

Contents lists available at ScienceDirect

## Journal of Communication Disorders

journal homepage: www.elsevier.com/locate/jcomdis



# Parental perceptions towards childhood stuttering in Sri Lanka



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#### ARTICLE INFO

Keywords:
Parental perceptions
Childhood stuttering
Sri lanka
Oualitative

#### ABSTRACT

Introduction: Parental perceptions towards stuttering is an important consideration as parents play a crucial role in the initial identification and management of stuttering in young children. Although several studies have been conducted on parental perceptions towards childhood stuttering in other countries, little is known about how stuttering is perceived and managed by parents in Sri Lanka.

*Aims*: This study explored Sri Lankan parents' perceptions towards childhood stuttering and their experiences regarding attending speech and language therapy for stuttering.

Methodology: Using a qualitative approach, 15 parents of children who stutter were recruited from a stuttering clinic at a state university in Sri Lanka. Parents participated in semi-structured interviews with the first author. The interviews were conducted via telephone in Sinhala language, recorded, transcribed verbatim in Sinhala and then translated into English. The data were analysed using thematic analysis.

Results: Five themes emerged from the data: (1) limited knowledge about stuttering and management (2) influence of religion and culture on stuttering (3) variable responses to stuttering (4) impact of stuttering on the parent and child (5) impact and engagement in speech therapy.

Conclusion: The findings highlighted the need to educate the Sri Lankan public about stuttering as a communication disorder and raise awareness about the profession of speech language therapy in the country. Specifically, it is important for other health professionals and teaching professionals to learn more about stuttering, so that appropriate early referrals can be made for speech and language therapy, lessening the impact on children and their families.

#### 1. Introduction

## 1.1. Background on developmental stuttering

Stuttering is a neurodevelopmental communication disorder and typically develops when a child is between 2 and 5 years of age (Yairi & Ambrose, 2013). Approximately 5%–8% of preschool-aged children exhibit stuttering (Månsson, 2000; Yairi & Ambrose, 2013) and research reports that 20–80% of children who stutter (CWS) may recover without treatment (Bloodstein & Ratner, 2008; Kefalianos et al., 2017). Potential predictive factors for recovery include: phonological abilities, articulatory rate, change in the pattern of disfluencies, and trend in stuttering severity over one-year post-onset (Sugathan & Maruthy, 2020). Research has shown that stuttering is less tractable with advancing age (O'Brian & Onslow, 2011). Therefore, it is recommended that management for the

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disorder commence in early childhood for a better prognosis and to avoid its negative impact on life such as reduced quality of life, interference with socializing, education, employment and mental health problems later in life (Connery, McCurtin & Robinson, 2020; Iverach et al., 2009; McAllister, Collier & Shepstone, 2012). It is within a speech and language therapist's (SLT) scope of practice to provide intervention for CWS (American Speech-Language-Hearing Association, 2020). However, it is also well reported that parents of CWS are equally important and play a significant role in the identification and management of stuttering and helping children cope with stuttering (Donaghy & Smith, 2016; Rocha, Yaruss & Rato, 2020).

#### 1.2. Parental role in identification and management of stuttering

Parents play an integral role in the identification and management of stuttering. Children typically spend a significant amount of time with their family during the period where stuttering begins (from 2 to 5 years) and parents are often the first people to notice early stuttering in their children (Einarsdóttir & Ingham, 2009). Thus, their knowledge and beliefs of stuttering may impact on how they potentially react to the disorder when it first occurs in their children. That is, whether they will seek support and/or assistance immediately, adopt a 'wait and see approach' or ignore the condition (Nonis, Unicomb & Hewat, 2021).

For a person who stutters, parents and the familial network in general are a known support not only in relation to stuttering, but across all related aspects of life (Plexico, Manning & DiLollo, 2005). Yaruss and Quesal (2004) suggest that a family's attitudes towards a child who stutters may support, hinder and/or delay the effective management of the disorder. For example, whilst some parents may support their child to accept and manage stuttering, other more negative parental reactions may hinder the development of positive management techniques and a child's self-identification as a person (Hughes, Gabel, Goberman & Hughes, 2011). Rocha et al. (2020) highlighted that parental knowledge towards stuttering may impact on their reactions towards the disorder and may help the child to cope with it.

Parental involvement is also viewed as an essential ingredient in the treatment of stuttering in early childhood and parents play a central role in a number of therapy programs for younger children (Ratner, 2004). Mallard (1998) has noted that family involvement in therapy has proven to be an effective tool in achieving communication success. It is widely accepted that evidence-based treatments for early childhood stuttering such as the Lidcombe Program of Early Stuttering Intervention (LP; Onslow, Packman & Harrison, 2003), the Palin Parent Child Interaction Therapy (PCI; Millard, Edwards & Cook, 2009), and RESTART-Demands Capacities Model (RESTART- DCM; Franken, Schalk & Boelens, 2005) require parents to deliver treatment to the child in their natural environment under the guidance and supervision of a SLT. For example, the LP consists of two stages and in stage one, parents visit the clinic weekly and learn how to provide verbal contingencies to child's speech at home for at least 10 to 15 min every day (Onslow et al., 2020). In stage two, parents visit the clinic less often and the parents are trained to maintain child's fluency for a long time. In PCI, the parents are trained to spend a five minute play-based special time with the child three to five times per week. The aims of this special time are to empower parents to manage their child's stuttering and increase their confidence in their own skills as well as seeking to increase fluency in the child. Some parent targets include reducing parental speech rate, following the child's lead and pace in play, turn taking, and using comments over questions in conversation (Millard, Nicholas & Cook, 2008). In RESTART-DCM, parents are instructed to reduce environmental demands that place on the child's speech and are trained to provide parent-child special times for 15 min per day at least five days a week (Franken & Putker-de Bruijn, 2007). The role of parents in each of these treatments further signifies their importance in the management of stuttering in children. Therefore, understanding how parents perceive and respond to stuttering in their everyday environment is crucial for SLTs to successfully educate and involve them in treatment.

#### 1.3. Parental perceptions towards stuttering across the world

Parental perceptions towards stuttering and its management may be influenced by the socio-cultural community in which they belong. Culture is described as the cumulative deposit of several attributes including knowledge, experience, beliefs, attitudes, religion, and material objects and possessions acquired by a group of people in the course of generations through individual and group striving (Samovar & Porter, 1994). Public perceptions towards people who stutter (PWS) tend to be more positive in Western countries compared with Asian and Middle East countries (Arafa, Senosy, Sheerah & St Louis, 2021; Haryani, S, J, Y & M, 2020; St. Louis, 2015). These differences may represent artefacts of the unique blends of culture, nationality, language, religion and ethnicity of each country (St.Louis, 2005; Ustun-Yavuz, Warmington, Gerlach & St Louis, 2021). A scoping review was conducted exploring public attitudes towards stuttering across Asia from articles published between 2001 and 2019 (Haryani et al., 2020). A total of nine relevant articles, conducted in four Asian countries including Turkey, Kuwait, China/Hong Kong, and Japan were included in the review. The findings indicated public attitudes towards stuttering from countries in the Asian region were generally less positive compared to western countries except Kuwait. This review highlighted that the causes of these negative attitudes may differ depending on cultural factors, such as religion or traditional beliefs.

Religion has been described in relation to culture (Edara, 2017). The cultural and religious influences in a country could influence the stigmatization and beliefs about stuttering (Haryani et al., 2020). For instance, compared with people living in other parts of the world, people who live in Middle Eastern countries are more likely to believe that stuttering is an act of God or a result of supernatural causes such as demons and spirits (Abdalla & St. Louis, 2012; El-Adawy et al., 2020). In India, some people believe that disabilities including stuttering is the result of past life deeds (karma) of the child or their parents (Rout, Kumar & Kumar, 2014). Knowledge and beliefs about what causes stuttering may have an impact on whether or not one would seek help to treat stuttering and where or who to seek help from Al-Khaledi, Lincoln, McCabe, Packman and Alshatti (2009). Therefore, it is important for SLTs to be culturally sensitive when working with PWS. If a parent/family views stuttering as a disorder with a religious cause, the SLTs could acknowledge their

beliefs while providing education from the scientific literature around the aetiology of the disorder. However this should be done with sensitivity to avoid inadvertently challenging clients to decide between the clinician's advice and the family's' personal beliefs (Rout et al., 2014).

Research on parental perceptions towards stuttering and treatment has increased across the last decade (Nonis et al., 2021). This may be a result of the development of speech and language therapy practices for stuttering worldwide and the increasing awareness of the benefits of early intervention and effective treatment approaches for young children (De Sonneville-Koedoot, Stolk, Rietveld & Franken, 2015; Goodhue, Onslow, Quine, O'Brian & Hearne, 2010). Studies that have explored parental perceptions towards stuttering have used different methodologies and instruments to collect data such as the Public Opinion Survey of Human Attributes-Stuttering (POSHA) and its variations (Al-Khaledi et al., 2009; Özdemir, St Louis & Topbas, 2011), Parental Attitudes Toward Stuttering (PATS) inventory and Alabama Stuttering Knowledge (ASK) Test (Crowe & Cooper, 1977), The Woods and Williams (1976) Adjective Checklist (Fowlie & Cooper, 1978), surveys, questionnaires (Costelloe, Davis & Cavenagh, 2015) and interviews (Goodhue et al., 2010; Plexico & Burrus, 2012).

Nonis et al. (2021), conducted a systematic review of literature exploring the studies on parental perceptions towards stuttering worldwide published between 1970 and 2019. Twenty-one studies conducted in nine different countries including the USA, UK, Australia, New Zealand, Kuwait, Turkey, Poland, Sweden and Egypt were included in the review. Of the studies included in the review, 18 studies had recruited parents of a child who stutters (receiving, waiting for therapy or discharged from therapy) and three studies recruited parents from the general population who don't have a child who stutter. This study highlighted limited parental knowledge regarding stuttering in general, and the presence of some negative attitudes and reactions towards stuttering irrespective of the country (Nonis et al., 2021). With regard to management of stuttering, the majority of the studies that were included in the review indicated parents' perceptions on the benefits of attending speech and language therapy. However, the findings also emphasized a mismatch between parents' expectations from therapy and outcomes as the parents do not only seek an improvement for child's fluency from therapy but also expect some assistance for themselves to cope with the condition. Overall, the results highlighted the importance of educating the general public (and specifically parents) about stuttering, and the need for SLTs to consider parental expectations of therapy and to provide education around stuttering and its management prior to commencement of treatment (Nonis et al., 2021). These considerations may enhance future clinical management through establishing joint goals for therapy and improving parental understanding, knowledge, skills, and confidence in managing stuttering. The findings of the review further revealed that the majority of literature on parental perceptions towards stuttering and treatment, originated from western developed countries such as the USA, UK and Australia. This might be because speech and language therapy is a well-established profession in these countries and many treatment studies for stuttering have been originated there. Of note was that only a handful of studies on parental perceptions towards stuttering has been originated from the Asian countries including Kuwait and Turkey (Al-Khaledi et al., 2009; Özdemir et al., 2011), with no studies from any south Asian countries including Sri Lanka.

## 1.4. Speech and language therapy in Sri Lanka

Sri Lanka is a developing country in the South Asian region with a population of 22 million. Sinhalese (74.9%) is the major ethnic group in the country and other ethnic groups include Tamil (12.7%), Moor (7.0%) and others (Sri Lanka Department of Census & Statistics, 2012). Sri Lanka is a multi-religious country with the Buddhists constitute the majority (70.1%) while Hindus, Islam and Christians constitute12.5%, 9.6% and 7.6% respectively (Sri Lanka Department of Census & Statistics, 2012). Sinhala is the first language of the Sinhalese and is spoken by the majority of Sri Lankans. Tamil and English are two other main languages spoken by many people in the country. According to the Sri Lanka Department of Census and Statistics (2012), the majority of Sri Lankan population is in the rural sector (77.4%).

In Sri Lanka, the first training program for Speech and Language Therapy commenced in 1998 at the University of Kelaniya and the first cohort of SLTs started practicing in 2000 (Wickenden et al., 2001). This remains as the only speech and language therapy degree program and to date it is anecdotally reported that around 400 SLTs work in Sri Lanka in various settings such as hospitals, schools, preschools, rehabilitation centers and community-based clinics. In order to practice as a SLT in Sri Lanka, a clinician should possess the minimum qualification of bachelor's degree in speech and language therapy and register with the Sri Lankan Medical Council. The Sri Lankan Association of Speech and Language Pathologists (SLASLP) was established in 2017 as the national professional body. Even though speech and language therapy was established in Sri Lanka nearly 20 years ago, it has developed slowly with few research and clinical experts and limited publications emerging from the discipline (Hettiarachchi, 2016; Muttiah, McNaughton & Drager, 2016) specially in relation to stuttering.

There is minimal research in relation to stuttering generally that has emerged from Sri Lanka. In addition to few undergraduate research projects, there are only two conference presentations including the lived experiences of siblings of CWS, and of adults who stutter (Hettiarachchi & Nonis, 2017; Nonis & Hettiarachchi, 2017) and one conference publication in relation to teachers' attitudes about stuttering in the Sri Lankan context (Kuruppu & Jayawardena, 2015). Therefore, in relation to the scope of the current study, only one study is available and relevant which was conducted by Kuruppu and Jayawardena (2015). Additionally, no studies have explored public opinions towards stuttering in Sri Lanka. Kuruppu and Jayawardena (2015), investigated the knowledge and attitudes of 84 Sri Lankan primary school teachers towards CWS using a questionnaire. According to the findings 57% of teachers agreed that stuttering doesn't affect a child's cognitive level. Many teachers thought that CWS have the potential to overcome stuttering and the child's everyday environment is an important factor in reinforcing or reducing stuttering. Results revealed that teachers who were having a family member or close relative of PWS had higher levels of knowledge and more desirable attitudes towards stuttering. Even though the findings of this study in general reported that Sri Lankan primary teachers held desirable attitudes towards certain aspects

of stuttering, some undesirable attitudes and limited knowledge towards stuttering were also present. For example, around 47% of the teachers reported to believe that CWS are shy and 51% conveyed that, teachers should make the children repeat the words until they can speak to them fluently. However, the authors highlighted that these teachers might be more knowledgeable than the teachers who work in other parts of the country, since this study was conducted in an international school in an urban setting with more resources available to teachers on stuttering and other communication disorders (Kuruppu & Jayawardena, 2015). This study has further conveyed the importance of educating teachers about stuttering to foster an environment with healthy attitudes and actions towards CWS.

Apart from this single published study around teachers' perceptions, little is known about how the Sri Lankan community (especially the parents) perceive stuttering as a disorder and their views about its management. Therefore, by gaining more understanding of parental perceptions in Sri Lanka, the SLTs could educate parents on stuttering as a disorder and provide appropriate support for parents to uptake of evidence-based interventions for CWS.

## 1.5. Aims of the study

A paucity of literature exists regarding parental perceptions towards stuttering in some countries including Sri Lanka where speech and language therapy is still a growing profession. Given the importance of the parents' role in the management of stuttering in children, the aims of the current study are to explore parental perceptions towards childhood stuttering and their experiences of speech and language therapy for stuttering in Sri Lanka.

## 2. Methods

## 2.1. Research design

A generic qualitative approach was used in this study. Generic qualitative enquiry investigates people's reports of their subjective opinions, attitudes, beliefs, or reflections on their experiences, of things in the outer world (Percy, Kostere & Kostere, 2015). A qualitative approach is therefore appropriate for this study as it enabled in-depth investigations on the phenomenon in question.

#### 2.2. Ethics approval

This research was approved by Human Research Ethics Committees at the University of Newcastle, Australia (H-2019–0044) and University of Kelaniya, Sri Lanka (P/111/4/2019). All parents participated voluntarily and their consent to participate was recorded prior to commencing the interviews.

## 2.3. Procedure

#### 2.3.1. Participants

Participants for this study were recruited through convenience sampling from the stuttering clinic at University of Kelaniya, Sri

**Table 1**Demographic Details of the Participants.

Name	Gender	Occupation	Highest Level of Education Completed	Child's Gender	Child's Age	Onset of Stuttering	Family history of stuttering	Treatment status
P1	Mother	Housewife	Secondary Education	Male	11 years	3 years	Positive	Discharged
P2	Mother	Dentist	Bachelor's Degree	Male	11 years	4 years	Negative	In active therapy
Р3	Mother	Housewife	Secondary Education	Male	11 years	3 years	Negative	In active therapy
P4	Mother	Accounts assistant	Bachelor's Degree	Male	6 years	3 ½ years	Positive	Discontinued therapy
P5	Mother	Nurse	Diploma	Male	5 years	1 ½ years	Positive	In active therapy
P6	Father	Engineer	Master's Degree	Female	4 years	1 ½ years	Positive	Discontinued therapy
P7	Mother	Housewife	Secondary Education	Male	5 years	3 1/2 years	Positive	In active therapy
P8	Mother	Preschool teacher	Diploma	Male	5 years	2 years	Negative	In active therapy
P9	Mother	Housewife	Primary Education	Male Male	4 years 12 years	2 years 2 years	Positive	In active therapy
P10	Mother	Housewife	Primary Education	Male	10 years	7 years	Positive	In active therapy
P11	Father	Tourism Supervisor	Diploma	Female	8 years	2 years	Negative	In active therapy
P12	Mother	Housewife	Secondary Education	Female	3 years	2 years	Positive	In active therapy
P13	Mother	Housewife	Secondary Education	Male	8 years	2 years	Negative	In active therapy
P14	Mother	Housewife	Primary Education	Male	12 years	5 years	Negative	In active therapy
P15	Mother	Housewife	Secondary Education	Male	9 years	3 ½ years	Negative	Discontinued therapy

Lanka. Study information sheets and consent forms were distributed amongst the parents of CWS registered at the stuttering clinic in person and via email. Parents who were interested in taking part of research contacted the first author to clarify any questions and/or discuss a time for interviews to take place. Parents were included if they had a child aged below 12 years who has received or currently receiving treatment for stuttering at the stuttering clinic. Parents were excluded if their child has any other concomitant physical, cognitive disabilities or behavioural disorders.

Fifteen interviews were conducted to obtain data and through the process of conducting all of these, saturation was reached. The participants were 15 parents (two fathers and 13 mothers) of 16 children (one mother has two CWS) who had been involved in the child's stuttering treatment. In some families, both parents were involved in therapy. In these instances, one parent was interviewed according to their preference. All participants were Sinhalese and the age of the children ranged from 3 to 12 years. See Table 1 for an overview of the participants' demographic information.

#### 2.3.2. Data collection

Semi- structured interviews were conducted to explore parental perceptions towards childhood stuttering and its treatment in Sri Lanka. An interview guide was developed to collect data by the authors and reviewed by an experienced SLT who was independent from the study (all females). All questions were open-ended and were supplemented with probing questions to elicit additional details. The interview guide is provided in Appendix A. Participants were asked to discuss what they know about stuttering, what their/other's reactions to stuttering in their child/ren, impact of stuttering on themselves/child/family, and their thoughts/views on treatment of early stuttering.

All interviews were conducted via telephone by the first author, a female SLT (who was not known to participants) in Sinhala language according to the participants' preference. Interviews were recorded on a smartphone (OPPO R15) then downloaded to a password protected file. The duration of the interviews ranged from 25 min to 45 min (M = 34.04, SD = 7.19). Additional notes were taken during the interview to confirm content and assist with the translation process. After collecting data, the interviews were deidentified and transcribed verbatim by the first author. Then the first author, a native Sinhala speaker who is competent in Sinhala and English languages, translated all the Sinhala transcripts into English. After translation, 20% of the transcripts were given to a Sri Lankan SLT who is independent of the research study to check the accuracy of translation. This SLT is a native Sinhala speaker and competent in English language. The SLT agreed with 99.4% of the translation and, where there were differences, consensus was reached by discussion.

## 2.4. Data analysis

The transcripts were analysed using thematic analysis described by Braun and Clarke (2006). Thematic analysis is a method for identifying, analysing, and reporting patterns (themes) within data (Braun & Clarke, 2006). After translating the Sinhala transcripts to English, the transcripts were uploaded to NVivo 12 to store, manage and code the data. As qualitative data analysis is an iterative process, the first step of immersing and familiarising oneself with the data commenced throughout the transcription and coding process. During this process, initial impressions of the data were recorded in a participant/coding journal and meaning units were extracted to generate initial codes for the entire data set by the first author. These codes were further modified, refined and merged. Codes were then sorted and collated into potential sub-themes and themes by the first author.

## 2.5. Credibility

The credibility of this study was achieved through member checking and peer debriefing (Shento, 2004; Tobin & Begley, 2004).

**Table 2**An Overview of the Themes and Subthemes.

Themes	Subthemes			
Limited knowledge about stuttering and management	Uncertainty over the causes of stuttering			
	Uncertainty of how to help CWS			
	Lack of awareness of speech therapy			
	Advice from others			
Religion, culture and stuttering	Stuttering is linked with spiritual beliefs			
	Engage in religious activities and cultural remedies			
	Engage in religious activities before seeking professional help			
Variable responses to stuttering	Caregiver Strategies used to enhance fluency			
	Support from others in child's environment			
	Unfavourable responses to child's stuttering			
Impact of stuttering on the parent and the child	Minimal impact			
	Perceived impact based on previous exposure			
	Impact on the child and their activities of daily living			
	Parents' worries about child's stuttering			
Impact and engagement in speech therapy	Effectiveness of therapy			
•	Lack of improvement in fluency			
	Barriers to therapy			
	Suggestions to improve therapy			

Member checking is an opportunity for the participants to review their own manuscript to verify the transcription accuracy (Creswell, 2013). Nine of the fifteen participants agreed to this process, and they were emailed a copy of their interview transcript in Sinhala language. Of these five participants responded that the transcripts were an accurate record of their interview, and the remaining participants did not respond. Peer debriefing was conducted with the assistance of the co-authors in two stages. During the first stage, 10% of the de-identified, translated transcripts were given to the second author to make her own list of open codes. This list was compared to the original set of codes and where new codes suggested and/or if there were differences, discussions were conducted until consensus was reached. In the second stage, identified categories and potential themes and subthemes by the first author were given to the co-authors. There were several discussions conducted with the co-authors in identifying the potential themes and subthemes, until consensus was reached, to ensure that the analysis transparently captured the meaning of the data set.

#### 3. Results

Analysis of the 15 interviews with the Sri Lankan parents identified 18 subthemes that were grouped into five themes. The themes highlighted the parents' limited knowledge about stuttering and management, the relationships between religion, culture and stuttering, variable responses to their child's stuttering, the impact of stuttering on the parent and the child and impact and engagement in speech therapy. An overview of the themes and subthemes is provided in Table 2 and each theme is discussed below.

### 3.1. Theme 1: limited knowledge about stuttering and management

This theme emerged when participants discussed their uncertainty about stuttering, lack of awareness about the speech and language therapy profession, as well as variable advice they received about management of their child's stuttering. The majority of participants were uncertain about the cause of stuttering, and some speculated that the stuttering may be related to genetics, frightening events, karma, imitation, being the only child, problem with the oral structure, bad luck, evil eye, medication, or asking too many questions. Specifically, one of the mothers whose husband and two sons with stuttering indicated multiple possible causes for stuttering such as genetics, her negative thoughts during pregnancy and imitation:

So, I knew it was clearly from his father. It is a genetic issue ... when I was expecting my son, I had moments when I felt whether he would also have a stutter. It might also have been affected... My elder son would have got stuttering because he sees his father and would have tried to imitate him. Then the second son would have seen his father and brother both stuttering. So, I think that is why. (P9) Many parents believed frightening events may cause stuttering, P7 mentioned:

We felt it would have been because of him getting scared. Those days my husband had brought a monkey and my son got very scared of it. He ran screaming. Then even I felt he was very scared and was thinking whether it caused it. (P7)

Participants were also surprised at the onset of their child's stuttering: "It started all of a sudden and we couldn't believe it. There was no sign of it" (P6), and few reported that they had difficulties in identifying stuttering with other speech sound problems. For example, P3 said "We didn't really think it was a stutter that he had. We just felt that the sound was different. It was as if the sound didn't come when he tried to tell some words. Now his stutter is worse". Additionally, many parents expressed that they were unsure of how to help when they identified it as stuttering: "I was clueless on what I should do to help him when he would stutter in front of a crowd, whether I should complete his sentences" (P4).

Even though the parents were willing to help the child, some parents didn't know where to seek help from, and were not aware about the existence of speech and language therapy profession: "We thought that there would be some medication to reduce stuttering. But the doctor said that there was no medication for it, only speech therapy. Then only we got to know about speech therapy" (P1). Another parent said:

Of course, I didn't have an idea of whom we should meet. But my wife had found from one of her friends about a speech therapy clinic which had been said to fix this.... Getting to know that a place like this exists in Sri Lanka itself made us happy. (P6)

Although parents also received a variety of advice from family, relatives, friends, medical professionals and teachers regarding what they should do about their child's stuttering, the single overriding piece of advice from all sources was that the stuttering would recover naturally: "What the teacher says is that this problem will soon be gone with time. She told me that there were many who stutter during school age and then many overcame their stuttering gradually" (P5), and P11 mentioned "We always felt it will be alright. Doctors were also telling us that it will be gone when she grows up. So, we had hope that she will grow out of it". Further to this advice, some parents noted they were told by professionals that their child's stuttering would improve when around peers at school: "Teacher didn't say anything. She just said that it will go away once he's with other children" (P12).

## 3.2. Theme 2: religion, culture and stuttering

This theme emerged as parents described religious and cultural beliefs that influenced their understanding of the cause and management of stuttering.

Several parents indicated their belief that stuttering could be a result of karma, bad luck and/or 'evil eye'. Specifically, a number of parents indicated that stuttering is a result of karma or sins one had committed in his/her previous life "In Buddhism they say these things happen because of the sins committed in a previous birth" (P11). Some parents went on to state that this belief was not just their own, but that of their child and other significant others in the child's life "I believe it is karma. My son himself says that he would have

got this stutter because of something he did wrong in his previous life... He says it could be karma" (P3). One parent reported that they went to an astrologer when the child was born, and he had predicted their child's stuttering prior to its onset:

We checked his birth time when he was very little. Then we were told that we should expect something like this when my son starts to talk..... He told us that after he is 1 year, he will start stuttering. He actually used the same word. Then he told us to do several things. (P5)

Additionally, one mother indicated that 'evil-eye' (malevolent glare of a person may bring misfortune, bad luck, or injury etc. to another) could have caused her son's stuttering. For example, P8 said "He started talking very nicely with others and strangers since he was very little, and everyone made comments about it. So, we think it is the 'evil-eye' which caused my child's stuttering".

Sri Lankan religions and cultural activities were also described in relation to treating the child's stuttering. For example, many Buddhist and Catholic parents reported to engage in religious activities such as conducting regular /bo:di pu:ja/ (making offerings to Buddha) and worshipping the /bo:di/ (ritual of sacred tree), making vows at temples and churches, doing meritorious deeds, praying and getting the children blessed from religious leaders. For example, P10 mentioned: "We made vows. Some say that when you do these certain offerings [pu:ja:] that the stuttering would stop. So, we did those" and P15 said: "We are Catholics...We pray to God, make vows to Mother Mary and other saints to bring the child's condition to a better state when he grows up". According to the participants not only the parents, but also the grandparents were reported to engage in these religious activities in order to overcome stuttering. A participant explained:

My mother believes in karma. She took my son to the temple many times and would recite /ga:ta/ (prayers) and worship the Bodhi, so that whatever past karma would be dispelled. Both my husband and I come from very religious backgrounds. We believe that if we do meritorious deeds this problem would go away. (P4)

Parents' experience of the impact of these interventions was variable. Some parents further expressed that these activities had proven to be successful in reducing the stuttering. For example, P11 mentioned: "We had /bo:di pu:ja/ continuously for seven and 14 days. We took her to the temple a lot. Now it is reduced up to 75%", and P6 said: "We are Catholics. We believe that God can do anything for us. Even my brother was very religious. He told us not to worry about it. We all prayed a lot and she recovered".

Whilst other parents reported the opposite as they eventually had to seek the assistance of a medical professional:

On Sundays, I light oil lamps in the temple. I went to the temple whenever I could and did Bodhi puja. I also made vows to the temple asking to heal my son. That I would ring the bell if his fluency is improved.......I went every year and made religious vows. But I haven't had any positive results yet. But then I started realizing that it will not help me. I knew it might not work as my husband also has got this. (P9)

Other parents engaged in both religious activities and speech therapy to overcome stuttering.

We prayed and we took him for speech therapy" and P5 said "I felt I should have done both. My husband's mother is a nurse and she also told us to do both. I would do anything to make my child better. (P7)

In addition, there were few parents who engaged in religious activities to appease other family members, not because of their own beliefs: "I'm of course not agreeable to those. But my wife believes in them. Because these could lead to family issues, I took them" (P11).

Furthermore, parents reported several cultural influences to treat stuttering such as eating cashew leaves and implementing astrologer's recommendations. For example, a mother explained some advice she received regarding eating cashew leaves to cure stuttering: "Our relatives and close friends said to give cooked cashew leaves. But I didn't try those" (P1). The parents who believed in astrology have described how they have been trying to implement astrologer's advice to dispel the child's bad luck in order to overcome child's stuttering:

He (astrologer) told us to go to the [name of a famous temple] temple and feed milk to a snake. There are many snakes that come to worship the Bodhi. But we didn't do it because we are scared of snakes. So, we asked whether we could try anything else. Then he told us to go to the [name of another famous temple] temple and offer a basket with incense and flowers. So, we did that. (P5)

Another cultural reaction to management of stuttering emerged from the data was that engaging in religious activities before seeking any assistance from a medical professional. Many parents indicated that they just waited for a couple of months/ years to see if stuttering would resolve with time while they engage in religious activities:

He started stuttering when he was 2 years.... Initially we started doing all the religious practices we could do... But I haven't had any positive results yet...So, I took him for speech therapy last year. He was 11 years by then. (P9)

#### 3.3. Theme 3: variable responses to stuttering

This theme emerged when parents described the variety of strategies used to increase their child's fluency as well as the responses and reactions of other people in the child's environment.

Many parents associated stuttering with a fast speech rate and instructed their child to talk slowly: "He stutters when he speaks fast. He can say well when he says it slow. We would tell him to say it slowly" (P14). According to the participants, not only the parents but also the grandparents provided instructions for the child to be fluent: "My mother tells my son to talk as slowly as possible without rushing and encourages saying that he can say it nicely (P4). Helping the child to produce words correctly was another strategy used by some parents: "When he started saying /tɑ: tɑ: tɑ:/ for /tɑ:ttɑ:/ (Father) we showed him how to say it correctly" (P12). Asking the child to drag the words and say, take a deep breath before talking and talk loudly were some other strategies reported by a number of

parents. For example, P10 said: "We just tell him, sweet child don't speak like that. Just drag the word and say it" and P9 said: "I tell him to talk while taking a breath without rushing. Sometimes I would tell him to stop for a while, relax and then talk"

In addition, some parents indicated that they didn't use any strategies as to not make their child aware of the stuttering. Others noted they would ignore the stuttering and allow their child to talk in his/her own way: "We tried to ignore it thinking it would resolve that way. We didn't even force him to say it correctly. We simply ignored" (P12).

Many parents noted their child received support from close family, friends and preschool/school staff. For example, P2, said: "Everyone loves him. His-sisters and brothers they all teach him. "They say no /qijq:/ (brother) this is how you should say. Even his younger brother, my sister's son also understands and helps him out". Participants mentioned that some teachers supported parents with reassurance about their child at school: "She told us not to worry and she will take care of our son in the class" (P14). A number of parents were grateful to the preschool/schoolteachers for providing opportunities and encouraging the child to participate in events:

Teacher didn't talk about it. But didn't treat my son any different to that of his peers. The teacher at the preschool was good. She even gave my son the chance to do the welcome speech for the annual concert. The teacher told us that we should provide him opportunities to take part in activities despite his stuttering. She made sure my son got a chance at everything (P1).

In contrast, several parents also noted unfavourable responses to child's stuttering including teasing, imitating and laughing: "I'm staying closer to my husband's family and his sister's children make fun out of my son when he gets stuck. Then I tell them not to laugh at him because he would get angry" (P3). Despite these unsupportive responses, one of the mothers explained how his son ignores all the negative comments and continues talking: "Now he is schooling, but still stutters. Then he would say that his friends laugh at him and imitate him. But he talks despite his stuttering" (P8). Some parents also reported how others look at their child differently. "But for a person who doesn't know him well they look at him in a different way" (P9). Forcing the child to talk nicely and making negative comments about child's future and scolding them were some of the other unfavourable responses conveyed by parents. For example, P10 said: "We would keep telling him that if he continues to talk like that, he won't be able to learn and succeed in his studies" and P3 said "When I am angry, I scold him. Sometimes I tell him to stop and try to say it slowly tomorrow. There are times I shout at him because of his speech".

As reported, not only the parents but also other close relatives such as aunts and uncles seemed to force the child to talk correctly. For example, P7 said: "My brother is living next door. He had once told him strictly to talk correctly without trying to act like he can't". Additionally, a few parents also reported that they avoided the child to participate in certain events:

I sometimes don't allow him to do certain things like where he has to do a reading for Sunday Holy mass. I have told the priest to allow him to read the bible only on weekdays. Because it is not nice if he stutters in front of lots of children, people might stare at him. (P15)

## 3.4. Theme 4: impact of stuttering on the parent and child

This theme highlighted the impact of stuttering on both parents and children in varying degrees, how the previous exposure to someone with stuttering has influenced their perceptions and parents' worries about child's stuttering.

Though the majority of parents described the impact of stuttering on different domains of life, there were some parents who reported that stuttering has made no/minimal impact on them or their children: "No he's all happy. He doesn't even feel it" (P14), "He doesn't really take much notice of it. He is just like a regular child playing and participating in anything" (P9). Few parents also indicated that stuttering is not a big issue for them: "We don't get worried over it. We always thought he will be alright" (P11).

Parents held different views about the impact of stuttering based on their past experiences of associating with someone who stutter. Having a direct contact with a person who stutters has made either a positive or negative impact on them based on their past experience with that person:

It didn't affect me because my brother also had it when he was small, and he didn't make it a big deal. I also know of a campus lecturer with stuttering. He also didn't make it an issue. So, I even told my wife that it is not a problem and what we should do is to build up her personality. Stuttering doesn't affect life. I didn't worry about it..... For me having a stutter is not a big issue. (P6)

However, one parent with a friend who stutters revealed her fears about her child's future: "I feel it could be an issue. I had a friend. He had a severe stutter. He was cornered by children in the class. I'm scared if it continues whether the same might happen" (P7).

Many parents expressed how stuttering has made an impact on the child's activities of daily living, specifically on communication and socialization. In terms of communication, parents indicated the limited verbal output of child and avoiding words: "He sometimes tells me amma (mom) I can't say this, I won't say this.' Sometimes he would just stop and wouldn't say anything" (P4). Some parents expressed the impact of stuttering on communication in the classroom:

He is not like other children...Even if he hasn't made any mistake at school, there are times he finds it difficult to describe it and justify his actions. Because of his stuttering, sometimes he can't control his words or talk continuously. (P14)

A number of parents indicated that stuttering has impacted on their child's social life and participation. For example, P1 said: "Like I said he was always on pins and didn't talk much with others, he didn't have friends at school" and P13 said: "Because of his stutter he was very backward".

Parents also described child's feelings associated with stuttering such as being sad and frustrated: "My eldest son has told me that when he struggles to talk in school, he gets frustrated" (P9). Many parents expressed the emotional impact of stuttering on themselves such as feeling sad, guilty and helpless. For example, P5 mentioned: "It hurts me a lot to see him talking like that. He would stop midway when he found it difficult to say the word out loud. During those times I would feel very sad, but I don't show it" and P4 said: "I felt helpless because I couldn't pin down why it happened and I thought whether it was due to some fault of mine. I always blamed

myself for it".

Some parents indicated their fears about child's future if stuttering would persist. They were afraid if stuttering would impact on child's cognitive development, participation and being victims of bullying. P11 said: "I feel scared that when he grows up, his friends will bully him that he will be the laughingstock in the class" and P7 said: "Anyway now we have to include him in grade 1 as admission interviews are being called for. I'm worried that when he is asked questions he wouldn't answer because of his problem". Another parent mentioned:

I felt sad because he might have it when he grows up. I also felt that it might affect his cognitive development. Then my husband would constantly try to make me feel better by saying that it will not affect his cognition and that this is a speech difficulty. I tend to overact sometimes. (P12)

#### 3.5. Theme 5: impact and engagement in speech therapy

This theme highlighted participants' perceptions around the effectiveness and benefits of attending speech and language therapy for stuttering. These perceptions included the effectiveness of therapy, lack of improvement in fluency, the barriers to therapy and their suggestions to improve therapy.

The majority of participants indicated their overall satisfaction of attending speech and language therapy for stuttering: "I'm very happy about therapy. It has been really useful" (P13). Many participants described that attending therapy has resulted many benefits including increased fluency, social participation, self- confidence, improved behaviours of the child and improved knowledge about stuttering by parents. For example, P5 mentioned: "I felt not only does my son's speech was improved but also his behaviours were improved" and P1 mentioned: "My son participates in many things after coming for speech therapy. Now he is very forward and participates in anything".

Even though many parents commented upon the usefulness of attending speech and language therapy, few parents, whose child's speech had not improved, questioned the effectiveness of therapy:

"It's the same. Still, he seems to get stuck. He tends to repeat again and again" (P14). In addition to that, parents also described the barriers to therapy. amongst them, many parents indicated their limited understanding about the therapy approaches/techniques being used in therapy. For example, the majority of parents expressed that they have been instructed to do several activities with the child at home such as drawing, asking the child to name flash cards, reading books, breathing and relaxation exercises. But they were not sure how these activities could help the child to improve fluency: "The therapist gave picture cards and asked my son to name them. But they didn't teach him how to name them fluently" (P2) and "My son was asked to blow a candle using his exhaling air and by changing the distance. He was also asked to blow balloons, bubbles and do other blowing activities at home" (P9).

Furthermore, some parents also noted service constraints such as lack of consistency in receiving weekly appointments to attend clinical services. These parents highlighted the importance of having weekly clinics so that the clinician can take the lead and the child seems to follow the activities well: "I used to come regularly for speech therapy then we were scheduled for once in two weeks but now we get monthly appointments. It will be really good if we could get weekly appointments" (P3). Some parents also discussed difficulties in accessing services in remote areas and few parents indicated that they had to withdraw from continuing therapy due to the difficulties in commuting: "Commuting was difficult because of the distance from our new home. So, we couldn't continue therapy for long" (P4). In contrast, another mother has expressed her commitment in coming for therapy despite the long hours spent for commuting: "We used to travel two hours to get there and overall, four hours on the road. Now many parents wouldn't want to do that. We went every week for almost a year" (P1).

Parents also discussed their expectations from therapy and suggestions to improve therapy. Parents' expectations and suggestions were more related to increased knowledge about stuttering and what they can do to support their child.

I feel it would be really beneficial if therapists could give us a more detailed explanation of stuttering. What causes it, whether it is a sickness? Why it happens? Because we feel very sad and cannot understand why it happened. So, I think if that side of speech therapy could be improved it would be really good... I would also like to know how my husband and I could support to improve my son's speech. When we are not at home he stays with his grandparents. So, if the therapists could also educate us on how the grandparents can support the child, it will be great. (P4)

#### 4. Discussion

The current study is the first of its kind exploring parental perceptions towards stuttering in Sri Lanka. The results provide in-depth information about how Sri Lankan religions and culture influence parental perceptions and reactions towards stuttering, impact of stuttering on both parents and children and parental views about speech and language therapy for stuttering in the Sri Lankan context.

#### 4.1. Influence of Sri Lankan religions and culture on parental perceptions towards stuttering

Overall, the findings of this study highlighted parents' limited knowledge about the causes of stuttering, development and nature of stuttering, uncertainty of how to help/manage a child who stutter and limited awareness about the existence of speech and language therapy profession. This is in line with previous studies where parents from several countries such as the USA, Egypt and Kuwait have reported limited knowledge about different aspects of the stuttering disorder (Al-Khaledi et al., 2009; Plexico & Burrus, 2012; Safwat & Sheikhany, 2014). For example, similar to Sri Lankan parents, some Turkish and Kuwaiti parents reported to attribute the causes of

stuttering with religious beliefs, frightening events and learning (Al-Khaledi et al., 2009; Özdemir et al., 2011). However, unlike the parents from other countries, none of Sri Lankan parents associated stuttering with factors such as environmental causes, psychological or emotional factors and/or parents' overreaction to a child's mistakes (Al-Khaledi et al., 2009; Costelloe et al., 2015). The current study revealed the influence of Sri Lankan religions and culture on parental perceptions towards stuttering. The majority of Sri Lankans are Buddhists, and this might have influenced parental spiritual beliefs as causation for stuttering such as Karma. Similarly, parents in South Asia who may share similar religious values have attributed Karma as the causation of other disorders such as Autism and intellectual disability (John & Montgomery, 2015; Riany, Cuskelly & Meredith, 2016).

The findings further indicated that parents may undertake cultural remedies to treat stuttering (e.g., eating cashew leaves, seeking advice from astrologers). These findings align with those from parents in India, a country which is geographically the closest to Sri Lanka. In India, it is recommended that chewing holy basil, black pepper, and ginger with rock salt be used to treat stuttering (Rout et al., 2014). Additionally, in India, astrologers recommend wearing a "Panna," a green coloured gemstone for clear speech (Rout et al., 2014). Therefore, when parents attributed religious or cultural beliefs as the contributors of stuttering, it is not surprising that they engage in religious/cultural remedies to overcome stuttering. This indicates the importance of raising awareness of stuttering and educating the benefits of attending speech and language therapy for stuttering and other communication disorders amongst people. Given the participants' religious and cultural beliefs of stuttering, this emphasizes a potential need for SLTs to acknowledge parental reactions towards stuttering in view of these beliefs and educate them about stuttering/ treatment at the commencement of therapy in order to successfully involve family members in the process. These findings also have implications for SLTs worldwide who may work with Sri Lankan children and families, as awareness of such religious and cultural beliefs may impact the family's views of the disorder. Previous research findings suggest that the home culture plays a significant role in shaping attitudes towards stuttering than the host culture (Ustun-Yavuz et al., 2021). Speech and language therapists can therefore provide culturally sensitive education accordingly in order to deliver effective management.

#### 4.2. Familial role in managing stuttering in children

The current study also revealed different ways in which parents and others in the child's environment such as grandparents, close relatives and peers respond to child's stuttering. Even though these responses were mainly positive, some unfavourable responses to child's stuttering such as laughing were also reported in line with previous literature (Glover, St Louis & Weidner, 2019; Humeniuk & Tarkowski, 2016; Safwat & Sheikhany, 2014). Unlike western countries, in Sri Lanka it is common to have extended family structure where two or more generations live together in one house (this includes grandparents, uncles & aunts sometimes). As a result, parents tend to seek assistance from grandparents to look after their children while they are at work. This leads children to spend a considerable amount of time with their grandparents and other close relatives. Thus, it is important for SLTs to explore the child's family structure and identify the existence of any negative attitudes or reactions towards stuttering by the immediate home environment. If any negative responses are identified, it is very important for SLTs to educate family (e.g., parents, siblings, grandparents, aunts and uncles etc.) about stuttering and facilitate positive ways of responding to child's stuttering. This would ensure that a child who stutter is supported by his/her family which will significantly impact on the quality of life for CWS (Humeniuk & Tarkowski, 2016; Salehpoor, Latifi & Tohidast, 2020; Yaruss & Quesal, 2004).

## 4.3. Impact of stuttering on parents and children in Sri Lanka

Even though some parents indicated that stuttering has had no or little impact, a number of parents reported the stuttering did in fact impact either their child and/or themselves/the family. In relation to the impact of stuttering on parents, emotional impact of stuttering such as feeling worried, guilty and helpless was reported my many parents in line with previous studies (Langevin, Packman & Onslow, 2010; Plexico & Burrus, 2012). But none of the Sri Lankan parents reported that they got an opportunity to discuss these feelings with the SLT or they got any support from the SLT to cope with these emotions. The authors surmise that in Sri Lanka, parents may consider medical professionals as more authoritative and subsequently prioritise what these professionals tell them. Other authors have reported that parents from Japan may have a tendency towards listening and holding back their own responses and opinions out of respect and/or not wanting to be rude to clinicians (Chu et al., 2014). It is therefore an important consideration for SLTs to encourage, acknowledge and support parental queries and opinions during the management process in order to educate and empower them as members of the therapeutic team. In addition, with regards to the parents' descriptions about the impact of stuttering in their children (e.g., the avoidance behaviours, limited communication output, teasing and bullying from others) reported in this study aligns with research that has investigated impact of stuttering on pre-schoolers (Beilby, 2014; Langevin et al., 2010). This highlights the importance of adapting a holistic approach to stuttering, which is not only focusing on overt aspects of stuttering such as speech behaviours, but also the covert features such as avoidance and feelings. Moreover, since it's reported that some of these children were also bullied and teased by their peers at school, it will be vital for SLTs to get involved with teachers to address such issues to ensure the psychosocial wellbeing of CWS.

### 4.4. Parental views on speech and language therapy

Clinically, parental views on speech and language therapy can assist SLTs working with families of CWS (Goodhue et al., 2010). In the current study, though some parents were positively engaged in therapy, many didn't have a good understanding of why a particular therapy approach/activity might be implemented. Therefore, it would be beneficial if parents were provided with education around

the rationale behind therapy activities being used with CWS, from the beginning and throughout the therapy process. This will enable parents to understand the importance of conducting particular therapy activities thus lead to improve the quality of delivering home based activities by them. Additionally, the findings highlighted that, parents not only seek an improvement for child's fluency from therapy but also expect SLTs to educate them about stuttering disorder, its causes, nature and how to respond to the stuttering moments. This is in line with previous studies where parents requested SLTs to provide more education about understanding stuttering, and how to respond and cope with the condition (Costelloe et al., 2015; Langevin et al., 2010; Plexico & Burrus, 2012; Unicomb, Hewat & Harrison, 2019).

A number of participants discussed many barriers to access and engage in speech and language therapy. The majority of the barriers (e.g., difficulties in commuting, less frequent clinic appointments, limited speech and language therapy services in remote areas) conveyed by parents were external to the therapy sessions and these were not highlighted in previous studies that explored parental perceptions about speech and language therapy for stuttering. Parents conveyed the difficulties in commuting long distance to attend the clinic, which impacted on discontinuing therapy. Although the university clinic is situated in an urban area close to the capital of Sri Lanka, as just under 80% of the population of Sri Lanka is situated rurally, it may be the case that several parents in this study were having to travel from rural locations to the clinic due to the lack of availability of speech therapy services in their area/s. Some parents indicated the importance of having intensive treatment where they can get appointments on a weekly basis. Even though speech and language therapy services in the remote areas were increased drastically over the past decades, there may be some areas in the country with limited speech and language therapy services. A huge case load at clinical settings, especially in the government sector might have led to provide less frequent appointments to the clients. Therefore, expanding speech and language therapy services across the country and improving telehealth practice for stuttering would enable the clients with stuttering and their families to access speech and language therapy without facing a lot of barriers. Research has shown promising results of delivering some childhood treatment programs for early stuttering such as the Lidcombe Programme through tele practice (Bridgman, Onslow, O'Brian, Jones & Block, 2016; O'Brian, Smith & Onslow, 2014).

Several mothers indicated their dissatisfaction of therapy due to lack of improvement of fluency in their child who stutters in line with previous literature (Costelloe et al., 2015; Hayhow, 2009; Plexico & Burrus, 2012). Ferdinands and Bridgman (2018) stated that, a decrease in stuttering severity generally relates to an increase in parental satisfaction. In the current study lack of fluency improvement, could be in-part due to the fact that the majority of participants in this study had school aged CWS, a period where stuttering tractability reduces (O'Brian & Onslow, 2011). Additionally, parents' dissatisfaction of therapy may also be due to the treatment approaches used by St.Ts. This calls the importance of exploring current treatment practices used by Sri Lankan St.Ts and investigate the facilitators and barriers in the service delivery with this client group. Speech and language therapy services is a developing profession in Sri Lanka and there are limited experts in the area of stuttering and limited research studies being published about stuttering in the Sri Lankan context. Therefore, it is imperative that more research is conducted investigating Sri Lankan St.Ts' perspectives on the management of stuttering to facilitate continuing educational programs as appropriate. Additionally, it is also vital to conduct stuttering treatment studies and evaluate their efficacy in the Sri Lankan context. This will ensure that stuttering treatment practices are grounded in the best cultural practices which will lead to deliver an effective treatment for CWS in Sri Lanka thus improve their quality of life.

#### 5. Limitations and future directions

This study recruited parents of CWS from one clinic in Sri Lanka. Therefore, the findings of this study are not easily generalizable to Sri Lanka as a whole. In the current study, the stuttering severity of the participants' children nor their time in treatment was collected as part of the research. If such details were included, it could have been observed how stuttering severity and the time in treatment might influence on parental perceptions. The longer a child is in treatment, the less likely parents are to perceive therapy positively (Hayhow, 2009). Furthermore, since the participants were parents of CWS who already engaged in therapy their perceptions of stuttering might have changed after attending therapy. Therefore, it will be beneficial if future research would explore parents from other stuttering clinics, or parents who have a child who stutter but still haven't accessed speech and language therapy or explore the perceptions of parents of children who don't stutter.

## 6. Conclusion

The findings of the present study highlighted parents' limited knowledge about stuttering and management in Sri Lanka. Findings indicated that many Sri Lankan parents do not seek professional help soon after the onset of stuttering due to limited knowledge about stuttering as a disorder, religious and cultural beliefs and/or a lack of awareness of the speech and language therapy profession in general. This study revealed the interplay between Sri Lankan culture and religions in influencing parental perceptions towards stuttering. Therefore, the importance of obtaining early intervention for childhood stuttering should be promoted in the Sri Lankan community specially amongst the parents, teachers and medical professionals. This could be achieved by organizing public education programs on television, radio, newspapers and using social media. This study revealed the importance of educating Sri Lankan public about stuttering and its management in general. Further studies should explore Sri Lankan SLTs current practices for childhood stuttering and their perspectives and challenges in managing this client group. Furthermore, the findings of the current study indicated how contextual factors influence a person's perceptions and the possible existence of similar perceptions towards stuttering by other south Asian countries. Therefore, the current study highlights the need for SLTs across the world who work with Sri Lankan families supporting CWS to consider the influence of religious and cultural factors when planning for management.

#### CRediT authorship contribution statement

**Dinusha Nonis:** Writing – original draft, Writing – review & editing, Formal analysis, Visualization, Methodology, Conceptualization, Investigation, Data curation. **Rachael Unicomb:** Conceptualization, Methodology, Project administration, Resources, Writing – review & editing, Supervision, Validation, Investigation, Funding acquisition, Project administration. **Sally Hewat:** Conceptualization, Methodology, Project administration, Resources, Writing – review & editing, Supervision, Validation, Investigation, Project administration.

#### **Declaration of Competing Interest**

There is no conflict of interest.

#### Acknowledgements

This paper is part of Dinusha Nonis' PhD candidature in Speech Pathology at the University of Newcastle, Australia (Ms. Nonis's PhD is funded by UNRS/UNIPRS central scholarship by the University of Newcastle, Australia.). The authors would like to thank all the parents who participated for the interviews. They would also like to thank the Department of Disability Studies, University of Kelaniya for its support during the conduct of this research study.

## Appendix A

Semi structured Interview Guide

Researcher: Thank you for joining to share your perceptions about childhood stuttering. I'm going to ask you a few questions about childhood stuttering and your views about speech and language therapy for stuttering. I wish to advise you before we begin that this interview is being audiotaped, and if possible, ask you not to identify yourself or any third party by name during the interview. Do you have any questions?

- 1. Tell me what you know about stuttering?
- · Thoughts and feelings
- Causes
- Onset
- Characteristics
  - 2. When your child began to stutter, what did you (others) do?
- Reactions of parents & siblings
- Reactions of close relatives (e.g., grandparents)
- · Reactions of child's friends & others
- Use of any strategies
  - 3. What are your thoughts about the treatment for early stuttering?
- · Views about speech and language therapy
- Parents' expectations
- · Parents' involvement
  - 4. Do you think that your child's stuttering impacts on you, your family or your child's life? If yes, how?
- Socialising
- Education
- Self esteem
  - 5. Are there any other comments you would like to make with regard to stuttering?

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