Stimulation plays a significant role in the Cognitive development of children. Stimulation may be defined as availability of opportunities to the child in terms of play, adult-child interaction, child-child interaction and material available to the child. Previous research has proved beyond doubt that stimulation brings about an improvement in various inter-related domains of child development. The importance of stimulating environment during early period cannot be overlooked. “Better the experience given, richer is the dividend”. The present investigation was undertaken to study the quality and quantity of stimulation and relate it to cognitive development of children in a poverty setting. Two groups of children were selected for the present research with a perspective to view the difference in the stimulation provided to anganwadi and home based children. The research findings were expected to have implications for improvement of quality of stimulation being provided in ICDS centres and for enhancing cognitive development of children in general. The research was undertaken with a conviction backed by research data that the home is a place of active stimulation and home as a context can be further utilized for stimulating young children.

The sample of the study comprised 400 children from slum areas of Jammu which was further sub-divided into two groups. The first group included 200 anganwadi children (AWG) in the age group of 3-6 years. The second group consisted of 200 children (HBG) from the similar residential areas who were not availing any preschool facility (HBG) in the same age group. The SES scale by Madhosh and Rafique (1998) was used for matching both the groups. Multimethod approach was used for data collection which
included standardised test for study of cognitive development by Pandey (1992). Since the physical infrastructure is considered to be an important indicator of stimulation, the observation schedule prepared by NIPCCD was administered to study this aspect. A Stimulation scale was devised by modifying Mohite Home Inventory (1982), Caldwell Home Inventory (1982), Jaswal Home Environment Scale (1998) and Tessers Inventory (2001). Spot Observation was designed to focus on opportunities, activities, objects, interactions, proximity of adults, etc as indicators of stimulation at AW centres and at homes. The present study is mainly quantitative in nature and the data obtained by using standardised tools, spot observation and observation schedule have been analysed by computing frequencies and percentages and wherever required content analysis has been done. Appropriate statistical tests like t-test, ANOVA, chi-square, correlation were also used for analyzing the quantitative data.

The findings of the present research revealed that Anganwadi children were found to be performing better on Cognitive skills test than home based children. Six cognitive skills namely conceptual skills, information, comprehension, visual perception, memory and object vocabulary were selected for investigation. The results obtained after data analysis revealed that anganwadi children performed better consistently across all dimensions as compared to home based children. Gender differences and developmental progression were also observed on these skills. Females in both the groups scored higher than males on Conceptual skills and males scored higher than females on other dimensions of cognitive development included in the present study. Age trend showed increase in Cognitive development of Anganwadi children of all the age groups with increase in age whereas the Home Based Children in both age groups except 5-6 years of age showed increasing trend on the indicators of Information and Object Vocabulary.
The physical environment of AW centres was not found to be that conducive but comparatively better than the homes of the sample children. All the anganwadi buildings were concrete and among them some were old and dilapidated. Kitchen activities were performed in rooms at anganwadis and homes which make the space congested and inadequate for children to move and play in addition to the risks involved in carrying cooking activities involving cutting and fire etc in the room where children play.

Analysis of mean scores on stimulation scale showed statistically significant difference on stimulation provided to AW and HB children. All the indicators of stimulation studied in the present research namely Language stimulation, Encouragement of social maturity, Maternal attitude and discipline and Variety of stimulation showed the difference. Higher mean scores on the stimulation scale were received by AWG as compared to the HBG.

The variation in stimulation among both the groups was also observed. In both the groups, majority of children received moderate stimulation (83.5%) whereas very few were in poor/lacking (1.5%) category. More of AWG children received high stimulation (22.5%) than the HBG (15%). It was also seen that males among both the groups fell in the high category as compared to females in both the settings. In HBG, most of the females received moderate stimulation. The chi square analysis showed highly significant difference (p<0.01) on the variation in stimulation received by sample children among both the groups.

It was also found that there is positive impact of Intervention / stimulation on cognitive development. Children in both AWG & HBG showed better performance on tasks of cognitive skills during post-testing stage as compared to their earlier performance one year ago. However, more difference was seen in many dimensions among AWG as compared to HBG, thus indicating the positive impact of intervention received at AWGs. Similar findings have been reported in several research studies earlier.
The correlation analysis among sample children depicts significant and positive correlation between language stimulation and different aspects of cognitive development selected for study in the present research except memory. Encouragement of social maturity dimension also showed significant positive relation with the indicators of information, comprehension and vocabulary. Maternal attitude and discipline showed positive significant relation with conceptual skills, visual perception, memory and object vocabulary. As far as variety of stimulation is concerned, significant relationship with all the aspects of cognitive development except memory was seen.

The research findings in the present context reveal that stimulating opportunities were available for children in home and anganwadi settings in the case of slum children. In both the settings, children were receiving moderate levels of stimulation and some were getting high stimulation. There were few children receiving low stimulation. Thus the earlier conviction stands supported. However, keeping in view the context, intervention modules need to be devised using pictorial pamphlets and AV aids for improvement in awareness of mothers and AWWs for need for enhancing stimulation in children’s environment. Several such suggestions were given to anganwadi workers and caregivers to foster development among children.