**Specific Psycho-Physiological Stimulations during Early Developmental Stages and Achievement of Specific Learning Milestones**

**ABSTRACT**

The present investigation was designed to study and highlight the importance of the specific psycho-physiological stimulations provided by parents to children less than 10 years of age on their achievement of specific learning milestones. As a first part of study the investigator developed two new instruments for the assessment of specific learning milestones achieved by the children and the specific psycho-physiological stimulations provided by the parents. Both these instruments consists of 30 domains, which were identified after reviewing the literature regarding the stimulations of specific brain area for the growth and development of specific learning milestones in the linguistic and logical domains of learning. The First instrument is “Specific Learning Abilities Milestones Battery for Children under 10 Years (SLMBC)” to assess Linguistic and Logical learning milestones of Children under 10 Years to evaluate whether a child has achieved adequate brain growth and development for adequate learning according to his/her age. The assessment is conducted through three hundred and eighty three (383) items of performance tests which are included in thirty (30) different domains. Second one is “Specific Psycho-Physiological Stimulations Questionnaire for Parents of Children under 10 Years (SPSQ)”. The questionnaire has 30 domains those are adopted from Specific Learning Abilities Milestones Battery for Children under 10 Years (SLMBC).

SPSQ checks amount of psycho-physiological stimulations provided by the parents to their children under 10 years of age for the achievement of adequate brain growth and development and there by learning milestones with respect to their age. The questionnaire consists of 150 items, which checks the amount of psycho-physiological stimulations given by parents to their child in 30 different domains of learning milestones, with 5 items in each domain. The study also addresses whether the learning milestones among children under 10 years of age differ with respect to difference in selected socio personal variables such as gender, educational qualification of mothers, amount of time any one of the parents spent exclusively with the child, amount of time child spent for outdoor games, amount of time child spent with mobile phone, and amount of time child listen to music.

 SLMBC was administered to 900 students belonging to the age group of 05 to 09 years and who were studying in CBSE curriculum. Details of provided psycho-physiological stimulations were collected from the students using SPSQ. The sample was collected from Trivandrum, Kottayam and Malapuram Districts to ensure the representation of North, South and middle of Kerala state.

 The findings of the study revealed that, the sample of children studied have achieved high level of specific learning milestones and received high level of specific psycho-physiological stimulations. It was found that the achievement of specific learning milestones increases with increase in specific psycho-physiological stimulations received from the parents. The study did not yield gender difference in the achievement of specific learning milestones among children and the extent of specific psycho-physiological stimulations received from parents. However socio personal variables such as educational qualification of mothers, amount of time spent exclusively with the child by any one of the parents, amount of time spent by children for outdoor games, amount of time spent by children with mobile phone, and the amount of time spent by children to listen music yielded significant differences in the achieved specific learning milestones and the extent of specific psycho-physiological stimulations received from the parents. The study also revealed a very highly significant positive relationship between the achieved specific learning milestones and the specific psycho-physiological stimulations received from the parents. Findings of the study have significant implications and the study highlighted the importance and need of stimulation of specific brain areas for the development of specific learning milestones.

***Keywords: Psycho-physiological Stimulations, SLMBC, SPSQ, Learning Milestones, Early Developmental Stages and Specific Learning Abilities***