



American
Speech-Language-
Hearing
Association

ASHA KIRAN

2016-2017



AIC
Asian Indian Caucus

Connection - Innovation - Service

THE ANNUAL NEWSLETTER OF ASIAN INDIAN CAUCUS (AIC)

NOVEMBER 2016

About Asian Indian Caucus

The Asian-Indian Caucus (AIC) is one of the six multicultural constituency groups of the American Speech Language and Hearing Association (ASHA). AIC was established in 1994 to address the professional, clinical and educational needs of persons of Asian Indian origin, residing in the United States in the area of communication sciences and disorders. Asian Indians, otherwise known as South Asians, refer to persons who trace their origin to the Indian subcontinent, including, but not limited to the following countries (in alphabetical order): Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

AIC OBJECTIVES

- * To serve as a resource to meet the needs of clients of Asian Indian origin.
- * To provide a forum for interaction and collaboration among clinicians, researchers, and students of Asian-Indian origin in the field of communication sciences and disorders.
- * To promote initiatives to increase the body of knowledge pertaining to Asian- Indian individuals as it relates to the field of communication sciences and disorders, and to compile and disseminate this body of knowledge.
- * To enhance cultural competence among ASHA-certified professionals and increase cultural sensitivity regarding Asian Indians.
- * To serve as a networking and mentoring resource for the general ASHA membership serving individuals of Asian-Indian origin with communication disorders.
- * To work closely with ASHA, it's Office of Multicultural Affairs (OMA), and it's Multicultural Issues Board (MIB) in initiatives pertaining to the above objectives.

WANT TO KNOW MORE ABOUT AIC?

Like us on our Facebook page- <http://goo.gl/kgCqK>

IN THIS ISSUE

- 1 ABOUT AIC
- 2 PRESIDENT'S MESSAGE
- 3 EXECUTIVE BOARD
- 4 FROM THE EDITOR'S DESK
- 6 AIC SPOTLIGHT- Dr. Swathi Kiran
- 11 AUDIOLOGY INDIA-SMALL STEPS TOWARDS HEARING HEALTHCARE IN INDIA- Vijayalakshmi Easwar, Sriram Boothalingam, Spoorthi Thammaiah & Vinaya Manchaiah
- 14 CULTURAL DIVERSITY AND SOCIAL LANGUAGE-Heidi Britz
- 16 MY JOURNEY- Anahita Mehta
- 19 INDIAN SPEECH AND HEARING ASSOCIATION-Rohit Ravi & Krishna Yerraguntla
- 21 NEW BORN SCREENING- THE CURRENT SCENERIO IN INDIA- Rohit Ravi & Krishana Yerraguntla
- 23 A SHORT REVIEW ON COCHLEAR IMPLANTS AND SPEECH, LANGUAGE AND HEARING RESEARCH IN INDIA- Sridhya Balaji
- 34 MULTICULTURAL GROUP PRESENTS AT ASHA
- 35 FELICITATIONS
- 37 AIC SCHOLARSHIP
- 38 AIC FLYER
- 39 PRESENTATIONS AT ASHA

ASHA KIRAN
2016-2017



PRESIDENT'S ADDRESS

Dear AIC Members,

Hearty Namaste and Vanakkam to you all!!! It gives me immense pleasure to write to you all again at this exciting time of the year. I feel honored and privileged to serve as the 2015-16 President of our esteemed caucus. I am grateful to our dynamic executive team (Arun Biran, Prabu Eswaran, Ranjini Mohan, Priya Sudarsanam, Sharmila Biran and Saradha Ananthkrishnan) for their tireless and enthusiastic hard work, which has kept this caucus moving in great stride for the last 12 months. We have made some significant progress in addressing professional, clinical and educational needs of our Asian Indian clients and our members.

Firstly, we have established strong collaborations with ASHA's multicultural issues board (MIB) and other multicultural constituency groups (MCCGs; Native American, Asian Pacific Caucus, Hispanic Caucus, L'GASP-GLBTQ Caucus and National Black Association for Speech-Language and Hearing) to determine collective goals and future directions of MCCGs in the field of Communicative Sciences and Disorders. As a first step, we will be having a joint oral presentation at ASHA 2016 convention . We are hoping to stimulate further discussions and joint ventures in this regard.

In an effort to address our growing clinician needs to serve Asian Indian clients in the US, we have established strong ties with the Indian Speech and Hearing Association (ISHA) and hope to expand, develop and collect resources in different Asian Indian languages to add to our AIC resource database. We are grateful to eminent ISHA members Dr. Prathiba Karanth, Dr. Kalyani Mandke, Prof. Roopa Nagarajan and Dr. Krishna Yerraguntla for their continued support and we hope to have long term collaborations at many different levels with ISHA. In addition, AIC will also have its presence in ISHA convention at Kolkata, India next year.

We are excited to have collaborated with Alpha Vista USA Inc., a leading provider of school based clinical services and have established the "Alpha Vista-Asian Indian Caucus Student Clinician Scholarship" . This will provide \$500.00 support to two eligible students and one clinician presenting an oral or poster presentation on Asian Indian population at ASHA convention this year. We are hoping that students and clinicians will benefit greatly from this opportunity.

We are proud to have continued with our other ongoing mission to address variety of clinician and Asian Indian client needs such as education about Indian cultural competency, location of service providers, provision of variety of online resources, our annual publication of newsletters, mentoring graduate students and ASHA clinical fellows and constantly building networks in academic and clinical settings. We are also hoping to expand our mentorship program to pair new students and clinicians with experienced clinicians and researchers.

Finally, we are in the process of establishing an official advisory board comprising of past AIC presidents and senior founding members to offer support and steer the executive committee in the right direction. With their support, we are hoping to restructure bylaws, infrastructure, improve our communication with members, membership requirements, dues, funding and also set up a system for grant development, research and CEU opportunities for our AIC members.

As much as we have made good progress, we still continue to face challenges on the topic of members and memberships. It is my sincere request to all of you to connect with our caucus on a consistent basis, pay your membership dues annually (\$20.00 for professionals and \$10.00 for students) and support all of the existing and upcoming new initiatives . It is my hope that with all of your continued support, we will continue to nurture, grow and enrich our caucus.

I look forward to seeing you all at ASHA Convention, Philadelphia, PA.

Nandri & Dhanyavaad!!

Best,

Akila Rajappa (President (2015-16))

AIC PRESIDENT



AKILA RAJAPPA

ASHA KIRAN
2016-2017



EXECUTIVE BOARD

President– Akila Rajappa.

Akila Rajappa is a Board Certified Specialist in Swallowing and Swallowing Disorders (BCS-S) with over 15 years of clinical experience in the treatment of swallowing, cognitive, and communication disorders in adult/geriatric population. She is currently pursuing her PhD in Speech Language Pathology at Columbia University, NY. Akila has a passion for dysphagia rehabilitation and her interests lie in understanding neural mechanisms of airway protective behaviors. She is a member of the Public Relations Committee of American Board of Swallowing and Swallowing Disorders (ABSSD). She is actively involved in serving the Asian Indian community through her outreach educational initiatives on healthy aging for seniors, voice consultation programs for Indian Classical singers and also conducting Indian cultural events in the NY/NJ metropolitan area. She is currently working as a Lead Speech Pathologist for Genesis Rehabilitation Services at Inglemoor Center, NJ. She can be contacted at atr2123@tc.columbia.edu



Vice President (Public Relations) - Prabhu Eswaran.

Prabhu Eswaran is currently working as a school-based speech-language pathologist in Los Angeles, California. His areas of interest include child language disorders, communication disorders in culturally and linguistically diverse populations and technology in special education. He can be contacted at prabhuslp@gmail.com



Vice President (Professional Development)- Ranjini Mohan.

Ranjini Mohan received a dual-title Ph.D. in Cognitive Neuroscience & Gerontology from Purdue University in May 2016. She is currently pursuing her Clinical Fellowship with Paragon Rehabilitation at Lafayette, IN. Her professional interests include cognitive and language processing, aging and neurogenic communication disorders. She can be contacted at ranjini25@gmail.com



Secretary– Priya Sudarsanam.

Priya Sudarsanam, MS, CCC-SLP has been a speech and language pathologist for 12 years. She currently works in early intervention in Gallup, New Mexico and specializes in language development and feeding. Priya is also a cranial sacral practitioner and incorporates this into her therapy practice with her clients. Priya is executive director and co-owner of Avenues Early Childhood Services, Inc., a non profit early childhood program in Gallup, NM which currently provides preventative home visiting services at no cost to families.



Co-Editor– Sharmila Biran.

Sharmila Biran is currently working as a school based Speech Language Pathologist in Atlanta, Georgia.. She has over 18 years of experience. Her interests include swallowing, language disorders, cognitive and communicative disorders. She can be reached at shamibiran@yahoo.com



Co-Editor– Saradha Ananthkrishnan.

Saradha Ananthkrishnan is an assistant professor in the Department of Audiology, Speech Language Pathology and Deaf Studies at Towson University, Maryland. She teaches a mix of graduate and undergraduate courses in speech language pathology and audiology, and her research focuses on auditory electrophysiology.





FROM THE EDITORS' DESK

Greetings from the AIC 2016 Editorial Board!

Welcome to the 2016 edition of ASHA-KIRAN! Our newsletter begins with a "Spotlight" feature on Dr. Swathi Kiran, Professor of Speech Language Pathology and Director of the Ph.D. program in the Department of Speech, Language and Hearing Sciences at Boston University. Dr. Kiran, who has a keen research interest in aphasia, with numerous peer-reviewed publications and NIH-funded grants to her credit, shares with the readers her professional journey, her past and present scholarship foci and her advice for budding SLPs.

Following the Spotlight section is a mosaic of diverse articles exploring both clinical and research facets of audiology and speech-language pathology. First, Dr. Vijayalakshmi Easwar and her colleagues share the wonderful work being done by Audiology India, a volunteer-driven, non-profit and non-governmental organization, to improve hearing healthcare in India. Next, Heidi Britz, a lead SLP with extensive experience in public school systems, provides valuable insights on the impact of cultural diversity on social language. Additionally she provides several resources related to social language/pragmatic skills. This is followed by Dr. Anahita Mehta, who narrates her experiences with basic and applied research in hearing science and audiology in her transition from a clinical audiology student in Mumbai, India to a post-doctoral researcher in Minneapolis, Minnesota.

In this issue of ASHA Kiran, we are pleased to showcase contributions from Mr. Rohit Ravi and Dr. Krishna Yerraguntla, our colleagues from Manipal University, India, on the Indian Speech and Hearing Association (ISHA) as an organization, and the current state of newborn hearing screening in India. Lastly, Srividya Balaji from Dr. S.R. Chandrashekar institute of Speech and Hearing, Bangalore, India, presents a detailed review on cochlear implant research in India.



Saradha Ananthakrishnan



Sharmila Biran



FROM THE EDITORS' DESK

...Continued

We are very happy to extend our felicitations to the many achievers in the Asian Indian speech and hearing community this year. Kudos to Mr. Rohit Ravi for receiving the Audiology Research Travel Award (ARTA) to attend ASHA 2016, Dr. Vinaya Manchiah for being named to the 2016 class of 'Jerger Future Leaders of Audiology' by the American Academy of Audiology, and Dr. Ranjini Mohan and Dr. Anusha Sundarrajan for successfully completing their doctoral dissertations in 2016! Last but not the least, hearty congratulations to our very own President, Akila Rajappa for being invited to present the work done by the Asian Indian Caucus (AIC) (as part of the ASHA Multicultural Constituency Group Seminar) at ASHA 2016! Many congratulations to all of you!

We are also tremendously excited to announce the very first iteration of the Alpha Vista- Asian Indian Caucus Student and Clinician Scholarship, which offers two student scholarships and one clinician scholarship to the amount of \$500 each to eligible students and clinicians in the field of speech language pathology and audiology. Application details are listed within the newsletter. Additionally, readers will find information within the newsletter on the AIC meeting to be held during the ASHA convention in November 2016.

Finally, we sincerely appreciate the hard work put in by all our contributors as well as the executive board of the AIC in developing the 2016 edition of ASHA Kiran. A special shout-out to Ms. Shriya Basu for volunteering to help out with the editorial process!

We hope you enjoy reading ASHA Kiran 2016 as much as we enjoyed preparing it! Happy reading!

Saradha Ananthakrishnan and Sharmila Biran

ASHA KIRAN
2016-2017



SPOTLIGHT: DR. SWATHI KIRAN

You are a well known entity in the world of Speech and Hearing. Please tell us about yourself, your educational history and your journey. How did you first get involved in this field?

I am originally from India. I spent the first part of my life in Africa and have been in the US for the last 20 plus years. I received my bachelor's degree in Speech Pathology and Audiology from All India Institute of Speech and Hearing in Mysore. I then received my Masters and PhD from Northwestern University in the field of Aphasia. My first faculty position was at the University of Texas at Austin where I was first an Assistant Professor and then Associate Professor. I then moved to Boston University in 2009 and I am a Full Professor there now.

I have always been intrigued by the brain. When I was in high school I became interested in how we dream and form memories and was fascinated with the brain since then. I found my way to studying language loss (aphasia) as an undergraduate student and the topic continued to interest me. It is coincidental and fortunate that the work I do helps people who have had strokes. My work has an impact on people's lives on a daily basis and I am very grateful for that opportunity.

You are engaged in numerous professional activities- including directing the Aphasia lab at Boston University, research and development. Please tell us more about them.

I direct the Aphasia Research Laboratory at Boston University Sargent College of Health & Rehabilitation Sciences. I am also the Research Director at the Aphasia Resource Center. I am fortunate to be at the helm of both these centers. The Aphasia Research Laboratory is aimed at developing cutting-edge treatments for aphasia and understanding the nature of neuroplasticity. My lab examines recovery of language functions in individuals who have suffered a stroke. We examine the basis of neuroplasticity in the damaged brain by using functional neuroimaging to examine brain activation patterns in individuals who show recovered and impaired language skills. I have had several NIH funded projects that are aimed at developing effective approaches to alleviate language and communication difficulties in patients with aphasia. We are also one of the few laboratories in the world that systematically examine the nature of psycholinguistic and neural basis of bilingual aphasia.

The Aphasia Resource Center is aimed at providing patient education, support and treatment for stroke patients in the greater Boston area. It also provides valuable opportunities for graduate clinicians to obtain experience treating patients with aphasia. Finally, I am also the co-founder and Chief Scientist of Constant Therapy, a healthcare IT start-up company that delivers continuous and affordable rehabilitation to chronic stroke survivors.



Dr. Swathi Kiran, M.A, Ph.D., is Professor and Director of the Ph.D. program in the Department of Speech, Language and Hearing Sciences, at the Boston University (BU) Sargent College of Health Sciences.

A highly productive scholar, she leads the Aphasia Research Laboratory at BU, and is the research director of the Aphasia Resource Center at BU.

She also serves as a faculty member at the Center for Systems Neuroscience (BU), the Undergraduate Program in Neuroscience, (BU), the Graduate Program in Neuroscience (BU) and the Massachusetts General Hospital in the Neuroscience/Neurology department.

ASHA KIRAN
2016-2017



SPOTLIGHT: DR.SWATHI KIRAN ...Continued...

You are the Cofounder of Constant Therapy- an award winning speech therapy app. What motivated you for this? What challenges did you have to overcome? Kindly inform our readers about this app and its multitudinous uses.

I have always wanted my work to make an impact on society. While the aphasia rehabilitation research has important theoretical and clinical implications, my goal is for the rehabilitation research to improve the practical delivery of health care to people who need it. With funding from the Coulter Foundation that promotes bench to bedside translational research, I was involved in developing an innovative therapy software platform called Constant Therapy. This platform delivers rehabilitation on mobile devices and records patient performance at a very detailed level automatically. Constant Therapy consists of over 60 different therapy tasks that include language (speaking, comprehension, reading, and writing) and cognitive (visuo-spatial, memory, attention, reasoning and executive function) tasks that can be used with very severe patients as well as very mildly affected patients. In an initial study with over 50 patients who practiced personalized therapy tasks using this iPad-based software at their homes and at weekly visits to the clinic, we observed remarkable positive treatment outcomes. Importantly, because this software records patient progress automatically, it enables us to isolate and examine treatments that work from those that don't for specific individuals.

This work is very exciting because a technology based treatment delivery like Constant Therapy allows the collection and analysis of large data sets (millions of data points) to understand the effectiveness of rehabilitation. This data can be used to inform clinical practice both from a task efficacy perspective, as well as from the perspective sharing of clinical experiences across large numbers of clinicians. This data not only enable clinicians to make better decisions, but also enables patients to see their own progress. Constant Therapy users have noted that they can now track their own progress, which gives them ownership over their therapy and motivates them to do better.

I ask my students: Why does this project matter– does anyone actually care?
I have always wanted my work to make an impact on society.

ASHA KIRAN
2016-2017



SPOTLIGHT: DR.SWATHI KIRAN ...Continued...

What do you think will change about technology advancements and therapy in the next 10 years.

Technology and smart and connected health innovations have become an important avenue to provide ongoing care to patients who need rehabilitation services for months, often years. Even though speech-language services for communication are particularly suited for remote-rehabilitation due to the emphasis on auditory/visual interaction, the application of connected health for speech-language rehabilitative services is still in its infancy. The advancements in tablets, cloud-computing and other technologies to facilitate connected and continuing healthcare services will focus on therapies that are patient-centric and empower individuals (especially the ones who need long term care) to take ownership of their own rehabilitation. Thus, patients will no longer be passive consumers. These solutions will shift more power to the patient enabling him or her to assume a more collaborative role with their clinicians to direct the course of their rehabilitation. They will be able to see objective analysis enabling them to measure and understand their progress. They will also gain access to high quality therapy consistently anywhere and anytime for as long as they desire. I believe this will be a game changer and everyone will benefit as a result.

These technological solutions will also allow us to gather large amounts of data across on performance across large patient populations. This rich store of information combined with advanced analytics and data mining tools will give us the ability to predict the outcomes of different courses of therapy for each unique individual's diagnosis. We will understand, even before applying therapies, what is most likely to work or not work. Armed with this information we can design the best course of therapy for any given patient.

What can Asian Indian SLP Students/clinicians do to become more knowledgeable regarding this?

This is a very exciting time to be in our profession as ground breaking transformations are taking place. The most important development is that advancements in tools and technologies are removing the limitations associated with traditional rehabilitation methods. I would encourage students/clinicians to read the latest papers/research that are published about technological applications for speech and language therapy. They should understand how technology can enable them in their clinical delivery. They should also spend time understanding the advantages and disadvantages of different types of technological solutions. Finally, whenever possible, they should try to get involved in research projects that examine the utility/validity of technological applications and contribute to science.

Am I not good enough?

At times, I come across students or therapists dejected, sometimes having a grant rejected or a patient not improving. I always tell them—it is not you—**LEARN A LESSON FROM EVERYTHING YOU DO, FOCUS ON THE SOLUTION.**

TAKE SMALL SUCCESSES WHEREEVER YOU GET IT. As long you are passionate about something and you believe in it—**failures are OK— grow from it.**

ASHA KIRAN
2016-2017



SPOTLIGHT: DR.SWATHI KIRAN ...Continued...

What is your current research/interest about?

My current research has three broad strands. First, we are in the middle of a multi-year, multi-site project looking at the nature of neuroplasticity after rehabilitation in aphasia. This project collects multi-modality imaging (fMRI, MRI, DTI, ASL, and rsfMRI) information from chronic stroke survivors before and after rehabilitation and will identify what markers in the brain predict improvements after therapy. We will also be able to document how the damaged brain is plastic and is amenable to rewiring and reorganization.

In the second strand, we are very interested in improving rehabilitation outcomes for bilingual individuals with aphasia. While our current work is focused on Spanish-English bilinguals, we will soon also be working with Chinese-English bilingual and hope to extend this work to the different Indian bilingual language combinations. In this work, we use computation modeling (computer simulations) to behave like a bilingual person; we then lesion the “bilingual model” and retrain the model as if it were receiving therapy. We then compare outcomes from the computer model to actual human patient outcomes to see how well the computer explained actual treatment outcomes. With help from a newly funded NIH project, the computer simulation actually predicts beforehand what treatment is optimal for the patient to receive and we evaluate whether the model’s prediction is accurate or not based on outcomes from actual patient treatment data.

The third strand continues to be to broaden the reach of rehabilitation research on society through technology. With the large amounts of big data that we are able to collect within the Constant Therapy platform, we are using machine learning techniques to understand the treatments that work from those that don’t for specific individuals and allows for the prediction of possible outcomes even before assigning specific therapies to specific individuals.

Who is your role model? Name some people who have inspired you and why.

My role model is my mother who is a very successful human anatomy Professor in India. She has taught me to be independent, persistent, focused and disciplined about the work that I do.

I AM AMAZED AT PEOPLE WHO TAKE INTELLECTUAL RISKS!!

Occasionally they turn out to be wrong, but really big ideas in research have played out because people took risks

ASHA KIRAN
2016-2017



SPOTLIGHT: DR.SWATHI KIRAN ...Continued

Two other women have inspired me through my academic journey.

One is Dr. Pratibha Karanth, my undergraduate mentor at All India Institute of Speech and Hearing. The other person is Dr. Cynthia Thompson, my graduate mentor at Northwestern University. Both these women have taught me the rigors of the scientific approach, the importance of careful planning of research studies, the value of constructive criticism, and unrelenting pursuit of knowledge with an open mind. I continue to learn from them every time I interact with them.

Dr. Swathi Kiran is the recipient of several awards and honors—recently, she was named an ASHA Fellow (2013), and also received the Thomas McMahon Mentoring Award from the Harvard-MIT Health Sciences and technology Program (2013). In addition to her academic and scholarship commitments, Dr. Kiran is also engaged in various national and international professional activities in organizations such as ASHA and NIH, and serves as a reviewer and editor for several high impact-factor scientific journals in speech language pathology.

ASHA KIRAN
2016-2017



Audiology India: Small steps towards improving Hearing Healthcare in India

Vijayalakshmi Easwar^{1,2}, Sriram Boothalingam^{1,3}, Spoorthi Thammaiah^{1,4} & Vinaya Manchaiah^{1,4,5}

¹Audiology India (NGO), Mysore, Karnataka, India

²National Centre for Audiology, Western University, London, Ontario, Canada

³The Roxelyn and Richard Pepper Department of Communication Sciences and Disorders, Northwestern University, Evanston, IL, USA

⁴Department of Speech and Hearing Sciences, Lamar University, Beaumont, Texas, USA

⁵The Swedish Institute for Disability Research, Department of Behavioral Science & Learning, Linköping



Hearing health care outside of urban areas needs improvement in developing countries

Hearing loss is a major health issue for developing nations, considering that, about two-thirds of the 360 million individuals with hearing loss, reside here (WHO, 2013). In a developing nation like India, the prevalence of hearing disability between the years 1999 and 2002 was estimated to be around 5.9 to 16.6% (WHO, 1999; National Sample Survey Organization, 2003). Unfortunately, only 3% of those in need of hearing care have access to, and avail, appropriate services in developing nations (WHO, 2004). Two major barriers impede the provision of hearing care in these countries: (1) clustering of hearing care services in urban areas, offering limited access to individuals in suburban and rural areas (Manchaiah, 2016), and (2) high purchase and maintenance costs of hearing aids.

Audiology India aims to improve awareness and access to hearing care

Audiology India (AI) is a non-government and not-for-profit organization aiming to promote hearing health care in India by overcoming some known barriers. AI was founded by Dr. Vinaya Manchaiah and Dr. Srikanth Chundu in the year 2009. AI was first established as a website that offered information about ear and hearing health care specifically for audiologists and those training to be audiologists. Expanding from the goals of a successful website, AI has grown into a multidisciplinary team serving individuals with hearing difficulties, especially in suburban and rural communities in various parts of the country. AI currently has four objectives: community services, awareness campaigns, research, and consultancy services.

Community services

AI conducts free speech-and-hearing screening camps and community-based hearing rehabilitation. Hearing rehabilitation is conducted systematically in three phases catering to financially deprived rural/suburban areas. In the *first stage*, hearing assessments are performed, and ear impressions are obtained for those who require hearing aids. In the *second stage*, hearing aids are fitted, and instructions for use are provided. In the *third stage*, review of hearing aid use is performed, and necessary adjustments are made. So far, AI has conducted 36 free camps, and has tested approximately 1850 individuals. An estimated 700 behind-the-ear (BTE) hearing aids have been given free of cost to individuals in need identified during these camps.

Awareness campaigns

AI has so far organized 10 orientation programs for school teachers and general public about hearing, hearing disorders, and dangers of high sound levels, both occupational and recreational. These programs have built custom resources (e.g., videos) aimed at improving the awareness of speech and hearing disorders, and therefore facilitating prevention and early detection of hearing difficulties. Not limiting the activities to community services and campaigning, AI has taken up need based audiology research which is directly linked to hearing health care services offered.

ASHA KIRAN
2016-2017



Audiology India: Small steps towards improving Hearing Healthcare in India ...Continued...

Evaluation of current practices: research

AI team members have published research articles bringing to light the limited awareness of the profession of audiology in India, diversity in practice across the country, places of work, and professional issues related to audiologists practicing in India. Such surveys repeatedly provide evidence for the need to develop nation-wide guidelines for service delivery, diversification, and definition of clear roles for audiology professionals from varied degrees/background in training (Easwar et al., 2013).

An ongoing goal of our research is evaluation of outcomes of hearing rehabilitation provided by AI in community-based settings. This includes investigating outcomes with standardized measures and studying hearing aid usage (e.g., device handling skills, recall of information for hearing aids users) in low resource settings where camps are held. We recently completed validation of outcome measures that will be used for further research projects (Thammaiah et al., 2016).

Generating income to support our services: consultancy services

AI offers consultancy services to local businesses and individuals. The revenue generated from consultancy services is used to sustain the above activities. Providing consultancy services have proven to be challenging so far with limited income generation, but we hope to diversify our services and predict growth in the coming years.

AI is a volunteer-driven organization

AI is run by three trustees, six directors and three advisors. A full time employee and about 50 part-time volunteers work for AI, some working remotely from outside India. We attract student volunteers not only from audiology and speech-language pathology but also from engineering and other fields. We are eternally grateful to all the volunteers for their continuing generous contributions.

Funding and Collaboration

Funding requirements have grown since our humble beginning, where much of AI activities were managed through collaborations. For instance, community-based rehabilitation camps have usually been sponsored by other government or non-government organizations like Rotary Clubs. However, our expanded objectives demand more directed funding to support an office, a full-time employee and travel expenses for volunteers. Currently, we rely heavily on donations and fund raising activities conducted locally in Mysore, Karnataka.

While we strive to sustain and improve our current undertakings, we are constantly in the lookout for avenues to expand hearing health care services, both in variety and geography. We extend our invitation to any interested volunteers to support the cause of Audiology India. This can include leading and/or participating in fundraising activities, developing and participating in projects, and serving as AI ambassadors.

Further information including our publications is available at www.audiologyindia.org. Please forward interests and enquiries to contact@audiologyindia.com.



Audiology India: Small steps towards improving Hearing Healthcare in India ...Continued

References

Easwar, V., Boothalingam, S., Chundu, S., Manchaiah, V.K.C. & Ismail, S.M. (2013). Audiological practices in India: An internet-based survey of audiologists. *Indian Journal of Otolaryngology and Head & Neck Surgery*, 65(3), 636-644.

Manchaiah V. (2016). Hearing Healthcare in India. *ENT & Audiology News*, 25(1), 73-74.

National Sample Survey Organization. (2003). *Disabled persons in India. NSS 58th round*. National Sample Survey Organization, New Delhi (July-December 2002).

Thammaiah, S., Manchaiah, V., Easwar, V. & Krishna, R. (2016). Translation and adaptation of five English self-report health measures to South-Indian Kannada language. *Audiology Research*, 6(153), 22-27.

World Health Organization. (1999). *Ear and hearing disorders survey: Protocol and software package*. World Health Organization, Geneva (July 1999): WHO/PBD/PDH/99.8.

World Health Organization. (2004). *Guidelines for hearing aids and services for developing countries (2nd ed)*. Geneva, Switzerland: World Health Organization.

World Health Organization. (2013). Millions of people in the world has hearing loss that can be treated or prevented. Available from: <http://www.who.int/pbd/deafness/news/Millionslivewithhearingloss.pdf> (accessed on July 17, 2016).

ASHA KIRAN
2016-2017



Cultural Diversity and Social Language

Heidi Britz



I work in a large school system in Georgia, with just over 96,000 students. Of this population, roughly ten percent identify as Asian, fifteen percent Hispanic and an additional three percent identify as multi-racial. My particular school has changed drastically demographically over the past ten years. This was due to several factors including the city having a large Tech industry that attracts people from all over the world and the transient nature of the greater Atlanta area. I have also noticed a significant increase in the number of young students moving into the area with social language impairments, particularly in families from India. As we are becoming a global society, the impact of culture and community on multilingual students (particularly in the area of social language development) must be considered when assessing them and/or providing interventions, as Speech Language Pathologists. While the nuances of cultural expectations may change across the world, there are societal norms in social expectations, regardless of language.

Michelle Garcia Winner, a Speech Language Pathologist with a special focus in social language therapy and research, elaborates about social expectations across cultures, *"Their social brains are designed to seek opportunities to focus on social information and therefore learn the social norms of their community. As individuals participate in their communities they form societies and there are some universal notions about how this is accomplished across the world: In societies, social values are typically shared and can be thought of as cultural values. Those with similar cultural values also share social expectations for how people within that specific culture behave - these are their cultural norms. The social behaviors (e.g., social skills) connected to the norms help demonstrate the cultural values.*



Heidi Britz, MA CCC-SLP, is a Lead Speech Language Pathologist in the public schools. She graduated with her Masters in communicative disorders from the University of Central Florida and is a member of ASHA. She has been practicing for over twenty years, and specializes in developing social language training and support for students in her school district. For more ideas on social language activities and ideas, follow her on her blog, Smartmouthslp, at

www.smartmouthslp.com.

ASHA KIRAN
2016-2017



Cultural Diversity and Social Language ...Continued

For students with suspected social language impairments, the speech language pathologist is typically part of the team providing school based assessment and services. It is important to take into consideration not only a possible diagnosis but the cultural impact on social language as well. Children learning and speaking more than one language may experience the stages of second language acquisition that develop over 5-7 years in neurotypical students. Social language moves quite fast; particularly as the student moves through the upper grades, and this may also make those acquiring a second language appear slower in their social processing. This is not an impairment however, and consultation with the teacher of ESOL (English for Speakers of Other Languages) is suggested to see how the student's skills are developing as compared to their peers who are also acquiring English. We need to consider academic language (the vocabulary and terms of the classroom and academic subjects) as well as social language (communicative intents, humor) acquisition when looking at the whole child.

I often tell my students, who have more than one language that—this is a gift! They look at me dubiously, as they are often hesitant to talk about speaking another language at home and can even be embarrassed if their parents speak to them in front of peers in the family's native language. I suspect that it is because it makes the student stand out from their peers, and it is human nature to want to "blend in" socially. We need to empower them to look at their ability to speak languages other than English as a positive trait in the schools. As the world becomes more multilingual, this skill will be advantageous in the job market beyond high school.

Cultural impact can be more than spoken language, as I found out several years ago when I had the opportunity to evaluate a student who had moved to our area following Hurricane Katrina in New Orleans. The student I saw was a quiet and serious child who demonstrated some soft social language weaknesses, including poor eye contact. As I reviewed the testing results with his mom and addressed the eye contact with her, I learned something quite valuable. She shared that in her culture and community, direct eye contact with an adult is considered rude and disrespectful. It was a paradigm shift for me therapeutically and something I have never forgotten.

As part of assessing our students, whether in the Response to Intervention (RTI) process or diagnostically through testing and developing an Individualized Education Plan (IEP), culture and community must be considered as well as test scores and data collection. Our job as part of the team is to talk to the family, ask questions and involve our ESOL teachers and community liaisons to develop a holistic view of the child's abilities and limitations *before* we determine that there is an impairment versus a difference.

<https://www.socialthinking.com/Articles?name=Adapting%20to%20Cultures>

Article by Michelle Garcia Winner of Social Thinking ®

Heidi Britz is a Lead Speech Language Pathologist in the public schools. She can be reached for questions or comments on this article at britz@fultonschools.org

ASHA KIRAN
2016-2017



My Journey

Anahita Mehta

As a kid, I always wanted to learn more about sound and the hearing sense. One of my closest friends at the time had a hearing impairment and that triggered my fascination to learn more about how the auditory system worked. I started out by pursuing my undergraduate degree (Bachelors in Audiology and Speech Language Pathology) at Ali Yavar Jung National Institute for the Hearing Handicapped, Mumbai in 2009. My undergraduate degree exposed me to an incredible case load but I knew that at some point down the road, I wanted to look into aspects of hearing loss beyond a clinical perspective to truly understand auditory functioning.

I went on to enroll in a Master's degree in Audiological science at the Ear institute at University College London (UCL). The Ear Institute is an interdisciplinary research institute where the research revolves around understanding hearing but the techniques span across the fields of genetics, cell biology, neurophysiology, human perception, cognition and clinical trials. I appreciated the complexities of understanding auditory function and realized that compared to other senses like vision, the auditory system is relatively underexplored. Being exposed to such breadth in auditory research inspired me to think beyond traditional clinical audiology and got me further interested in exploring basic hearing processes. I wanted to get as much research experience as possible to help me decide what area of auditory research interested me the most and whether I wanted to switch from clinical work to basic research in auditory neuroscience.

My first research experience was an 8 week internship at the University of Cambridge where we studied properties of complex pitch perception using frequency following responses (FFR)(1). I was thrown into the deep end of EEG data analysis which was a very steep learning curve. However, it was exciting to be investigating new research ideas and this experience essentially served a crash course in everything from experimental design to analysis and interpretation of data. Simultaneously, I also carried out my Master's thesis project that studied the effects of aging on temporal fine structure perception(2). After these brief research experiences, I worked for a year at the Institute of Hearing Research in Nottingham on developing a platform for carrying out psychophysical tests of hearing in children with cochlear implants in clinics. It was an interesting experience as I had to collaborate with both clinicians as well as basic research investigators. I could draw upon my experience at that time for what could possibly be a feasible test setup for a busy clinic while trying to get clinicians to appreciate the need for more fine-grained assessment of



Dr. Anahita H. Mehta is currently a Postdoctoral Associate at the University of Minnesota. She completed her PhD in Auditory Neuroscience at University College London, UK.

Her current research focuses on understanding how complex pitch is perceived in cochlear implants. She is also interested in using neuroimaging techniques to investigate the effects of attention on sound segregation.

ASHA KIRAN
2016-2017



My Journey ...Continued...

cochlear implanted children. By this time, I had experienced three different research settings and three completely different auditory research fields and I recognized that I enjoyed investigating basic auditory phenomena using electrophysiological measures like EEG.

I started my PhD in auditory neuroscience at the Ear Institute in 2011 studying the effect of attention on auditory scene analysis. It was a rapid learning experience of dealing with errors, careful assessment of the equipment and experimental paradigms and getting proficient with different programming platforms and analysis techniques, but being a part of such a dynamic research environment was exhilarating. In the second year of my PhD, I did a four month research project at the University of Maryland which ended up leading to the rest of my PhD project. I started investigating the 'octave illusion' which is an auditory illusion using stimuli very similar to ones used for studying scene analysis. Using EEG, we went on to test various aspects of the illusion that led to unexpected insights into how our auditory system processes sounds that occur simultaneously. My PhD proposed an alternative explanation for how the auditory system perceives this illusion. On the surface, exploring how an illusion is perceived sounds frivolous, but illusory percepts often tap into physiological processes that lead to understanding nuances of sensory systems. In auditory scene analysis, it is known that sounds that start and end at the same time are extremely difficult to parse apart. This binding phenomenon is known as temporal coherence. The octave illusion however, demonstrates a particular bilateral stimulus configuration, wherein binaural context and competition leads to the breakdown of these temporal coherence bonds. This particular property of the stimulus makes it very appealing to study in the context of coherence effects as well as bilateral context effects(3,4).

After my PhD, I decided that I wanted to explore a different field to augment my skill set and started a post-doctoral fellowship at the University of Minnesota. In my post-doc, I currently study fundamental characteristics of pitch perception and how that relates to pitch perception in cochlear implants. The spectral resolution of cochlear implants is currently insufficient to convey spectral pitch. It is also well known that contrary to speech perception, which implant users seem to do quite well in, melodic music perception is extremely poor with cochlear implants, even for extremely experienced implant users. With current advances in technology and different current focusing and steering paradigms being developed, there is a large emphasis on thinking that spectral pitch cues can be restored. Several studies have looked into the fundamental question of how many channels and how much current overlap can be tolerated when conveying pitch cues and have found that between 16-32 channels with modest amount of channel interaction should suffice. However, these studies have potential drawbacks due to poor control over the stimulus parameters. We are currently systematically addressing this important question using stringent vocoder studies in normal hearing individuals and we find that the parameters required to actually be able to use spectral cues far exceeds current day cochlear implant paradigms. Our results suggest that CIs, even with current-focusing techniques such as partial tripolar stimulation, will not achieve the place specificity necessary to evoke a complex pitch. Instead, new approaches (including different implantation sites, such as the auditory nerve) may be necessary to improve the pitch perception experience by patients or to further improve techniques of providing temporal pitch cues to implant users.

There is a persistent issue of a lack of understanding on both sides of the research spectrum; where basic researchers fail to communicate the importance of their work in a digestible fashion to the clinicians, who often feel like the problems their patients face are not addressed adequately. Having seen both sides, I appreciate clinical concerns and also believe that a mutually

ASHA KIRAN
2016–2017



My Journey ...Continued

beneficial relationship can be formed by bridging this chasm. This is especially true in the field of cochlear implants where the need for well controlled basic research is of utmost importance to move modern day implants beyond the current status quo. I aspire to carry on with understanding how human hearing works and hope to incorporate invaluable clinical feedback into my research.

References:

Gockel HE, Carlyon RP, Mehta A, Plack CJ. The frequency following response (FFR) may reflect pitch-bearing information but is not a direct representation of pitch. *J Assoc Res Otolaryngology JARO*. 2011 Dec;12(6):767–82.

Moore BCJ, Vickers DA, Mehta A. The effects of age on temporal fine structure sensitivity in monaural and binaural conditions. *Int J Audiol*. 2012 Oct 1;51(10):715–21.

Mehta AH, Yasin I, Oxenham AJ, Shamma S. Neural correlates of attention and streaming in a perceptually multistable auditory illusion. *J Acoust Soc Am*. 2016 Oct 1;140(4):2225–33.

Mehta AH, Jacoby N, Yasin I, Oxenham AJ, Shamma SA. An auditory illusion reveals the role of streaming in the temporal misallocation of perceptual objects. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2016 (in press).



Indian Speech and Hearing Association

Rohit Ravi and Krishna Yerraguntla

Indian Speech and Hearing Association is a professional association of speech language pathologists and audiologists in India and internationally with over 2500 members. It works towards enabling professional excellence among these professionals, safeguarding ethics and advocacy for persons with speech, language and/or hearing disorders.

About ISHA:

The ISHA was founded on 15th December 1967, registered under the Mysore Societies Registration Act, 1960. The first annual conference was held in Calcutta (now Kolkata) along with Association of Otolaryngologists in India (AOI) in 1968. Since 1978, after gracefully parting from AOI, ISHA became an independent body. The 49th annual convention of the ISHA will be held in Kolkata in January 2017. The central office of the association is at All India Institute of Speech and Hearing, Mysore. The association publishes the Journal of Indian Speech Language and Hearing Association (JISHA) where articles related to assessment and management of speech, language and hearing disorders are published.

Aims and Objectives of the Association:

To encourage scientific study of the processes involved in Speech-Language and Hearing, to promote investigation of Speech-Language and Hearing disorders, foster improvement of therapeutic procedures for such disorders, to stimulate exchange of information among persons thus engaged and disseminate such information. The detailed aims and objectives are available at www.ishaindia.org.in.

What's New?

Recognition by Rehabilitation Council of India

ISHA has also developed scope of practice and is now accepted by Rehabilitation Council of India. It has started its efforts in developing uniform guidelines and will be kept in ISHA website for members access.

Members only page:

The members only pages have information related to orations, advocacy, special interest groups, papers presented in the past ISHA Conferences, link to update your profile from time to time and many more. If you have not received your login details, contact secretary at secretary@ishaindia.org.in with your membership number.



Rohit Ravi is a doctoral candidate with the Dept. of Speech and Hearing, School of Allied Health Sciences, Manipal University Manipal, Karnataka, India.



Dr. Krishna Yerraguntla is currently working as a Professor and leads the Department of Speech and Hearing at the School of Allied Health Sciences, Manipal University, India and is also the General Secretary of Indian Speech and Hearing Association.



Indian Speech and Hearing Association ...Continued

Newsletter:

The ISHA newsletter provides update on the upcoming events as well as new happenings in the field. The previous issues of news letters are also available in the members only pages.

Webinar:

Among the recent initiatives, ISHA has introduced webinars delivered from national and international faculties on topics related to speech, language and hearing. These webinars are aimed at updating the professionals on the current trends and practices on clinically relevant topics to foster better service delivery.

Research Request:

In an initiative to encourage research activities among the fellow professionals, ISHA also provides an option to send research request that are accessible to all.

Reference:

Indian Speech and Hearing Association official website <http://www.ishaindia.org.in/> (Retrieved on 16th October 2016)



Newborn Hearing Screening– the current scenario in India

Rohit Ravi and Krishna Yerraguntla

The National Sample Survey Organization (NSSO)¹ survey carried out in India in 2002 estimated 291 persons per 100,000 suffering from severe to profound hearing loss of which almost 7% have a congenital hearing loss. As per the WHO estimates in India, an estimated prevalence of hearing loss is 6.3%. However, in spite of this high prevalence there is a lack of universal newborn hearing screening programs in the country at a central level².

The Union Government initiated the National Program for the Prevention and Control of Deafness (NPPCD)³ in 2006. The program focuses on capacity building and manpower development, hearing and ear care, ear health promotion and prevention, early detection of ear problems and management, community screening camps, rehabilitation and hearing aid provision. However, the program does not have a provision for establishing UNHS. The Rashtriya Bal Swasthya Karyakram (RBSK)⁴ is another important initiative under the National Rural Health Mission, aiming at early identification and early intervention for children from birth to 18 years. It aims to cover the 4 'D's viz. Defects at birth, Deficiencies, Diseases, Development delays including disability.

Kumar and Mohapatra⁵ surveyed 185 speech and hearing institutions and hospitals in India involved in newborn hearing screening. Out of the 31 centers that responded, only 16 conducted newborn hearing screening program. More than half of the centers reported of not receiving any funds for the program. They concluded that NHS is yet to get a good grounding in the medical set-ups, in the absence of which intervention is not possible. Newborn hearing screening attempts have been made at the individual centre/hospital levels however mainly focusing on urban population.^{6,7,8,9,10,11} These studies have limitations in terms of being single center studies, difference in screening procedures, losses to follow-up and lack of uniformity. As a result of these issues, it is still difficult to conclude with a uniform screening model that could benefit the entire country

A successful UNHS program in the Indian scenario would benefit from contribution from the health care providers as well as the beneficiaries (family/parent). However, lack of adequate knowledge and awareness among the parents accompanied with superstitious and cultural beliefs lead to a further delay in identification and treatment of hearing loss.¹² Ravi et al¹³ emphasized on the need for implementing public awareness programs to enhance the knowledge and attitude of family members towards hearing loss in infants which will help in better implementation of screening programs. The use of database management systems will further enable better documentation and follow-up.

However, lack of knowledge and awareness among the masses, inadequate qualified professionals and infrastructure, lack of insurance or funding, and absence of standardized screening procedures, the establishment of UNHS in Indian scenario still seems as a distant dream.



Rohit Ravi is a doctoral candidate with the Dept. of Speech and Hearing, School of Allied Health Sciences, Manipal University Manipal, Karnataka, India.



Dr. Krishna Yerraguntla is currently working as a Professor and leads the Department of Speech and Hearing at the School of Allied Health Sciences, Manipal University, India and is also the General Secretary of Indian Speech and Hearing Association.



Newborn Hearing Screening– the current scenario in India ...Continued

References:

- Report No. 485: Disabled Persons in India, July--December 2002. NSS 58 Round. National Sample Survey Organisation. Ministry of Statistics and Programme Implementation Government of India. 2003 Dec
- State of Hearing and Ear Care in the South East Asia Region (2012). WHO Regional Office for South East Asia. World Health Organization. (Accessed on 17th Oct 2016). Available from: http://apps.searo.who.int/pds_docs/B1466.pdf
- New Delhi: Ministry of Health and Family Welfare (2006) Directorate General of Health Services. National Programme for Prevention and Control of Deafness, Project Proposal
- Rastriya Bal Swasthya Karyakram (RBSK) operational guidelines. Available from: http://nrhm.gov.in/images/pdf/programmes/RBSK/For_more_information.pdf (Accessed on 17 Oct 2016).
- Kumar, S., & Mohapatra, B. (2010). Status of newborn hearing screening program in India. *International Journal of Pediatric Otorhinolaryngology*, 75 (1), 20 – 26.
- Jewel, J., Varghese, P.V., Singh, T., Varghese, A. (2013). Newborn hearing screening- experience at a tertiary hospital in Northwest India, *International Journal of Otolaryngology and Head & Neck Surgery*, 2, 211-214
- John, M., Balraj, A., & Kurein, M. (2009). Neonatal screening for hearing loss: pilot study from a tertiary care centre. *Indian journal of Otolaryngology Head Neck Surgery*, 61, 23-26.
- Kumar, A., Chandrashekar, & Sodhi, K. (2013). Universal Hearing Screening in Newborn, *International Journal of Basic and Applied Medical Sciences*, 3 (2), 2277-2103.
- Paul, A.K. (2011). Early identification of hearing loss and centralized newborn hearing screening facility-The Cochin experience. *Indian Pediatrics*, 48, 355-359
- Dhawan, R., & Mathur, N.N. (2006). Comparative evaluation of transient evoked oto-acoustic emissions and brainstem evoked response audiometry as screening modality for hearing impairment in neonates. *Indian Journal of Otolaryngology and Head and Neck Surgery*, 59 (1), 15 – 18.
- Mathur, N.N., & Dhawan, R. (2007). An alternative strategy for universal infant hearing screening in tertiary hospitals with a high delivery rate, within a developing country, using transient evoked Oto-acoustic emissions and brainstem evoked response audiometry, *The Journal of Laryngology & Otology*, 121, 639-643.
- Ravi, R., Gunjawate, D., Yerraguntla, K., Rajashekhar, B. & Lewis, L.E. (2016). Knowledge and attitude of parents/ caregivers towards hearing loss and screening in newborns – A systematic review. *International Journal of Audiology*. 55 (12), 715-722.
- Ravi, R., Yerraguntla, K., Gunjawate, D., & Rajashekhar, B., Lewis, L.E. & Guddattu, V. (2016). Knowledge and attitude (KA) survey regarding infant hearing loss in Karnataka, India. *International Journal of Pediatric Otorhinolaryngology*. 85, 1-4



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India

Srividya Balaji

A cochlear implant (CI) is an auditory prosthesis that provides access to hearing for individuals with sensorineural hearing loss by by-passing damaged cochlear hair cells and directly stimulating the hearing nerve using coded electrical signals. CI candidacy depends on a variety of different factors including but not limited to degree of hearing loss, benefit from amplification, presence of associated medical conditions, and motivation and involvement in the (re)habilitation process. Adults with severe-profound acquired hearing loss and those with limited benefit from hearing aids may qualify as candidates for cochlear implantation. Children as young as 12 months of age with profound hearing loss in both ears and who demonstrate little progress in the development of auditory skills may also be considered as candidates.

CI programs in India have grown by leaps and bounds in the past two decades, with the entry of major CI companies such as Cochlear (Australia), Advanced Bionics (USA), Med-El (Austria) and Digisonic of Neurolec (France) into the medical device market in India. This in turn has facilitated extensive research in the field of CIs by audiologists and speech language pathologists. This article provides a brief summary of the different CI research studies done in India in the following areas:

- development of material for evaluation and rehabilitation;
- processor technology
- speech perception and production skills
- language development
- quality of life



Srividya Balaji is a PhD scholar from Dr. S.R. Chandrashekar institute of Speech and Hearing, Bangalore, India. Her area of interests are diagnostic and rehabilitative audiology. Her present research focuses on speech perception and production skills in children with cochlear implants. She can be contacted at srividya2001@yahoo.com



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

Development of material for evaluation and rehabilitation:

| Author | Material developed |
|--|---|
| Yathiraj (2003) | Auditory learning manual for English speaking Indian hearing impaired children |
| Rawat and Yathiraj (2000) | Auditory learning manual for English speaking Indian hearing impaired children |
| Sarvarkar, (1998); Tamilmani, (2001); Jijo, (2008); Bishwal, (2009); Tiwari, (2011) | Early speech perception test (ESPT) in in Marathi, Tamil, Malayalam, Oriya, Hindi |
| Gore and Bhat (2002) | Early consonant perception test |
| Gore and Bhat (2002) | Easy and difficult sentence test |
| Mathew, (1996); Vandana, (1998); Kant, (2003); Prakash, (1999) | Picture based tests were developed by in Malayalam, Kannada, Hindi and Tamil |
| Kumar, (2006); Sharanya, (2012); Piyumi, (2009) | Hearing in Noise test (HINT) was adapted in English, Tamil and Sinhali |
| Kant (2009) | Home auditory training program (HAP) |
| Chayakantha & Yathiraj, (2010); Dhiraj, (2010) | Lexical neighbourhood test (LNT) adapted in Indian English and Hindi |
| Kinariwala and Gore (2012) | Minimal pair discrimination test in English |



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

Studies done with processor technology:

| Author | Area of study |
|----------------|---|
| Gore (2003) | Created MAP's with different pulse width and recorded the sound field thresholds. |
| Imran (2007) | Auto NRT a software provision in Cochlear implants which helps in automatically estimating the T levels by the equipment. The Auto NRT thresholds were compared with behavioural T levels at different stimulation rates. It was seen that the Auto NRT based prediction of T levels was best for 250 Hz only. |
| Jijo,(2011) | The application of ESRT as a tool to set the comfortable levels in children with cochlear implants was studied. It was seen that the ESRT can be obtained at comfortable levels for all children. The T (threshold) and C (comfortable) levels are obtained using different techniques by the software. |
| Bhutani (2011) | Compared the relationship of four measures of ECAP with T and C levels in 14 children with Nucleus Freedom implant for 5 electrodes. The best electrode for predicting T and C level from ECAP was electrode no. 1. |
| Ashwini (2011) | Studied ESRT as a tool to obtain T and C levels from electrodes It was seen that the ESRT levels were higher than the C levels, with difference less than 30 CL. |
| Hossain (2013) | To assess the outcomes of Cochlear implants on the auditory cortex cortical auditory evoked potentials (CAEPs) was done. It was seen that if auditory input is not restored until after the developmental period, then the cross-modal reorganized pathways may exhibits abnormal functional characteristics as observed in recorded P1 amplitude, latencies and morphologies of CAEPs. |
| Gagan (2011) | The Effect of Frequency Re – allocation on the vowel perception of children with Cochlear Implant was studied. Study indicates the need for developing individualized frequency map for the cochlear implant subjects. |



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India

...Continued...

Studies done on speech perception skills:

| Author | Study |
|---------------------------------|--|
| Sitaram (2009) | Reported that the speech perception scores correlate with evoked potential findings, ALLR. The results suggested that the wave morphology was different in children with cochlear implants when compared to children with normal hearing, but after three months of rehabilitation the morphology improved and P1 latency reduced with increase in speech perception scores too. |
| Nisha Sara Kuruvilla, 2009 | Compared audio visual integration in speech perception in children with cochlear implants using Mc Gurk Paradigm The oral group and also children with higher implant age had significantly better audio visual integration than the oral-aural group. |
| Jain, (2009) | The effect of therapy on the working memory in the perception of words and sentences of children with cochlear implants was analysed, on ESPT, token test, Speech recognition score and forward and backward digit span test. It was seen that training on memory improves perception of words and sentences. |
| Litty(2010) | Studied voice gender identification in children with cochlear implants. Male and female recorded sentences were used as stimulus .It was seen that gender identification was achieved in 21 months of implant age and identification improved as experience with cochlear implant increased. |
| Ramandee etal., (2011) | Reported that the speech perception in noise improved in simulated condition of cochlear implant and electroacoustic stimulation in 20 Hindi speaking adults. |
| Menon (2008) | Evaluated Cochlear implanted children using Nucleus Implant with ACE strategy for perception of music. It was seen that vocal + instrumental perception was better perceived than instrumental music alone with these children. |
| Jandeep (2012) | Studied the effect of music training on music perception in the children with cochlear implants. The pitch discrimination for a pair of keyboard notes and song recognition skills with rhymes showed significant improvement after 3 months of intensive music training. |
| Radhika (2012) | Studied intonation perceptual discrimination skills for declarative and interrogative sentences by children with cochlear implants. It was seen that the intonation recognition skills were poorer for the children with cochlear implants than with normal hearing. |
| Sornam (2013) | Reported improved scores after temporal training on temporal perception tasks like gap detection and word perception skills, modulation detection with 1KHz tone and speech perception in noise. |
| Ratna Kumar & Mo-hanthy, (2016) | Studied the benefits of bimodal stimulation (i.e. CI in one ear and HA in the contralateral ear) in children. |



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India

...Continued...

Studies done on speech production skills in cochlear implantees:

| Author | Study |
|----------------------------------|--|
| Anusha, Varsha & Sreedevi (2010) | Compared lead and lag VOT, word and vowel duration and F2 in children with cochlear implants with those with BTE hearing aids and with age-matched normal hearing children. Results suggest that lead VOT in CI and BTE users were longer than normal hearing group. The F2 values were higher for CI group and lower for BTE group than normal hearing group. |
| Rohini (2011) | The acoustic and perceptual analysis of speech of children with normal hearing, hearing aids and cochlear implants was compared. When the formant values of the vowels were compared between normal hearing and children with cochlear implants, higher formant values for all three formants were seen. The vowel duration and word duration were also significantly higher. |
| Kant (2012) | Studied acoustic analysis of speech of children with cochlear implants for vowels, fricatives and affricates using Praat software. Significant difference was found in VOT for /b/, F1 and F2 of /e/ and F3 of /u/ sounds when compared to normal hearing peers. |
| Srividya & Premalatha, (2014) | Compared speech perception and production of the vowels in children with cochlear implants with those of age matched normal hearing children. The vowel perception scores are slightly poorer in children with cochlear implants when compared to normal hearing group. Vowel back ness (bell/ ball) was easy to be perceived than vowel height (pin/ pen and put/pot) fetching better scores. Significant difference was seen in formant values of vowels, vowel duration, Word duration between both the groups. |



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

Studies done on language areas in cochlear implantees:

| Author | Study |
|-----------------------|--|
| Jeena (2005) | The meta-phonological skills of children with cochlear implants and compared with normal hearing peer group with test of reading and meta-phonological skills was seen. |
| Pruthvi et al. (2008) | Described video analysis technique to compare rate of progress of verbal and gestural turns in children implanted. |
| Manju (2008) | Reported the semantics and syntax language outcomes of children with cochlear implants comparing with normal hearing children on Malayalam Language test. The performance of children in 4-10 year old group was poorer when compared to normal hearing group but the scores were on par for children above 10 years of age. |
| Blessy (2011) | The stress production patterns of the children with cochlear implants at word and phrase level in two groups of children who were implanted before and after 3 years of age. Non-word and real word imitation with trochiac and iambic stress and imitation of phrases was evaluated and found that children who were implanted before 3years of age accurate production of stress patterns. |



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

Studies done on quality of life post implant:

| Author | Study |
|--------------------------------|--|
| Priyanaka (2010) | Studied the quality of life of two groups of mothers of children using either hearing aids or cochlear implants using a self-answerable 5 point scale questionnaire. No significant difference was seen in two groups of mothers. |
| Kanaka (2010) | Reported an increased self-esteem, independence and social functioning along with better sound perception in individuals with cochlear implants. She reported no significant difference in the overall quality of life in the first 3 months, but a difference was seen in the self-esteem at 6-9 months post CI. In the 9-12 months post-switch on, there was a significant difference for sound perception, social interaction and quality of life. |
| Santhi et al (2013) | Conducted a study to compare the levels of stress and depression in mothers of children using hearing aids and children who had cochlear implants. Two self-reporting scales Parental Stress Index (PSI) & Centre for Epidemiologic Studies Depression Scale (CESD). The results revealed that mothers in both the groups have high stress levels. This highlights the need for the rehabilitative professionals to focus on family-based intervention for children with hearing impairment. |
| Vinila, Aparn & Prakash (2013) | Conducted a study to evaluate the needs of parents on transition of their children with hearing impairment from preschool to inclusive school. Scale of parental needs in transition to school (Kargin, Baydik & Akcamete, 2004) was used. It indicated that 75% of parents expressed need for information on most of the areas of transition to school. |



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

As can be seen from the research summarized above, significant advances have been achieved in the field of cochlear implantation in India in the recent years. These advancements in research have translated to the clinic as well, with increasing instances of CIs being used as part of early intervention in children with congenital profound sensorineural hearing loss. Given the number of researchers and clinicians working in this area, there is no doubt that our knowledge related to cochlear implants will continue to grow at a fast clip in the years to come in India!

References :

- Anusha, S., Varsha.J., Sreedevi, N. (2010). A comparison of acoustic characteristics of speech of young cochlear implant and BTE users with normal hearing age matched individuals. *Journal of All India Institute of Speech and Hearing*, Vol. 29 (1), 87-93.
- Ashwini Rao, T.N. (2011). *Electrically evoked stapedial reflex threshold levels: relationship with behavioural T and C levels in cochlear implant users*. An unpublished Masters dissertation submitted to University of Mysore.
- Bhutani, P. (2007). *Comparison of relationship of 4 measures of ECAP with T and C levels in Children with Nucleus Freedom Implant*. An unpublished Masters Dissertation submitted to Bangalore University.
- Bishwal, S. (2009). *Early speech perception test for Oriya speaking children with hearing impairment*. An unpublished Masters Dissertation submitted to Bangalore University.
- Blessing, D.J. (2011). *An analysis of production of stress by children using cochlear implants*. An unpublished Masters Dissertation submitted to Bangalore University.
- Chayakantha, Yathiraj, A. (2010). *LNT in English for Indian children*. An unpublished Masters dissertation submitted to University of Mysore.
- Cochlear implant group of India (CIGI), 2011: Clinical practice guidelines for cochlear implantation. <http://cicgi.in>
- Dhiraj,K.S. (2010). *Development of lexical neighbourhood test in Hindi*. Unpublished Masters Dissertation submitted to Bangalore University.
- Hossain, M.D., Raghunandan, S., Kameswaran,M., Ranjith, R. (2013). A clinical study of cortical evoked potentials in cochlear implantees. *Indian J of Otolarynol Head Neck Surg*. Dec;65 (Suppl 3):587-93.
- Gagan,B. (2011). *Effect of frequency re-allocation on the vowel perception in children with cochlear implants*. Unpublished Masters Dissertation submitted to Bangalore University.
- Ganapathy, M.K., Hariprakash,P., & Rajasekhar,B. (2012). *Brain stem encoding of fundamental frequency in cochlear implant users*. Lamvert academic publishing.
- Gore,M., (2003). *Mapping in the cases of partially insertion of nucleus 22 CI*. Paper presented in 1st CIGICON, Mumbai.



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

Gore, M & Bhat, R.J. (2008). *The early speech perception test in Kannada*. Report. Dr.S.R.C. Institute of Speech and Hearing.

Imran, D. (2007). *Correlation between Auto NRT T levels and behavioural T levels at different stimulation rates in children using Nucleus Freedom Implant- a multicentre study*. An unpublished Masters Dissertation submitted to the Manipal University.

ISHA Monograph (2013): *The cochlear implant: an overview*.

Jain, G. (2009). *Effect of therapy on working memory in the perception of words and sentences in children with cochlear implants*. An unpublished Masters Dissertation submitted to Bangalore University.

Jandeep, K. (2012). *Effect of music training on music perception in children using cochlear implants*. Unpublished Masters Dissertation submitted to the Bangalore University.

Jeena, M.J. (2005). *Meta-phonological skills of children with hearing impairment using cochlear implants*. An unpublished Masters Dissertation submitted to the Manipal University.

Jeyaraman J. 2012. Practices in habilitation of pediatric recipients of cochlear implants in India: A survey. *Cochlear Implant International*.

Jijo, J.O. (2011). *Development of electro stapedial reflex in predicting comfortable levels in children with cochlear implants*. An unpublished Masters Dissertation submitted to Bangalore University.

Jijo, P.M. (2008). *ESPT for Malayalam Hearing impaired children*. An unpublished Masters dissertation submitted to University of Mysore.

Kanaka, G. (2010). Quality of life in post-lingually deaf adults with cochlear implants. Unpublished PhD thesis submitted to the Manipal University.

Kant, B.C. (2003). *Picture speech identification test for Hindi speaking children*. An unpublished Masters dissertation submitted to University of Mysore.

Kant A, & Adhyaru, M. (2009). Home auditory training program (HAP) for cochlear implantees and hearing impaired children using hearing aids – an outcome of a three year research project. *Indian Journal of Otolaryngology Head Neck Surg* (January-March 2009) 61: 54- 58.

Kant,A., Govale, P., Rangasayee, R.,Kirthane, M. (2012). Acoustic analysis of cochlear implantees and its implications. *Exp Otorhinolaryngology*, Suppl Cl. 5 (suppl 1), April 2012, S14-S18.

Kinariwala, I. (2012). *Development of minimal pair test in Indian English*. An unpublished Masters Dissertation submitted to the Bangalore University.

Kumar, A. (2006). *Development of Hearing in noise test in English for Indian population*. An unpublished masters Dissertation submitted to the Bangalore University.

Litty. Z. (2010). Voice gender identification in children with cochlear implants. An unpublished Masters Dissertation submitted to the Bangalore University.

Manju, S. (2008). *Performance of children with hearing impairment using cochlear implants on Malayalam Language Test*. An unpublished Masters Dissertation submitted to Manipal University.



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued...

Thomas, M. (2007). *Development of rehabilitation material in Malayalam for cochlear implantees*. An unpublished Masters Dissertation submitted to the Manipal University.

Mathew, P. (1996). *Picture test for speech perception in Malayalam*. An unpublished Masters dissertation submitted to University of Mysore.

Muthu, S.P. (2012). *Research articles on cochlear implants*. Lambert academic publishing.

Nisha, S.K. (2009). *Audio visual integration in speech perception in children with cochlear implants*. An unpublished Masters Dissertation submitted to the Bangalore University.

Nina, M. R. (2008). *Effect of number of maxim on music perception and word identification in children with Nucleus Freedom Implant*. An unpublished Masters Dissertation submitted to the Bangalore University.

Prakash, B. (1999). *Picture speech identification test for children in Tamil*. An unpublished Masters dissertation submitted to the University of Mysore.

Piyumi, C.K. (2009). *Development of Hearing in noise for Sinhali speaking population*. An unpublished Masters Dissertation submitted to the Bangalore University.

Priyanka. (2010). *Comparison of quality of life between mothers of children using cochlear implants and hearing aids*. An unpublished Masters Dissertation submitted to the Bangalore University.

Pruthvi, A., Mageshwari, U., Mokatan, H., Hegde, K. (2008). *Comparison of rate of progress of verbal and gestural turns in children implanted before 3 years of age with those implanted after 3years of age*. Paper presented in 8th CIGICON, Bengalooru.

Radhika, H. (2012). *A study of speech intonation discrimination skills in children with cochlear implants*. An unpublished Masters Dissertation submitted to the Bangalore University.

Ramandeep, K., Ganesh.A.C., & Subba Rao.T.A. (2011). Clear and conversation speech perception in simulated cochlear implant and simulated electroacoustic stimulation. *Journal of the All India Institute of Speech & Hearing*, Vol. 30, p189-194.

Rashida and Yathiraj, A. (2000). *Early speech perception test*. All India Institute of Speech and Hearing, Mysore.

Rathna kumar, S.B. and Mohanty, P. (2016). Benefits of Bimodal Stimulation in Children with Cochlear Implant: Role of Contralateral Residual Acoustic Hearing and Auditory Experience with Bimodal Stimulation. *International Journal of Allied Medical Sciences and Clinical Research*. Volume 4, Issue 1, p136-141.

Rawat, N. and Yathiraj, A. (2000). *Environmental sound test*. All India Institute of speech and Hearing, Mysore.

Rohini, R. (2011). *Acoustic and perceptual analysis of speech of children with normal hearing, hearing aids and cochlear implant users*. An unpublished Masters Dissertation submitted to the Bangalore University.

Santhi,S.S., Prakash, S. G. R., Ravichandra.A.,Susan, K. Y., Alex, W. (2013). Measuring Levels of Stress and Depression in Mothers of Children Using Hearing Aids and Cochlear Implants: A Comparative Study. *International Journal of Special Education*, Vol 28 No.1, p37-44.



A Short Review on Cochlear Implants and Speech, Language and Hearing Research in India ...Continued

Saranya. (2012). *Development of sentences in Tamil as material for the assessment of speech recognition threshold*. An unpublished Masters Dissertation submitted to the Bangalore University.

Savarkar, M. (1998). *Marathi Early speech perception test*. An unpublished Masters dissertation submitted to the Mumbai University.

Sitaram, S. (2009). *Study of maturation in central auditory system in children with cochlear implants through LLR and speech perception*. An unpublished Masters Dissertation submitted to the Bangalore University.

Sornam, N.S. (2013). *Effect of training young recipients with cochlear implants on temporal skills on auditory perception*. An unpublished Masters Dissertation submitted to the Bangalore University.

Srividya, A., & Premalatha, B.S. (2016). An insight into vowel perception and production by children with cochlear implants and children with normal hearing. *Imperial Journal of Interdisciplinary Research (IJIR)*, Vol-2, Issue-7, 1638-1645.

Tamilmani, C. (2002). *Early speech perception test in Tamil*. An independent project submitted to the Bangalore University.

Tiwari, V. (2011). *Early speech perception test in Hindi*. An unpublished Masters dissertation submitted to Bangalore University.

Vandana, S. (1998). *Speech identification tests for Kannada speaking children*. An unpublished Masters dissertation submitted to University of Mysore.

Vinila, V.J., Aparna, R., Prakash, S.S., Prakash, S.G.R., Narender, K. (2013). Parental needs of transition of children using cochlear implants from pre-school to inclusive school. *International Journal of special education*, Vol. 28 No. 1, p45-55.



AIC, MCGs PRESENT AT ASHA 2016

Topic Area: Cultural and Linguistic Issues

Session Number: 1413

Title: The Unique Perspectives, Collective Voice & Varied Contributions of the ASHA Multicultural Constituency Groups (MCCGs)

Session Format: Seminar 2-hours

Day: Friday, November 18, 2016

Time: 1:00 PM - 3:00 PM

Author(s): William Gillispie (Author who will be presenting at the session), Akila Rajappa (Author who will be presenting at the session), Linda Rosa-Lugo (Author who will be presenting at the session), Lauren Seeley (Author who will be presenting at the session), Steven Vertz (Author who will be presenting at the session), Rachel Williams (Author who will be presenting at the session), Betty Yu (Author who will be presenting at the session)

ASHA KIRAN
2016-2017



FELICITATIONS TO...



Rohit Ravi is a Doctoral candidate at Dept. of Speech and Hearing, School of Allied Health Sciences, Manipal University. His PhD is supported by the Manipal University doctoral scholarship, Otodynamics Ltd (UK) and HiTRACK, National Center for Hearing Assessment & Management Utah State University. His area of PhD is universal Newborn Hearing Screening. He has several publications in peer reviewed international journals in the field of knowledge, attitude and practice surveys, audiology occupational stress and professional quality of life to his credit. He is also actively involved in systematic reviews on different topics. In June 2016, he was awarded with international travel support from Department of Science and Technology, Govt. of India for presenting at Family Centered Early Intervention Congress, 2016 held at Bad Ischl, Austria. He has been awarded with Audiology/Hearing Research Travel Award (ARTA) for attending the American Speech and Hearing Association, Convention 2016. This makes him the first researcher from an Asian University to receive this honor. Congratulations Rohit!

Vinaya Manchaiah, Jo Mayo Endowed Professor, Associate Professor at Lamar University in Texas has been named to the 2016 class of 'Jerger Future Leaders of Audiology' by the American Academy of Audiology. Congratulations Dr. Manchaiah!



ASHA KIRAN
2016-2017



FELICITATIONS!



Akila Rajappa was invited to present the work done by the Asian Indian Caucus (AIC) (as part of the ASHA Multicultural Constituency Group Seminar) at ASHA 2016! Congratulations Akila!

Dr. Ranjini Mohan successfully completed her Ph.D. in Cognitive Neuroscience and Gerontology in May 2016 at Purdue University. Her dissertation was titled "Neural activity reveals effect of aging on inhibitory processes during word retrieval"
Congratulations Ranjini!



Dr. Anusha Sundarrajan successfully completed her Ph.D. in Speech Language Pathology in August 2016 at Purdue University. Her dissertation was titled "Hydration and vocal loading on voice measures". Congratulations Anusha!

* AIC invites you to recognize your teachers, mentors, colleagues and friends for their achievements and accomplishments in our field. Your nominations could include awards, felicitations, grants, promotions, graduations, scholarships, tenure etc. Pictures can be included.

ASHA KIRAN
2016-2017



Innovate
Transform
Serve

Alpha Vista- Asian Indian Caucus Student and Clinician Scholarship

The Asian Indian Caucus (AIC), a multicultural constituency group of ASHA, is pleased to announce the “**Alpha Vista – Asian Indian Caucus Student and Clinician Scholarship**” for eligible students and clinicians attending the 2016-American Speech and Hearing Association (ASHA) conference at Philadelphia, PA. There will be a total of two student and one-clinician scholarship to the amount of \$500 each, provided to eligible students and clinicians in the field of speech language pathology and audiology.

Eligibility for Student Scholarships:

A. Students must be full time or part time MS/MA and/or AuD/PhD students from accredited Speech Language Pathology/ Communication Sciences and Disorders programs/universities in the United States.

B. Students should be presenting at ASHA conference, either a poster or oral presentation, with content preferably related to speech/language/hearing/swallowing/cognition research/services pertaining to Asian Indian Population.

C. Application Materials:

- Statement of intent (indicating why he/she is applying for this scholarship and how it will beneficial to them and the target community)
- Biographical Sketch/CV
- One recommendation letter from a Faculty of their institution

Eligibility for Clinician Scholarship:

A. Clinicians must be ASHA certified and be in full time or part time working status from an organization/company in the United States.

B. Clinicians should be presenting at ASHA conference, either a poster or oral presentation, with content preferably related to speech/language/hearing/swallowing/cognition research/services pertaining to Asian Indian Population.

C. Application Materials:

- Statement of intent (indicating why he/she is applying for this scholarship and how it will beneficial to them and the target community)
- Biographical Sketch/CV
- One recommendation letter from a Supervisor of their organization.

Application Deadline:

All Applications should be mailed to asianindiancaucus@gmail.com, **no later than Nov11th, 12:00pm**. Winners will be awarded in the Asian Indian Caucus (AIC) Annual Meeting on **Nov 18th** at ASHA Conference at **CC, 304, Pennsylvania Convention Center, PA at 6-8pm**.



Presentations by/for Asian Indians at ASHA

Topic Area: Cultural and Linguistic Issues

Session Code: 1019

Title: Contemporary Approaches to Assessment & Intervention with Bilingual Speakers with Aphasia

Presenter(s): Jose Centeno, Swathi Kiran, Maria Munoz

Day: 11/17/16

Time: 10:30 AM-12:30 PM

Session Format: Oral Session (Seminar 2-hours)

PDH(s): 2 Hrs

Location: Pennsylvania Convention Center

Room: 118C

Topic Area: Speech and Language Science

Session Code: 1045

Title: Bilingual Sentence Processing: Performance Within & Across Languages

Presenter(s): Yasmeen Shah, Ran Li, Lisa Milman, Mariah Pranger, Tierney Evans, Eve Higby, Valerie Shafer, Eva Fernández, Loraine Obler, Katherine Garnier, Margarita Kaushanskaya, Carrie Jackson, Abigail Massaro, Holger Hopp, Tracy Love, Henrike Blumenfeld

Day: 11/17/16

Time: 10:30 AM-12:30 PM

Session Format: Oral Session (Seminar 2-hours)

PDH(s): 2 Hrs

Location: Pennsylvania Convention Center

Room: 103A

Topic Area: Hearing and Balance Science

Session Code: 6003

Title: Neural Processes Underlying Listening Effort

Presenter(s): Amy Kemp, David Eddins, Rahul Shrivastav, Amanda Hampton Wray

Day: 11/17/16

Time: 11:00 AM-12:30 PM

Session Format: Poster (90-minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 103

Topic Area: Fluency

Session Code: 8021

Title: Backward Masking Abilities of Speech & Tones in Persons Who Stutter

Presenter(s): Shriya Basu, Robert Schlauch, Jayanthi Sasisekaran

Day: 11/17/16

Time: 11:00 AM-12:30 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 315

Topic Area: Academic and Clinical Education

Session Code: 7047

Title: Do Written Reflections Improve Clinical Education in Group Supervision Experiences?

Presenter(s): Dawn Wetzel, Anu Subramanian

Day: 11/17/16

Time: 1:30 PM-3:00 PM

Session Format: Poster (90-minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 175

Topic Area: Motor Speech Disorders

Session Code: 8173

Title: The Role of Practice Distribution in Learning Foreign Language Utterances

Presenter(s): Ramesh Kaipa, Bethany Howard, Eric Turcat, Laurielle Turcat, Roha Mariam Thomas

Day: 11/17/16

Time: 1:30 PM-3:00 PM

Session Format: Poster (90-minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 467

Topic Area: Swallowing and Swallowing Disorders

Session Code: SC10

Title: Real-Life Cases Meet Real-world Evidence: Dysphagia Case Studies Across the Life Span

Presenter(s): Pamela Dodrill, Molly Knigge, Joseph Murray, Ann Kearney, Rinki Varindani Desai, Harrison Jones

Day: 11/17/16



Presentations by/for Asian Indians at ASHA

Time: 1:30 PM-4:30 PM

Session Format: Short Course (3-hours)

PDH(s): Marriott Philadelphia Downtown

Location: Pennsylvania Convention Center

Room: 407/408/409

Topic Area: Language Disorders in Adults

Session Code: 8239

Title: Conversation Training in Aphasia: A Single Case Study

Presenter(s): Grama Rangamani, Amanda Rumpca

Day: 11/17/16

Time: 3:00 PM-4:30 PM

Session Format: Poster (90-minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 533

Topic Area: Speech and Language Science

Session Code: 8277

Title: Effects of Aging on Speech Motor Control During Dual Task Performance

Presenter(s): Lindsay Riekers, Supraja Anand

Day: 11/17/16

Time: 3:00 PM-4:30 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 571

Topic Area: Auditory/Central Auditory Processing

Session Code: 7136

Title: Auditory Stroop Effect in Children With Learning Disability

Presenter(s): Roha Mariam Thomas, Ramesh Kaipa, Attigodu Chandrashekara Ganesh

Day: 11/17/16

Time: 4:30 PM-6:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 264

Topic Area: Augmentative and Alternative Communication (AAC)

Session Code: 1220

Title: Do Animations Facilitate Understanding of Graphic Symbols in Children With Autism?

Presenter(s): Kristofer Brock, Ralf Schlosser, Rajinder Koul, Howard Shane

Day: 11/17/16

Time: 6:30 PM-7:30 PM

Session Format: Oral Session (Seminar 1-hour)

PDH(s): 1 Hrs

Location: Pennsylvania Convention Center

Room: 202AB

Topic Area: Fluency

Session Code: 5598

Title: Stuttering & Labor Market Outcomes: Quantifying the Impact & Accounting for Causes

Presenter(s): Hope Gerlach, Evan Totty, Anu Subramanian, Patricia Zebrowski

Day: 11/18/16

Time: 8:00 AM-8:30 AM

Session Format: Technical Research (30 minutes – 20 minutes presentation and 10 minutes question and answer)

PDH(s): 30 Minutes

Location: Pennsylvania Convention Center

Room: Franklin 13

Topic Area: Language Disorders in Adults

Session Code: 5620

Title: A Novel Scoring System to Analyze Reading & Writing Errors

Presenter(s): Katrina Ross, Swathi Kiran, Jeffrey Johnson, Shreya Ramesh, Marcos Zedan

Day: 11/18/16

Time: 8:30 AM-9:00 AM

Session Format: Technical Research (30 minutes – 20 minutes presentation and 10 minutes question and answer)

PDH(s): 30 Minutes

Location: Marriott Philadelphia Downtown

Room: Franklin 9/10

Topic Area: Academic and Clinical Education

Session Code: 7305



Presentations by/for Asian Indians at ASHA

Title: Influence of Mandarin as a First Language on English Language Learning: A Case Study

Presenter(s): Haley Kreiter, Megan Young, Gemma Cerutti, Anu Subramanian

Day: 11/18/16

Time: 9:00 AM-10:30 AM

Session Format: Poster (90-minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 132

Topic Area: Fluency

Session Code: 8517

Title: Stressed Out: Application of Metrical Phonology in Identifying the Location of Stuttered Syllables

Presenter(s): Kenneth Logan, Nalanda Chakraborty

Day: 11/18/16

Time: 9:00 AM-10:30 AM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 303

Topic Area: Language and Learning in School-Age Children and Adolescents

Session Code: 8532

Title: Validation of a Novel Automated Working Memory Task in School-Age Children: Preliminary Data

Presenter(s): Beula Magimairaj

Day: 11/18/16

Time: 9:00 AM-10:30 AM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 318

Topic Area: Language Disorders in Adults

Session Code: 8545

Title: Treatment of Underlying Forms & Constraint Induced Auditory Training in Aphasia: A Single Case Study

Presenter(s): Grama Rangamani, Jane Anderson

Day: 11/18/16

Time: 9:00 AM-10:30 AM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 331

Topic Area: Speech and Language Science

Session Code: 8568

Title: Working Memory & Motor Speech Interactions in Young Adults

Presenter(s): Katherine Cavaliere, Neeraja Sadagopan

Day: 11/18/16

Time: 9:00 AM-10:30 AM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 354

Topic Area: Language Disorders in Adults

Session Code: 5624

Title: Musical Processing in Aphasia

Presenter(s): Sadhvi Saxena, Yasmeen Farooqi-Shah, L. Robert Slevc, Madeline Pifer, Tara Pinto

Day: 11/18/16

Time: 9:30 AM-10:00 AM

Session Format: Technical Research (30 minutes – 20 minutes presentation and 10 minutes question and answer)

PDH(s): 30 Minutes

Location: Marriott Philadelphia Downtown

Room: Franklin 9/10

Topic Area: Global Issues and Practices

Session Code: 7362

Title: Global Consultation & Collaboration: Who Benefits?

Presenter(s): Ramani Voleti, Kelly Worcester, Kerry McNamara, Radhika Poovayya, Bhagya Shivkumar

Day: 11/18/16

Time: 10:30 AM-12:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B



Presentations by/for Asian Indians at ASHA

Poster Board: 189

Topic Area: Motor Speech Disorders

Session Code: 8727

Title: Speech & Nonspeech Motor Control of Prosody by Individuals With Congenital & Acquired Dysarthria

Presenter(s): Jonathan Brumberg, Jill Thorson, Kevin Pitt, Rupal Patel

Day: 11/18/16

Time: 12:30 PM-2:00 PM

Session Format: Poster (90-minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 513

Topic Area: Literacy Assessment and Intervention

Session Code: 8721

Title: Effects of a Consultative Coaching Approach on Preschool Teachers' Use of Dialogic Reading Strategies

Presenter(s): Shubha Kashinath, Cindy Esquivias

Day: 11/18/16

Time: 12:30 PM-2:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 507

Topic Area: Language Disorders in Adults

Session Code: 8712

Title: Verb Network Strengthening Treatment [VNeST] for Increasing Sentence Production in Broca's Aphasia

Presenter(s): Radhika Poovayya, Bhagya Shivkumar

Day: 11/18/16

Time: 12:30 PM-2:00 PM

Poster (90-minute commitment)

Session Format: 15 Minutes

PDH(s):

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 498

Topic Area: Motor Speech Disorders

Session Code: 1431

Title: Auditory & Somatosensory Mechanisms Associated With Voice Disorders & Voice Treatment in Parkinson's Disease

Presenter(s): Michael Hammer, Sona Patel, Cara Stepp, Charles Larson

Day: 11/18/16

Time: 1:00 PM-3:00 PM

Session Format: Oral Session (Seminar 2-hours)

PDH(s): 2 Hrs

Location: Pennsylvania Convention Center

Room: 115C

Topic Area: Cultural and Linguistic Issues

Session Code: 1413

Title: The Unique Perspectives, Collective Voice & Varied Contributions of the ASHA Multicultural Constituency Groups (MCCGs)

Presenter(s): William Gillispie, Akila Rajappa, Linda Rosa-Lugo, Lauren Seeley, Steven Vertz, Rachel Williams, Betty Yu

Day: 11/18/16

Time: 1:00 PM-3:00 PM

Session Format: Oral Session (Seminar 2-hours)

PDH(s): 2 Hrs

Location: Pennsylvania Convention Center

Room: Terrace Ballroom III

Topic Area: Swallowing and Swallowing Disorders

Session Code: 8818

Title: Trismus Intervention in Patients With Head & Neck Cancer

Presenter(s): Carley Preshaw, Balaji Rangarathanm

Day: 11/18/16

Time: 2:00 PM-3:30 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board:604

Topic Area: Hearing, Balance, Tinnitus – Assessment and Intervention: Pediatrics

Session Code: 6218

Title: Intervention Approaches for Children With Unilateral Auditory Neuropathy Spectrum Disorder

Presenter(s): Bailey Yeager, Lata Krishnan

Day: 11/18/16

Time: 2:00 PM-3:30 PM



Presentations by/for Asian Indians at ASHA

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 118

Topic Area: Academic and Clinical Education

Session Code: 7436

Title: The Effects of Lab Instruction on the Knowledge of Anatomy & Physiology in Undergraduate Students

Presenter(s): Mikeala Elliott, Balaji Rangarathnam, Jamie Perry, Kathleen Cox, Heather Wright

Day: 11/18/16

Time: 3:30 PM-5:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 263

Topic Area: Fluency

Session Code: 8840

Title: Disfluencies & Self-Corrections in a Nonword Repetition Task in Children Who Stutter

Presenter(s): Jayanthi Sasisekaran, Erin Weathers, Monica Delgado, Kaitlin Trefethen

Day: 11/18/16

Time: 3:30 PM-5:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 626

Topic Area: Fluency

Session Code: 8837

Title: Comparison of Attitude Towards Communication in Children With & Without Stuttering in India

Presenter(s): Mamta Kumari, Martine Vanryckeghem, Mala Hathiramani

Day: 11/18/16

Time: 3:30 PM-5:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 623

Topic Area: Cultural and Linguistic Issues

Session Code: 7447

Title: Uncovering Barriers to Communication Breakdown in Health Care Towards Improved Quality of Care

Presenter(s): Ameer Shah

Day: 11/18/16

Time: 3:30 PM-5:00 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 274

Topic Area: Craniofacial and Velopharyngeal Disorders

Session Code: 5591

Title: Underlying Mechanism for Nasal "Rustling" Noise During Speech in Children With Cleft Palate

Presenter(s): Hedieh Hashemi Hosseinabad, Suzanne Boyce, Ann Kummer

Day: 11/18/16

Time: 5:30 PM-6:00 PM

Session Format: Technical Research (30 minutes – 20 minutes presentation and 10 minutes question and answer)

PDH(s): 30 Minutes

Location: Marriott Philadelphia Downtown

Room: Franklin 9/10

Topic Area: Motor Speech Disorders

Session Code: 9159

Title: Speech Characteristics & Listener Attitudes Toward Speakers With Dysarthria

Presenter(s): Daniel Reilly, Kathryn Connaghan, Rupal Patel

Day: 11/19/16

Time: 9:30 AM-11:00 AM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 453

Topic Area: Language Disorders in Adults



Presentations by/for Asian Indians at ASHA

Session Code: 9238

Title: Script Training in Treatment of Severe Aphasia: A Case Study

Presenter(s): Radhika Poovayya, Bhagya Shivkumar

Day: 11/19/16

Time: 11:00 AM-12:30 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 532

Topic Area:

Session Code: 9202

Title: Errors & Movement Variability With Nonword Repetition in Children Who Stutter

Presenter(s): Shriya Basu, Erin Weathers, Jayanthi Sasisekaran, Alyssa Spanovich

Day: 11/19/16

Time: 11:00 AM-12:30 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 496

Topic Area: Speech and Language Science

Session Code: 9264

Title: Do Healthy Adults Process Auditory Feedback in Different Ways?

Presenter(s): Kerianne Sharpe, Vikram Dayalu, Sona Patel

Day: 11/19/16

Time: 11:00 AM-12:30 PM

Session Format: Poster (90 minute commitment)

PDH(s): 15 Minutes

Location: Pennsylvania Convention Center

Room: Hall B

Poster Board: 558

Topic Area: Global Issues and Practices

Session Code: 1723

Title: Audiology Services for All: Promoting Access to Hearing Health in Underserved Contexts

Presenter(s): Vinaya Manchaiah

Day: 11/19/16

Time: 1:00 PM-2:00 PM

Session Format: Oral Session (Seminar 1-hour)

PDH(s): 1 Hrs

Location: Pennsylvania Convention Center

Room: 111AB

Topic Area: Language Disorders in Adults

Session Code: 1783

Title: Stories of Aphasia: Exploring Paths to Recovery in India

Presenter(s): Satyapal Goswami, Julie Hengst, Suma Devanga, Aditi Rao, Sharon Mathews

Day: 11/19/16

Time: 2:30 PM-3:30 PM

Session Format: Oral Session (Seminar 1-hour)

PDH(s): 1 Hr

Location: Pennsylvania Convention Center

Room: 108B

Topic Area: Cultural and Linguistic Issues

Session Code: 1771

Title: Ethnographic Interviews by Students Toward Developing Their Cultural Competency

Presenter(s): Ameer Shah

Day: 11/19/16

Time: 2:30 PM-3:30 PM

Session Format: Oral Session (Seminar 1-hour)

PDH(s): 1 Hr

Location: Pennsylvania Convention Center

Room: 122AB