4

Research Highlights

All India Institute of Speech and Hearing is the leading organization in the country in conducting both basic and applied research related to speech, language and hearing and related fields of knowledge. Research activities of the institute comes under two broad categories: (a) Faculty research and (b) Student Research.

**a)Faculty Research**

There are two types of faculty research

1. Extramurally Funded Research
2. Intramurally Funded Research

Extramurally Funded Research projects are sponsored by national and international agencies like Department of Science & Technology and World Health Organization. During the year under report, 4 projects were successfully completed by the faculty and staff under extramural fund and 4 projects were going on. The completed projects are:

1. Issues and strategies for development of human resources for deafness prevention, identification and management. A World Health Organisation sponsored project work under the supervision of Dr. Vijayalakshmi Basavaraj, Director and Dr. Manjula P, Professor in Audiology.(Rs.20000)
2. Comparative efficacy of BTEs over body level hearing aids in the development of speech and language among the hearing impaired children. A DRC (S&T) sponsored project work under the supervision of Dr. M. Jayaram, Professor in Speech – Language Pathology and Audiology, NIMHANS, Bangalore and Dr. Manjula P, Professor in Audiology ( Rs.2,17,000/-)
3. Design and Development of Speech Enhancer.A project work sponsored by the Society for Biomedical Technology under the supervision of Dr.Ajeesh K.Abraham, Reader in Electronics.(Rs.5,80,000)
4. Support for the dissemination and use of hearing aids. A World Health Organisation sponsored project work under the supervision of Dr. Vijayalakshmi Basavaraj, Director and Dr.Manjula P, Professor in Audiology. (Rs.2,17,000/-)

The ongoing extramurally funded research projects included the following:

1. *Sensitizing Teachers on Academic Problems in School children in Karnataka.* A project work of Rs.14,00000 under the supervision of Dr. S. Venkatesan, sponsored by Sarva Siksha Abhiyan, Ministry of Human Resources Development,Govt.of India.
2. Development of speech Rhythm in Kannada speaking children. A project work of Rs. Rs. 19,44,360.00 under the supervision of Dr S.R.Savithri,Director and Dr. N. Sreedevi,Reader, Department of Speech Language Sciences,sponsored by the Dept. of Science and Technology, Ministry of Science and Technology, Govt.of India.

Intramurally funded research projects are funded by the institute through the AIISH Research Fund (ARF).During the year under report, the institute faculty successfully completed 14 research projects under ARF fund and 58 projects were going on. Some of completed projects are:

1. Development and Standardization of Boston Naming Test in bilinguals (Kannada - English and Telugu – English)/A project work under the supervision of Dr.K.C.Shyamala, Professor, Speech - Language Pathology.
2. Development of Consumer Satisfaction Inventory/ A project work under the supervision of, Dr. Y.V. Geetha, Professor, Speech - Language Science.

The ongoing extramurally funded research projects included the following:

1. *Maturation of auditory processes in children aged 6-11 years.* A project work of Rs.3,90,000/- under the supervision of Dr. Asha Yathiraj,Professor in Audiology and Dr. Vanaja C.S,lecturer in Audiology.
2. Impact evaluation of government benefits and concession provided to persons with mental retardation belonging to Mysore district. A project work of Rs.3,20,000/- under the supervision of Dr.G.Jayaram,Reader in Clinical Psychology.

**2. Student Research**

Two categories of student research are being carried out at the institute under the supervision of experienced faculty members. These include: Doctoral and Post-doctoral Research, and (b) Postgraduate Research.

**2.1 Doctoral and Post-doctoral Research**

By the end of the reporting year, two students were awarded doctoral degree, four submitted their research report for evaluation and 29 others were pursuing their research in the institute. In addition, one student was doing his post-doctoral research.

**2.2 Postgraduate Research**

All the students pursuing their postgraduate degree under various specialisation in the institute have to undertake a research project / dissertation as a part of their course work. --- postgraduate dissertations were completed and --- were under progress by the end of last year.

In addition to the postgraduate research works, the institute provides facility and guidance for carrying out graduate level dissertation works to the student studying in other institutions. Last year, 12 B.Tech students from various Engineering colleges did their dissertation works at the Department of Electronics under the guidance of department faculty.

**Research Paper Presentations**

Faculty members, staff, research scholars and students present research papers at national and international conferences.

33 papers were presented at various national and international conferences, last year which include the following

International Conferences / Seminars.

1. Deepa M.S & Shyamala, K.C. *Generative discourse production: Assessment and functional Maintenance plan for bilingual (Kannada –English) persons with dementia*. 4th Annual conference “coming of age: dementia in 21st century” at University of Stirling, Excel, London, United Kingdom from 19th to 24th October 2010.
2. Gopi Kishore, P., Remya H Y, Ranjini G.C, Kanthima V Namboothiri. *Efficacy of voice therapy in sulcus vocalis: A single case study.* International Symposium on Frontiers of Research on Speech and Music (FRSM-2011), Bhuvaneshwar, February 2011
3. Rajasudhakar, R. & Nirmal Sugathan. *Acoustic vowel space in individuals with Broca’s aphasia.* International Symposium on Frontiers of Research on Speech and Music (FRSM-2011), Bhuvaneshwar, February 2011.
4. Rajasudhakar, R., Baljeet Rana & Nayana. *Variability of fundamental frequency under voice disguised condition.* International Symposium on Frontiers of Research on Speech and Music (FRSM-2011), Bhuvaneshwar, February 2011.
5. Rajasudhakar, R., Sachin, L. C. & Somy E. Sam. *Measurement of time dose in different professions.* International Symposium on Frontiers of Research on Speech and Music (FRSM-2011), Bhuvaneshwar, February 2011.
6. Savithri, S.R., Sreedevi, N., Aparna, V.S & Deepa Anand. *Effect of gender on speech rhythm in 3-4 year old Kannada speaking children.* Frontiers of Research in Speech & Music (FRSM/CMMR) 2011.
7. Savithri, S.R., Sreedevi, N., Aparna, V.S & Deepa Anand. Speech rhythm in 11-12 years old Kannada speaking children. Frontiers of Research in Speech & Music (FRSM/CMMR) 2011.
8. Swapna, N., Manju, M & Swapna, N. Verbal perseveration in Malayalam-English bilingual elderly individuals. 8th Asia Pacific Conference on Speech, Language & Hearing held between 11th - 14th January 2011,Christchurch New Zealand.
9. Swapna, N., Shylaja, K & Swapna, N. Nonword repetition in children with specific language impairment: An exploratory study. 8th Asia Pacific Conference on Speech, Language & Hearing held between 11th - 14th January 2011,Christchurch New Zealand.

National Conferences / Seminars / Workshop

1. Ajish K Abraham. Assistive Device for museum Access to Persons with hearing impairment. National Conference on “Emerging Medical Instrumentation” (CEMI-2010).
2. Aswathy. “National Seminar on Language Acquision or Learning” paper titled as Hearing Impairment and Agrammatism.
3. Basavaraj, V. (2010). “Strategy and protocol for universal hearing screening followed at AIISH, Mysore” at the two-day workshop on “New Born Hearing Screening – Formulating Strategy for India” organized by Ali Yavar Jung National Institute for the Hearing Handicapped, Mumbai on 3rd and 4th May 2010.
4. Basavaraj, V. (2010). *Role of Newborn Hearing screening.* 6th South Zone and 28th Karnataka State ENT Conference held at Mysore on 22.10.2010.
5. Basavaraj, V. (2011). *Developing communication skills in persons with communication disorders*. National Conference on ‘IT for persons with disabilities’ organized by the Department of IT, BT and S&T, Government of Karnataka, held at Bangalore on 11.1.2011.
6. Basavaraj, V. (2011). *Infant Hearing Screening: A community based approach*. Panelist for the panel discussion on “Locally adopted strategies as a tool for prevention and rehabilitation” at 63rd AOICON 2011 organized by Sound Hearing 2010 at Chennai on 8/9.1.2011.
7. Basavaraj, V. (2011). “Developing communication skills in persons with communication disorders” at the National Conference on ‘IT for persons with Disabilities” organized by the Department of IT, BT and S&G, Government of Karnataka at Bangalore on 11.1.2011.
8. B Nandeesha. Information Literacy Meet Web 2.0: How the New Tools Influence our Own Training and Teaching. National Seminar on Management of Digital Information Sources, Services and Systems, organized by RNS Institute of Technology, Bangalore, from 29th to 30th July 2010.
9. Dhananjay, R & Sujeet Kumar Sinha. Brain-stem correlates of temporal processing in middle aged individuals: A preliminary study. ISHACON43 at Kolkata held on 21-23.01.11
10. Dr. S. Venkatesan. Invite Lecture on ‘Learning Disability: the continuing Challenge’ at National Seminar on Learning disability; Approaches, Challenges and Provisions in the department of Social Sciences, Lady Doak College, Madurai on 29-30.11.2010.
11. Dr. S. Venkatesan. ‘Counseling Issues’ at National Seminar on Multi-disciplinary Approaches to Disability Management in Faculty of Disability Management and Special Education, Ramakrishna Mission Vivekananda University, Kovai, TN on 18-20.6.2010.
12. Geetha, Y.V., Aishwarya Anand & Nisha Sudhi. Do children with stuttering vary in their rate of speech with respect to capacity (DDK) and performance (articulatory rate)?. ISHACON 43, Kolkatta. Jan 2011.
13. Hasna Fathima. “National Seminar on Language Acquision or Learning”. Paper was titled as Phonological activation during visual word recognition in deaf signers and hearing adults.
14. Jayashree. C. Shanbal., Sangeetha, G & Vrunda, C. Translation priming in bilingual children with learning disability. ISHA Con, Kolkata.
15. Jayashree. C. Shanbal., Sharon Susan Sam & Anjali Maratt. Diagnosing Learning Disabilities in Children: A Speech Language Pathologist Perspective. National Seminar on Language Acquisition/ Learning, Trivandrum, Kerala.
16. Jyothi., Kanchan & Sujeet Kumar Sinha. Test-retest-reliability of cochlear hydrops analysis masking procedure test. ISHACON43 at Kolkata held on 21-23.01.11
17. Manjula, R. Augmentative and Alternative Communication and Education. 3rd National conference of ISAAC India Chapter at IICP, Kolkata from 2nd to 4th Feb 2011.
18. Pushpavathi, M & Gopisankar. Nasalence value for Rainbow and Zoo passage of non native English speakers. INDO Cleft -2010 conference held at AIIMS, NewDelhi on 24.04.10.
19. Pushpavathi, M & Indu Thammaiah. Early intervention module for children with cleft palate . Indocleft -2011 on 30.1.11 at Chennai.
20. Pushpavathi, M Prevention of voice problems and maintenance of healthy voice. National workshop on Voice assessment and management held at AIISH from 9-10 of December.
21. Pushpavathi, M. Prosthodontic management of challenging cases with CLP. Indocleft -2011 on 29.1.11 at Chennai.
22. Pushpavathi, M. Speech Production. Indocleft -2011 on 29.1.11 at Chennai
23. Pushpavathi, M., Indu Thammaiah & Jasmine. Awareness of parents of CLP on the nature of Cleft palate. Indocleft -2011 on 30.1.11 at Chennai.
24. Santosh, M., Anusha, S. & Rajashekhar, B. Prevalence of voice problems in university teachers. 7th Annual Conference of Association of Phonosurgeons of India - PHONOCON 2011 from 25-27th Feb 2011, The Army Hospital (Research & Referral) New Delhi.
25. Shyamala, K.C. Assessment and Intervention approaches in PDD and ASD. National Seminar on Communication disorders in children and Dysphagia 4th – 6th, March, 2011, at Hyderabad.
26. Shyamala, K.C. Contemporary issues and Concepts of PDD & ASD. National Seminar on Communication disorders in children and Dysphagia 4th – 6th, March, 2011, at Hyderabad.
27. Sreedevi, N., Merin John & Nisha Sudhi. Sensitivity evaluation of CAPP-M in children with Hearing Impairment. ISHACON 43, Kolkatta. Jan 2011.
28. Swapna, N., Ansu, A Grace., Shylaja, K & Swapna, N. Nonword repetition in sequential and simultaneous bilinguals. Paper presented (Poster presentation) at the ISHA conference held at Kolkata on 22nd Jan 2011.
29. Vivek Mandal & Animesh Barman. On vestibular evoked myogenic potentials. ISHACON43 at Kolkata held on 21-23.01.11.

**Research Paper Publication: Journals**

Many faculty members and staff publish their research works in national and international journals. Six articles were published in international journals and 47 in national journals, last year. These are:

International journals:

1. Akshay Raj Maggu & Asha Yathiraj (2011). Effect of Noise Desensitization Training on Children with Poor Speech-In-Noise Scores. Canadian Journal of Speech-Language Pathology and Audiology, Vol.35, No.1, pp.56-63.
2. Deepa M. S. & Shyamala K. C. (2010). Cognitive linguistic performance in bilingual persons with dementia. International Journal of Mind, Brain, Cognition, 1 , 2.
3. Jayakumar, T & Savithri S. R. (2011) Effect of Geographical and Ethnic Variation on Dysphonia Severity Index: A Study of Indian Population. Journal of Voice. (In press)
4. Manjula, R & Rupela, V. ( 2010). Diadochokinetic assessment in Persons with Down Syndrome. Asia pacific Journal of Speech. Language and Hearing. Vol 13 (2), pp 109-120.
5. Manjula, R, Rupela, V & Velleman, S.L. (2010). Phonological processes in Kannada speaking adolescents with Down Syndrome. Clinical Linguistics & Phonetics. Vol 24 (6), p 431-450.
6. Sujeet Kumar Sinha & Basavaraj, V. (2010). Speech Evoked Auditory Brainstem Responses: A New Tool to Study Brainstem Encoding of Speech Sounds. Indian Journal of Otolaryngology and Head & Neck Surgery, Vol.62(4), 395-399.
7. Venkatesan, S. (2010). Case Study on Cost Benefit Analysis for Government Sponsored Pension Scheme for Persons with Mental Retardation. Asian Journal of Developmental Matters .4.1.176-188

National Journals:

1. Brajesh Priyadarshi & Kartikeyan, B.M.(2010) Comparison of Coarticulatory Effects in speech of Tamil Speaking Children and Adults with Down’s Syndrome: An Acoustic Explanatory Study. Indian Linguistics: Journal of the Linguistic Society of India, Vol 71,pp 105-112.
2. Brajesh Priyadarshi., Shyamala. K. C., Basanti Devi & Vishnu.K.K.(2010). Comparison of Markedness of Lexical Semantic Abilities in Normal Children and Children with Hearing Impairment. Language in India. Vol 10(11), pp 398-408.
3. Deepa M. S. & Shyamala K. C. (2010). Complex discourse production in persons with mild dementia: measures of richness of vocabulary. Journal of All India Institute of Speech and Hearing, 29,1. 12-22.
4. Deepa M. S. & Shyamala K. C. (2010). Bilingual persons with mild dementia- spectrum of cognitive linguistic functions. Language in India, 10:12. ISSN 1930-2940.
5. Ganapathy, S.H and Basavaraj, V. (2010). “The Effect of bone vibrator coupling force in bone conduction ABR.” Journal of Indian Speech and Hearing Association, Vol. 24, No.2, 90-99.
6. Garvita Mehta & Sandeep, M (2011). Neurophysiological representation of Hearing Aid Processed Speech, Journal of Indian Speech and Hearing Association, Vol.25(1), 49-58.
7. Geetha, Y.V., Nisha Sudhi & Merin John. (2010). Age and Gender differences in Persons with Stuttering. Journal of All India Institute of Speech and Hearing Vol 29 (2), pp. 131-138.
8. Govindaraju, R., and Venkatesan, S. (2010). Knowledge and Awareness in Teachers about Government Programs to combat School Drop outs. Journal of Indian Academy of Applied Psychology. 36. 2. 300-306.
9. Hema, N., & Shyamala, K. C. (2010). Discourse in Traumatic Brain Injury. Journal of All India Institute of Speech and Hearing, 29(2), 181-197.
10. Jayakumar, T. & Savithri, S.R. (2010). Respiratory similarity in monozygotic twins. Journal of All India Institute of Speech and Hearing. Vol.29, (1), pp. 73-80.
11. Jayashree.C. Shanbal., Chaithra,S & Prathima, S.(2010). Phonological awareness skills and reading in children who are at risk for learning disability: role in the indian context?. The Journal of All India Institute of Speech and Hearing. Vol29(2).
12. Karimi, A., and Venkatesan, S. (2010). Psychometric Properties and Norm differences in Mathematics Anxiety Scale for High School Students in India. Asian Journal of Developmental Matters. 4. (1). 130-136.
13. Khan, N.A.; Kanchan, A.; Jahan, M. & Singh, A.R. (Jan 2011). ‘Human Figure Drawings of Normal Indian Adults’. SIS Journal of Projective Psychology and Mental Health; Volume 18; No. 1; 50-61.
14. Khan, N.A.; Kanchan, A.; Singh, A: Senger, K.S, & Nag; AK (2010) ‘A Comparative Study of Neuro-Cognitive Impairment in Elderly Patients with Schizophrenia and Elderly Normals’. Eastern Journal of Psychiatry, pp60-63.
15. Khoshali, A.K., and Venkatesan, S. (2010). Development of Play Activity Checklist for Children with Mental Retardation. Indian Journal of Clinical Psychology. 37. 2. 101-107.
16. Kumari Apeksha & Devi N. (2010). Effect of Sensorineural Hering Loss on Speech Evoked Aided Auditory Late Latency Response. Journal of All India Institute of Speech and Hearing, Vol.29(2), pp.241-247.
17. Manjula, R & Priya M.B. (2010). Effect of posture on respiratory and phonatory measures in typically developing children: Implications in cerebral palsy. Journal of Indian Speech Language and Hearing Association, Vol 24(2), pp 109-120.
18. Mariam Liveem. T., Aparna, V.S. & Prema K.S.(2010). Cross Linguistic Study of Phonological Similarity Effect. Journal of All India Institute of Speech and Hearing. Vol 29 (2), pp. 169-174.
19. Prakash R., Dubey I., Abhishek P., Gupta S.K., Rastogi P and Siddque S.V (2010) “Long-term Vihangam Yoga Meditation and Scores on Tests of Attention” Perceptual and Motor Skills, 2010, 110,3,1-10 (Co-author)
20. Pushpavathi, M, Chandrabose, Jocine Gloria., St Louis, Kenneth & Raoof, Shabina. (2010). Awareness of stuttering among prospective teachers of Mysore. Journal of All India Institute of Speech and Hearing, Vol.29 (2), pp.144-152.
21. Pushpavathi, M., Venkatesan, S. & Purushotham, K.(2011). Adjustment patterns in Voice disorders. Journal of Indian Speech and Hearing Association. Vol.25 (1) pp.21-31.
22. Rajasudhakar, R. & Savithri, S. R. (2010). Effects of teaching and voice rest on acoustic voice characteristics of female primary school teachers. Journal of All India Institute of Speech and Hearing, Vol. 29 (2), pp. 198- 203.
23. Rhea M.K., Seby, M.M & Swapna, N. (2011). Cluster disfluencies: A comparison between children with and without stuttering. Journal India Speech and Hearing Association, 2011, 25, No.1, 1-8.
24. Sangeetha, M. & Geetha, Y.V.(2010). Prevalence of seizure disorders in children with communication disorders- a preliminary study. Journal of All India Institute of Speech and Hearing. Vol 29 (1), pp.163-172.
25. Santosh, M. & Rajshekar, B. (2011). Perceptual and Acoustic Analysis of Voice in Individuals with total thyroidectomy: Pre-Post Surgery Comparison. Indian Journal of Otolaryngology and Head and Neck surgery. Vol. 63, pp.32-39.
26. Savithri S. R., . Sreedevi, N., Jayakumar, T. & Kavya, V. (2010). Development of speech rhythm in Kannada speaking children. Journal of All India Institute of Speech and Hearing. Vol.29(2), pp. 175-180.
27. Shyamala, K.C, Vishnu, K.K, Arya Abraham & Sapna Bhat,(2010). Fast Mapping of Novel Words: A Cross-Linguistic Study. International Journal of Mind, Brain & Cognition, Vol 1 (1), pp 58-70.
28. Sreedevi, N., Anusha, S., & Varsha, J. (2010). A Comparison of acoustic characteristics of speech in cochlear implant and BTE users with normal Hearing age matched individuals. Journal of All India Institute of Speech and Hearing. Vol. 29 (1), pp. 87-93.
29. Sreedevi, N., Shishira, S. B. & Sushma, S. (2010). Speech Intelligibility in typically developing children (3-4 years). Journal of All India Institute of Speech and Hearing. Vol. 29 (1), pp 81-86.
30. Sudarshan, H.M., and Venkatesan, S. (2010). Marital Adjustment in Rural Women Identified With HIV/AIDS and Undergoing Anti Retro Viral Drug Therapy. Asian Journal of Developmental Matters. 4.2.51-60.
31. Sujeet Kumar Sinha & Basavaraj, V. (2010). Auditory Brainstem Responses to Forward and Reversed Speech in Normal Hearing Individuals. Journal of All India Institute of Speech and Hearing, Vol.29(2), pp.232-240.
32. Sujeet Kumar Sinha & Basavaraj, V (2010). Lateral Asymmetry in Speech Processing at the Brainstem: Evidence from Speech Evoked ABR. Journal of All India Institute of Speech and Hearing, Vol.29(2), pp.101-109.
33. Sujeet Kumar Sinha and Basavaraj, V. (2010). “Speech evoked auditory brainstem responses: A new tool to study brainstem encoding of speech sounds”, Indian Journal of Otolaryngology and Head & Neck Surgery.
34. Swapna, N., Steby, S., Sindhupriya, C & Rupali, M.(2010). Cognitive-linguistic abilities in bilingual children. Journal of All India Institute of Speech and Hearing, Vol.29(1), pp1-11.
35. Swapna, N., Sushma, M., Amulya, P.R & Ranjini, M.(2010). Fast mapping in typically developing Kannada speaking toddlers. Journal of All India Institute of Speech and Hearing, Vol.29(1), pp.55-62.
36. Varun Uthappa, Priyanka Shailat & Animesh Barman (2010). Relationship between OAEs and Behavioral Discrimination Ability of Normal Hearing Individuals. Journal of All India Institute of Speech and Hearing, Vol.29(2), pp.110-114.
37. Vasudeva, R & Vasantha Lakshmi, M.S. (2009). Burr Distribution as limit distribution of Extremes of a random number of random variables. mySCIENCE. Vol 4(2), pp120-129.
38. Venkatesan, S. (2010). Cultural Factors in Clinical Assessment: The Indian Perspective. Indian Journal of Clinical Psychology. 37.1.75-85.
39. Venkatesan, S. (2010). Indian Scales and Inventories: Revisiting Clinimetry through IJP. Indian Journal of Psychiatry. 52. Supplement. S54-61.
40. Venkatesan, S., and Purusotham, P. (2010). Validation of Item Pool on Number Competencies in Preschool and Primary School Children. Disabilities & Impairments. 24.1. 5-12.
41. Venkatesan, S., and Ravindranath, A. (2011). Depression in Institutionalized and Non-institutionalized Elderly. Journal of Indian Academy of Applied Psychology. 37. 1. 53-59.
42. Venkatesan, S., Pushpavathi, M., and Purusotham, P. (2010). Adjustment Patterns in Voice Disorders. Journal of Indian Association of Speech and Hearing. 25.1.21-30.
43. Venkatesan, S., Pushpavathi, M., and Purusotham, P. (2010). Adjustment Patterns in Voice Disorders. Journal of Indian Association of Speech and Hearing. 25.1.21-30.
44. Venkatesan,S.,Basavaraj,V., Vasanthalakshmi, M.S., and Purusotham, P. (2010). Pilot Study on Process Evaluation of DHLS Program Conducted through Real vis-à-vis Virtual Modes: 2007-08’. Journal of All India Institute of Speech and Hearing. 29, 2, 283-292.
45. Venkatesan,S.,Basavaraj,V.,Vasanthalakshmi, M.S., and Purusotham, P. (2010). Pilot Study on Process Evaluation of DHLS Program Conducted through Real vis-à-vis Virtual Modes: 2007-08’. Journal of All India Institute of Speech and Hearing. 29, 2, 283-292.
46. Vijay Kumar Yadav Avilala, Prashanth Prabhu P, & Animesh Barman (2010). The Effect of Filtered Speech on Speech Identification Scores of Young Normal Hearing Adults. Journal of All India Institute of Speech and Hearing, Vol.29(2), pp.115-119.
47. Vijayalakshmi Basavaraj., Venkatesan, S., Vasantha Lakshmi, M.S & Purusotham, P.(2010). Pilot study on process evaluation of DHLS program conducted through real vis-à-vis virtual modes : 2007-08. Journal of All India Institute of Speech and Hearing. Vol.29, No.2,pp. 283-292
48. Vijetha, P. & Jangaiah, C. (2010). Intelligence, Creative thinking abilities and Academic achievement of children with hearing impairment – A correlation study. Journal of All India Institute of Speech and Hearing. Vol 29(2), pp. 262-268.
49. Vishnu K.K., Maya Leela & Subba Rao T.A.(2010) A Comparative Study on the Efficacy of Two Different Clinical Language Intervention Procedures. Language in India. Vol. 10 pp 182 – 196.(online journal)
50. Yeshoda,K., Bijoyaa, M., Nisha, S., Liveem, M. T., SriPallavi, M. & Anil Kumar. (2010). Analysis of Acoustic Patterns In Honey Bees- An Investigation. Journal of All India Institute of Speech and Hearing. Vol. 29 (2), pp. 139- 143.

**Online Journals**

1. Sarika Khurana & Prema, K.S. (2011) Emergent Literacy Experiences in the Classroom- A sample survey in Mysore City. Languages in India. Volume 11, 428-463.
2. Shyamala, K.C., Ravi Kumar & Haripriya, G.(2010) Verbal interaction and input in Hearing impaired. Language in India. Vol 10, pp 27-36.
3. Sreedevi, N., Rhea, M. K. & Prasad, J. (2010). Speech and Language characteristics of monozygotic twins – A Case study. Language in India, Vol. 10.

**Research Paper Publication: Conference Proceedings**

24 research papers were published in national and international seminar proceedings by the faculty and staff, last year. These are:

International

1. Jayashree.C. Shanbal., Sneha George., Preeti Thomas & Padmatharini, K.S. Linguistic profiling in bilingual aphasia. International Symposium on Bilingual Aphasia.
2. Jayashree.C. Shanbal., Manju Mohan,P., Lakshmi.S. Mohan., Maria Rappai & Louisa, B. Suting. Mental lexicon organization in L1 and L2 in Bilingual Aphasics: An investigation through prototypicality and Hierarchical models. International Symposium on Bilingual Aphasia.
3. Savithri, S R., Sreedevi, N., Aparna, V S., & Ms. Deepa A. Speech Rhythm in 11-12 year old Kannada speaking children. Proceedings of the International Symposium on Frontiers on Speech & Music and Computer Music Modeling and Retrieval. March 9-12. Bhubhaneshwar, 56-59.
4. Savithri, S R., Sreedevi, N., Deepa Anand & Ms. Aparna, V.S. Effect of gender on speech rhythm in 3-4 year old Kannada speaking children. Proceedings of the International Symposium on Frontiers on Speech & Music and Computer Music Modeling and Retrieval. March 9-12. Bhubhaneshwar, 31-35.
5. Sreedevi, N., Aparna, V.S & Ms. Manju, M. P. Effects of speaking rate on formant frequencies and duration of vowels in Malayalam. Proceedings of the International Symposium on Frontiers on Speech & Music and Computer Music Modeling and Retrieval. March 9-12. Bhubhaneshwar, 4-8.
6. Sreedevi, N., Reuben T. V & Ms. Aparna, V S. A comparison of spectral characteristics of vowels in Malayalam across mobile phone and live recordings. Proceedings of the International Symposium on Frontiers on Speech & Music and Computer Music Modeling and Retrieval. March 9-12. Bhubhaneshwar, 125-128.
7. Rajasudhakar, R., Sachin, L. C & Ms. Somy E Sam. Measurement of time dose using ambulatory phonation monitor in different professions. International Symposium on Frontiers of Research on Speech and Music (FRSM-2011). 44-48.
8. Rajasudhakar, R & Nirmal Sugathan. Acoustic vowel space in individuals with Broca’s aphasia. International Symposium on Frontiers of Research on Speech and Music (FRSM-2011). 77- 80.
9. Rajasudhakar, R., Baljeet, R & Nayana. Variability of fundamental frequency under voice disguised condition. International Symposium on Frontiers of Research on Speech and Music (FRSM-2011). 17-21.

National

1. Aishwarya, A. & Geetha, Y.V. Gender difference in coping among parents of children with Autism. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 286-291.
2. Ajish K Abraham. (2010). Assistive Device for museum Access to Persons with hearing impairment. National conference on “Emerging Medical Instrumentation” (CEMI-2010).
3. Bijoyaa, M & Prema K.S. The nuances of Gender in discourse. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 279-283.
4. Brajesh Priyadarshi., Rupali Mathur & Mohana, P. “Developing Protocol to Enhance Word Retrieval Ability Using Componential Analysis for Individuals with Aphasia”. 2nd National Women’s Science Congress, held at AIISH, Mysore.
5. Devika, R & Prema K.S. Parental Awareness of their Children’s Communicative Behaviour: A Survey in Mysore City. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 302-312.
6. Gopi Kishore, P. Rehabilitation of voice in professional voice users. National Workshop on Professional Voice Assessment and Management.
7. Kavya, V., Savithri. S. R & Sreedevi, N. Effect of gender on speech rhythm in Kannada Speaking Children. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 283-286.
8. Mahalakshmi, P. & Prema K.S. Language sampling for Corpus Linguistics: Picture stimuli verses spontaneous elicitation. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 256-263.
9. Powlin, A.C. & Savithri S.R. Effect of temporal variation on phoneme identification skills in 2-3 old late talking children. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 246-251.
10. Sahana, V., Savithri, S.R & Kavya. Acoustic similarities and differences within and between speakers in disguised condition. Lilavati -2, Proceedings of the 2nd National Women’s Science Congress, Matru Vedike and SVAK (Swadwshi Vijnana Andolana-Karnataka, Mysore; 316-320.
11. Shyamala, K.C. Bilingual Aphasia. ISBA on 4 - - 5 January 2010.
12. Sreedevi, N & Merin, J. Phonological processes in 3-3.6 years typically developing Malayalam speaking children. “National seminar on Language Acquisition/ Learning. 3-4 Feb 2011. Trivandrum.
13. Swapna, N., Manju, M &. Swapna, N. Verbal perseveration in a Bilingual aphasic. Proceedings of the International Symposium on Bilingual aphasia held on 4 - 5 January 2010, 185-190.
14. Swapna, N., Raheela, Q & Priyanka. Speed of processing in children with learning disability on linguistic and nonlinguistic tasks. Proceedings of the Second National Women’s Congress held from 7th to 9th November 2009, 251-255.
15. Yeshoda, K. Prevention of Voice Problems – Vocal Abuse Reduction Program. Proceedings of National Workshop on Professional Voice: Assessment and Management, AIISH, Mysore.

**Student Research Publication**

The research projects done by the postgraduate students of the institute are being published in-house as ‘Student Research at AIISH’. During the reporting year, Volume No. VIII of ‘Student Research at AIISH’ was published in three parts namely (A) Audiology, (B) Speech Language Pathology and (C) Special Education. It contains 71 articles written jointly by the student researchers and their supervisors based upon the postgraduate dissertations.

**Books/Book Chapters**

Faculty members are actively involved in writing books based upon various aspects of Communication Disorders and related themes. Last year, 10 books/book chapters were written by the faculty as follows :

1. Basavaraj, V. and Rangasayee, R. et al. (2010). Chapter on Hearing Impairment in the book “Status of Disability in India – 2007” by Rehabilitation Council of India, New Delhi. pp 99-145.
2. Geetha Y.V., Prema K.S., Karanth, P. & Manjula, R. (2010). “With a little bit of help” -A manual and 634 cards for language training in Hindi. As a part of Production of Language Training Materials in ten major Indian Languages -An UNICEF Project. Books for Change publishers and National Trust, Bangalore.
3. Geetha Y.V., Prema, K.S., Karanth, P. & Manjula, R. (2010). “With a little bit of help” -A manual and 634 cards for language training in Malayalam. As a part of Production of Language Training Materials in ten major Indian Languages -An UNICEF Project. Books for Change publishers and National Trust, Bangalore.
4. Geetha Y.V., Prema, K.S., Karanth, P. & Manjula, R. (2010). “With a little bit of help” -A manual and 634 cards for language training in Marathi. As a part of Production of Language Training Materials in ten major Indian Languages -An UNICEF Project. Books for Change publishers and National Trust, Bangalore.
5. Geetha Y.V., Prema, K.S., Karanth, P. & Manjula, R. (2010). “With a little bit of help” -A manual and 634 cards for language training in Tamil. As a part of Production of Language Training Materials in ten major Indian Languages -An UNICEF Project. Books for Change publishers and National Trust, Bangalore.
6. Geetha Y.V., Prema, K.S., Karanth, P. & Manjula, R. (2010). “With a little bit of help” -A manual and 634 cards for language training in Telugu. As a part of Production of Language Training Materials in ten major Indian Languages -An UNICEF Project. Books for Change publishers and National Trust, Bangalore.
7. Prema, K.S & Shyamala, K.C. (2010) In Special volume ‘Cognitive initiatives’ chapter titled Language processing in bilinguals and biliterates. DST (in press).
8. Venkatesan, S. (2010). Toy Kit for Kids with Developmental Disabilities: User Manual. Mysore: AIISH. (Revised English Edition)
9. Venkatesan, S. (2010). Chapter titled ‘Cognitive Behavior Group therapy in Mathematics Anxiety’ Co-authored by Ayatollah Karmi published in book titled ‘Recent Studies in School Psychology’. Edited by Panch Ramalingam and foreword by Professor Bill Pfohl, President, International School Psychology Association, in January, 2010. Published by Authors Press, New Delhi as chapter 10 under pages 121-128.
10. Venkatesan, S. (2011). Functional Assessment Battery: Idiometric Analysis of Neuropschological Functions in Adults with Mental Retardation. Bangalore: Psychotronics.
11. Yathiraj, A, (2010-11). Unit 2: Auditory training and its importance and auditory verbal therapy (AVT)In Perception through hearing aids, auditory training and evaluation of hearing aids (Block 2). Publication of IGNOU for programme Aural Rehabilitation of Children with Hearing Impairment.

**Editorial Work**

The faculty are involved in editing of books, journal articles and conference proceeding in their fields of expertise. The editorial works carried out last year are given below:

|  |  |  |  |
| --- | --- | --- | --- |
| Sl.No | Name | Journal / book | Volume / Year |
|  | Dr. Asha Yathiraj | Journal of All India Institute of Speech and Hearing | Vol.29, No.1, 2010 |
|  | Dr. Asha Yathiraj | Journal of All India Institute of Speech and Hearing | Vol.29, No.2, 2010 |
|  | Dr. Asha Yathiraj | Block 1: Hearing and auditory processes; Block 3: Language; Block 4: The speech process and components of speech & Block 5: Speech teaching of Aural rehabilitation of children with hearing impairment. | Who are the publishers |
|  | Dr. Manjula P | Journal of All India Institute of Speech and Hearing | Vol.29, No.1, 2010 |
|  | Dr. Manjula P | Journal of All India Institute of Speech and Hearing | Vol.29, No.2, 2010 |
|  | Dr. Venkatesan S | Book Review: Portage guide to early childhood education. CBR Network (South Asia).29.1.128-130. |  |
|  | Dr. S.R. Savithri | Proceedings of the National Workshop on Professional Voice: Assessment and Management. AIISH, Mysore. |  |
|  | Dr. S.R. Savithri | Journal of the Acoustical Society of India |  |
|  | Dr. S.R. Savithri | Journal of All India Institute of Speech and Hearing |  |
|  | Dr. S.R. Savithri | Train your child – Level 1 |  |
|  | Prof. K. S. Prema, | Sensitivity training on academic problems in primary school children enrolled under SSA in Karnataka-Instructor Manual |  |
|  | Dr. Sandeep M | Compiler for Audiology dissertation articles for Student research at AIISH Mysore publication 2009-10. |  |
|  | Dr. N. Swapna | Student Research at AIISH - Dissertations done in 2009-10, Volume VIII, Part B –Speech-Language Pathology, |  |
|  | Dr. D. Malar | Student Research at AIISH - Dissertations done in 2009-10 |  |

**Peer-Reviewing**

Experienced faculty members of the institute are also involved in peer-reviewing of research papers received for publications by the reputed journals in the field. They were also involved in peer-reviewing various project proposals submitted to national agencies like DST and other research project evaluation. The details of peer-review carried out by faculty last year are given below:

Dr. Asha Yathiraj

* Reviewer for Journal of Indian Speech Language and Hearing Association Vol.25, No.1, 2011.

Dr. Manjula P

* Reviewer for Journal of Indian Speech Language and Hearing Association Vol.24, No.2, 2010.
* Reviewer for Journal of Indian Speech Language and Hearing Association Vol.25, No.1, 2011.

Dr. Animesh Barman

* Reviewer for Journal of Indian Speech Language and Hearing Association Vol.24, No.2, 2010.

Dr. Venkatesan S

* Autism Spectrum Disorder and Efficacy of Integrated Approach to Yoga Therapy. Journal of Indian Speech and Hearing Association. Research Article.
* Acquisition of Vigilance in Children. Journal of Indian Speech and Hearing Association. Research Article.
* ‘Identification of Learning Disability: Speech Language Pathologist-Teacher Partnership’. Journal of All India Institute of Speech and Hearing. Research Article.
* Does SES influence Phonological Awareness Skills?. Journal of All India Institute of Speech and Hearing. Research Article.
* Cognitive Language Skills of Children with Human Immuno Deficiency Virus’. Journal of All India Institute of Speech and Hearing. Research Article.
* Do Developmental Dyscalculic Children have Spatial Biases in Processing Numbers? Evidences from SNARC Effect?’. Journal of All India Institute of Speech and Hearing. Research Article.
* Yogic Intervention and Anxiety Disorder. Journal of All India Institute of Speech and Hearing. Research Article.
* Assessment of Auditory Working Memory in Normal Hearing and Hearing Impaired Children . Pre-registration PhD Review & Colloquium of Mr. Ranganathan at AIISH, Mysore. (Research Proposal).
* Intelligence Testing and its implications for Disability Evaluation in Individuals with Mental Retardation. Peer Review: Psychological Studies, Springer, New York. (Research Proposal)
* A Longitudinal Study on Growth and Development of Low Birth Weight Infants (Birth to 2 years of age) of Mysore. Pre-registration PhD Review & Colloquium of Ms. MV Arundathy .Department of Food Science & Nutrition, UOM, Mysore. (Research Proposal).
* Do all persons with Schizophrenia have Cluttering?. Journal of All India Institute of Speech and Hearing. Research Article.
* Profile of Recognition of Emotion: A Study with Three Clinical Samples in a Comparative Context with Normals. Indian Journal of Clinical Psychology. Research Article.
* Personality And Perceived Family Environment In Cluster-B Personality Disorders. Indian Journal of Clinical Psychology. Research Article.
* A Cognitive Exploration of the Concept of ‘Privacy’ among Indians. IIT, Gandhinagar, Ahmedabad. Project Proposal from DST, GOI, New Delhi.
* Nutritional Status and Cognitive Functioning and Development through supplementary food mixes to 3-6 year old children. Department of Human Development, Home Science College & Research Institute, Madurai; 625 104. Project Proposal from DST, GOI, New Delhi.
* The Effect of Neural Correlates of Repetitive Transcranial Magnetic Stimulation on Positive and Negative Symptoms and Associated Cognitive Dysfunctions in Schizophrenia. Mental Health & Neuro Sciences Division, Caring Foundation, New Delhi. Project Proposal from DST, GOI, New Delhi
* Brain Region Specific Epigenomic Changes in Impaired Cognition. Department of Zoology, University of Delhi, New Delhi. Project Proposal from DST, GOI, New Delhi.
* Using visual diary in promoting awareness of inner life among 4-6 elementary school students in SD Negeri Patang Puluhan, Yogyakarta, Indonesia. Psychological Studies, Springer, New York. Research Article.

Dr. G. Jayarama

* Factors in Movement Imagery with vision and in the total absence of vision during mental practice: A neuroimaging study. Project Proposal from DST, GOI, New Delhi. December 2010.
* The role of Amygdalar Neurons and Glia in Sleep- dependent Consolidation of cued Fear – Conditioned Memory in the rat. Project Proposal from DST, GOI, New Delhi. December 2010.
* Shape Perception development by cognitive learning and EEG based motion control of an artificial limb. Project Proposal from DST, GOI, New Delhi. December 2010.

Ms.Amrita Kanchan

* Effect of heavy metal exposure on cognitive function and behaviour with special reference to gene expression of antioxidant enzymes in rats; modulation by plant products. Project Proposal from DST, GOI, New Delhi. December 2010
* Neurophysiological correlates of central executive system of working memory using ERP compatible neuropsychological tests. Project Proposal from DST, GOI, New Delhi. December 2010
* Role of handedness in explaining differences in cognitive functioning. Project Proposal from DST, GOI, New Delhi. December 2010.

Dr. R. Manjula

* Reviewer for Journal of All India Institute of Speech and Hearing, AIISH, Mysore.
* Reviewer for Journal of Indian Speech and Hearing Association, ISHA, India.

Dr. S.R. Savithri

* Editor for Journal of All India Institute of Speech and Hearing, AIISH, Mysore.

Dr. K.S. Prema

* Reviewer for Journal of All India Institute of Speech and Hearing, AIISH, Mysore

Dr. Santosh. M

* Reviewer for Journal of Indian Speech and Hearing Association, ISHA, India.