig & Dodge (2006) child who is encouraged to be open about stuttering within the school environment is more likely to develop a more positive long term attitude toward communication.

The teacher's attitude and acceptance could also influence those of the peer group. The teacher's role in the prevention of teasing and bullying is paramount. The teachers need to counsel the teasers or bullies. Stuttering intervention will be more successful when teasing and bullying become unacceptable to the peers of the perpetrators.

The literature on awareness and attitudes towards stuttering shows the existence of negative attitudes and lack of awareness among school teachers. Though the attitudes are universal they differ to some extent with cultures (Cooper & Rustin, 1985). There have been no reported studies on the attitudes of school teachers in the Indian context. There have been attempts at studying the attitudes of peer group on stuttering in the Indian context. Catherine (2005) had conducted a study to find out the awareness and attitudes of peer group towards school children who stutter. The results of the study showed that awareness was present in Tamil speaking children as early as 5-6 years and overall the attitude of the children was negative towards disfluent speaker.

Gopeekrishnan (2004) had made an attempt to develop an instrument to measure the listener attitudes toward stuttering. He studied three groups of subjects including relatives, friends and teachers. In this study, as a subgroup only fifteen teachers participated. A comparison was made between the different subgroups i.e.

friends, relatives and teachers in their attitudes towards stutterers. The study shows that on an average, different subsections of subjects did not differ significantly in their attitudes towards stutterers and they are more likely to have positive attitude towards stutterers than their western counterparts. The number of teachers in the study was very limited and also awareness about stuttering was not studied.

#### NEED FOR THE STUDY

There is a great need to study the variations of awareness, attitudes and acceptance of teachers with regard to various factors such as: teachers who are aware and exposed to stutterers vs. not aware/exposed, urban vs. rural, different socioeconomic status, different age ranges and gender. Hence, the present study will be conducted by taking into account all these factors. It is also desirable to study the attitudes of teachers of pre-primary and primary grades as it is preschool and early school years where the onset of stuttering occurs in majority of children and which might later become a chronic life long problem. The present study aims at finding answers to the following hypotheses:

- Teachers are aware of what stuttering is
- Teachers' attitudes do not change based on their exposure to the stuttering
- Teachers' attitudes do not depend on whether they are from urban or rural area
- Teachers' attitudes do not depend on their socio economic status
- Teachers' attitudes do not depend on their gender
- Teachers' attitudes do not depend on their age
- Teachers' attitudes do not depend on their language background

#### REVIEW OF LITERATURE

Communication is essential to human beings for social survival especially in modern societies. Without communication or language human beings will have difficulty to survive as a social person. Such a person may be deprived of success and satisfaction that come from many forms of human accomplishments that are rooted in language and communication. Speech is a verbal means of communicating or conveying meaning, which is used by large majority of human beings. Communication through speech is thought to be disordered when it deviates from the norms of the community such as it interferes with the transmission of messages; it stands out as unusually different, or produces negative feelings within the communicator and makes him maladjusted in society. Communication disorders are always entangled with the attitudes of listeners towards that disorder and the person who possesses the disorder.

Triandis (1971) described attitudes as an idea charged with emotion that predisposes a class of action to a particular class of situation. Triandis (1967) supports a tripartite attitudinal model that describes three classes of evaluative responses to specific stimuli or attitudinal objects. They are (a) affect is associated with sympathetic nervous response or verbal statements of affect or emotion (the feeling component), (b) behavior deals with overt action or verbal elements concerning the behavior (the action component), and (c) cognition is associated with perceptual responses or verbal statement of belief (the idea component).

The presence of a stigma has negative effects on interpersonal behavior of both the stigmatized person and the person(s) with whom he or she is interacting (Farina, Allen and Saul, 1968; Hastorf, Schneider & Polefka, 1970; Love, 1981). This information is relevant to speech language clinicians in at least two ways. First, in relation to clinical interactions with clients, a speech language clinician should be fully aware of the problems clients face in society so that the clinicians can relate to the clients effectively (Turnbaugh, Guitar & Hoffman, 1979; Woods & Willams, 1971). Second, awareness of the problems their clients encounter in different places (including school) speech language clinicians in a unique position to assure that the rights of the communicatively handicapped are not violated (Love, 1981).

According to Van Riper (1978) stuttering occurs when the forward flow of speech is interrupted abnormally by repetitions of a sound, syllable or articulatory posture or by avoidance and struggle behavior.

Yurker (1988) reported that people with communication disabilities might arouse discomfort in their listeners. Stuttering as a communication disability elicits an especially negative personality stereotypes maintained by different groups of people (Weasel and Specter, 1998). From a practical point of view it is possible that the attitude of listeners towards stutterers and stuttering can be a primary factor in precipitating, maintenance of stuttering behavior (Van Riper, 1982).

Investigators have indicated that the attitudes displayed by classroom teachers towards speech correction are possible significant catalysts in the identification of, and success in therapy with, communicatively disordered students (Lloyd & Ainsworth, 1954; Clausen, 1975). The teachers' negative attitude can remain a threat to clients and their problems. Therefore, stuttering intervention program should focus not only on achieving a desired rates of fluency in the children speech, but also on change the negative attitude of significant others who interact with children who stutter in school situation.

Stuttering is a disorder of high variability and inconsistencies and least well understood among all the communication disorders. Professionals or experts in the field are plagued by the uncertainties with regard to its onset, causes, characteristics and management options. Among the public it is something to be made fun of or ridiculed. Often in the movies and dramas characters are made to stutter in order to humor the audience, not realizing how humiliating or insulting it is to the person who has stuttering.

Attitudes of different groups of listeners towards stuttering have been a major area of study in the field of stuttering research. The literature shows that stutterers are stereotyped as submissive, non-assertive, persons who are tensed, insecure and fearful.

Borsel, Verniers & Bouvry (1999) studied public awareness of stuttering using a questionnaire, which contained 13 items. One thousand three hundred sixty two lay persons were interviewed. Questions pertained to various aspects of stuttering including prevalence, onset, gender distribution and occurrence in different cultures, causes, treatment, intelligence and hereditariness. The results revealed that most of the respondents were to some extent familiar with stuttering but their overall knowledge of the disorder was limited. More than 80% of the respondents had heard or met a stutterer. Regarding age of onset and gender distribution of stuttering a considerable number of people were in line with the current knowledge. Regarding therapy, the view of layman seemed to be fairly optimistic, with 98% of the respondents believing that stuttering can be treated. For other aspects many respondents were less well informed.

Research has shown that many populations had negative stereotypes toward persons who stutter. These stereotypes include the belief that people who stutter are generally quiet, reticent, guarded, avoiding, introverted, passive, self derogatory, anxious, tense, nervous, and afraid (Crow & Cooper, 1977; Woods & Williams, 1976).

Among the groups of people whose attitude toward speakers who stutter have been assessed are store clerks (McDonald and Frick,1954), school teachers (Crowe and Walton, 1981), Vocational Rehabilitation counselors (Hurst and Cooper, 1983), employers (Hurst and Cooper, 1983), Speech Language Pathologist (Lass, Ruscello, Schmitt, Pannbacker, Orlando, Dean Ruziska and Radshaw 1989), professors & students (Dorsey and Guenther, 2000). In each case, respondents tended to ascribe

negative personality traits to those who stutter and to report generally negative attitudes toward them.

Past research suggest that negative stereotypes of people who stutter remain intact regardless of personal exposure or family relation to stuttering. Doody, Kalinowski, Armson, and Stuart (1993) surveyed 106 members in three small communities in Newfoundland, Canada using a 25-item semantic differential scale (Woods & Williams, 1976). Those surveyed were asked to rate both "a hypothetical adult male stutterer and a hypothetical adult male non stutterer." Results indicated that negative stereotypes of people who stutter were present even though 85% of those surveyed reported knowing at least one person who stutters, and 39% of the studied participants reported a familial relation with a person who stutters. These results suggest that those negative stereotypes and perceptions of people who stutter are both stable and persistent despite personal exposure or familial relation to stuttering behaviors and to people who stutter.

The research by Burley & Rinaldi (1986) has shown that listeners make more negative distributions toward stutterers than to fluent speakers. Their study also demonstrated a gender difference: males' ratings were more negative than females' ratings. Since their experiment lacked the appropriate control of ratings of fluent speakers the study 'Listeners attitude to stuttering speakers - No evidence for a gender difference' was replicated by Patterson & Pring (1991) to supply the necessary control group. The subjects were 2 male stutterers in the severe range and 2 fluent speakers who

were age matched. The rating task was done by 20 men & 20 women. Though the results again showed listeners to perceive stutterers more negatively, they failed to replicate the gender difference. In this study only sex difference was studied and hence it is limited with regard to variables.

Hurst and Cooper (1983) assessed the vocational rehabilitation counselors' knowledge of and attitudes toward stuttering. One hundred and fifty two vocational rehabilitation counselors were studied using the 'Alabama Rehabilitation Counselors Attitudes Toward Stuttering' (ARCATS) inventory. It consists of 25 true-false statements designed to assess knowledge of stuttering and 15 statements designed to assess attitudes toward stuttering. On the basis of their responses to stuttering knowledge, the 152 rehabilitation counselors studied appeared to be relatively knowledgeable about stuttering. But, they also were found to hold, the unsubstantiated beliefs that stutterers as a group possess characteristic personality traits as well as psychological problems. Counselors were found to perceive stuttering as being significantly vocationally handicapping and amenable to therapy and to perceive stutterers as almost always benefiting from therapy and as being good candidates for vocational rehabilitation.

In another study, Hurst and Cooper (1983) investigated the attitudes of 644 employers through the use of 'The Employer Attitudes Toward Stuttering' (EATS) inventory. The questionnaire required the respondents to indicate their strength of agreement to seven attitudinal statements concerning stuttering. While rejecting the suggestion that stuttering interferes with job performance, the employers agreed that

stuttering decreases employability and interfere with job promotion possibilities. It was concluded that although stuttering may interfere with job performance, it is a significant vocationally handicapping problem. In their study no attempt was made to assess the validity or reliability of the EATS inventory in assessing attitudes of employers.

Parental attitude toward and knowledge of stuttering was investigated by Crowe & Cooper (1977), using Parental attitude toward stuttering inventory and the Alabama Stuttering Knowledge (ASK) test. Results indicated that the parents of non stutterers displayed more desirable attitude toward stuttering and more accurate knowledge of stuttering than did the parents of stutterers.

Cooper & Cooper (1985) conducted a study to determine if shifts in the attitudes of speech clinicians towards stuttering occurred during the decade 1973-1983. The attitudes of 674 speech language pathologists toward stuttering, stutterers, stuttering therapy, parents of stutterers, and related issues were studied. During that period, clinician attitudes were found to shift away from support of the Johnsonian concepts, which suggests parental causality and dangers in early intervention. In addition, clinicians became less likely to perceive stutterers as possessing psychological disorders and misperceptions of their problem and of their interpersonal relationships. However, a significant number of clinicians were found to hold unsubstantiated beliefs regarding the personality of stutterers, their parents, and the efficacy of early intervention with very young stutterers.

A study on speech language pathologists' perceptions of child and adult female and male stutterers was conducted by Lass, et al (1989). A questionnaire was constructed by the authors asking respondents to list as many adjectives as they could think of that, in their opinion, accurately described four hypothetical stutterers (a typical adult male, adult female and 8 year old male and female stutterer.) The questionnaire was completed by 81 speech language pathologists. A total of 529 traits were reported by respondents for all hypothetical stutterers. The large majority of reported adjectives were negative stereotypical personality traits like nervous, shy and frustrated indicating that perceptions of practicing speech language pathologists concerning stutterers have remained relatively unchanged over the past two decades.

McGee, Kallinowski & Stuart (1996) conducted a study to measure high school students' perceptions toward people who stutter before and after viewing the documentary *Voices to Remember* (Bondarenko, 1992). The purpose of the study was to determine if the video, a poignant and emotional documentary, was effective in changing a group of high school students' perceptions of a hypothetical male stutterer to become more congruent with the psychological data from the stuttering population. However the participants' existing negative perceptions of the "hypothetical male stutterer" became more negative after viewing the documentary. Specifically, participants believed that people who stutter are more self-derogatory, fearful, inflexible, withdrawn and reticent after viewing *Voices to Remember*. This study suggest that this documentary alone was insufficient in promoting the participants' perceptual changes as measured by a 25-item semantic differential scale (Woods &

Williams, 1976), to better resemble psychological data representing the stuttering population.

Primary care professionals' knowledge and attitudes on speech disfluency in preschool children was investigated by Lass, Lees, Cameron Stark, Jan Baired, Susan and Birse (2000). A postal questionnaire survey was carried out of all general practitioners and health visitors in the area of the former Highland Community NHS Trust to elicit this information. The results indicated that these professionals were more likely to refer young children to speech language therapy if they themselves had received some postgraduate training about this disorder. More general practitioners than health visitors in this area were uncertain about the natural history of the disorder and about whether young disfluent children should be enrolled for therapy. General practitioners were more inclined to believe that there were personality traits characteristic of those who stammer and they were also more influenced by waiting lists in their decisions about referral. It would seem that some primary care professionals may have beliefs about stammering which were acquired in their training and which have not been updated.

Dorsey & Guenther (2000) studied the attitudes of professors & students toward college students who stutter. Two hundred questionnaires, each containing 20 personality items were mailed to college professors and students to judge on a seven-point scale. The participants were asked to rate either a hypothetical student who stutters or a hypothetical average college student. Thirty four professors and fifty seven

students returned the completed questionnaires. Results have shown that participants rated the hypothetical student who stutters more negatively on the personality traits than the hypothetical average college student. However the professor participants rated the hypothetical student who stutters more negatively than did the student participants.

Using the 'Teacher Attitudes Toward Stuttering (TATS) inventory Crowe and Walton (1981) conducted a study in which attitudes of hundred elementary school teachers toward stuttering were studied. Teachers' attitudes as indicated by TATS inventory scores were compared with teachers' knowledge of stuttering, age of the teacher, number of years of teaching experience, educational level and whether the teacher had personal experience with a stutterer. Results indicated that significant positive correlations were demonstrated between teacher attitudes and knowledge of stuttering. Significant negative correlations were demonstrated between teacher attitudes/knowledge of stuttering and the presence of a stuttering child in the classroom.

Boehnke, Ginkel, Deleeuw, and Clancy, (2001) attempted to find out what the general public knows and believes about stuttering as a disorder, by interviewing their friends and family members. The subjects consisted of 42 males and 42 females between the ages of 20 and 50. The UMD Fluency Disorders class of 2001 developed a brief interview protocol for all students to use when gathering data from subjects. The interview protocol began with demographic information and it then proceeded to three open ended questions. Each class member interviewed six people, some strangers, some acquaintances, and some family members. Interviews were conducted in person or over the telephone. The student researchers wrote each subject's responses down on the

interview protocol forms. The results of the survey suggest that the public has an incomplete and inaccurate perception of what stuttering is and what causes it. Their understanding of stuttering may be confined to the behavior of stuttering and not encompass the broader scope of the disorder.

Knowledge and attitudes of students from two universities in the Western Cape was investigated by Catherine Power (2001). The purpose of this research study was to determine the knowledge and attitudes towards stuttering of third-year students studying English as a subject at two Universities in the Western Cape. A questionnaire was designed to obtain personal information from the students, their experience with people who stutter and to assess their knowledge and attitudes regarding stuttering. A total of 71 students from both the University of Cape Town (30) and Stellenbosch (41) were selected. Although they knew of a person who stuttered, they demonstrated a limited amount of knowledge regarding stuttering. Their attitudes were generally positive; however they regarded the personality of stutterers in a negative, stereotypical manner. The results of this study cannot be generalized as the sample size is too small.

Thomas R (2001) conducted a study to investigate the perceptions of a group of respondents toward one stutterer and compare their perceptions with one another and with those of the stutterer. The respondents included 4 groups - family and friends, colleagues, teachers and students, who had long term and often intimate contact with the same stutterer. Three males & three females who stuttered in the age range of 18-56 years participated. The questionnaire was mailed to the 6 stutterers and 169 closest colleagues out of whom 114 were returned. The results showed that the family or

friends rated the stutterer closer to normal while colleagues (and for one stutterer also teachers) rated the speech as closer to abnormal. The findings provided evidence for distinct attitude among the 3 groups examined and it suggested that informal, non clinical and long term personal contact with one stutterer may alleviate the negative stereotype identified in the general population. The differences in attitudes between those who know at least one stutterer and the general population bolster the view that intimate rather than superficial contact decreases stereotyping in a variety of contexts.

The literature on awareness and attitudes towards stuttering shows the existence of negative attitudes and lack of awareness among school teachers. Though the attitudes are universal they differ to some extent with cultures (Cooper & Rustin, 1985). The reported studies on the attitudes of people toward stuttering and stutterers in the Indian context have been very scanty, restricted to few geographical areas and limited number of variables.

Catherine (2005) had conducted a study to find out the awareness and attitudes of peer group towards school children who stutter. Video samples of a normal and stuttering male child aged 4 years were shown to Tamil speaking normal school children between the age of 5 and 14 years .A questionnaire with 13 questions were administered and the responses were recorded. The results of the study showed that awareness was present in Tamil speaking children as early as 5-6 years and overall the attitude of the children was negative towards disfluent speaker. Since the study used video samples for investigating the awareness it might have affected the results .Also the number of questions used to study the attitude was 6 which is very limited.

Gopeekrishnan (2004) had made an attempt to develop an instrument to measure the listener attitudes toward stuttering. He studied three groups of subjects including relatives, friends and teachers. In this study, as a subgroup only fifteen teachers participated. A comparison was made between the different subgroups i.e. friends, relatives and teachers in their attitudes towards stutterers. The results have shown that on an average, different subsections of subjects did not differ significantly in their attitudes towards stutterers and they are more likely to have positive attitude towards stutterers than their western counterparts. The number of teachers in the study was very limited and also awareness about stuttering was not studied. There was a need to study the variations of attitudes and acceptance of teachers with regard to various factors such as: teachers who had a student with stuttering in the class vs. not present, urban vs. rural, different socioeconomic status, different age ranges and gender. Hence, the present study was undertaken by taking in to account all these factors. It is also desirable to study the attitudes of teachers of primary grades as it is early school years where the onset of stuttering occurs in majority of children and which might later become a chronic life long problem.

Attitudes of teaching professionals towards children who stutter in school situation was also studied by Rajsudhakar, Venugopal and Goswamy (2005) on 50 prospective teachers, 29 elementary school teachers and 18 special educators using a questionnaire developed in two phases. The results of their study revealed that they had more positive attitude towards children with stuttering in a school situation and their perceived attitude of other teachers were significantly lesser than themselves. However,

their study did not focus on the awareness of the subjects about stuttering and other variables with regard their education, gender, socioeconomic status etc.

Most of the above mentioned studies regarding awareness and attitudes are in western context. Because attitudes toward disorders are likely to be culture-bound (Payne, 1986), it can not be assumed that awareness and attitudes are same across diverse populations. Though the attitudes are universal, they differ to some extent with different cultures (Cooper & Rustin, 1985). Also there have been no reported large scale studies on the awareness and attitudes of primary school teachers toward children with stuttering.

#### **METHOD**

The present study was conducted to find out primary school teachers awareness and attitudes towards children who stutter. This was carried out in two phases. In phase one, a questionnaire was prepared in English to answer the questions related to the hypotheses to be tested. This was administered on 150 primary school teachers to test the hypotheses.

**SUBJECTS:** Hundred and fifty Malayalam speaking lower primary school teachers in the age range of 20-55 from Kerala, a south Indian state was randomly selected for the study. Teachers were grouped as follows

- Teachers who are exposed to stuttering vs. not exposed.
- Teachers who had a stuttering student in the class vs. not present.
- Teachers of urban vs. rural school.
- Teachers from low, middle and high socio economic status
- Male vs. female teachers
- Teachers across mean age ranges: 20-30; 30-40; 40-50 ;50 & above

#### **MATERIAL & PROCEDURE**

A questionnaire was developed in English through literature survey, consisting of statements related to the awareness and attitudes about stuttering and persons with stuttering. The questionnaire consists of 3 parts; part I included demographic data regarding the subject like information about respondent's age, gender, educational level and socioeconomic status. Part II of the questionnaire included 20 questions to investigate the awareness of the disorder with regard to the exposure to persons with

stuttering, characteristic features, causative factors, treatment options. That is the first 7 questions enquired regarding the subject's exposure to stuttering i.e. whether the teacher knew a stutterer among relatives, family, neighbors or in the class. Questions 8-14 enquired about the awareness of characteristics of stuttering and 15-16 about the causes of stuttering and 17-20 regarding the awareness of treatment. The participants were unaware of these divisions into different categories. They were forced to make a choice from 'yes, no or not sure' as the response. For questions 13 & 14 they were free to write their responses. Part III contained 30 questions to study the attitude toward children with stuttering. Here the first 12 questions inquired regarding the subject's attitude toward the personality characteristics of persons with stuttering; questions 13-20 elicited information about teachers feelings and beliefs about handling persons with stuttering and questions 21-30 were about teachers' role in overcoming stuttering. (Please see Appendix for details)

Each item in the questionnaire was expressed as a statement. The subject responded to each statement by putting a tick on the appropriate response options. A five point rating scale was used for scoring. The rating scale ranged from 'strongly disagree' through 'not sure' to 'strongly agree'. Ordinal number values were assigned to the scale for analyses (1 = Strongly Disagree; 2 = Disagree; 3 = Not sure; 4 = Agree; 5 = Strongly Agree). Questionnaire was administered on 10 speech language pathologists for suggestions and modifications. A pilot study was done on 10 teachers and the results of the pilot test indicated that majority of the items were clear. Based on the study a few questions were again modified by rephrasing it. Finally the questionnaire

#### RESULTS AND DISCUSSION

The subjects consisted of 34 males and 116 females between the ages of 20 and 55 years. Teachers were divided into different age groups: 20-30 yrs, 30-40 yrs, 40-50 yrs and 50 yrs & above. The following table indicates the number of subjects in each age group and the total number of subjects.

Table 1 - Distribution of subjects with respect to gender and age group

Agegroup Gender	20-30 yrs	30-40 yrs	40-50 yrs	50yrs & above	Total
Males	6	11	9	8	34
Females	29	24	41	22	116
Total	35	35	50	30	150

In the present study, gender comparison is not highlighted because of the small number of male subjects. The results of the study was analyzed and discussed with respect to awareness about stuttering and attitudes toward stuttering.

### I. Awareness about stuttering

Total of 20 questions were presented to the subjects to test hypotheses regarding the awareness towards stuttering. These questions were classified into different divisions and in the subsequent sections result will be presented for each.

#### A. Exposure to stuttering:

#### a) Age group 20-30 yrs

Majority of the respondents (91.4%) had seen a stutterer in their neighborhood. A small group of respondents (11.4%) also had family members with stuttering. The third question was given to cross check the answer of first question and it revealed the same answer as that of first question. There were some teachers (20%) who had children with stuttering in their classes.

Table 2 - Percentage of awareness responses for 20-30 years age group

		Total respon	ises
Question Number	Yes (%)	No (%)	Not Sure (%)
1	91.4	8.6	0
2	11.4	88.6	0
3	91.4	8.6	0
4	20.0	80.0	0
5	68.6	31.4	0
6	60.0	40.0	0
7	77.1	14.3	8.6

There were around 68.6% of the teachers having interaction with children or adults with stuttering and around 60% of them had an interaction for more than 6 months. Most of the teachers (77.1%) had reported that many people are not aware of stuttering. The responses for the 7 questions related to exposure show that most of the teachers had exposure to children or adults with stuttering. Descriptively there was not much difference in exposure between males and females.

#### b) Age group 30-40 yrs

In the 30-40 age group also, the clear majority of respondents (97.1%) had seen a stutterer. A small group of respondents (5.7%) had family members with stuttering. There were some teachers (37.1%) who had children with stuttering in their classes. There were around 82.9 % of the teachers having interaction with

children or adults with stuttering and around 42.9 % of them had an interaction for more than 6 months.

Table 3 - Percentage of awareness responses for 30-40 years age group

	Total responses		
Question Number	Yes (%)	No (%)	Not Sure (%)
1	97.1	2.9	0
2	5.7	94.3	0
3	80.0	20.0	0
4	37.1	62.9	0
5	82.9	17.1	0
6	42.9	57.1	0
7	57.1	42.9	0

Majority of the teachers (57.1%) had reported that many people are not aware of stuttering. The responses for the 7 questions related to exposure shows that most of the teachers had exposure to children or adults with stuttering. Descriptively there was not much difference in exposure between males and females.

#### c) Age group 40-50 yrs

Table 4 - Percentage of awareness responses for 40-50 years age group

		Total respon	nses
Question Number	Yes (%)	No (%)	Not Sure (%)
1	100	0	0
2	6	94	0
3	100	0	0
4	28	72	0
5	100	0	0
6	72	28	0
7	60	40	0

All teachers (100 %) in this age group had seen a stutterer. A small group of respondents (6%) also had family members with stuttering. Around 28% of the teachers had children with stuttering in their classes. All the teachers reported that they have interaction with children or adults with stuttering and around 72% of them had an interaction for more than 6 months. Most of the teachers (60%) had reported that many people are not aware of stuttering. Descriptively there was no difference in exposure between males and females.

#### d) Age group 50 years and above

Table 5 - Percentage of awareness responses for 50 years and above age group

		Total respo	onses
Question Number	Yes (%)	No (%)	Not Sure (%)
1	100	0	0
2	6.7	93.3	0
3	100	0	0
4	43.3	56.7	0
5	100	0	0
6	50	50	0
7	63.3	36.6	0

In 50 years and above age group also, all the teachers had reported that they had seen a stutterer. A small group of respondents (6.7%) had family members with stuttering. There were some teachers (43.3%) who had children with stuttering in their classes. All the teachers had reported that they have interaction with children or adults with stuttering and around 50% of them had an interaction for more than 6 months. Most of the teachers (63.3%) had reported that many people are not aware of stuttering. The responses for the 7 questions related to exposure shows that most of the teachers had exposure to children or adults with stuttering. Descriptively there was no difference in exposure between males and females.

From the above results regarding the exposure to stuttering it is very evident that stuttering is a disorder majority of the teachers are to some extent familiar with. According to Van Borsel, Verniers, & Bouvry (1999) majority of the public (81.6%) had heard or met a stutterer at one time or other. In the present study the percentage of teachers who had seen a stutterer is higher (above 95%) than that. This can be either due to higher percentage of prevalence or due to more awareness regarding stuttering.

#### **B.** Characteristics of stuttering

#### 1) Classification of stuttering problem:

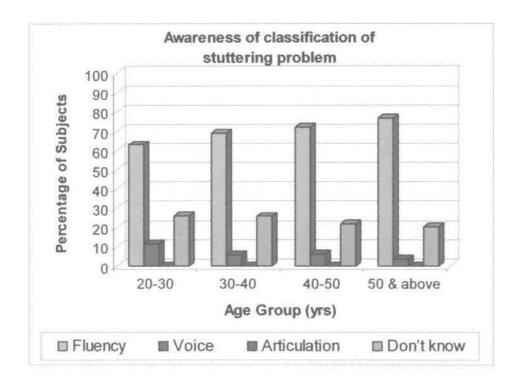
A question was given to the subjects asking about the classification of stuttering problem. Four options were provided for that. The following table gives percentage of subjects selecting each response.

Table 6 - Awareness of classification of stuttering problem

Age group (in years)	% of Subjects
Fluency	70.0
Voice	6.6
Articulation	0
Don't know	23.4

It is evident from the table that most of the subjects (70%) considered stuttering as a fluency problem & 23.4% are not aware of this concept. The following graph gives the distribution of options selected by subjects in the each age group.

Graph 1: Awareness of classification of stuttering problem with respect to age group



From the graph, it can be seen that in all the age groups according to majority of the subjects stuttering is considered as a fluency problem.

#### 2) Characteristics of stuttering:

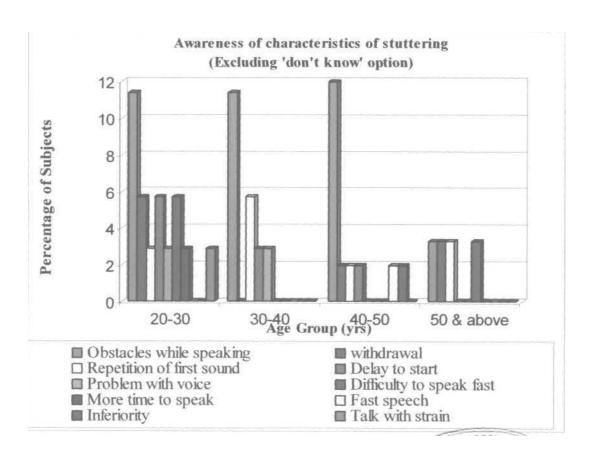
An open ended question was given about what the respondents feel about the characteristics of stuttering. Different answers were given by the respondents. Some of the respondents mentioned more than one possible characteristic. Answers could be classified into 11 categories. Table 6 shows the percentage of times a characteristic was mentioned. Majority of the teachers (75.3%) was unaware of the characteristics, and in the remaining subjects, majority have given the characteristic as obstacles while speaking.

Table 7 - Awareness of characteristics of stuttering

Characteristics	% of Subjects
Obstacles while speaking	10.0
withdrawal	2.6
Repetition of first sound	3.3
Delay to start	2.7
Problem with voice	1.3
Difficulty to speak fast	2.0
More time to speak	0.7
Fast speech	0.7
Inferiority	0.7
Talk with strain	0.7
Don't know	75.3

The following graph gives distribution of subjects giving various characteristics of stuttering with respect to age groups.

Graph 2: Awareness of characteristics of stuttering with respect to age group



From the graph it is clear that in all age groups the dominating characteristic given was obstacles while speaking (10.0%). Other major characteristics that are quoted are withdrawal, delay to start and difficulty to speak fast.

The teachers gave many neutral responses indicating that they were unsure of the answers and this is in consonance with the study by Hulit & Wirtz, 1994. Catherine power (1991) also reports that the university students' knowledge of etiology was limited. The finding in the present study, that teachers lack awareness points out the need for providing information in this regard.

#### 3) Other aspects related to characteristics:

#### a) Age group 20-30 yrs

Table 8 - Awareness of other aspects of characteristics

	Total responses			
Question Number	Yes (%)	No (%)	Not Sure (%)	
9	80.0	5.7	14.3	
10	82.9	6.9	10.3	
11	31.4	20.0	48.6	
12	28.6	42.8	28.6	
4	62.9	0	37.1	

Majority of the school teachers (80%) responded that all school teachers can identify stuttering if it is present in their student. Also, 82.9 % of them could understand stuttering as different from misarticulation. Nearly 50% of the teachers were not sure regarding the gender difference in stuttering i.e. whether the stuttering is more in boys than girls. Majority of the teachers (42.8%) denied the statement that

child with stuttering has the same amount of problem in all the speaking situations. Also 28.6% accepted the statement and another 28.6% was not sure of it. Majority of the teachers (62.9%) responded that stuttering develops mostly in the childhood. Remaining 37.1% were not sure of this.

#### b) Age group 30-40 yrs

Table 9 - Awareness of other aspects of characteristics

		Total responses	S
Question Number	Yes (%)	No (%)	Not Sure (%)
9	80.0	20.0	0
10	68.6	22.8	8.6
11	40.0	31.4	28.6
12	37.1	48.6	14.3
14	62.9	25.7	11.4

In the 30-40 years age group majority of the school teachers (80%) responded that all school teachers can identify stuttering if it is present in their student. Also, 68.6 % of them could understand stuttering as different from misarticulation. 40% of the teachers accepted that stuttering is more in boys than girls. Majority of the teachers (48.6%) denied the statement that child with stuttering has the same amount of problem in all the speaking situations. Majority of the teachers (62.9%) responded that stuttering develops mostly in the childhood.

# c) Age group 40-50 yrs

Table 10- Awareness of other aspects of characteristics

Total responses			
Question Number	Yes (%)	No (%)	Not Sure (%)
9	96.0	4.0	0
10	80.0	20.0	0
11	46.0	16.0	38.0
12	32.0	60.0	8.0
14	70.0	20.0	10.0

Majority of the school teachers (96%) responded that all school teachers can identify stuttering if it is present in their student. Also, 80 % of them could understand stuttering as different from misarticulation. 46% the teachers accepted that stuttering is more in boys than in girls. Majority of the teachers (60%) denied the statement that child with stuttering has the same amount of problem in all the speaking situations. Majority of the teachers (70%) responded that stuttering develops mostly in the childhood.

# d) Age group 50 & above

Table 11 - Awareness of characteristics of stuttering

		Total response	S
Question Number	Yes (%)	No (%)	Not Sure (%)
9	83.3	13.3	3.3
10	80.0	20.0	0
11	66.6	20.0	13.3
12	40.0	60.0	0
14	76.6	23.3	0



Majority of the school teachers (83.3%) responded that all school teachers can identify stuttering if it is present in their student. Also, 80 % of them could understand stuttering as different from misarticulation. 66% the teachers accepted that stuttering is more in boys than in girls. Majority of the teachers (60%) denied the statement that child with stuttering has the same amount of problem in all the speaking situations. Majority of the teachers (76.6%) responded that stuttering develops mostly in the childhood.

Even though most of the teachers could not list out all the characteristics of stuttering, it is promising that they can differentiate stuttering and misarticulation and also they can identify if it is present in their students.

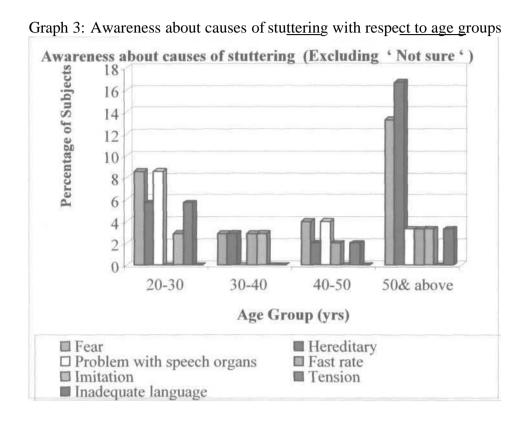
#### C. Awareness of causes of stuttering

An open ended question was given to the subjects asking about what they think is the cause of stuttering. Answers could be classified into 8 categories. The following table gives the percentage of subjects giving the following causes.

Table 12- Causes of stuttering classified under various categories.

Causes	% of subjects responses
Fear	6.7
Hereditary	6.0
Problem with speech organs	4.0
Fast rate	2.0
Imitation	2.0
Tension	2.0
Inadequate language	0.7
Not Sure	88.7

As seen in the table majority of the teachers (88.7%) was unaware of the cause of stuttering and in the remaining subjects, majority have given the cause as fear, hereditary problems and problem with speech organs. The following graph gives distribution of subjects giving various causes of stuttering with respect to age groups.



From the graph it is evident that the causes given by various age groups are not similarly distributed. Respondents suggested a variety of factors that may cause stuttering. Some of the respondents also mentioned more than one possible cause. According to 20-30 age groups the major causes are fear, and problem with speech organs followed by hereditary and tension. According to 30-40 age groups the major causes are fear, hereditary, fast rate & imitation. According to 40-50 age groups the

major causes are fear and problem with speech organs and according to group 50 & above most of them quoted hereditary followed by Fear.

Fear and hereditary was reported by all the age groups. This may be based on their interaction with students with stuttering in the class and also with their family members. Catherine power (1991) also reports that the university students' knowledge of etiology was limited. The finding in the present study that teachers lack awareness regarding cause of stuttering points out to the need for providing information in this regard.

### 2) Other question related to cause

Table 13 - Percentage of responses for whether stuttering is due to parental mishandling

Responses	Yes	No (%)	Not	Sure
Age group	(%)		(%)	
20-30yrs	5.7	57.1		37.1
30-40 yrs	8.6	82.9		8.6
40-50 yrs	10.0	80.0		10.0
50yrs & above	0	93.3		6.7

The teachers had to respond to the question whether stuttering is due to parental mishandling. As seen in table 13, it is clear that majority of the teachers disagree with the statement in all the four age groups. In the 20-30 age groups, 37.1% was not sure of it. This goes against the diagnosogenic concept of Wendell Johnson.

### D. Treatment of stuttering

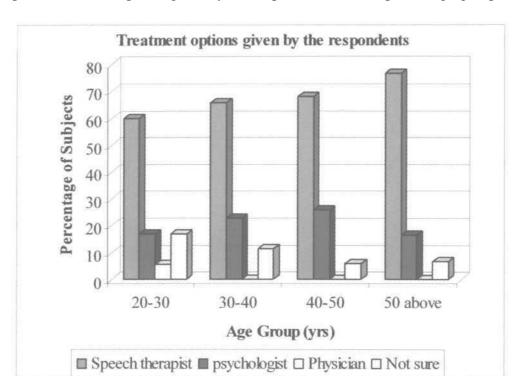
Regarding the line of treatment for stuttering, Table 14 provides percent of responses as to who should treat stuttering.

Table 14 - Treatment options given by the respondents of different age groups

Professional	% of Subjects	
Speech	67.3	
therapist	07.5	
Psychologist	21.3	
Physician	1.3	
Not sure	10.0	

It is evident from the table that most of the subjects (67.3%) considered consultation by a speech therapist as the treatment option, followed by psychologist. It can be noticed most of the subjects felt problem with speech organs and fear as causes of stuttering (From table 11).

The following graph gives distribution of subjects' responses for treatment options with respect to age groups. From the graph it is evident that, in all the age groups according to the majority of subjects, the line of treatment is to consult a speech therapist. Majority of the respondents (67.3%) considered speech therapy as the possible treatment option. The next option which was reported was to go to a psychologist, (21.1%). Among the teachers (10 %) of them were not sure of the treatment options.



Graph 4: Treatment options given by the respondents with respect to age group

It was promising to note that the majority knew that a stutterer should consult a speech therapist (Catherine Power, 2001).

# 2) Other questions related to Treatment

The teachers were asked to respond to the statement whether they consider that stuttering spontaneously recovers without treatment and their responses are given in the table.

Table 15 -Regarding spontaneous recovery.

Responses	Yes (%)	No (%)	Not Sure (%)
Age group			
20-3 Oyrs	71.4	5.7	22.9
30-40 yrs	65.7	28.6	5.7
40-50 yrs	76	22	2
50yrs & above	66.7	10	23.3

From the above table it is evident that majority of the teachers in all the age groups think that stuttering spontaneously recovers. In the study by Hurst & Cooper (1983) only 34 % of the Vocational Counselors knew about spontaneous recovery of stuttering. But in the present study in all the age groups above 60% reported regarding the occurrence of spontaneous recovery. Even though, spontaneous recovery is present, over emphasis on it can affect many of the children negatively. The spontaneous recovery may not be applied to children over the age of five, who have been stuttering for a year or more. As a result most authorities on stuttering recommend positive, supportive early treatment in the belief that the eradication of stuttering is possible for those less likely to recover otherwise. So teachers should be made aware of this, not to wait for spontaneous recovery to occur, and early treatment is necessary to avoid children becoming chronic stutterers.

The other question regarding treatment was whether stuttering can be treated or not. The 20th question was for cross checking the response of the 18th one.

Table 16 -Regarding whether stuttering can be cured

Responses Age group	Yes (%)		No (%)		Not Sure (%)	
Question number	18	20	18	20	18	20
20-30yrs	57.1	62.9	8.6	2.9	34.2	34.2
30-40 yrs	74.2	74.3	14.3	5.7	11.4	20.0
40-50 yrs	50	50	10	0	40	50
50yrs & above	50	50	0	0	50	50

From the Table 16 it is evident that majority of the teachers in all the age groups accepted that stuttering can be treated. In 50 years and above age group 50% of the subjects were not sure of the answer and 50% opined stuttering cannot be treated. The percentage of response that stuttering can be treated is less compared to the percentage of response (98%) in the study by Van Borsel, Verniers & Bouvry (1999). The findings in this study points to the need that teachers should be made aware of the treatment options for stuttering. Otherwise, even if they recognize stuttering in students they may not be able to help children.

# II Attitude towards Stuttering

The data regarding the attitudes of teachers towards stuttering and persons with stuttering was analyzed in two stages as given below.

Stage 1: Mode (responses with maximum frequency) was considered to discuss the attitude of teachers with respect to each statement and the attitude was regarded as positive /negative/neutral.

**Stage 2:** Effect of age, gender, region, presence /absence of a student with stuttering in the class and socioeconomic status (SES) on the teachers' attitude were studied.

Thirty statements were given to the teachers to check their attitude towards children with stuttering. The number of responses for each statement under the 3 domains, i.e., personality characteristics, teachers' feelings and beliefs about handling stuttering and teachers' role in overcoming stuttering on the 5 point rating scale are discussed below. Responses of strongly disagree & disagree were combined to find out the total number of respondents who disagree with each statement. The same was done with strongly agree and agree to find out the total number of respondents who agree with each statement.

#### 1. Attitude towards personality characteristics of persons with stuttering.

The first 12 statements in Part III of the questionnaire evaluated the attitudes of the teachers regarding the Personality characteristics of persons with stuttering. Table 17 below gives the responses of the teachers for the 12 different statements. The following are the responses of the total 150 teachers who are having positive attitude for the statements.

- Hundred and twenty two teachers agreed that children with stuttering are as intelligent as normal children.
- Hundred and four teachers agreed that children with stuttering are as good as normal children in leadership.
- Ninety teachers agreed that children do not stutter to get attention.
- Hundred and twenty two teachers agreed that children with stuttering can perform as well academically as other children.
- Ninety nine teachers agreed that children with stuttering can speak fluently many times.
- Seventy nine teachers agreed that stuttering is not a preliminary sign of character weakness.
- Hundred and twenty three teachers agreed that stuttering can be found in children with any socioeconomic status.

Table -17 Personality characteristics of persons with stuttering (statement no: 1-12)

Statement	Number of subjects who answered				
No:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
1	38	72#	9	22	9
2	10	9	9	90*	32
3	17	70#	9	40	14
4	5	28	13	86*	18
5	9	27	24	64*	26
6	17	30	49-	42	12
7	1	6	11	88*	34
8	7	20	24	82*	17
9	35*	44*	49	17	5
10	7	8	12	88*	35
11	12	6	40	78#	14
12	18	36	13	72#	11

<sup>\* -</sup> Shows that teachers have positive attitude regarding that statement.

The following are the responses of the teachers who are having neutral attitude

• Forty nine of the teachers were not sure whether children who stutter have behavioral problems or not.

The following are the responses which are having negative attitude.

- Hundred and ten teachers agreed that children with stuttering have feelings of inferiority compared to normal speaking children.
- Eighty seven agreed that children with stuttering are withdrawn and shy than normal children.
- Eighty three agreed that children with stuttering are often objects of fun in the class.
- Ninety two teachers agreed that stuttering may be related to excessive fear reactions.

Among the responses 7 of them revealed positive attitude, one is neutral and four of them revealed negative attitude.

<sup># -</sup> Shows that teachers have negative attitude regarding that statement.

<sup>~ -</sup> Shows that teacher have neutral attitude regarding that statement.

Some of the responses given by teachers were 'Not sure' responses. Hulit & Wirtz (1994) in their study also reported that the students answered many neutral responses indicating that they were unsure of the answers. Negative attitudes were however attributed to the stutterer's personality. They were seen as shy and withdrawn; it was also reported by Woods & Williams (1971) that classroom teachers, speech clinicians & college students perceived, people with stuttering in this way. Also, majority of them regarded children with stuttering as having feelings of inferiority, which is in consonance with the study of many authors (Lass & Louis, 1981; Ruscello, Lass, Schmitt, Pannbacker, 1990; Dorsey, & Guenther, (2000). But teachers saw the stutters as being intelligent and as good as normal children in leadership & academic performances.. This is in consonance with the study by Hurst & Cooper, (1983) where, the same was reported by Vocational Counselors.

### 2: Teachers feelings and beliefs about handling persons with stuttering

Out of the eight questions related to teachers' feelings and beliefs all the questions revealed positive attitude except one which is whether teachers can be biased while assessing students. Majority of the teachers did not feel that teachers react more negatively to children with stuttering than those with other speech problems. This is not in consonance with the finding of many authors (Hurst & Cooper, 1983; Crowe & Cooper, 1977) where they reported majority of the respondents agreed that the public tends to react more negatively. Also majority of the teachers agreed that teachers find it enjoyable to talk to children with stuttering, which is also not in consonance with the

study by Hurst & Cooper, (1983). They reported that employers felt discomfort while talking with stutterers.

Table - 18 Teachers feelings and beliefs about handling persons with stuttering

Statement	Number of subjects who answered				
No:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
13	61*	51	18	17	3
14	51	63*	16	13	7
15	45	68*	13	20	5
16	77*	42	3	13	15
17	6	61#	21	39	23
18	15	32	21	62*	20
19	34*	48*	13	51	4
20	17	41	10	65*	17

<sup>\* -</sup> Shows that teachers have positive attitude regarding that statement.

The following are the responses which are having positive attitude:

- Hundred and twelve teachers disagreed that teachers feel embarrassed when they speak to children with stuttering
- Hundred and fourteen respondents did not feel that teachers react more negatively to children with stuttering than those with other speech problems.
- Hundred and thirteen teachers disagreed that teachers often ask the child to keep quiet when he exhibits stuttering
- Hundred and nineteen teachers do not believe that others will develop the same problem by exposure to children with stuttering
- Eighty two of the respondents agreed that teachers do not ignore or talk very less to children with stuttering
- Eighty two of the teachers disagreed the statement that teachers find it not so enjoyable to talk to children with stuttering (34 strongly disagree and 48 disagree)
- Eighty two of the teachers believed that Stuttering is not a serious problem to worry about

<sup># -</sup> Shows that teachers have Negative attitude regarding that statement.

The following is the response which is having negative attitude:

• Sixty seven of the teachers agreed that teachers are biased while assessing the performance of children with stuttering

#### 3. Teachers' role in overcoming stuttering

The teachers' role in helping children overcome stuttering was evaluated using statements from 21-30. The results are given in Table 19 below:

Table 19 - Teachers' role in overcoming stuttering

Statement	Number of subjects who answered				
No:	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
21	63*	60	10	15	2
22	15	7	3	90*	35
23	63*	59	9	14	6
24	19	34	28	70*	21
25	9	22	28	70*	21
26	18	12	13	68*	39
27	15	35	65-	26	9
28	4	9	41	80*	16
29	20	41	6	69#	14
30	83*	42	7	12	6

<sup>\* -</sup> Shows that teachers have positive attitude regarding that statement.

The following are the responses which are having positive attitude:

- Hundred and twenty three teachers disagreed that teachers have no influence in eliminating teasing by the peer group
- Hundred and twenty five teachers agreed that teachers can help children with stuttering in developing a positive attitude in them regarding their abilities.
- Hundred and twenty two teachers disagreed that teachers have no influence on changing the attitudes of the child towards his stuttering problem
- Ninety one teachers agreed that teachers need not caution children with stuttering to think before they speak.

<sup># -</sup> Shows that teachers have Negative attitude regarding that statement.

<sup>~ -</sup> Shows that teacher have positive attitude regarding that statement.

- Ninety one teachers agreed the statement that teachers know how to help children with stuttering in a classroom.
- Hundred and seven teachers agreed that teachers should inform the parents regarding the child's problem.
- Ninety six of them agreed that speech therapy is the most preferable treatment for stuttering
- Hundred and twenty five teachers disagreed to the statement that ask the child to shift the school or change medium

The following is the responses which is having a neutral attitude:

• Sixty five of the teachers were not sure whether there is complete cure for stuttering

The following is the responses which is having negative attitude:

- Eighty three teachers were with the opinion that teachers do not have the time to help the child with stuttering
- Eight of the responses revealed positive attitude, one was in a neutral mode and one was in a negative mode.

Result of only one statement in this part was towards negative because majority of the teachers agreed that they do not have time to help children with stuttering. The result shows that teachers are aware that they can help children with stuttering in changing their negative perceptions and also in creating a positive attitude towards their problem. It reveals the fact that teachers should be made aware how to help children in the following areas:

- To solve teasing & bullying by peer group
- To help in the transfer of therapy technique in the classroom situation.
- To help the student to do oral class room presentation etc.

More than one third of the teachers are not sure whether there is complete cure for stuttering. So they need to be provided with information to have a more optimistic attitude.

#### **Test Retest Reliability**

Test retest reliability of questionnaire was found out by administering it on 10 subjects after a period of 4 days from the date of initial administration.

Table 20 - Test Retest Reliability

Attitude Domains	Reliability
Personality Characteristics	99%
Feelings& beliefs	99%
Teacher's role	98%
Total	99%

Alpha coefficient was done to find out the reliability of the testing and high reliability is present since the coefficients are 98% and above.

**Stage** 2: For each question related to attitude, ratings were given from 1 to 5, highest for the desirable answer. The total attitude score for each subject was calculated to study the effect of different factors.

#### A. Comparison across age groups.

The following table shows the distribution of subjects with respect to age groups & number of subjects.

Table 21- Distribution of subjects with respect to age groups & number of subjects.

Age groups(years)	Number of subjects	
20-30	35	
30-40	35	
40-50	50	
50 & above	30	

Table 22- Mean and Standard Deviation of attitude scores, across age groups.

	Age groups	Mean	S.D
Personality	20-30	38.9714	4.3891
Characteristics	30-40	40.0857	4.7735
	40-50	40.0600	4.8462
	50 & above	38.9333	4.4639
	Total	39.5867	4.6374
Feelings and	20-30	30.0571	4.6775
Beliefs	30-40	28.6857	5.8550
	40-50	30.4000	5.0749
	50 & above	28.6667	4.3734
	Total	29.5733	5.0638
Teachers role	20-30	36.5714	3.7752
	30-40	35.6286	4.3662
	40-50	37.3200	4.3959
	50 & above	35.7333	5.0236
	Total	36.4333	4.4032
Total	20-30	105.8000	8.8378
	30-40	105.4000	11.3194
	40-50	107.7800	9.8567
	50 & above	104.0000	11.2403
	Total	106.0067	10.2744

ANOVA was done to compare the attitudes of the teachers across four domains for each of the age groups. The following table gives results of one way ANOVA.

Table 23- Results of ANOVA

Domains	F (3,146)	P
Personality characteristics	.708	.548
Feelings and Beliefs	1.236	.299
Teachers role	1.339	.264
Total	.922	.432

The results revealed no significant difference in the attitude of teachers based on the age groups, 20-30 years, 30-40 years, 40-50 years and 50 years & above (p>0.05), for all the domains of attitude & also to the total. Regardless of the age group, subjects in

the study tend to respond to the attitude items similarly. Same was reported by Hulit &Wirtz (1994). The following graph shows mean attitude scores with respect to age group in each domain.

42 40 38 Average Attitude Scores 36 34 Age Groups (yrs) 32 30 28 50 & above 26 Personality Char. Feelings & Beliefs Teacher's Role **Domains** 

Graph 5- Mean attitude scores with respect to age group in each domain.

From the graph it is evident that 30-40 years and 40-50 years age groups had slightly higher scores in personality characteristics of stutterers compared to the other groups. In the domains of feelings and beliefs and teachers' role, 40-50 years and 20-30 years had slightly higher scores compared to other groups.

### B. Comparison across gender

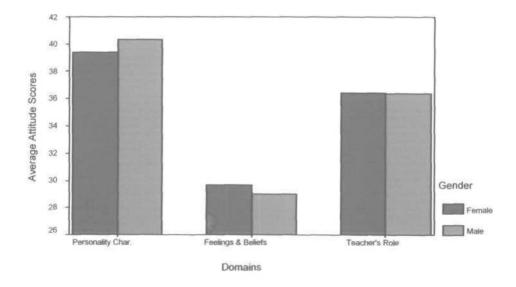
There were 116 females & 34 males in the present study. The Table below gives the comparison of results across gender.

Table 24 - Mean and standard deviation of the attitude scores across the gender

Domains	Gender	Mean	S. D
Personality characteristics	Female	39.3814	4.9802
reisonality characteristics	Male	40.3438	3.0012
Feelings and Beliefs	Female	29.7203	4.9145
	Male	29.0313	5.6310
Teachers role	Female	36.4407	4.3216
	Male	36.4063	4.7645
Total	Female	105.7288	9.9732
	Male	107.0313	11.4286

Mean and standard deviation for the gender was found out. Independent t- test was done to compare males and females. No significant difference was found between males and females (p>0.05) with respect to various domains of attitudes of teachers. This finding is in consonance with the finding of the study by Patterson & Pring (1991) where no gender difference was evident while it contradicts the result of Burley & Rinaldi, (1986) since they reported that males were having a more negative attitude towards persons with stuttering. The following graph shows mean attitude scores with respect to gender in each domain.

Graph 6 - Mean attitude scores with respect to gender in each domain.



From the graph, it can be seen that in the domain of personality characteristics, males had slightly higher scores compared to females and in the domain of feelings and beliefs females had slightly higher scores compared to males. No difference was seen in the domain of teacher's role.

#### C. Comparison across regional back ground

There were 74 subjects from urban background and 76 subjects from rural background. Table 25 gives Mean and standard deviation of responses across rural and urban population studied.

Table 25- Mean and SD of the attitude scores across the rural vs. urban condition

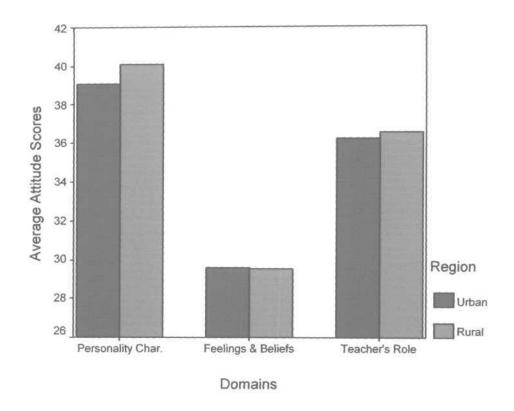
Domains	Urban VS	Mean	S. D
	Rural(No:)		
Personality characteristics	Urban	39.0811	3.7808
reisonanty characteristics	Rural	40.0789	5.3211
Feelings and beliefs	Urban	29.5946	5.0393
	Rural	29.5526	5.1209
Teachers role	Urban	36.2703	3.8224
Teachers fole	Rural	36.5921	4.9239
Total	Urban	105.2432	8.6386
Total	Rural	106.7500	11.6598

Mean and standard deviation was found out for the attitude across the rural vs. urban condition. Independent t- test was done to compare the attitude of teachers from rural vs. urban region. No significant difference was found between attitudes of teachers

from rural vs. urban region. (p>0.05). No studies have been reported which compared the attitudes of people across regional (rural/urban) background.

The following graph shows mean attitude scores with respect to regional back ground for each domain.

Graph 7 - Mean attitude scores with respect to regional back ground in each domain



#### D. Attitudes of teachers with presence or absence of students with stuttering

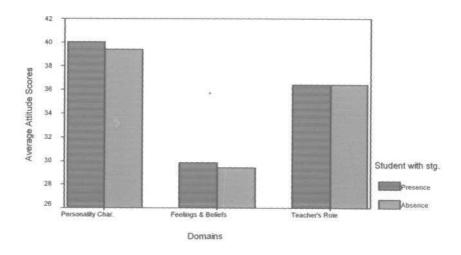
There were 67 teachers who had students with stuttering in their class as against 83 teachers who did not. Independent t test was administered to see if the attitudes of teachers vary with presence or absence of students with stuttering in the class i.e., having direct contact with children having stuttering.

Table 26 - Mean and SD of the attitude across the presence of students with stuttering

	Presence	Mean	S.D
Personality	Yes	40.0435	5.2618
characteristics	No	39.3846	4.3451
Feelings and	Yes	29.8696	5.2052
Beliefs	No	29.4423	5.0200
Teachers role	Yes	36.4565	4.7032
	No	36.4231	4.2875
Total	Yes	106.9565	9.9554
	No	105.5865	10.4320

The results revealed no significant difference in the attitude between teachers who had a student with stuttering in their class versus not (p>0.05). This may be due to the fact that exposure is for short term duration and also a lack of closest relationship with people who stutter. The study by Thomas (2001) reported that intimate rather than superficial contact decreases stereotyping in a variety of contexts. Present study is also not in consonance with the study of Crowe & Walton (1981) who reported significant negative relationships between desired teacher attitudes and the presence of a student with stuttering in the class.

Graph 8 - Mean attitude scores with respect to presence of a student with stuttering



Graph 9 shows mean attitude scores with respect t to presence of a student with stuttering in the class in each domain.

### V Comparison of attitude across the different socioeconomic status

Socio economic statuses (SES) of the teachers were obtained by taking their education, occupation and income (total family income/property) based on five point scale. There were 40 teachers from high socio economic status, 89 from middle socioeconomic status and 21 from low socio economic status. Table 27 gives Mean and SD scores for the three SES categories among the three attitudinal domains.

Table 27 - Mean and SD of the attitude scores across the socioeconomic status.

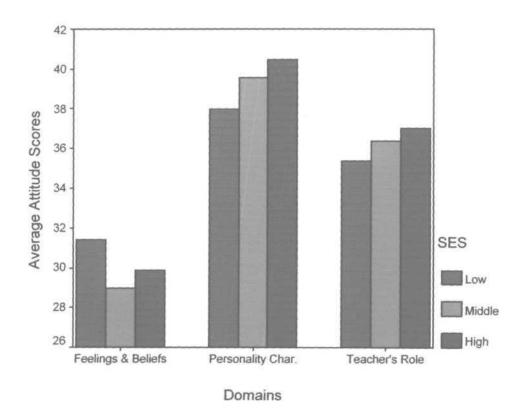
	SES	Mean	rS.D
Personality	Low	37.9524	5.2199
characteristics	Middle	39.5568	4.7727
	High	40.4878	3.8349
	Total	39.5867	4.6374
Feelings and	Low	31.4286	4.4110
Beliefs	Middle	28.9886	4.7934
	High	29.8780	5.7585
	Total	29.5733	5.0638
Teachers Role	Low	35.3810	4.3758
	Middle	36.4091	4.2389
	High	37.0244	4.7565
	Total	36.4333	4.4032
Total	Low	105.2381	9.0438
	Middle	105.5455	10.9113
	High	107.3902	9.5207
	Total	106.0067	10.2744

Independent t test was administered to see the attitude across different socioeconomic status. There was no significant difference in the attitude between teachers from low, middle or high socioeconomic status (p>0.05). This is in consonance

with the study of Catherine (2006) where no difference was found in the knowledge of normal school going children from low and middle socio economic status towards children with stuttering .Her study did not include children from high socio economic status.

The following graph shows mean attitude scores with respect to different socio economic status in each domain.

Graph 9 - Mean attitude scores with respect to different SES for each domain



Thus there was no significant effect of age, gender, regional back ground presence or absence of a student with stuttering and socioeconomic status on attitude o teachers in all the domains.

#### SUMMARY AND CONCLUSIONS

The purpose of the study was to find out primary school teachers awareness and attitudes towards children with stuttering. Hundred and fifty Malayalam speaking lower primary school teachers in the age range of 20-55 years from Kerala, a south Indian state was randomly selected for the study. The different variables taken included teachers who had exposure to persons with stuttering, teachers of urban vs rural schools, teachers from low, middle and high socio economic status, male vs female teachers and teachers across mean age ranges: 20-30; 30-40; 40-50 and 50 & above years.

A questionnaire was developed in English through literature survey, consisting three parts; demographic data, questions related to awareness and statements related to attitudes. After pilot testing it was translated to Malayalam language and again after doing a pilot study on five Malayalee subjects, the final questionnaire was evolved for collecting data from the subjects.

The study was done in 2 parts. In the first part awareness of teachers regarding stuttering was studied and it was found that even though more than 90% of the teachers had exposure to persons with stuttering, their awareness regarding characteristics and causes of stuttering are very limited. Majority of the teachers (75.3%) were not aware of the causes of stuttering. This is not surprising considering the knowledge of professionals in this regard. In spite of decades of research in the field stuttering evades speech language pathologist to answer questions concerning onset, development and nature of

the disorder. Compared to characteristics and causes they had better knowledge on statements related to treatment of stuttering. Around 50% of the teachers from all the age groups reported that stuttering can be cured and around 67.3% of the teachers considered consulting a speech therapist as the treatment option. Majority of the teachers were not aware that stuttering is more prevalent in boys than girls; also they were not aware of the variations in stuttering according to situations.

Some of the other important findings of the present study are:

- In all the age groups around 80% of the teachers reported that they can identify children with stuttering if present in their class.
- 60% reported that stuttering is different from misarticulation.
- According to 60% stuttering develops in the childhood.

In the second part of the study attitudes of the teachers towards children with stuttering was studied. The frequency of responses was considered to discuss the attitude of teachers with respect to each statement and the attitude was regarded as positive/negative/neutral. Attitudes were divided in to 3 domains personality characteristics of the stutterers, teachers' feelings and beliefs and teachers' role in eliminating stuttering. Comparison of attitude scores across age groups, gender, regional background, presence of students with stuttering in the class vs. not and different socio economic status were found out using independent t- test and no significant difference was seen (p>0.05).

In the domain of personality characteristics of children with stuttering they were reported as intelligent, as good as other children in leadership and academic performance. But negative stereotypes like shy, withdrawn, fearful and inferiority complex was reported in children with stuttering. Teachers' feelings and beliefs regarding children with stuttering were positive except for their response (67%) that teachers can be negatively biased while assessing the performance of a student with stuttering. Teachers had positive attitudes regarding their role in creating a positive attitude in children. However, 83 teachers out of 150 (55.3%) reported that they do not have time to help student with stuttering.

Comparison of attitude scores across age groups, gender, regional background, presence of students with stuttering in the class vs. not and different socio economic status were found out using independent t- test and no significant difference was seen (p>0.05).

As a conclusion it can be pointed out that teachers are not well aware of the cause and characteristics of the disorder. Even though overall attitude is positive, negative stereotypes like fear, shy, withdrawn and feelings of inferiority are attributed by the teachers to children with stuttering. It may be concluded that

- Teachers are not well aware of what stuttering is
- Teachers' attitudes do not change based on their exposure to the stuttering
- Teachers' attitudes do not depend on whether they are from urban or rural area
- Teachers' attitudes do not depend on their socio economic status
- Teachers' attitudes do not depend on their gender
- Teachers' attitudes do not depend on their age

The study has clinical implications. The information in the questionnaire can be used in counseling both persons with stuttering and also the public, especially the teachers. The positive points like persons with stuttering are considered as intelligent and good as other children in leadership etc can be informed to the children to convince them that public especially teachers consider them with these positive aspects. Teachers can be counseled regarding the positive aspects and also about the negative stereotypes attributed to persons with stuttering. Teachers should be provided with knowledge how to solve teasing and bullying in class room situation, how to transfer therapy techniques in class room situation etc.

Speech language therapists in practice should convey accurate information about stuttering and those who stutter to the public. It is sure that attitudes about stuttering will not improve as long as people remain ignorant about the true nature and the true characteristics of the disorder and capabilities of persons with stuttering.

As mentioned earlier, the teachers play a crucial role in the educational process of children and hence their perceptions are very important to the educational progress of their students. They are the key persons in the early identification, prevention and management of stuttering, which otherwise could become a life-long handicapping condition

#### Limitations of the study:

- •• Due to time constraints the number of subjects studied under different variables (age, gender, SES, rural/urban) had to be limited
- ••• Use of video samples of children with stuttering could have enhanced the awareness and attitude issues related to stuttering.

# **Recommendations for further study:**

- Large scale study with different geographic, linguistic background is necessary
- The study can include other populations of other professionals, peer group and public
- Validating the attitudes of people with those of persons with stuttering

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# APPENDIX -I

# Questionnaire

#### Part I

Name of the teacher: Age: Gender:

Name of the School: Class teacher for:

Education: 1) Below SSLC 2) TTC 3) TTC+PG 4) TTC+ Degree 5) PG

Number of years of teaching: 1) < 1 yr 2) 1-2 yrs 3) 2-5yrs 4) > 5yrs

Total family income/mth (Rs):1) < Rs.5000 2) 5000-10000 3) 11000-15000 4) >16000 Total Property: 1)NA 2) NIL 3)/<1 Lakh 4) 1-5 lakh 5)/>5Lakh

Strength of class in your school: 1)<20 2)20-30 3)30-50 4)>50

# Part II (Please answer the following with the options provided)

Sl.No	Exposure	No	Yes	Not sure
1)	Have you seen children/adult with stuttering?			
2)	Have you seen children with stuttering in your family?			
3)	Have you seen children with stuttering in your neighborhood/ anywhere?			
4)	Have you ever had a student in your class with stuttering?			
5)	Have you ever interacted with children/adults with stuttering?			
6)	If yes, is it for > 6months?			
7)	Many people are not aware of stuttering			
	Characteristics			
8)	What do you think is the problem of the child with stuttering?  a) Articulation problem b) voice problem c) fluency problem d) Do n		ow	
9)	All the school teachers can identify stuttering if present in their stude			
10)	Stuttering is different from misarticulation			
11)				
12)				
	all the speaking situations			
13)	What are the characteristics of Stuttering?			
	a) b) c)	d) Not sure		,
14)	Stuttering mostly develops early in the childhood			
	Causes			
15)	Stuttering usually develops due to parental mishandling			
16)	What do you think is the cause of stuttering?			
	a) b) c)	d)	Not su	re
	Treatment			
17)	Many children with stuttering spontaneously recover without treatrm			
18)	Stuttering can be overcome by treatment			
19)	What do you think is the line of treatment for stuttering? Consult a: 1) Physician 2) Psychologist 3) Speech therapist 4) Not su	re		
20)	Stuttering can be cured			

# Part III

Please read the following questions carefully. You can rate each question on the following scale. Please tick (V) one of the options a, b, c, d or e, whichever you feel is appropriate. Please feel free to clarify if you have any queries, a - Strongly disagree; b - Disagree; c - Not sure; d - Agree; e - Strongly agree

SI No	Personality characteristics of PWS		
1)	Children with stuttering do not have feelings of inferiority compared to		
,	normal speaking children		
2)	Children with stuttering are as intelligent as normal children		
3)	Children with stuttering are not withdrawn and shy than normal childrei		
4)	Children with stuttering are as good as normal children in leadership		
5)	Children do not stutter to get attention		
6)	Children who stutter do not have behavioral problems		
7)	Children with stuttering can perform as well academically as other children		
8)	Children with stuttering can speak fluently many times		
9)	Stuttering may be viewed as a preliminary sign of character weakness		
10)	Stuttering can be found in children with any socioeconomic status		
11)	Stuttering may be related to excessive fear reactions		
12)	Children with stuttering are often objects of fun in the class		
	Teachers feelings and beliefs about handling PWS		
13)	Teachers feel embarrassed when they speak to children with stuttering		
14)	Teachers react more negatively to children with stuttering than those wi		
	other speech problems		
15)	Teachers often ask the child to keep quiet when he exhibits stuttering		
16)	Teachers feel that exposure to children with stuttering can cause similar		
	problems in others		
17)	Teachers are not biased while assessing the performance of children wit		
	stuttering		
18)	Teachers do not ignore or talk very less to children with stuttering		
19)	Teachers find it not so enjoyable to talk to children with stuttering		
20)	Stuttering is not a serious problem to worry about		
	Teachers' role in overcoming stuttering		
21)	Teachers have no influence in eliminating teasing by the peer group		
22)	Teachers can help children with stuttering in developing a positive attiti in their regarding their abilities		
23)	Teachers have no influence on changing the attitudes of the child towar		
,	his stuttering problem		
24)	Teachers need not caution children with stuttering to think before they		
	speak		
25)	Teachers know how to help children with stuttering in a classroom		
26)	Teachers should inform the parents regarding the child's problem		
27)	There is no complete cure for stuttering		
28)	Speech therapy is the most preferable treatment for stuttering		
29)	Teachers do not have the time to help the child with stuttering		
30)	Teachers should ask the child to shift the school or change medium		

#### APPENDIX - II

# Questionnaire

#### Part 1

അദ്ധ്യാപകന്റെ പേര് ഭ വയസ് ഭ സ്ത്രീ/പുരുഷൻ ക്രാസ്ടീച്ചർ ഭ ക്രാസ്ടീച്ചർ ഭ വിദ്യാഭ്യാസാം 1) Below SSLC 2) TTC 3) TTC + PG 4) TTC + Degree 5) PG സേവന കാലയളവ് ഭ 1) <1 Year 2) 1-2 yrs 3) 2-5 yrs 4) > 5 yrs കുടുംബത്തിന്റെആകെ മാസവരുമാനാം 1) < 5000 2) 5000-10000 3) 10000-15000 4) > 16000 ആകെ സ്വത്ത് ഭ 1) NA 2) NIL 3) 1< lakh 4) 1-5 lakh 5) />6 lakh ക്ലാസിൽ കുട്ടികളുടെ എണ്ണാ ഭ 1) <20 2) 20-30 3) 30-50 4) > 50

Part 11 (തന്നിരിക്കുന്നതിന് അനുയോജ്യമായി ഉത്തരം നല്കുക )

No 1) 2) 3) 4)	നിങ്ങൾ വിക്ക് ഉളള കുട്ടികളെ/മുതിർന്നവരെ കണ്ടിട്ടുണ്ടോ ? നിങ്ങളുടെ കുടുംബത്തിൽ വിക്ക് ഉളള കുട്ടികൾ ഉണ്ടോ ? അയൽപക്കത്തോ മറ്റെവിടെയെങ്കിലുമോ വിക്കുളള കുട്ടികളെ കണ്ടിട്ടുണ്ടോ ? നിങ്ങളുടെ ക്ലാസിൽ എന്നെങ്കിലും വിക്കുളള കുട്ടികൾ ഉണ്ടായിരുന്നോ? നിങ്ങൾ വിക്ക് ഉളള കുട്ടികളോടോ മുതിർന്നവരോടോ എന്നെങ്കിലും സമ്പർക്കം പുലർത്തിയിട്ടുണ്ടോ ? ഉണ്ടെങ്കിൽ അത് ദ മാസത്തിൽ കൂടുതലാണോ ?			sure
3)	നിങ്ങളുടെ കുടുംബത്തിൽ വിക്ക് ഉള്ള കുട്ടികൾ ഉണ്ടോ ? അയൽപക്കത്തോ മറ്റെവിടെയെങ്കിലുമോ വിക്കുള്ള കുട്ടികളെ കണ്ടിട്ടുണ്ടോ ? നിങ്ങളുടെ ക്ലാസിൽ എന്നെങ്കിലും വിക്കുള്ള കുട്ടികൾ ഉണ്ടായിരുന്നോ? നിങ്ങൾ വിക്ക് ഉള്ള കുട്ടികളോടോ മുതിർന്നവരോടോ എന്നെങ്കിലും സമ്പർക്കം പുലർത്തിയിട്ടുണ്ടോ ?			
4)	അയൽപക്കത്തോ മറ്റെവിടെയെങ്കിലുമോ വിക്കുളള കുട്ടികളെ കണ്ടിട്ടുണ്ടോ ? നിങ്ങളുടെ ക്ലാസിൽ എന്നെങ്കിലും വിക്കുളള കുട്ടികൾ ഉണ്ടായിരുന്നോ? നിങ്ങൾ വിക്ക് ഉളള കുട്ടികളോടോ മുതിർന്നവരോടോ എന്നെങ്കിലും സമ്പർക്കം പുലർത്തിയിട്ടുണ്ടോ ?			
	നിങ്ങളുടെ ക്ലാസിൽ എന്നെങ്കിലും വിക്കുളള കുട്ടികൾ ഉണ്ടായിരുന്നോ? നിങ്ങൾ വിക്ക് ഉളള കുട്ടികളോടോ മുതിർന്നവരോടോ എന്നെങ്കിലും സമ്പർക്കം പുലർത്തിയിട്ടുണ്ടോ ?			
5)	നിങ്ങൾ വിക്ക് ഉള്ള കുട്ടികളോടോ മുതിർന്നവരോടോ എന്നെങ്കിലും സമ്പർക്കം പുലർത്തിയിട്ടുണ്ടോ ?			
*/	ഉണ്ടെങ്കിൽ അത് ഒ മാസത്തിൽ കൂടുതലാണോ ?			
6)				
7)	പല ആളുകളും വിക്കിനെക്കുറിച്ച് ബോധവാൻമാരല്ല			
	ലക്ഷണങ്ങൾ			
8)	വിക്ക് ഉളള കുട്ടിയുടെ പ്രശ്നം എന്താണെന്നാണ് നിങ്ങൾ കരുതുന്നത് ? 1) ഉച്ചാരണവൈകല്യം 2) സ്വരത്തിന്റെ പ്രശ്നം 3) സംസാരതടസം 4) അറിയില്ല			
9)	തങ്ങളുടെ ക്ലാസിലെ കുട്ടിക്ക് വിക്കുണ്ടെങ്കിൽ അത് തിരിച്ചറിയാൻ എല്ലാ അദ്ധ്യാപകർക്കും കഴിയും			
10)				
11)				
12)				
13)	വിക്കിന്റെ ലക്ഷണങ്ങൾ എന്തെല്ലാം			
	1) 2) 3) 4) അറിയില്ല			
14)	വിക്ക് മിക്കവാറുംതന്നെ ചെറുപ്പത്തിലാണ് ഉണ്ടാകുന്നത്			
	കാരണങ്ങൾ			
15)	മാതാപിതാക്കൾ തെറ്റായ രീതിയിൽ കൈകാര്യം ചെയ്യുന്നതുകൊണ്ടാണ് വിക്ക് ഉണ്ടാകുന്നത്			
18)				
	ചികിത്സ			
17)				
18)	ചികിത്സവഴി വിക്കിനെ തരണം ചെയ്യാൻ സാധിക്കും			
19)	ചികിത്സിക്കുവാനായി കാണേണ്ടത് ആരെ ?			
	1) ഫിസിഷൃനെ 2) സൈക്കോളജിസ്റ്റിനെ 3) സ്പീച്ച് തെറപ്പിസ്റ്റിനെ4) അറിയല്ല			
20)	വിക്ക് സുഖപ്പെടുത്താൻ കഴിയും			

# Part 111

(താഴെ കൊടുത്തിരിക്കുന്ന ചോദ്യങ്ങൾ ശ്രദ്ധാപൂർവ്വം വായിക്കുക. a,b,c,d,e ഇവയിൽ അനുയോജ്യമെന്ന് തോന്നുന്നതിന്റെ നേരെ ടിക്ക് ( $\sqrt{\phantom{a}}$ ) ചെയ്യുക. സംശയമുണ്ടെങ്കിൽ ദ യവായി ചോദിക്കുക) a)തീർത്തും വിയോജിക്കുന്നു b)വിയോജിക്കുന്നു c) അറിയില്ല d) യോജിക്കുന്നു e)തീർത്തും യോജിക്കുന്നു

Sl.No	വിക്കുളളവരുടെ വൃക്തിത്വ സവിശേഷതകൾ	a	b	c	d	e
1	മറ്റുകുട്ടികളെ അപേക്ഷിച്ച് വിക്കുളള കുട്ടികൾക്ക് അപകർഷതാബോധം ഇല്ല	,				
2	വിക്കുളള കുട്ടികൾ മറ്റുകുട്ടികളെപ്പോലെതന്നെ ബുദ്ധിയുളളവരാണ്					
3	വിക്കുളള കുട്ടികൾ മറ്റുകുട്ടികളേക്കാൾ ഉളളിലേക്ക് വലിയുന്നവരും നാണപ്രകൃതിക്കാരും അല്ല					
4	വിക്കുളള കുട്ടികൾ മറ്റുകുട്ടികളെപ്പോലെതന്നെ നേതൃത്വം നൽകാൻ കഴിവുളളവരാണ്					
5	ശ്രദ്ധ കിട്ടുവാനായി കുട്ടികൾ വിക്കാറില്ല					
6	വിക്കുളള കുട്ടികൾക്ക് മറ്റു സ്വഭാവവൈകല്യങ്ങളൊന്നുമില്ല					
7	വിക്കുളള കുട്ടികൾക്ക് മറ്റുകുട്ടികളെപ്പോലെതന്നെ പഠിക്കാൻ സാധിക്കും					
8	വിക്കുളള കുട്ടികൾക്ക് ചിലപ്പോഴൊക്കെ നന്നായി സംസാരിക്കാൻ സാധിക്കും					
9	വിക്ക് സ്വഭാവ വൈകലൃത്തിന്റെ ഒരു പ്രാഥമിക ലക്ഷണമായി കാണാറുണ്ട്					
10	എല്ലാ സാമൂഹിക സാമ്പത്തിക നിലവാരത്തിൽപ്പെട്ടവരിലും വിക്ക് ഉണ്ടാകാറുണ്ട്					
11	വിക്കിന് ഭയവുമായി ബന്ധമുണ്ട്					
12	വിക്കുളള കുട്ടികൾ പലപ്പോഴും ക്ലാസിൽ തമാശയ്ക്കുളള വിഷയമാണ്					
	വിക്കുളളവരെ കൈകാര്യം ചെയ്യേണ്ടതിനെക്കുറിച്ചുള്ള അദ്ധ്യാപകരുടെ മനോഭാവ	lo	_		-	
13	പൊതുസ്ഥലത്ത് വിക്കുളള കുട്ടികളോട് സംസാരിക്കുമ്പോൾ അദ്ധ്യാപ്കർക്ക് ഇളിഭൃത (ചമ്മൽ) തോന്നാറുണ്ട്					
14	മറ്റുസംസാരവൈകല്യമുളള കുട്ടികളെ അപേക്ഷിച്ച് വിക്കുളള കുട്ടികളോട് അദ്ധ്യാപകർ കു ടുതൽ നെഗറ്റീവ് ആയിട്ടാണ് പെരുമാറുന്നത്					
15	കുട്ടി വിക്കുന്നത് കാണുമ്പോൾ പലപ്പോഴും അദ്ധ്യാപകർ മിണ്ടാതിരിക്കാൻ ആവശുപ്പെടാറുണ്ട്					
16	വിക്കുളള കുട്ടികളുമായി ഇടപെട്ടാൽ മറ്റുകുട്ടികൾക്കും വിക്ക് ഉണ്ടാകുമെന്ന് അദ്ധ്യാപകർ കരുതുന്നു					
17	വിക്കുളള കുട്ടികളെ വിലയിരുത്തുമ്പോൾ അവരുടെ കഴിവിനനുസരിച്ച് വിലമതിക്കുവാൻ ചിലപ്പോൾ അദ്ധ്യാപകർക്ക് സാധിക്കാറില്ല					
18	വിക്കുളള കുട്ടികളെ അദ്ധ്യാപകർ അവഗണിക്കുകയോ വളരെക്കുറച്ച് മാത്രം അവരോട് സംസാരിക്കുകയോ ചെയ്യാറില്ല					
19	വിക്കുളള കുട്ടികളോട് സംസാരിക്കുന്നത് അത്ര രസകരമായി അദ്ധ്യാപ കർക്ക് തോന്നാറില്ല			1		
20	വിഷമീക്കുവാൻ മാത്രം ഗൗരവമേറിയ ഒരു പ്രശ്നമല്ല വിക്ക്					$\vdash$
	വിക്കിനെ തരണംചെയ്യുന്നതിൽ അദ്ധ്യാപകരുടെ പങ്ക്		<u> </u>			$\vdash$
21	സമപ്രായക്കാരുടെ കളിയാക്കൽ ഒഴിവാക്കുന്നതിൽ അദ്ധ്യാപകർക്ക് ഒരു സ്വാധീനവുമില്ല				_	
22	വിക്കുളള കുട്ടികളിൽ തങ്ങളുടെ കഴിവിനെക്കുറിച്ച് ക്രിയാത്മക മനോഭാവം വളർത്തുവാൻ അദ്ധ്യാപകർക്ക് കഴിയും					
23	തന്റെ വിക്കിനെക്കുറിച്ചുള്ള ഒരു കുട്ടിയുടെ മനോഭാവം മാറ്റുന്നതിൽ അദ്ധ്യാപ കർക്ക് ഒരു സ്വാധീനവുമില്ല					
24	ചിന്തിച്ച് സംസാരിക്കുവാൻ അദ്ധ്യാപകർ വിക്കുളള കുട്ടികളോട് പറയേണ്ട ആവശ്യമില്ല		-			-
25	ക്ലാസിൽ വിക്കുളള കുട്ടിയെ സഹായിക്കേണ്ടതെങ്ങനെയെന്ന് അദ്ധ്യാപകർക്കറിയാം					
26	കുട്ടിയുടെ വിക്കിനെക്കുറിച്ച് അദ്ധ്യാപകർ മാതാപിതാക്കളെ അറിയിക്കണം	-	-			
27	വിക്ക് പൂർണ്ണമായി സുഖപ്പെടില്ല				-	
28	വിക്കിനുള്ള ഏറ്റവും ഫലപ്രദമായ ചികിത്സ സ്പീച്ച് തെറപ്പിയാണ്		-			-
29	വിക്കുളള കുട്ടികളെ സഹായിക്കാൻ അദ്ധ്യാപകർക്ക് സമയം കിട്ടാറില്ല		-		_	-
30	അദ്ധ്യാപകർ വിക്കുളള കുട്ടിയോട് സ്ക്കൂൾ അല്ലെങ്കിൽ മീഡിയം മാറുവാൻ ആവശ്യപ്പെടണം					