©Kamla-Raj 2003 J. Hum. Ecol., 14(2): 137-139 (2003) PRINT: ISSN 0970-9274 ONLINE: 2456-6608 DOI: 10.31901/24566608.2003/14.02.10

# Effect of Parental Stimulation on Cognitive Abilities of Pre-Schoolers

#### A. Kalaramna and S. Punia

The environment has the powerful affect on the development of child's competence. An environment responsive to the Childs' skills and stimulation, time slightly ahead of the childs' developmental level, will accelerate a normal child's progress. Lack of stimulation and an unresponsive environment retards children's cognitive development Skeels (1966) also found that stimulating environment enhances mental development and on the other hand severity of punishment retards the mental development of the child. Further, Upadhyay (1981) also found that the factors of home environment did not effect the creativity but at the same time stimulating environment increased the creativity of children. It was found that parents play an important role in shaping child's personality. The way parents interacts with their children also affects the development of children. Gottfried and Gottfried (1984) examined that mother's intelligence and family demographic factors are related not only to children's cognitive development but also pervasively to the provision of their social and physical home stimulation. Dunham and Dunham (1990) found that for proper social, intellectual, physical and emotional development, parents are directly responsible for establishing a sound base. The baby comes into the world with a repertoire of skills and some important individual temperamental characteristics. But the environment the child is born with, matters enormously as well. The child can respond only to stimuli that are available to him, if the environment is not stimulating, he cannot respond and cannot learn how to respond to new things later. Just as babies differ in temperament, so do parents. So, this study had been an effort to find out the level of parental stimulation provided by the parents to their children in control and intervention group.

### METHODOLOGY

The study was conducted in randomly selected three schools of Hisar City. After making a purposive list of children between the age group of 3-4 years, 150 children and their parents were

randomly selected. Out of these 150 children, 60 children were selected purposively on the basis of poor performance on cognition. These 60 children were further equally divided into two groups i.e. control group and intervention group. Mothers of two selected groups were taken for experimentation. Independent variables constitute intervention package for cognition, SES factors, existing cognitive status of pre-schoolers, parental stimulation and cognitive environment present in the home. Parental stimulation was studied through self-structured and standardized inventory. Various statistical tools were used to analyze the data. For parental stimulation, frequencies and percentages were calculated for both groups i.e. control group and intervention group. Parental stimulation was observed in five areas in particular i.e. learning stimulation, language stimulation, academic stimulation, variety in experience stimulation and media stimulation.

# RESULTS AND DISCUSSION

The baby comes into the world with repertoire of skills and some important individual temperamental characteristics. But the environment, the child is born with matters enormously as well. The child can respond only to stimuli that are available to him, if the environment is not stimulating, he cannot respond and cannot respond to new things later. Just as babies differ in temperament, so do parents. The perusal of Table 1 reveals the stimulation level provided by 83.33 percent parents followed by moderate exposure which was evident in 10.00 percent whereas, there were only 6.66 percent parents provided high quality stimulation. In intervention group, low learning stimulation was provided/given by 20.00 percent parents.

A good look at the Table 1 further throws light on language stimulation provided by parents. In control group, moderate and high stimulation was provided by 30.00 percent and 23.33 percent parents, respectively. Low language stimulation was provided by 46.66 percent of parents.

Whereas in intervention group, moderate and high language stimulation was provided by 73.33 percent and 23.33 percent parents, respectively (Table 1).

Further probing of data for academic stimulation revealed that, in control group, low academic stimulation was provided by 70.00 percent parents, 30.00 percent parents provided moderate academic stimulation, whereas, none of the parents provided high parental stimulation. Comparatively, in intervention group, equal percentage of parents provided (40.00%) low and moderate stimulation; high academic stimulation was provided by few parents (20.00%).

It is further clear from the results that in case of control group, low variety in experience was provided to majority of children (60.00%) variety in experience was moderate among 16.66 percent and high stimulation among 23.33 percent families. The trend for the same aspect was some what different for intervention group. There were 50.00 percent parents who provided low variety in experience, whereas, 33.33 percent and 16.66 percent parents provided moderate and high stimulation for variety in experiences, respectively.

Table 1 further depicts media stimulation for control and intervention group. In control group, low media stimulation was evident among 36.66 percent families. Moderate media stimulation was provided to 26.66 percent of children and 36.66 percent children were exposed to high media stimulation. In intervention group, it was found that 66.66 percent parents provided moderate media stimulation and 23.33 percent parents provided high stimulation. There were only 10.00

percent respondents who provided low media stimulation.

The Table clearly speaks for total stimulation quality provided in control and intervention group. In control group, the trend of low, moderate and high stimulation was 50.00 percent, 33.33 percent and 16.66 percent respectively. In contrast, in intervention group, 3.33 percent, 76.66 percent and 20 percent parents provided low, moderate and high stimulation, respectively.

Conclusively, it can be stated that in both control and intervention group, most of the parents provided low stimulation to their children. The stimulation level was somewhat better in intervention group. These differences were also observed when parents were requested to participate in the intervention programme the parents who cared for the development of their children agreed to participate in the programme. It means that intervention group parents were more aware, willing, cooperative and had the zeal to improve the development of their children which is also clear from above table that their stimulation status was better than control group.

**KEY WORDS** Parental Stimulation. Cognitive Abilities. Pre-Schoolers.

ABSTRACT The study was conducted in randomly selected three schools of Hisar city. Initially, 150 children were tested for their cognitive abilities using MSCA profile. Sixty children were selected on the basis of poor performance. These children were equally divided to form control and intervention group. In both the groups, quality of parental stimulation was also studied through self-structured and standardized inventory. Frequencies and percentages were calculated to see the level of parental stimulation on various aspects. The results

Table 1: Parental stimulation level provided to children of control and intervention group

 $N = 60 (n_1 = 30, n_2 = 30)$ S. Levels Learning Language Academic Variety in Media **Total** No. stimulationstimulation stimulation stimulation experience stimulation stimulation 1. Low (%) 25 (83.33) 14 (46.66) 21 (70.00) 18 (60.00) 15 (50.00) Control 11 (36.66) Intervention 7 (23.33) 1 (3.33) 12 (40.00) 15 (50.00) 10 (10.00) 1 (3.33) Moderate (%) 3 (10.00) 9 (30.00) 9 (30.00) 5 (16.66) 8 (26.66) 10 (33.33) Control Intervention 17 (56.66) 22 (73.33) 12 (40.00) 10 (33.33) 20 (66.66) 23 (76.66) High (%) 2 (6.66) 7 (23.33) 0(0.00)7 (23.33) 11 (36.66) 5 (16.66) Control 0(0.00)6 (20.00) Intervention 6 (20.00) 7 (23.33) 5 (16.66) 7 (23.33)

<sup>\*</sup> Figures in parenthesis indicates percentage

revealed that in both control and intervention groups, most of the parents provided low stimulation to their children. The stimulation level was some what better in intervention group.

# REFERENCES

Dunham, P. and Dunham, F.: Effects of mother – infant social interactions on infants subsequent contingency task performance. *Child Dev.*, **61:** 785-793 (1990) Gottfried, Allen, W.: *Home Environment and Early* 

Cognitive Development, Longitudinal Research. Academic Press, Orlando (1984).

Skeels, H.M.: Adults Status of Children From Contrasting Early Life Experience. Monograph of the Society for Research in Child Dev. 31 (Serial No. 105) (1996).

Upadhyay, R.: An Experimental Study of the Effect of Stimulating Environment on Change in Creative Ability of Young Children. Ph.D. Thesis Education, Bombay University (1981).

Authors' Addresses: A. Kalaramna, Assistant Professor, Department of Human Development College of Home Science, P.A.U., Ludhiana, Punjab, India
S. Punia, Professor, Department of Human Development, College of Home Science, CCSH.A.U, Hisar, Haryana, India