

Prof.R.Sivakumar, has post graduate degree in Neurology specialization and doctoral research in stroke rehabilitation. His research focus includes stroke rehabilitation and postural control. He visits many Universities and institutions for guest lecturers in physiotherapy in neurology. He has been selected for FAIMER fellowship in the year 2018, and pursues the fellowship in PSG-FAIMER regional institution. Reflective learning is his focus area of educational innovative project. Many novel educational initiatives have been designed by him in Physiotherapy, such as online discussion forums for post-graduate research. He also holds position of Coordinator for Choice Based Credit System of SRIHER. He has designed online platforms for effective working of the CBCS. He has received “Young Achiever Award” from Indian Association of Physiotherapists. He guides post graduate dissertations and PhD Scholars. He has been reviewer for manuscripts in the area of postural control submitted to international journals.

Links to Publications:

R.Sivakumar, Roopa Yegnaswamy. Measurement of Postural sway with sway meter – an analysis. J Phys Ther. 2011;2:46-53.(<http://www.scopemed.org/?mno=13260>)

R.Sivakumar, C.M.Radhika. Impact of Fear of fall on scores of Berg Balance Scale in elderly population. Indian Journal of Physical Therapy and Occupational Therapy, July- sep 2012, volume 6,No.3. Page 271-274.

R.Sivakumar, Rajarajeswari, Rajeswari, Venkatesh. Analysis of Impact of Psychomotor Skill of the Examiner on the Results of “Passive Repositioning Test” Used for Proprioception Evaluation. Sri Ramachandra Journal of Medicine 06/2012; 5(1):35-37.

R.Sivakumar, Meenakshisundaram. U, Shankar. V, Arun Maiya, Rajeswaran. R, Influence of site and Size of cerebral infarct on recovery of motor function. Annals of Indian Academy of Neurology, Vol 16, Supp 1, oct 2013, S 70 (IAN Conference Abstract)

R.Sivakumar, Meenakshisundaram. U, Shankar. V, Arun Maiya, Rajeswaran. R. Effect of location of cerebral infarction on functional recovery following stroke. Sri Ramachandra Journal of Medicine, Jan-Jun 2014; vol 7 (1): 7 - 13.

Sirisha Nekkanti, **Sivakumar Ramachandran** Effectiveness of Functional Muscle Stimulation In Improving Motor Control Around Shoulder In Patients With Hemiplegia, International Journal of Physiotherapy and Research 01/2015; 3(1):863-67.

R.Sivakumar, Meenakshisundaram. U, Shankar. V, Arun Maiya, Rajeswaran. R.The influence of cerebral infarct location and volume on motor and functional recovery after stroke: A narrative review Int J Physiother Res 2015, Vol 3(2):966-70

R.Sivakumar, U. Meenakshisundaram, V. Shankar, M. Arun, R. Rajeswaran ; P. Venkatesan. Predicting motor function recovery at 90 days after an ischemic stroke - development of a model/equation. International Journal of Stroke 2016, Vol. 11(3S) 135. (10th World Stroke Congress

Abstract-<http://journals.sagepub.com/doi/abs/10.1177/1747493016670567>)

R. Sivakumar, A.Durga Reddy. Feasibility of using MMSE to evaluate cognitive impairments in south Indian stroke population - a narrative review. Indian Journal of Physiotherapy and Occupational therapy, 2016, vol 10 (2): 9-13.

Rasheeda, V., **Sivakumar, R.** The effect of swiss ball therapy on sit-to-stand function, paretic limb weight bearing and lower limb motor score in patients with hemiplegia. International Journal of Physiotherapy, 2017 4(6), 319-323

Jampana Suman Raju, **Sivakumar Ramachandran.** Contribution of corollary discharge in elderly people with peripheral proprioception deficit. Journal of Clinical and Diagnostic Research. 2018 January; 12:YC01-YC03

Ramya pavani K, **Sivakumar R,** Effect of training weight transfer phase of sit to stand on weight shifting on paretic lower limb, and sit to stand activity in patients with hemiplegia. Journal of Society of Indian Physiotherapist. 2018; 2(1):17-20

Sivakumar R, Sonali Jena, Effect of unstable surface sitting on anterior tibial muscle activity following stroke. Neurorehabilitation and Neural Repair 2018, Vol. 32(4-5) 401 (10th world congress for neurorehabilitation abstract)

Meenaskshi Jharbade, **R.Sivakumar,** Shankar V. Impact of Task Specific Training on Stroke Rehabilitation Outcomes a Narrative Literature Review. Neurorehabilitation and Neural Repair 2018, Vol. 32(4-5) 498 (10th world congress for neurorehabilitation abstract)

Vishnu Priya TM, Rajarajeswari A, **Sivakumar R,** Effectiveness of training on postural stability in mild to moderate Diabetic neuropathy patients. Accepted for publication in Medico-Legal Update (as on Oct 2018)

Karthika Ponni, Rajarajeswari A, **Sivakumar R.** Effectiveness of multimodal sensory stimulation in improving motor outcomes of preterm infants. Accepted for publication in Indian journal of public health research & Development (as on Oct 2018)

B.Sathyaprabha, Jaya Viajyragavan, Arun Maiya, Venkatesh, **Sivakumar R.** Effects of antenatal Exercise programme and education on health related quality of life: A randomized control trail. Journal of Clinical and Diagnostic Research. 2019 February; Vol 13:YF01-YF04

Srivarsha Teledevara, M Rajeswari, **RSiva kumar,** N Udayakumar Factors Associated with Low Muscle Tone and Impact of Common Musculoskeletal Problems on Motor Development in Preterm Infants at One Year of Corrected Age. Journal of Clinical and Diagnostic Research. 2019 Mar, Vol-13(3): YC12-YC16

Sivakumar Ramachandran, Sonali Jena. Effect of unstable surface sitting on paretic anterior tibial muscle following stroke. Accepted for publication – in press- Journal of Bodyworks and Movements (as on 03.06.2019)

Link to presentations:

R.Sivakumar, A.G.Dhandapani: “Efficacy of “Breathing pattern training” in patients with hemiplegia” in 41st National conference of Indian Association of Physiotherapists.

W. Stanley John, Siddhant Kumar, **R.Sivakumar**: Effect of electrical stimulation on denervated muscles: A literature review”, presented in 46th National conference of Indian Association of Physiotherapists. (*Guided*)

Suman Raju Jampana, Durian Preetha, **R.Sivakumar**: “Management of spasticity: A literature review” presented in 46th National conference of Indian Association of Physiotherapists. (*Guided*)

R.Sivakumar, Roopa Yegnaswamy: “Measurement of Postural sway with sway meter – an analysis” presented in World Conference of Physiotherapist, Mumbai, India. (*Guided*)

R.Sivakumar, Rajarajewari, Rajeswari, Pooja Gurprasad Mahatme: “ Analysis of impact of psychomotor skill of the examiner on the results of passive repositioning test used for proprioception evaluation” presented in 48th National conference of Indian Association of Physiotherapists (*Guided*)

R.Sivakumar, Hemapriya, Prathishta: “Analysis of impact of wand effect on testing postural sway with Lord’s sway meter” presented in 48th National conference of Indian Association of Physiotherapists (*Guided*)

Noor Fathima,**R.Sivakumar**:”Role of Physiotherapy in ataxia - a literature review” under students forum in 48th National conference of Indian Association of Physiotherapists (*Guided*)

Janani S R, **R.Sivakumar**:”Impact of motor imagery on motor performance - A study on problem solving ability, under students forum in 48th National conference of Indian Association of Physiotherapists (*Guided*)

R.Sivakumar, Radika.C.M. “Imapct of Fear of fall on scores of Berg Balance Scale in elderly population.” presented in 50th National conference of Indian Association of Physiotherapists.

R.Sivakumar, U.Meenakshisundaram, Arun Maiya, Shankar V, Rajarajeswaran, “Impact of site and size of cerebral infarct on motor and functional recovery” presented in National conference of Indian Academy of Neurology, Indore.

Vijaykumar D,**R.Sivakumar**: “Role of Physiotherapy in Muscular Dystrophy”:2nd International conference on neuromuscular diseases: Myocon 2014. (*Guided*)

Meena, **R.Sivakumar**,: Physical modalities in low back pain - an evidence review: poster presented in Electrotherapy conference, Saveetha University, Chennai (*Guided*)

R.Sivakumar,Durga Reddy:”Feasibility of using MMSE to evaluate cognitive impairments in south Indian stroke population - a narrative review. Biophysical well being. (*Guided*)

R.Sivakumar, U.Meenakshisundaram, Arun Maiya, Shankar V, Rajarajeswaran Predicting motor function recovery at 90 days after an ischemic stroke - development of a model/equation in Tamil Nadu Association of Neurologist Conference, 2015. (Won best paper award) (Presenter – Prof.U.Meenakshisundaram)

R.Sivakumar, U.Meenakshisundaram, Arun Maiya, Shankar V, Rajarajeswaran Predicting motor function recovery at 90 days after an ischemic stroke - development of a model/equation - poster presentation in 10th World Stroke Congress held in Hydrabrad, 26th to 29th October 2016.

R.Meeena, **R.Sivakumar**, The caregiver’s role in stroke rehabilitation - a narrative review. Physiotherapy Neuro update 2017, SRM University, Chennai.(Won first prize paper)

Indira sharma , Shiny angela, **R.Sivakumar**, Role of EEG based diagnostics and training in motor recovery following stroke, Physiotherapy Neuro update 2017, SRM University, Chennai.(Won first prize poster).

R.Sivakumar, Sonali Jena, Effect of unstable surface sitting on anterior tibial muscle activity following stroke, 10th world congress for neurorehabilitation, Mumbai. Feb 2018

Meenaskshi Jharbade, **R.Sivakumar**, Impact of task specific training on stroke rehabilitation outcome: A critical literature review 10th world congress for neurorehabilitation, Mumbai. Feb 2018

Link to Research work

PhD guidance UGC – JRF: Ms.Meenakshi Jharbade (2017 – 2022)
“Impact of Task specific training for paretic lower extremity on lower limb motor recovery and functions in early subacute phase following stroke” **Level – Guide**

Part time – Ms.Radhika (2018 – 2024) – Topic under discussion (as on Oct 2018)
Level – Guide

Part time – Prof. Narasimhan Swaminathan (2018 – 2024) – Digital teaching and learning experience in Higher education **Level – Co – Guide**

Part time – Mr.Chittaranjan Mishra (2019 – 2025) – Neuropathic pain risk factors and quality of life in person with spinal cord injury” **Level – Guide**

Part time – Mr.M.Saravana Hari Ganesh, (SRM University,Chennai) – Comparative study of University students with physical activity and without physical activity in parameters of perceived stress, academic output and mood status” **Level – Research Advisory Member**

FAIMER Project **EIP** – Effect of reflection before practice on skill demonstration of undergraduate physiotherapy students

PG (Title – Candidate – Reg no.)

Dissertation

2002

Effect of training muscles of scapular stabilisation on shoulder subluxation in patients with hemiplegia - G. Bharath (2501B01)

Efficacy of task specific training in improving weight transference through paretic lower extremity in patients with hemiplegia - RM Sundar Kumar (2501B03)

2003

Effectiveness of visual biofeedback to improve the ability of weight shifting in sitting in patients with hemiplegia - Namratha Ravindran(2502B03)

2004

A Study of influence of Gender on training symmetrical weight bearing with sit to stand activity in patients with CVA - D. Thiagarajan (2503B02)

2005

A Study to determine the effectiveness of training trunk rotation as a tool in improving weight transmission through the paretic lower limb in subject with hemiplegia - Arunachalam R (2504201)

A Study to compare the effectiveness of strength training to ankle muscles and single axis balance board training to improve balance among the asymptomatic healthy elderly adults - Deepak Kumar Nair(2504202)

2006

A Study to compare the functional reach between normal and obese subjects - Rajkumar K V (2505204)

2007

An analysis of compensation by the sense of effort for loss of peripheral proprioception in the elderly - Suman Raju Jampana (2506204) - Published

- 2008** To analyze contribution of ankle joint movement component in single and double upper extremity functional reach tests in younger and elderly subjects – Immanuvel (2507201)
- Analysis of the impact of fear of fall on the scores of Berg Balance scale among the elderly population - C M Radhika (2507203)
- 2009** An analysis of impact of training on multidirectional sway board on postural sway in unstable surface with visual reference in elderly population - J. Hemapriya (2508201)
- A study to analyse the impact of training trunk rotation in improving the lateral reaching ability in sitting in subjects with hemiplegia - Iswarya Lakshmi (2508202)
- 2010** Analysis of relationship between isometric strength of lower extremity extensors including dorsiflexor of ankle and sit to stand activity in elderly population - Rekha. S (2509204)
- 2011** A study to analyse the effectiveness of swiss ball therapy in improving sit to stand function in patients with hemiplegia - Rasheeda M V (2510204) - Published
- 2012** Effectiveness of electrical stimulation in improving motor control around shoulder in patients with Hemiplegia after stroke - Sirisha Nekkanti(2511204) - Published
- 2013** A novel method of training in sit-to-stand performance and weight bearing training in patients with hemiplegia - Ramya Pavani K (2512204) - Published
- 2014** Effect of functional weight shift training on postural control in frontal plane and hip abductor activity in patients with hemiplegia - Abbadi Durga Reddy (2513201)
- 2016** Impact of unstable surface sitting on ankle muscle after stroke - Sonali Jena (TPNU15004) - Published
- 2017** The impact of structured caregiver education on the Functional outcome of stroke patients- Meena(TPNU16002)
- 2018** Effect of Position Holding Exercises to Provoke Proximal Muscle Contraction of Paretic Upper Extremity in Early Sub-Acute Stroke – Monica G