

MOBILE PHONE PHOBIA IN PERSONS WITH STUTTERING- INDIAN SCENARIO

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Abstract

India is placed second to China in the total number of mobile subscribers. Most of the research has been done on feeling and attitudes associated with telephone use in Persons with stuttering (PWS). However, no research among the frequency of mobile phone usage and feeling, attitudes and coping strategies towards mobile phone usage among PWS has been done in the Indian context. The present study investigated the frequency of mobile phone usage in terms of calls made as well as received and attitudes, anxiety and coping strategies in PWS, using a questionnaire developed for the purpose. Sixty PWS (Twenty in each severity) in the age range of 15- 40 years participated in the study. It was found that persons with severe stuttering faced more difficulty compared to the other severity groups. Treatment strategies should address these issues in dealing with PWS.

Key words: Mobile phone, Anxiety, Attitude, Coping Strategies

Introduction

Stuttering is defined as the temporal disruption of the simultaneous and successive programming of muscular movements required to produce a speech sound or its link to the next sound which is characterized by repetitions, hesitations, prolongations and audible pauses (VanRiper, 1982). Speech language pathologists frequently encounter people with stuttering having telephobia. Telephone phobia (telephonophobia, telephobia) is reluctance or fear of making or taking phone calls, literally, "fear of telephone" (Marshall, 1995). It is considered to be a type of Social phobia or Social anxiety problem. The reasons for telephone being more difficult for persons with stuttering (PWS) could be due to total reliance on speech, lack of visual feedback from the listener, time pressure, fear of giving a bad impression and fear of being misunderstood or responding inappropriately. As a result PWS avoid many activities, such as scheduling events or clarifying information.

The over dependence on speech and the inability to supplement what is being said with nonverbal cues in telephonic conversation is also likely to be problematic for PWS. According to Kaasin and Bjerkan's (1982), PWS tend to stutter more likely on critical words which become vital in telephonic conversations. Furthermore, Rutter

(1987) suggests that telephonic conversation is more likely than 'face-to-face' talk to be task oriented, where specific information needs to be given or requested, not only is information load greater, the opportunities for employing covert behaviour such as circumlocution as well as nonverbal cues are reduced.

Compared to face-to-face conversations, telephonic conversations are generally dyadic (Schegloff, 1968) and have definite beginnings and ends which are marked by highly scripted nature of the opening and closing sequence (Cook & Lalljee, 1972; Drummond & Hopper, 1991; Ryan, Anas, Hummert, & Laver-Ingram, 1998). These features may cause difficulties for PWS. Also, anticipation as the telephone rings and the need to start speaking immediately at the moment the call is answered makes telephone a potentially hazardous task for PWS.

Few empirical studies have been done to support the fact that the telephone is rated as one of the most feared situations by PWS. The first and foremost study was done in 1957 by Trotter and Bergman where they compared reactions of persons with and without stuttering to different speech situations using the Stutterer's Reactions to Speech Situations Scale of Johnson, Darley, and Spriesterbach (1942). It was found that PWS wished to avoid speaking situations more than persons with no stuttering (PWNS), which was drastically more where use of the telephone was involved. In another study, Leith & Timmons (1983) tried to evaluate reactions of PWS to the telephone as a speaking situation. Of the 130 subjects they questioned, 72% placed making a call in their top three most feared speaking situations, which rose to 88% for persons with severe stuttering. They also asked subjects to rate different types of call in terms of associated fear. It was seen that making a call to a younger person or a peer of the same gender were rated as the least feared telephone situations. Further, situations including calling a peer of the opposite gender, higher authorities and different ethnic group were more feared telephonic situations. James, Brumfitt & Cudd (1999) studied the use of and attitudes towards the telephone by persons with stuttering impairment. The results indicated that making calls was more problematic than answering them. Avoidance behaviors were more prevalent amongst younger adults with stuttering than their older counterparts. The avoidance strategies used for making the calls like making the phone to be switched off or low battery, asking another person to make a call, or saying that there is no balance to make a call. Also, the anticipation of what others feel might be another factor. The preference by majority of PWS for mobile compared to landline phones might be due to the fact that they can walk with the mobile, instead of standing at one place for a landline phone. For majority of the PWS this mobility tends to ease their anxiety and tension which further reduces their stuttering. Also, they can use text messaging and voice mails in mobiles which cannot be used in landline phones. The caller identity facilities are there in mobile phone compared to landline, which enables PWS to reject or answer the calls according to caller's identity. Furthermore, the call rates in mobile phones are cheaper compared to landlines, which is another factor to prefer mobile over landline phones.

Persons with severe stuttering used the telephone the least. It was also found that telephone was being more problematic than 'face-to-face' communication. The reason for preferring face to face communication over telephone might be due to the fact that their inability to use hand gestures, eye blink and other forms of nonverbal communication. The "speaking only situation" tends to create more tension in PWS and also they have to keep the conversation going. Some PWS feel that their stuttering behaviours will increase the mobile / telephone bills, because of which they tend to make the conversations as fast as possible leading to more stuttering compared to face - face communication. Most of the PWS experience difficulty in starting of the conversation and also when they have to talk to strangers and authority figures due to anticipation of getting a bad impression as they are conditioned to believe. This problem is more in telephone conversation.

Studies have reported that when confronted with threatening social stimuli, people who stammer show physical arousal and report increased anxiety at the moment of stuttering (Bloodstein, 1995). Heart rate can accelerate just prior to stuttering, and when reading aloud people who stutter have been found to have greater heart rate variability, greater respiration changes and greater heart rate acceleration than non-stuttering controls (Alm 2004). In people who have stuttering, it has also been found that vasoconstriction is more likely to occur just before stuttering than before fluently spoken words (Bloodstein, 1995). Levels of state anxiety tend to be higher at the moment of stuttering than at non-stuttering moments and or in non-stuttering controls. For example, Craig (1990) found that people who stutter had substantially higher state anxiety levels than non-stuttering controls when talking on the telephone, and Gabel, Colcord & Petrosino (2002) found that people who stammer had higher levels of state anxiety when speaking.

Doughty (1990) did a case study in which hypnosis was used in an effort to reduce telephobia in PWS. Lee, McGough, and Peins (1976) used relaxation techniques to desensitize PWS towards telephone usage. Silverman (1977) suggests that persons with severe stuttering could consider Telecommunications Relay Service which is a system designed primarily for the hearing impaired in which text is relayed via an operator to another party. The existence of such services and products supports the notion that indeed the telephone can be problematic for PWS.

For landline phones, the network is better compared to mobile phones. It never runs out of battery and since they are big and bulky, they have less chances of getting lost or being stolen. While in the case of Mobile phones, mobility is the biggest advantage which allows the user to move while talking. Another aspect is versatility, which allows the user to take and view pictures, use internet, play music etc., while in landlines, it allows the user to take and receive calls only. Even the cost of the mobile phones are reducing daily and even the operators introducing various schemes makes people opt for mobile phones compared to landline phones. For persons with stuttering, it was seen that in case of landline phones, whenever they experienced stuttering they used to fidget with the wires to overcome tension and anxiety, while

for mobile phones, they could blame the network, put on voice call activation, switching off the mobile phone and if it is unknown or higher authorities seeing the caller identity they would refrain from picking the call, which are is not possible in the case of landlines.

Need for the study

Currently India is placed second to China in the total number of mobile subscribers. Most of the research has been done on feeling and attitudes associated with telephone use in PWS. However, no research among the frequency of mobile phone usage and feeling, attitudes and coping strategies towards mobile phone usage among PWS have been done in the Indian context. Such studies would have important clinical implications in the management of PWS. Hence the present study was planned with the main aim of understanding the usage of mobile phones and problems faced by PWS. The specific objectives were:

- (1) To study the frequency of Mobile phone usage in terms of calls made and received among PWS with different severity of stuttering.
- (2) To investigate the attitudes and feelings associated with Mobile phone usage in different severity groups of PWS.

Method

The study was carried out in two phases. In Phase 1 a questionnaire was developed through literature survey, consultations with speech and language pathologists, family members and PWS which was validated with a pilot study. In Phase 2 the questionnaire was administered to the selected participants individually.

Participants:

Sixty individuals diagnosed as having developmental stuttering, in the age range of 18 - 40 years were the participants of the study including 20 mild (17 M, 3 F) , 20 moderate (19 M, 1 F), and 20 severe stuttering (19M, 1 F) as per scores and classification of Stuttering Severity Index -3 (Riley, 1994). All participants should own a personal mobile phone to be included in the study. Those with associated neurogenic, psychiatric problems and any sensory motor deficits were excluded from the study.

Materials:

The materials included

- (1) Stuttering Severity Instrument (SSI - III, Riley, 1994).
- (2) Questionnaire developed for the study.

The Part 1 of the questionnaire consisted of demographic data, family history, and therapy experiences. Part 2 included 10 questions each to investigate mobile phone usage, attitudes, and feelings of PWS. Each item in the questionnaire was expressed

as a statement. Each item was scored along a 3-point rating scale, 'Never' (0), 'Occasionally' (1) and 'Frequently' (2). The maximum score was 60 and high scores indicated more problems in attitudes and feelings.

Procedure:

A written consent was obtained from the participants and the questionnaire was administered through interviewing the participants after the initial evaluations. The data was tabulated and analyzed using the SPSS 16 software.

Results and Discussion

It was seen that all the 60 participants preferred mobile phones over landlines. It was also found that 48 out of the 60 preferred face to face communications over telephone and 55 out of 60 PWS experienced more stuttering when they had to talk to strangers or unknown persons compared to friends and family members. The results of the study are discussed under the headings of frequency of mobile phone usage by PWS and their feelings, attitudes and coping.

1. Frequency of Mobile phone usage among PWS according to the severity

a. Calls made:

Table 1: Frequency of calls (in %) made by PWS in different severity groups

Severity of Stuttering	< 5 calls (%)	5- 10 calls (%)	> 10 calls (%)
Mild	9	12	79
Moderate	82	11	7
Severe	90	7	3

All participants were in the middle socio economic group. They were graduate and post graduate students and were prepaid mobile subscribers. None of them had attended fluency therapy before. As seen in Table 1, more number of persons with severe stuttering made less than 5 calls per day (90%) compared to the moderate (82%) and mild PWS (9%). This trend, as expected, was reversed in case of more than 10 calls made, where persons with mild stuttering made maximum calls (75%) followed by those with moderate (6%) and severe (3%) stuttering.

b. Calls received:

Table 2: Frequency of calls received by PWS in different severity groups

Severity of Stuttering	< 5 calls (%)	5- 10 calls (%)	> 10 calls (%)
Mild	10	15	75
Moderate	80	14	6
Severe	85	12	3

As seen in table 2, the trends were similar to the calls made in that maximum number of persons with severe stuttering received less than 5 calls (85%) followed by persons with moderate (80%) and mild stuttering (10%) respectively. For greater than 10 calls received per day also the pattern was similar, where it was maximum for mild (75%) followed by PWS with moderate (6%) and severe (3%) stuttering.

The data on the mobile phone usage in PWS suggests, in terms of frequency of usage of mobile phone in both receiving as well as making calls, persons with severe stuttering faced more problem compared to the other two groups. It was also found that making calls was more problematic than receiving for all severity groups considered which is in consensus with findings of Leith and Timmons (1983) and James et al (1999) data for telephone usage in PWS. Most of the PWS experience difficulty in starting of the conversation and also when they have to talk to strangers and authority figures due to anticipation of getting a bad impression as they are conditioned to believe. This problem is more in telephone conversation. This is in agreement with the studies done by Cook and Lalljee (1972) who also reported that PWS preferred face to face communication over telephonic communication. Another interesting aspect in our study was when PWS used mobile phones, they exhibited more problems on content words compared to function words, which was reported in telephone studies (Kaasin&Berjken, 1982). Social isolation and feelings of losing out was also mentioned by many respondents in our study which is in agreement with the other studies (Collins and Blood, 1990; Craig & Calver, 1991, and Silverman & Paytner, 1990).

Attitudes, anxiety and coping associated with Mobile phone usage:

Based on the questionnaire data, the percentage scores on attitude and feelings associated with mobile phone usage by PWS in different severity groups were analysed. Figure 1 provides details of the attitude, anxiety and coping behaviours associated with mobile phone usage among PWS. It is observed that persons with severe stuttering exhibited more negative attitudes and feelings associated with mobile phone usage compared to the other groups.

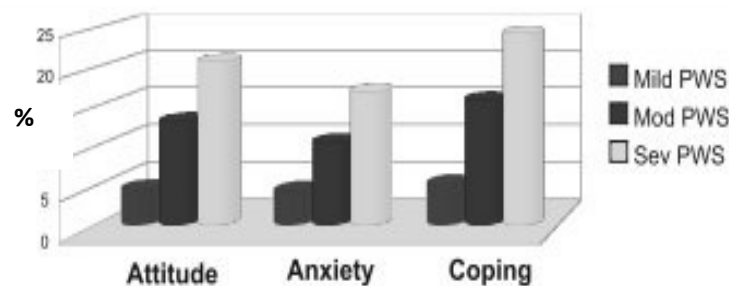


Fig 1: Attitudes, anxiety and coping associated with Mobile phone usage

- a. **Attitude:** In terms of attitudes, the mean scores for persons with mild, moderate and severe stuttering were 4.50, 13.15, and 20.75, respectively. The ANOVA results revealed that there was a significant difference between the three groups [F (2, 59) = 739, $p < 0.001$].
- b. **Anxiety:** In terms of anxiety, the mean scores for persons with mild, moderate and severe stuttering were 4.25, 10.45, and 16.90 respectively. The ANOVA results revealed that there was a significant difference between the three groups [F (2, 59) = 779, $p < 0.001$].
- c. **Coping:** In terms of coping strategies, mean score of 5.10, 15.85, and 24.30 was obtained for the mild, moderate and severe groups, The ANOVA results revealed that there was significant between the three groups [F (2, 59) = 852 , $p < 0.001$].

The negative attitudes increased with increased severity of the problem. This might be due to less understanding of the problems faced by PWS by the listeners, embarrassment, inferiority complex, time pressure, fear of being misunderstood and fear of giving a bad impression. In the present study PWS exhibited the anxiety factors such as, running out of breath while answering the phone, nervousness and getting stuck on a particular word. More anxiety was exhibited when they had to talk to strangers/ higher authorities. Finally, when more anxiety was present they tend to fidget with the phones and tried to shift the phone from one ear to the next. Even in the present study more anxiety was evident in severe group compared to the other two. Coping strategies included using few words, avoid talking to opposite gender and unknown persons, pretend to be tired or sick or blaming the phone or network for technical snags. PWS also tend to avoid introducing themselves in front of others. They also tend to say words slowly/ fast preceding the word on which stuttering is expected. The inability to use the mobile phone effectively might lead to misunderstanding in conveying essential information. All these might have a serious communicative handicap for PWS impinging upon their social life, emergencies, career and quality of life. However, many of the therapeutic approaches do not focus on the mobilephone/ telephonic issues in PWS.

Conclusions

The above study is aimed to explore to mobile phone phobia in PWS. The above study confirms many of the earlier findings by other authors with regard to telephobia in persons with stuttering. Results indicate that mobile phones may indeed be a problematic speaking situation for PWS especially for those with severe stuttering. Further studies in different age groups as well as the effect of mobile phone phobia before and after fluency therapy needs to be addressed. The effective therapeutic approaches, combined with mobile support services and counselling is essential to cut, combat or cope mobile phone phobia in PWS.

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