

# RECENT RESEARCH ON THE YOUNG CHILD

S. ANANDALAKSHMY

The major research studies of the last decade have been received and categorized for heuristic purposes under the heads of: (a) Development Norms and Infancy; (b) Personality and Affect-related Variables and (c) Cognitive Variables. Both published and unpublished sources have been cited.

The a-theoretical approach and the inappropriate use of standardized tests common to a majority of studies have been critically examined. The new directions for child study are suggested, with a focus on socially relevant problems.

Dr. (Miss) S. Anandalakshmy is Reader in the Department of Child Development, Lady Irwin College, Sikandra Road, New Delhi 110 001.

In the contemporary Indian scene, there is a great deal of interest in childhood. Changes in behaviour and development with age, and the process of change constitute the focus. The more recent concern with developmental changes is not always explicit; sometimes, it is implicit in the selection of age as the independent variable, or in the search for the antecedent-consequent links in the developmental span. Although the study of developmental processes would be well served by a follow-through of intra-individual development, most studies in this area take a cross-sectional rather than a longitudinal approach in the research framework.

In the studies in Child Development in India, two trends are apparent; the approach, by and large, is an a-theoretical one and the variables taken up for study are test-related, not theory-related. Also, samples are selected for convenience rather than for theoretical reasons. The base for sampling i.e. the independent variables has been examined critically. The thrust of the criticism of existing psychological research in India (Anandalakshmy, 1974) was that theoretically unrelated constructs have often been arbitrarily selected as dependent or independent variables. Many studies have used membership of a caste or religious group as the independent variable in the study of psychological factors without establishing

a-theoretical basis for the choice. There is, however, an emerging body of research which originates in socially relevant issues and in which there is better specification of the rationale for sample and variable selected.

## I. *Developmental Norms and Infancy*

A study of developmental norms of children in India between the ages of 2<sup>1</sup>/<sub>2</sub> to 5, sponsored by the National Council for Educational Research and Training has been discussed at length in the volume, "Review of Research in Psychology", published by the I.C.S.S.R. One part of it which was published (Muralidharan, 1974), stated that children living in urban areas showed a faster rate of motor development than those living in rural and industrial areas. A comparison of the results with those of Gesell's norms showed that on the whole, the present sample appeared to be a little ahead in the development of most of the motor skills than Gesell's sample.

In another study, sponsored by the N.C.E.R.T., the Developmental Norms Project focussed on the age group 5<sup>1</sup>/<sub>2</sub> to 11 years and is reported to be completed. The objective was to study the effects of different environmental variables on development: home, school, urban residence, social class, etc. The publication of both these nation-

wide normative studies is awaited with interest, since they are the first of the kind in India.

There has been one study on motor and mental development of infants, undertaken in the M.S. University of Baroda. An early version of the Bayley Infant Scale was used for the study, and performance on which was compared with the Bayley norms on U.S. infants. Within the Indian sample, there were urban upper class, urban lower class and rural infants. The comparison of mean total motor scores suggested the superiority of Indian babies in the first fifteen months. Within the Indian sample, for the first six months of life, urban upper socio-economic class babies scored lowest on averages and urban lower socio-economic class babies scored the highest. Babies from the rural areas occupy the middle position. Regarding comparative standing on mental scales, urban upper class infants had better average than the U.S.A. sample, practically for the whole period under study.

Currently, there is a large-scale longitudinal study in progress (Ghosh, 1976). Over 5,000 infants have been followed up from the prenatal stage to age 6. As it is the pediatric wing of the hospital that is conducting the study, the variables of physical growth and health status have been the focus of the investigation. Socio-economic and family size data are, of course, available. Cognitive assessment of the 4-year old and 6-year old cohort is in progress. This study promises to be a landmark, in that it links several socio-economic factors with health and with cognitive functioning. Another study of the relationships between nutritional status, environmental factors, maternal interaction and cognitive functioning has been undertaken on a moderate scale. About 500 infants, 6 to 24 months of age, from urban Delhi constitute the sample. The Bayley's Scale

of Infant Development has been used for assessing cognitive and motor development. The study is in the process of being written as this goes to press (Anandalakshmy, 1979).

Socialization as an area of research is a shared interest of several social sciences. Basically, the studies share the objectives of identifying relationships between characteristic patterns of adult behaviour and their supposed antecedents in childhood experience. This antecedent-consequent link receives theoretical support from the dynamic personality theory as well as from learning theory though they expose different explanatory principles.

Many studies on infants have been concerned with the age at which children are weaned and toilet-trained in different SES groups. By and large, mothers from the upper SES employed better feeding practices and weaned their children earlier. A few studies showed that there were specific differences between higher and lower socio-economic groups. Educated mothers belonging to the high-income group used feeding practices that were more responsive to infant needs, than did the lower socio-economic group mothers. The later weaned and toilet-trained their children at a later stage than the mothers of the higher socio-economic group (Desai, 1965; Devi, 1967; Singh, 1966).

### *Socialization in Childhood*

Studies on growth and development of young children emphasize the importance of good nutrition, a healthy environment and parental attitudes. The development of the child has been found to be positively related to stimulation at home. High and low stimulation homes were characterised on the basis of leisure-time activities of parents, availability of toys, space and books. Children were rated on activity level

and social, emotional, intellectual, motor and language development. Children from homes high on stimulation, scored higher on four of the six aspects studied: activity level, social, language and intellectual development (Muralidharan, 1970). Significant differences between adequately and non-adequately nourished children were observed on height, weight and intelligence, all measures favouring the well-nourished group. On most measures, the inadequately nourished group also showed greater variation than the adequately nourished group (Warner and Muralidharan, 1970).

Studies have been conducted on different groups differentiated on the basis of region, religion or caste. These have been on small samples and very few generalizations emerge. The majority of the mothers breast-fed their babies for several months. Weaning was found to be strict in some cases. There was no emphasis on toilet-training though it started at an early age. In a study on a Muslim community, it was found that mothers played a significant role in making children dependent. The majority of the children were moderately aggressive and toilet-training started late (Shroff, 1970). A recent study of Hindu, Muslim and Christian families (N=180, 60 from each group) to examine the differences in child-rearing practices; specifically, feeding and weaning, dressing, sleep and play routines, discipline and moral training, was conducted using home visits, observation and structured interviews. There were some differences among parents of the three groups; predictably SES and structure of family (nuclear/joint) also influenced the practices (Saied, 1975). Amongst the tribals of Tripura, there was an elaborate system of rituals and taboos in connection with the birth of the child. There was no conscious effort to wean the infant and toilet-training depended on the child's physical maturation. The father's

role in child care was limited (Basu, 1975).

A study conducted in a Community Development Block in Alipur, Delhi State, obtained an integral picture of the child-rearing practices and the use of health and educational services for the child under 6. The demographic profiles of the sample indicated a predominantly Jat and Harijan population, where most heads of household were employed in the city and a majority were illiterate. It was found that the number of family members working in the city bore no relationship to the size of the family. However, the educational level of the father and the size of the family were related inversely. The beliefs and practices in the upbringing of young children were ascertained by the interview method. It was found that religious beliefs and traditional rituals related to pregnancy implied various restrictions imposed on the mother. Children were breast-fed on self-demand until the age of three and there was little emphasis on toilet-training. Mothers of preschool children reported that by age three, children followed instructions, helped in household tasks and took on odd jobs. In a discussion on how the child acquired knowledge, most mothers felt that the child learned on his own. Books and teachers in their view, played a secondary role. Families in which members had more urban contact and were better educated, assisted children in learning tasks. Only half the number of preschool children attended 'balwadis'. The majority of mothers were indifferent to preschool education and did not consider it essential for the development of the child. Out of the 1,000 mothers interviewed, 67 per cent used the services of the Primary Health Centres. Most of these utilised the services for curative purposes when the child was sick, rather than for preventive purposes (Deulkar, 1977).

Child development research has established a relationship between the child's

experiences in the family and his behaviour. A study conducted by Ames (1974), investigated the influence of the type of family on 3½ to 5 year old children and their infraction with adult family members. The findings indicated that nuclear family children were brought up under the direct influence of adults more than were joint family children. Nuclear family children were reported to be more likely to have restrictions placed on their activities.

The types of family constellation as well as family interactions are considered to be significant determinants of the child's social behaviour. Aggression, dependence and achievement are among the major variables investigated in this context. Parental disciplinary techniques were studied in relation to aggression. Children exhibited significantly more aggression towards objects than towards persons. Parental techniques that encouraged internalization of behaviour codes were effective in controlling aggressive behaviour or in channelling it into pro-social behaviour. The child from a family where parents punished the child without an explanation, tended to be more aggressive in peer interactions (Sharda, 1972; Anandalakshmy, 1979). A study on the influence of educational qualifications of parents, their SES and the size of the family on the social participation of preschoolers (Begum, 1975) concluded that there was a positive relationship between the variables (education, SES and size of family) and the children's participation in the social activities at school.

The importance of fathers in child-rearing is being gradually acknowledged in the academic literature. A study conducted on attitudes of rural parents towards child-rearing, revealed that fathers who belong to the higher socio-economic status group, maintain a more favourable attitude towards child-rearing than those belonging to

the lower socio-economic status levels (Muthayya, 1974).

Social psychologists are concerned with the origins of certain aspects of behaviour which, at times, become social problems. Prejudice is one of these areas and naturally, the family as the primary agent of socialization, was studied for the beginnings of unfavourable attitudes to outgroup members. The origin of prejudice in children was investigated (Vyas, 1971 and Sharma, 1979) with the hypothesis that age and prejudiced attitudes would be correlated. Religion, caste and social class prejudices of children were taken into account. The age hypothesis was supported, stressing the cognitive aspect of prejudice; there was also a relationship between attitudes of parents and the prejudices manifest in their children.

It is only in recent years that pro-social behaviour has received some attention from researchers. Altruism, co-operation and sharing behaviour are among those variables. Generosity of children was studied in relation to parental warmth. In both the upper-income families (Kapoor, 1973) and lower-income families (Issacs, 1973), it was found that moral values internalized by children depended on the warmth of the parent-child relationship and the interaction patterns. No sex differences in generosity behaviour of children were seen. A study on altruism in 8-9 year-olds indicated that institutionalized children were significantly less altruistic than non-institutionalized children. A sex difference in altruism was observed, girls being more altruistic than boys. Training by a friendly adult model for a short period did not alter the institutionalised children's altruistic behaviour (Jain, 1973). Altruism has been studied as it relates to social class, in another study. With increasing socio-economic status levels, an increase in sympathy and concern for fellow beings was observed (Sakkar, 1972).

Several studies have been undertaken in the natural settings of small, homogeneous groups. In this set of studies, the method of study is near-ethnographic with the investigators interviewing parents and children informally. These studies differ not only in the methodology used, but also in the selection of the independent variable, i.e. parental occupation. The milestones in child-rearing generally considered for study, like feeding, weaning, and toilet-training are derivative from Freudian theory and considered to predict modal personality. In this set of studies, the Freudian model has been set aside, in favour of a model which takes socio-economic and occupational factors as the social realities within which a child grows up. The variables studied here were those which were also subjectively relevant to the parents interviewed.

The selection of competence as the dependent variable, rather than intelligence or personality, also represents a breakthrough. Competence is defined as being made up of three components: Self-reliance, Responsibility and Achievement, which were three of the eight variables, used by the Whiting cross-cultural studies (Whiting, 1966).

The first set of studies helped to establish the method and were of socialization patterns in a rural group (Yardi, 1972), in a Harijan slum (Bajaj, 1973), in a Harijan village community (George, 1973), and in a low-income urban group (Vohra, 1973). It was found that there was no clear pattern of rules which the parents followed. Yet, there were sex and birth order differences, favouring responsibility for girls and achievement for boys. The abilities of the children were largely geared to the performance of tasks essential for economic survival.

The father's occupation was expected to influence the attitude towards the children's occupational socialization as well as the

other aspirations for their future. Craftsmen, who are economically marginal, tend to involve the whole family in craft activities. Therefore, they were specifically selected in order to study the patterns of socialization for future occupational goals. Socialization for competence in families of craftsmen such as the potters (Gill, 1974), the mat-makers (Sahai, 1974), the makers of lac bangles (Vasudeva, 1974) and the toy-makers (Murthy, 1974) was studied. In all these communities, the general finding was that young children helped parents with occupational activities. Parents did not consciously train their children for competence but rather, the performance of certain tasks depended on the situational needs. The specific purpose of training children for future roles was implicit and not often stated by parents. Significant sex and birth order differences in the nature and expectations of tasks performed existed in all the communities. By and large, girls were trained to be self-reliant and responsible and boys were trained for achievement, generally in the craft. The extent to which the children had formal schooling was a function of the economic status of the family and the sex of the child. A larger study sponsored by the ICSSR, of the block Varanasi, farmers of Rudrapur (U.P.) and printers of Sanganeer, silk weavers of Chattarpur (Delhi) has been completed and is expected to be published in the near future. The section on the Sanganeer community has been published (Anandalakshmy, 1975).

## II. *Personality and Affect-related Variables in Development Adjustment*

In a study of preschoolers, significant differences between adjusted and maladjusted children were seen in parental child-rearing characteristics like accepting/rejecting, relaxed/overanxious and autho-

ritarian/democratic. Living in a nuclear family contributed to better adjustment than living in an extended family. Maternal education was an important factor influencing adjustment but the child's age, sex and social class were not significant variables (Periera and Thirtha, 1972). In most other studies, social class membership was a salient variable in adjustment.

There is a growing acceptance of the importance of the preschool experiences for later school adjustment, but this is not unequivocally supported by the available data. Some studies clearly reveal the importance of pre-school attendance for all-round adjustment to the primary school (Muralidharan and Banerji, 1975). But a study on the influence of nursery school attendance in the adjustment of upper class children in kindergarten showed no significant differences in the personal, social, home and academic adjustment of children exposed to a preschool programme and those not exposed to such a programme. The type of nursery school attended (child-oriented and task-oriented) also did not influence later adjustment (Grover, 1975). Similar conclusions were arrived at in another study on children from the lower socio-economic status groups (Chadha, 1975), where it was found that attendance of a preschool class in the Municipal School did not significantly influence adjustment of the children in class I, in personal, social or academic terms. This area requires more research, especially as the above findings go counter to the theoretical predictions.

There are several problems that parents face in dealing with children with deficits. One of these cases is having a mentally retarded child in the family. Twenty-eight children between 9 and 14 years of age were selected and studied intensively. Predictably, children with IQs lower than 50, presented more problems. Aggressiveness and moodi-

ness of the children worried the parents, but the greatest concern was regarding their future (Jain, 1967). In an exploratory study of families which have retarded children 10-14 years old, it was found that the presence of a retarded child in the family subjected the family members to some amount of stress, although the exact nature of the problem varied in each case (Saxena, 1976). A similar study on deaf children revealed parallel findings (Kumar, 1976). There was, even in the case of children with sensory deficits or lower mental functioning, a difference in the parental aspirations for sons and daughters.

In recent years cross-cultural psychology has come into a status of its own; on one hand, the discipline tests the universality of psychological variables, constructs and theories; and on the other, it helps to identify the cultural determinants of human behaviour. There are only few such studies that have used Indian samples.

A few studies have examined cross-cultural differences in anxiety. No significant differences in the anxiety levels of American, French, Japanese and Indian boys from high-fee schools were found. Indian girls from high-fee schools were significantly higher on anxiety than Japanese girls and were not significantly different on anxiety from American and French girls. Sex differences were in interaction with socio-economic status. Girls had higher anxiety scores than boys in high-fee schools but in low-fee schools, boys were more anxious (Muralidharan and Sharma, 1971).

The studies on the influence of social and cultural factors on the developing child do not give a very clear picture on the whole, partly because the country has a multitude of sub-cultures and societies, and partly because the studies have not always been large-scale or systematic enough for generalization.

### III. *Variables related to Cognitive Development;*

Intelligence, as measured by standard intelligence tests, and cognitive abilities, as measured by performance on the Piagetian tasks, form two separate categories of research. Much of the earlier and more traditional studies involved tests of intelligence. Piaget measures have been used and found to have a cross-culturally valid theoretical framework, but Indian researchers have, on the whole, been slow to take the Piagetian studies.

A longitudinal study on mental development during infancy, using the Bayley scale, revealed a consistent pattern of mental development. Also, mental development of individual infants as measured by the scale fluctuated a great deal. Parental education and income were, however, significantly related to the mental development of children after the age of two (Pathak, 1990). Nutritional status has been found to be linked with mental development. Children suffering from marasmus during infancy showed lowered scores on measured intelligence but the difference was not significant. The evidence indicates that the lag seen in malnourished children of their inter-sensory integrative functions puts them at a definite disadvantage in developing learning skills and profiting from the complex sensory stimulation provided by the educational environment (Ghai *et al*, 1973).

A study undertaken to investigate the effects of various types of programmed preschool experiences on concept formation, and personal-social adjustment, found that when children were exposed to structured learning situations and to incidental learning experiences, both groups showed a higher level of acquisition of concepts than children who had been exposed to neither of these preschool situations.

However, no difference was evident in the personal-social aspects of behaviour. School attendance seemed to influence the acquisition of concepts positively when school-going and non-school going children were compared to one another (Malani, 1975).

In a study investigating the performance of children on categorization tasks (Vartak, 1972), it was observed that younger children classified objects mainly by the more obvious characteristics like colour, whereas the older children classified objects by their function. The relationship between performance on a classification task and on a task involving role-taking skills indicated that there was no relationship between the two variables. Both tasks required cognitive ability but each of them, a different type. One finding of interest was that girls showed a higher level of role-taking skills at an earlier age than boys (Behl, 1976).

The conservation abilities of children have been studied, using Piagetian tasks. By and large, the studies are replications which support the theory (Rao, 1976). When matched on mental age, the upper SES children performed better on conservation tasks than children from the lower SES. Conservation ability was also positively related to academic achievement. No sex differences were found (Kapur, 1972). School and non-school children of the same age were used as samples for a study on conservation of mass, liquid and number. Schooling, *per se*, was found to have no effect on conservation ability which, it was argued, could be because of the quality of schooling being poor or the kind of out-of-school experiences being good for the development of conservation ability (Ahmed, 1973). Conservation ability of primary school children was studied in relation to comprehension and appreciation of humour as measured by a tool consisting of 15 humour stimuli. Conservation ability

2½ to 4 years of age (Rao and Anandakrishna, 1973). The children in both groups used a simple sentence structure (Restricted Code) more frequently. When talking to adults, all children made the speech structure more elaborate, than while talking to peers. The major findings were that specific situational variables were more important determinants of speech style especially when spontaneous speech is considered rather than the global variable of socio-economic status. Social class differences in the amount of verbalization in terms of total word count were present, but not in the structure of the sentences (Bhargava, 1974). The upper class children tended to use more of the Elaborated Code than lower class children and lower class children used more intra-communicative speech than those from the upper class but the differences were non-significant. A parallel study (Madan, 1974) confirmed these findings. The findings of these studies are in contradiction to the established relationship between social class and language behaviour. In the spontaneous speech of children, the social class differences get attenuated.

In a study analyzing the speech of 4 year-old children (Nayyar, 1975), it was observed that children did not modify their speech structure to the age of the listener—whether the listener was 2 years, or 4 years of age or an adult. Children used more of the Restricted Code in all these situations, i.e. in interaction with adults, peers and younger siblings.

The differences in structure, function and content of language in children of two age-groups; (2-3 yrs) and (4-5 yrs) were studied and it was found that older children used less egocentric speech, a longer mean length of utterance and a higher proportion of structurally complete sentences (Wadhwa, 1976). A study on younger children, 18-30 months of age, exposed to two languages in the home-situation, indicated that stages

in the acquisition of language (Hindi) followed universal patterns of language development. The children did not use the two linguistic systems separately but tended to use words from both as a composite language (Bedi, 1976).

Another study dealt with switching of codes of bilingual children (Marathi and Hindi), in relation to the role of the person, the situation and the topic of discussion. 3-year-olds did not switch language, but 8-year-olds did, showing that language-switching begins before 8 years and after 3 years of age. In 8-year olds who were clearly bilingual the topic of discussion was not related to the choice of language (Oak, 1975).

The effect of preschool education on the language and intellectual development of disadvantaged children was investigated. Children exposed to a pre-school were found to be performing consistently better in enumerative, quantitative aspects of language (vocabulary) and in certain measures of intellectual ability than children in a primary school, who had never been exposed to a preschool experience. However, there seemed to be no real difference in the degree of comprehension, quality of language used and other relevant qualitative aspects of language (Muralidharan and Banerji, 1973). A more recent doctoral study (Pankajam, 1979) also supports the thesis that preschool attendance enhances language competence.

#### *Moral Development*

Moral development is treated as subsumed under cognitive development because the studies deal largely with moral judgement rather than with moral behaviour. In Piagetian theory, systematized by Kohlberg, moral development is related to age and cognitive maturity.

A cross-sectional study to assess the knowledge of moral values of children (6-11

ys) from two types of schools showed a direct relationship between concept formation and age. Sex differences in the knowledge of moral concepts existed at the lower age level, but disappeared with age. Differences due to school environment did not influence the knowledge of moral concepts among older children (Sinha and Verma, 1972). Another study showed a significant relationship between moral judgment and intelligence as measured by the Raven's Progressive Matrices (Verma, 1976). In a study on the development of religious concepts in Hindu children of four age groups (6, 8, 10, 12 yrs) findings indicated that children's religious concepts progressed through stages parallel to those of cognitive development. Variations in patterns and content of socialization accounted for individual differences in the amount of information possessed (Sharma, 1976).

Several other studies are in progress. The Kohlberg Moral Judgment test (based on the Piagetian framework) has been adapted to suit the Indian culture at the M.S. University of Baroda. In the Indian samples, there are no sex differences or social class differences when total scores are considered. On specific issues, some SES differences were observed and explained (Saxena and Saraswati, 1976; Verma, 1976).

### *Projection for the Future*

The study of child development is gradually getting more responsive to new social needs and to the findings from the other social sciences. There is an increased awareness of the issues that have contemporary social salience. There is also an articulation that issues of immediate application to social problems must be tackled first. In this context, poverty and deprivation, social prejudice and social backwardness, all receive more attention. Since these topics are put high on priority

lists of funding agencies as well, there is a certain tendency to converge on these areas.

There may be a more concerted effort to build theory in Child Development, or to apply theory to specific aspects of the Indian cultural experience. In this context, Kakar's book: "The Inner World" is an important contribution. He uses the psychoanalytic framework for his analysis of childhood and society; his book is rich with references to traditional Indian myths and practices. It would seem fair to predict that psychologists interested in the cultural specifics that influence a child's life will turn to the Indian sources for insights.

Serious re-thinking on methodology will however be necessary, before such studies are launched. Developmental processes are naturally universal, but the cultural and sub-cultural variations in their expression are important. For instance, in using a standard measure of intelligence on culturally different groups the results are not really comparable. The inference drawn from the differing scores is that one group is superior or inferior to the other. The risks are obvious. The assumption that performance on the test is a conclusive indication of the person's competence and the social implication of this categorisation into "better" and "worse" groups can be serious. Psychologists have a responsibility to give the right kind of guidance regarding educational and social policy. It is therefore necessary that there should be greater awareness of the interpretation and application of their research findings.

Observation of young children under naturalistic and controlled conditions will continue to be a major method for the study of the child. One expects that researchers will make adaptations of the techniques of assessment, and move away from recording test results *per se*, to identifying the process under study in each case. A certain healthy

scepticism regarding the validity of standardised tests (which are almost always translations of vintage American Tests) and a willingness to reject a test that is unsuitable would be a positive step. Perhaps, changing the venue to the homes or to informal settings, will make possible more valid conclusions.

Another trend in the study of developmental processes that would be desirable is the shift to longitudinal studies. For too long, statements about development have been made on the available data from cross-sectional studies. The equivalence of samples of different age groups on non-age variables have been taken for granted in the past. Longitudinal studies would reveal the intra-individual variations which in turn could provide normative data. The tendency to look for the origins of the developmental processes would also take researchers to younger age groups. Infancy and the pre-school years should logically be studied

more intensively for the antecedents of later development in the childhood span, and in adulthood.

Cross-cultural studies are undertaken to test the universality of developmental principles as well as to study the differences in performance insofar as they explain the cultures. Both these reasons have been responsible for the upsurge in cross-cultural studies on development. It is to be hoped that we move away from mere replication studies to the development of theoretical constructs and new methods relevant to our clime and culture. Indian researchers may need to take up areas of study that have subjective relevance to the people. On the other hand, areas relevant for policy implications cannot also be ignored by the academic. Out of the plethora of materials, seminar papers and the like emerging out of the I.Y.C., it is to be hoped that some insights will be possible and that the child as an individual and as a person will stand to benefit.

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