

## **PSYCHOLOGICAL DATA SCIENCE IN READING COMPETENCY**

Debdulal Dutta Roy

*Psychological data science is innovative research paradigm. It is data rather hypothesis driven research paradigm. The paper discusses difference between hypothesis and data driven research paradigms. The data science starts with research questions not hypothesis or a-priori psychological researches. It includes five steps - data warehouse, data retrieving, data cleaning, data mining, data visualization, pattern recognition and discovery of knowledge. All the steps are discussed with one case study on development of reading competency through online computer adaptive reading skill development program.*

## **EFFICACY OF AUDIOLOGICAL TINNITUS MASKING AND CAROVERINE THERAPY IN CASES WITH TINNITUS: AN EXPERIMENTAL STUDY**

Indranil Chatterjee, Ramit Rana Biswas, Biswarup Mukherjee, Sudip Basu

& Sujata Mulia

*Till date no accepted standard of practice exists for the interdisciplinary clinical management of tinnitus, specifically in the audiological tinnitus masking along with the drug therapy. The study aims to a) compare the efficacy of the tinnitus masking approach and Caroverine therapy approach, b) evaluate the efficacy of the combined approach of Caroverine therapy (TINNEX) and tinnitus masking. C) justify the Caroverine therapy management and masking may be used in conjunctive on to establish a standard protocol . Participants with bilateral mild to severe hearing loss having unilateral tinnitus with age range of 30-60 year having unilateral tinnitus were included for the study. All of them were having 'A' type tympanogram, positive SISI and negative TDT using bilateral digital BTE hearing aid. The participants were divided into group 'A' and group 'B'. Group 'A' were provided with audiological tinnitus masking and group 'B' were administered with Cavorine therapy (TINNEX). Audiological tinnitus masking for group 'A' was given for 1 month. For group 'B' the participants were advised to consume the drug for 3 days with 3 hours interval twice daily. THI (Tinnitus Handicap Index) and VAS (Visual Analog Scale) were administered pre and post treatment. Statistical analysis was done using SPSS (version 16.0, descriptive statistics for all variables were measured. For group 'A' the THI scores significantly reduced to 6.5 post treatments indicative of slight or no handicap. VAS decreased from 97.5%*

*to 50% indicative of partial improvement. For group 'B' THI scores reduced to 7.3 post treatment indicative of slight or no handicap and mean VAS decreased from 97.5% to 1.6%. Discordant dysfunction theory was proposed by Jastreboff (1990), this theory postulates that when the cochlea is damaged by excessive noise, drugs exposure or viral infections the outer hair cells (OHC) are damaged first and inner hair cells (IHC) later. Medications that are antagonistic to glutamate and its receptor N-methyl-D-aspartate (NMDA) (like caroverine and memantine) reduce glutamate-induced continuous firing of the neuron (Lobarinas et al., 2006). It is difficult to study and treat tinnitus because of the lack of objective tools to quantify and measure it. These findings may underline the involvement of non-auditory centres in the pathogenesis and regulation of tinnitus. This is a pilot study, further studies may explore the efficacy of combined application of Caroverine therapy and Audiological tinnitus masking by using various serological and f -MRI studies in future.*

## **CREATIVITY AND PRESENT CLASSROOM: WHAT WE EXPECT AND WHAT WE FIND**

Tapan Kumar Basantia

*Present paper gives a bird's eye view about the importance of creativity from the perspective of individual development and the development of the society; and makes a vivid discussion regarding our expectations of making present classrooms creativity centered and the realities of the creativity facilitative programmes/ strategies/means etc. found in the existing classroom situations. A lot of research based and literary evidences are presented in this paper which describes the shortcomings of the existing classrooms for developing creative talents of the students. The paper concludes with steps/ strategies which can be used in our teaching learning process for the development creative abilities of the learners.*

**Key Words:** Creativity, Classroom

## **TRACING CASUAL TRAJECTORIES OF COGNITIVE EFFICIENCY OF LATE ADULTS: A PATH ANALYTIC STUDY**

Paromita Ghosh & Sudeshna Roy

*The study attempted to chart causal pathways from select demographic variables via adjustment (in its facets and totality) to cognitive efficiency of late adults. A stratified random sample of 200 late adults of middle socio-economic status families in Kolkata was selected. All were married and had children. 50 each were living alone; living with spouse; living with adult offspring; and living with spouse and adult offspring. Each stratum comprised 25 females and 25 males. Tools used for data collection included a General Information Schedule for eliciting demographics of respondents, P.G.I. Battery for Assessment of Mental Efficiency in the Elderly (Kohli et al., 1996) and Shamshad-Jasbir Old Age Adjustment Inventory (Hussain and Kaur, 1995). Path analyses were conducted. Demographic variables rather than adjustments were found stronger in influencing cognitive efficiency of sampled late adults. Adjustments emerged as weak mediators. Older female late adults especially those bereft of spouse were found particularly vulnerable to cognitive decline.*

## **COMPARATIVE STUDY ON THE MOTHER OF CHILDREN WITH INTELLECTUAL DISABILITY ON IMPACT OF DISABILITY AND CRITERIA OF FUNCTIONING ACHIEVED BY THEIR CHILDREN**

Dalia Roy & Madhumita Banerjee

*The present study examines the impact of disability among working and non working mothers of children with intellectual disability and the criterion of functioning achieved by their children. 30 mothers and 30 children with intellectual Disability were taken as sample of the study.*

*For the Purpose of assessment of each mother, NIMH – DIS (Disability Impact Scale) was used. Similarly FACP (Functional Assessment Checklist for Programming) was used on children in order to know the Functional achievement of children with Intellectual Disability. This test was administered separately and individually on mothers (working and non working). T test was applied to check the differences in impact of disability on working and non working mothers.*

*From the finding of the study, it was concluded that, there is no significant difference among working and non working mothers on disability impact scale*

*and also there is no significant difference among children of working and non working mothers on criterion of functioning.*

**Key Words:** Disability, Stress, Mental retardation, Attitudes of mothers

## **IMPACT OF PARENTAL ENCOURAGEMENT ON ACADEMIC PERFORMANCE – A STUDY IN RURAL WEST BENGAL**

Purba Chattopadhyay

*This study explores the extent to which the parental encouragement have the relation with academic performance of preadolescent secondary school students. The sample drawn through stratified random sampling, consisting of 240 students, belonging to both Hindu and Muslim families, from rural areas. Parental encouragement scale by Kusum Agarwal (1998) was used to measure parental encouragement of mothers as well as fathers, separately as perceived by the child. For gauging academic achievement, examination scores of the students, obtained by them in annual examination in the last previous class were noted down from their school records. After scoring, the data was subjected to statistical analysis using SPSS 17 software. The study revealed that there is a significant relationship between the parental encouragement and academic achievement among preadolescents. It also showed that the mother's education and encouragement were found to be significantly positively related to children's (both male and female) than that of father's education and encouragement at 0.01% and 0.05% levels of significance. Also, the findings show that there was no significant difference in the academic performance for children belonging to Hindu or Muslim religions. However, between preadolescent boys and girls, there was significant differences in the parental encouragement (for both Muslims and Hindus). Lastly, the study uses principal component analysis for data reduction and linear regression analysis which reveals that the maternal education and parental encouragement of mothers were the main determinants of academic performance.*

**Key Words:** Academic Performance, Preadolescents, Parental Encouragement, Religion.