CHAPTER II

REVIEW OF LITERATURE IN THE STUDIES IN

CHILD LANGUAGE DEVELOPMENT

The studies of children's language up to the early 1950's have been reviewed and adequately summarised by Mc Carthy (1954). She pointed out that since 1925 there has been a considerable growth of interest in linguistic development, partly because it has been realised that a child's linguistic expression is a valuable guide to his whole psychology.

Review of the literature can be taken under three headings:

1. Social class difference studies in language development,
2. Home environment studies,
3. Deprivation studies.

2.1.0 1. Social Class Difference Studies:

Mc Carthy (1954) introduced her general survey of literature on occupational group differences with this generalization. "There is considerable evidence in the literature to indicate that there exists a marked relationship between socio-economic status of the family and the child's linguistic development."
The first of the vigorous studies was that of Descoeudres (1921) who investigated three hundred children at private and state schools and found that the upper class children were superior on nearly every item of her battery of linguistic tests.

Buhler (1931) showed that poor children were generally retarded in general development but that they were most retarded linguistically. Children from better environment produced meaningful speech at an earlier age, used larger percentage of two and three word sentences earlier and were more advanced in their use of syntax, inflection and sentence structure.

The studies of McCarthy (1930) consistently showed striking social class differences. "Middle class children not only used longer sentences but also more mature sentence forms and questions." Moreover, McCarthy found that the differences between the social groups tended to increase rather than decrease as the children got older. Milner (1951) attempted to show that parent-child interaction was an important factor in linguistic development. She found that the families of high scorers usually had breakfast together and indulged in two way conversations before, after and during meals whereas the low scorers had much less
conversational interaction with the mother. Mc Carthy's work (1930) supports the hypothesis that contact with adults is very important. Using length of response as a criterion, she found that for children who associated chiefly with adults the median percent was 70. For those associated chiefly with older children it was 42.5." (Lowton 1963). 6

In summarizing the evidence on language and social class, Mc Carthy (1954) concluded that the wide spread and important differences which had been found might be due to some extent to the more restricted environment of working class children. In addition, the working class parents were themselves likely to be less developed linguistically and would not only be a less adequate speech model but also provide less verbal stimulation. She thought that the evidence indicated that parental attitudes towards their children and habits of family life were important factors for language development and that they happened to vary with socio-economic class as well.

In 1957 Templin 7 reported on a study of 480 children from age three to eight. The language areas measured were (1) articulation of speech sounds on
tests constructed by the author, (2) discrimination of speech sounds also on tests constructed by the author, (3) sentence structure, (4) vocabulary. Templin showed that the children from the upper socio-economic groups were consistently and significantly higher scorers than children from lower socio-economic children.

Many studies are available to show the social class difference in language development but in this chapter more focus is given to the important recent studies in 1960 and after.

2.1.1 Martin Deutsch:

Among more recent work in the 60s, particularly in the U.S. is Deutsch's verbal survey which operated with a core sample of 292 children and an extended population of 2500 children. The study was focused on Negro and white upper and lower socio-economic status children in grades, 1 to 5. The aim was to formulate a nomenclature of cognitive abilities, not simply to demonstrate the evidence of differences but to define anomalies and orderliness in perceptual, linguistic, and conceptual processes and school achievement. The survey collected data on over a
hundred identifiable variables the main focus being then language as the key to cognitive development and school attainment.

Deutsch's study was intended not simply to make comparative analysis of linguistic development but was concerned with "communication of information in the elementary school classroom". He defined the problem in this way, "Language is a central factor in school performance, both in the major interpersonal communication function of language and in its intrapersonal mediational function in problem solving."

Thus the study attempted to survey:

a) the language skills of the intellectually normal but socially disadvantaged child, and

b) the extent to which information is successfully communicated from teachers to pupils of different backgrounds.

The subjects were 167 children, first and fifth grade pupils from twelve New York Schools representing three socio-economic levels among Negro/white, male/female pupils. The linguistic data scored for six variables.
1. Total verbal output (to measure verbosity),
2. Use of nouns, verbs, adjectives, adverbs,
3. Type taken ratio (to measure verbal richness),
4. The number of sentence units spoken,
5. The mean length of sentence units,
6. The use of dependent and independent clauses.

Deutsch concluded that the results suggested that children of different social levels varied more in how they expressed themselves than in how much they express. The major distinction between the language experience of middle and lower class children is the difference in training which their respective cultures offer them in dealing with abstract ideas.

He also considered that the results obtained indicated that there was a language barrier between the middle class teachers and the lower class child, particularly the child in higher elementary school grades.

2.1.2 Basil Bernstein

The best known name in the language and education field is Basil Bernstein. His theories concern social class differences in language and propose causal relationships between a child's social class,
his language, and his success or failure at school. In particular Bernstein is known for the concepts of "restricted" and "elaborated" code; for the theory that some working class children may not have access to elaborated code and for the theory that this partly explains their problems at school.

Bernstein (1961) proposes that, in England at least, middle and lower class parents employ different child-rearing techniques which result in different patterns of language and thought in the middle class, life is oriented around the values of order, rationality, stability and the control of emotion and on the need to plan for long range goals. The parent teaches that the unbridled expression of emotion, particularly hostility, may create stress, damage interpersonal relations and in general make life chaotic. The child is therefore encouraged to verbalise emotions, to control them, and to try to understand why he feels as he does. In disciplining the child, middle class parents tend to use verbal rather than physical punishment, to take pains to elaborate on the rationale for a prohibition and to try to explore the child's motivation. Middle class child-rearing depends heavily on verbal exchange.
The parents use language to express goals to discipline the child, to explain the value system and the like. The accomplishment of their purpose requires a verbal system that is complex and that can carry subtle shades of meaning. Middle class language must be able to describe feelings and intentions, to elaborate the reasoning underlying decisions and to postulate hypothetical events in the future. Bernstein calls this type of language an elaborated code. The middle class child is exposed to this code and to these child-rearing practices from the earliest days of infancy.

Lower class socialization according to Bernstein is almost antithetical to that characterising the middle class. Lower class parents do not present to the child an ordered and rational system of living. Their lives are strongly affected by chance events and not constrained by careful and thoughtful plans for the future.

The parental discipline often takes arbitrary forms. Lower class parents simply tell a child what he must or must not do, for example - "Shut up" or "Get that", and fail to elaborate on the rationale for a prohibition. The parents express themselves in emotional, direct, and often volatile way. Their
language is a restricted code which is ill-suited for the expression of subtle shades of meaning or the elaboration of thought.

Consequently the child is not faced with the problem of comprehending a complex chain of reasoning involving relations and abstract categories. The lower class child acquires a language that is in many respects deficient. He uses restricted code.

Michael Stubbs commented on Bernstein's early work. "In this early version of Bernstein's theories the two kinds of language, restricted and elaborated code, are broadly related to the social class of speakers. Middle class (MC) speakers are said to use both codes, but some working class (WC) speakers are said to have access only to restricted code and this is said to affect the way such speakers can express themselves and form concepts. This is claimed to be particularly important in education, since schools are predicated upon an elaborated code. Few detailed examples of the codes were given, but elaborated code was said to be characterised by accurate and complex grammar, frequent use of prepositions, impersonal pronouns, passive verbs and unusual adjectives and adverbs. Conversely, restricted
The code was said to be characterised by short, grammatically simple, often unfinished sentences, frequent use of short commands and questions, categoric statements (Do as I tell you), simple repetitive use of conjunctions, rigid and limited use of adjectives and adverbs."

The theory is appealing because it appears to provide a linguistic explanation of why working class children are less successful than middle class children in school. In this early version of the theory - to which Bernstein no longer subscribes - a direct relation was claimed between social class and the codes to which speaker had access - a crude correlation between forms of language and social class.

Before going on to his more recent work, let us examine his concepts of elaborated and restricted codes in greater detail.

According to Bernstein, the former generates "universalistic" and "context - free meaning" while the later is "particularistic" and "context-bound". These two codes are the technique of transmitting the deep or core meaning structure of two different types of sub-cultures existing in the same society. About restricted code Bernstein states that "such a
communication code will emphasize verbally the communal rather than the individual, the concrete rather than the abstract, the substance rather than the elaboration of processes, the here and now rather than the exploration of motives and intentions and positional rather than personalized forms of social control". The elaborated code on the other hand transmits the type of culture which emphasizes more the individual i.e. "I", than the position and the community, i.e. "We", an open rather than closed communication system, and a form of social control which is not imperative but is more verbal, reasoned and through appeals. In elaborated code the emphasis is on verbal channel in order to elaborate the intention of the speaker, whereas in the restricted code the emphasis is on extra-verbal channels like objects or some activity.

In case of elaborated code the speaker will select from a relatively intensive range of alternatives and therefore the probability of predicting the pattern of organizing elements is considerably reduced. In case of restricted code the number of these alternatives is often severely limited and the probability of predicting the pattern is increased.
Elaborating the sociological conditions for the two codes Bernstein says "The pure form of restricted code would be one where the lexicon and hence the organizing structure irrespective of its degree of complexity are wholly predictable; for example - ritualistic modes of communication, relationships regulated by protocol, religious services, the opening gambits of a cocktail party, conversations about the weather, a mother telling her children stories. In pure form of restricted code individual intent can be signalled only through the non-verbal components of the situation i.e. intonation, stress, expressive features etc. Specific verbal planning will be minimal. Prediction will be possible at structural level, lexicon will vary from one case to another - drawn from narrow range. The context of the speech is concrete, descriptive, narrative, rather than analytical and abstract. The major function of this code is to reinforce the form of the social relationship (a warm and inclusive relation) by restricting the verbal signalling of individual responses." 13

An elaborated code is universalistic with reference to its meaning in as much as it summarises general social means and ends. The degree of
elaboration is the function of the generality of the means and ends, while the degree of restriction is a function of the parochialness of the social means and ends.

Bernstein has associated the middle class culture with the elaborated code and the working class with the restricted code. He has made his position clear in this connection by stating that mothers in the middle class (not all by any means), place greater emphasis upon the use of language in socializing the child into the moral order, in disciplining the child, and in the communication and recognition of feeling. This does not mean that working class mothers are nonverbal, only that they differ from the middle class mothers in the contexts which evoke universalistic meanings.

The two types of codes are the products of social relations and roles, occupation and type of family (Bernstein 1970). This restricted code will arise in types of social relations emphasising the "We" in place of "I" and where people in the community have a wide range of common assumptions, expectations and identifications. Similarly, if the occupations
require more of physical than of symbolic manipulations and control, the home surroundings are over-crowded and offer very little of intellectual stimulations for the child's socialization, and the absence of authority and power in professional situation is compensated at home, the restricted code of communication will emerge.

**Criticism:**

"When the theory is set out in this way it becomes clear that it is not a real theory. No real predictions are made, for example, about which form of family is related to which code. All we have are expectations, unsupported by evidence. Genuine scientific theories make predictions that certain things (X) will happen under certain conditions and that other things (Y) will not happen. Bernstein's model sets no real constraints on what may happen. An example of elaborated speech variants may be expected to be a realization of elaborated code but it may realise restricted code too." (Stubbs 1976)."
linguistic data. There are no extended real life examples of language use anywhere in Bernstein's papers, and no examples whatsoever of actual language use between mothers and children in the home or between teachers and pupils in the classroom.

Michael Stubbs further adds what others says about Bernstein's work --- "Labov says of Bernstein's work that no detailed specification has been given of the central concept of code, and that the experimental results are artefacts of the experimental situation. Rosen (1973) questions Bernstein's concept of social class and the lack of linguistic data. Jackson (1974) argues that Bernstein's work "fails by rather obvious intellectual tests" in that the theory is untestable and unrelated to linguistic evidence. And Trudgill (1975-b) questions the lack of linguistic enenplification and argues that the language differences which Bernstein has found are simply differences in style. (Stubbs 1976, p.49).

No critic of Bernstein's has ever denied that there are social class differences in language or that these differences are somehow related to educational problems faced by working class children.
2.1.3 Labov's Work:

William Labov, a linguist, has carried out a number of extremely creative studies on the language of poor black children. Labov and his colleagues focus on several major problems, the first of which is the relation between Negro speech and standard English. It is possible to conceive of standard English as the proper way of talking. One can then determine the extent to which Negro speech deviates from the norm or is in 'error'. Labov feels that such an approach fails to provide an accurate characteristic of Negro speech. The notion of error obscures the richness and complexity of Negro speech as well as its unique feature. Labov takes a different approach. He assumes that Negro language is a coherent system with its own structure and lawfulness.

Labov's work gains its power from two sources. First it is based on long-term intensive field work and participant observation in the speech communities he has investigated. Characteristically, Labov has tape-recorded speakers not only in interviews but in situations which were as natural as possible. To study the language of black adolescents in the urban ghettos of New York, for example, he spent time getting to know his informants, used a black colleagues as one of
the investigators, and observed and recorded his information in their usual surroundings in Harlem in the gangs with which they spent their time (Labov 1973). Second, his arguments are based closely on detailed analysis of actual language recorded, not on a surface analysis of a few dialect features but on the analysis of non-standard dialect in depth as a self-consistent language system. Labov's work is therefore important for its linguistically detailed analysis of spontaneous language collected as far as possible in its natural social contexts of use.

The central concern of his most important paper is to show that the concept of verbal deprivation is a myth. To show this, Labov discusses the misunderstandings which are possible about the relationships between language, concept formation, explicitness and logic.

Labov points out a first possible confusion between logic and explicitness. A criticism often raised against pupils' speech by teachers is that it is badly connected and inexplicit. The teachers often feel this about nonstandard Negro English (NNE), which has sentences like 'he my brother'. But there are many languages which do not use the verb 'to be' in such sentences, for example in Russian. One must
therefore be quite clear that if we teach a child to insert connections and use standard syntax in such sentences, then we are only teaching him slightly different forms of surface grammar. We are neither developing his logic or concepts, nor teaching him to be explicit.

We must be careful then, not to confuse logic, grammar and explicitness, or to confuse the conventions of standard English grammar with universal canons, of logic and thought.

Non-standard dialects as consistent linguistic systems:

Labov \(^{17}\) argues 'it is all too easy to assume that if some one's language is different from standard English, then it is deficient. But there is no linguistic evidence for equating such differences with deficit.' The work of Labov and others in the black speech communities of the inner city areas in the USA has documented in detail that NNE is a coherent, systematic, highly structured, rule-governed linguistic system. The notion that the language of socially impoverished groups is 'deficient' or structurally underdeveloped rests on a serious misunderstanding of the nature of human language. In fact NNE is very closely related to standard English with which it shares
the bulk of its grammatical and lexical systems. And the differences between the two language varieties are systematic not random. All the evidence demonstrates that when any child (unless severely mentally retarded) comes to school at the age of five, he has control of a complex linguistic system, so complex that linguists are not yet able to describe it fully.

Labov and Bernstein:

Labov and Bernstein have each commented very briefly on each other's work. Labov\(^18\) accuses Bernstein of failing to provide a proper linguistic specification of the central concept of code and of failing to relate the theory to actual data on the use of language in context. He also believes that what Bernstein treats as code differences are merely stylistic performances between speakers. Bernstein accuses much of the American work on sociolinguistics of being conducted at a trivial theoretical level in so far as it is not related to wider problems of the socialization of the child, cultural transmission and change. He accuses the American work on black English (including, presumably, Labov's) of being limited to relatively surface concepts of context and "language variety" and of
neglecting to analyse the deeper underlying problems of too educational knowledge is transmitted.

It is clear that much of Labov's work implicitly questions Bernstein's theory. Bernstein's work is experimental and/or abstract and speculative, rather than being based on details of observed language in use. Labov's most important work on the other hand is closely based on detailed linguistic analysis of language recorded during field work in natural social situation.

2.1.4 Lawton's study:

An experimental study of the speech and writing of some middle and working class Boys.

The reasons for undertaking this work were -

(1) to duplicate Bernstein's research on social class language differences in group discussion situations,

(2) to produce confirmatory evidence of the theory or to refute it,

(3) to extend the range of evidence by collecting discussion speech from some boys younger than the subjects used by Bernstein, and
(4) to investigate other kinds of speech situations and the written language of the same boys.

Owing to the large amount of work entailed in linguistic analysis at this kind, it was decided to limit the sample to four groups of five boys and to concentrate on detail and variety of contexts rather than produce a superficial analysis of a larger number of subjects.

Twenty boys were selected from two schools:

(1) a secondary modern school in a working class area of London,
(2) an independent fee-paying school in a middle class suburb of London.

All four groups are matched for verbal and non-verbal intelligence. All the boys were of average verbal and non-verbal intelligence.

He studied the boys in three situations.

(1) Written work: Essays and sentence completion tests:

Lawton visited each group of boys in a classroom in their own school and in six successive weeks asked them to write four 30 minute essays and two sentence-completion tests.
Conclusion:

(a) This study presented clear evidence that the working class/middle class difference in usage of restricted and elaborated code applies to written work as well as speech. This was the first occasion on which Bernstein's theory was tested using essays and other kinds of writing, although the experiment has since been repeated elsewhere and with a much larger number of pupils.

(b) Although there were social class differences even on narrative descriptive essays, the social class differences were greatest on essay subjects which enabled abstract writing to be selected.

(c) A new sentence-completion test was devised which was successful in distinguishing working class and middle class pupils in their use of subordinate clauses.

(2) Group discussions:

Each of the four groups was asked to discuss the question of capital punishment, the topic used by Bernstein earlier (1962). Each discussion lasted approximately thirty minutes, but the number of words spoken by each group was not exactly the same.
In each case the whole length of the discussion was used for the analysis but to make comparison possible with Bernstein's results (1962), the same exclusions were made for the purposes of analysis i.e. fragments, repetitions, together with, 'I mean' and 'I think' were omitted from the analysis.

Conclusion:

(a) In the discussion situation, linguistic results remarkably similar to Bernstein's were found, not only in the direction but in the actual numerical scores.

(3) Individual interviews:

Each boy was interviewed individually by the writer in a quiet room provided by the school and the whole of the interview was tape-recorded.

Conclusions:

(a) The speech analysis of the individual interview was of interest for a number of reasons.

(1) Social class difference were still in evidence i.e. the results were in general in agreement with the prediction according to the Bernstein theory, but
(2) the actual numerical results were quite different from the figures relating to discussion speech. The speech was found to vary not only according to social class, but also according to general context of situations.

(3) Interesting differences were found in relation to description and abstract language, and suggested evidence on social class differences in code switching.

General conclusions:

1) All three studies reported above show greater social class differences at age fifteen than at age twelve. This illustrates the need to study teaching programmes and teaching methods for all age groups.

2) The responses of working class boys to the abstract section of the interview suggest that they can be made to use something which at least approaches on elaborated code. They may experience great difficulty but in this situation which was intended to be friendly, stimulating and encouraging, their speech did not break down completely. Thus this study demonstrates a very considerable gap between the normal
linguistic performance and the potential attainment of certain working class pupils.

2.1.5 Robinson's work:

Robinson has done an interesting but incomplete study comparing poor children's ordinary language performance with their competence. His hypothesis is that the 'restricted code' is a better description of poor children's performance than of their competence. According to this view, members of the lower class may possess the basic competences for the elaborated code but for several reasons may not use it, especially with peers. For example, lower class boys in particular may view the elaborated code as being 'fancy', effeminate and in general as too closely associated with school and the values it represents. In interaction with peers they feel that they must uphold the values of the group and this requires use of the tough restricted code, even though the elaborated code is fully available.

Experiments - subjects were lower and middle class English children, 12 and 13 years of age. He asked them to write two letters - one formal and the other informal. In the first letter the children were asked to write to a close friend a letter containing
the latest news and gossip. Part of the instructions were - write naturally to him in the way you would if this were a real letter. This is not an English exercise of any sort, so just be yourself.

In the case of formal letters, the children were told to imagine that an official of the school system had available some money to give students, for a trip. Only a limited number of students could get it and they were to be selected on the basis of letters to the school officials. These letters had to describe the students' reason for wanting to make the trip.

Robinson's intention, which the experimental manipulations seem to accomplish, is to place the children in one situation which demands the informal speech of the restricted code and another which seems to require the formal code. Findings: - No social class differences appeared.

Conclusion:

When a formal situation made it necessary for the children to use the elaborated code, they could do so, the necessary competence is available. When the children did not need to use the code they often did not bother with it and instead reverted to other modes of speech.
1. In her 1977 study on social class and grammatical development, Poole-Johnston used a picture strip task to elicit speech from 36 five year old middle and working class children. This speech was later transcribed and analysed according to the rules of traditional grammar. It was found that the working class children made greater use of verbs and pronouns, whereas the middle class children made greater use of subordinate clauses. When further analysis was carried out into the choice made between nouns and pronouns in the subject position of sentence, working class children were found to make greater use of pronouns in this position while middle class children made greater use of nouns. It was suggested that this preference may arise from social class differences in the functional use of language by young children and the communication demands made of them in their social environment.

2. In her second study on social class and the speech of four-year olds, Poole Johnston studies the effect of intelligence.

The purpose of this study was to investigate more closely to what extent the social class differences
reported in the experiments were actually due to social class speech differences, and to what extent they may be said to be due to differences in intelligence. As the speech of young children develops rapidly, four-year old children from a six months age-range were studied. The children in the first experiment were matched in pairs on social class, sex, age, and the scores from a non-verbal intelligence test (which it was felt would be more culture-fair for the lower class children). The second experiment was a replication of the first with the children being drawn from the same schools as in the first experiment, except that measured intelligence was left free to vary. Speech was elicited by using the picture story technique described by Hawkins (1969) and was tape-recorded and analysed according to traditional grammar.

In the first experiment reported in this study, four-year old children from middle and lower class homes were matched in pairs according to their non-verbal intelligence test scores, and their speech was compared with that of a similar group of four-year olds in a second experiment who had not been matched for intelligence. Speech was elicited from the children in both experiments by the use of a
picture-strip technique, analysed according to traditional grammar. Few social class differences emerged in the speech of the first group of four-year olds but in the second experiment social class difference was found in the use of adjectives even when verbal intelligence was controlled for statistically. A significant difference in the use of nouns in the second experiment was found to be due to intelligence differences between the two social class groups and the frequency of the use of nouns, pronouns and adverbs was found to be correlated with verbal IQ. The lack of a correlation of speech variables with verbal IQ in the first experiment was attributed to the narrowness of the IQ range which resulted from the experimental matching of intelligence. It is suggested that differences in verbal intelligence do affect the speech that children use and care should be taken not to confuse this variable with that of social class when studying the speech of young children.

2.2.0 Home Environment Studies of Robert H. Bradley and Bettye M. Caldwell (University of Arkansas at Little Rock);

1. 1976: In this study it was found that certain aspects of the infants' early home environment were strongly related to children's mental test performance.
at age 3. The study involved periodic assessment of the home during the first two years of life with an instrument designed to measure six types of environmental stimulation. Other studies employing this instrument have shown that particular aspects of early environment are related to changes in mental test performance between 6 months and 3 years of age (1976).

2. When the follow up study (1977) was undertaken at the age of five and a half years it was indicated that home environment scores during the first two years of life were strongly related to 54 months -- IQ scores. Of the six aspects of home environment measured by 'Home' - Emotional and verbal responsivity of Mother, maternal involvement with the child and provision of appropriate play materials revealed the most substantial association with mental test performance at 54 months. Results show that the pattern of relationship between 'Home' scores and mental test performance changes somewhat across the early childhood years.

Home: Home Observation and Measurement of the Environment (Caldwell, Helder, & Kaplan)25 - This inventory is an observations - interview
procedure which assesses the quality of stimulation available to the child in the home.

It is composed of six sub scales.

1. Educational and verbal responsibility of mother.
2. Avoidance of restriction and punishment.
3. Organisation of the environment.
4. Provision of appropriate play materials.
5. Maternal involvement with the child.
6. Opportunities for variety in daily stimulation.

The findings suggest that if parents assist their children during the first two years of life in terms of organizing the environment for them, children move more easily from sensorimotor to preoccupational thinking. Among the various types of environmental stimulation available to the child in the first two years of life, there are three whose effects seem to remain substantial throughout early childhood: emotional and verbal responsiveness of mother, maternal involvement with child, provision of appropriate play materials. It appears that verbal stimulation involving the labelling of objects and
relationships may provide the kind of basis needed for subsequent development of specific verbal abilities and for the formation of concepts. It also appears that parents who actively encourage achievement during the first two years may facilitate continuous cognitive striving by their children throughout early childhood. Finally, it appears that mothers who interact frequently with their children and who are responsive to their emotional needs may develop in their children a sense of trust and enjoyment in the environment.

3. The most important study of these investigators involved a process-oriented research strategy which was employed to examine relations among various aspects of early home environment and children's language development. Infant's home environment was assessed when they were 0 and 24 months old with the 'Home observations and measurement of the environment' (Home) Scale. When 3 years of age, each child was administered the Illinois test of psycholinguistic abilities. The results demonstrated that it is possible to specify some of the parameters of early experience related to certain aspects of language development. The Home sub-scales, emotional and verbal responsivity of mother, provision of appropriate play
materials, and maternal involvement with child showed the strongest overall relation to language competence. Among the 10 psycholinguistic abilities measured, auditory reception, auditory association, visual association and grammatical closure were most strongly associated with the quality of stimulation found in the early environment. Relations differed somewhat depending on the race and sex of the child.

2.3.0 The deprivation studies of Kellmer Pringle:

In England, in 1960, the term deprivation was commonly used to denote three different conditions - first, the child who is living in residential care, either for long periods or permanently and is deprived of normal family life; second, if a child is unloved and rejected by his parents, especially his mother, he is likely to suffer emotional deprivation; and third, the child who is growing up in a home which is culturally and educationally extremely unstimulating, will be handicapped by environmental deprivation. It is generally accepted now that each of these three conditions may be detrimental to emotional and social development. Far less is known about the likely
effects of deprivation in all its forms on language development, intellectual growth and educational progress (Kellmer Pringle, 1965).

Pringle refers to the work of Batewood and Weiss (1930) on the early effects of environmental deprivation in an investigation of newborn infants. Given various stimuli such as light, sound, smell and temperature, neonates vocalized much more than in situations where they were "allowed to lie naturally without any external stimulation". She refers to the work of William McFurland (1937) who found that children living in homes were markedly superior in vocabulary scores. Milner (1951) selected contrasting groups of 6 to 7 year old Negro children on the basis of their language IQ. Patterns of parent-child interaction were studied for children who received high and low scores respectively on a number of language criteria. It was found out that in the homes of the high scoring children there was much more conversion at meal times in which the children participated actively. Similarly they received more overt expressions of affection from significant adults in the home than those who scored low on the language tests. These factors tended to be
concomitant with variation in socio-economic status which has frequently been shown to be related to language development. Milner suggests that it is parental attitudes towards children and patterns of family life which are the really significant factors for language development and that these happen to vary also with socio-economic class. If association with adults is a factor facilitating language development (McCarthy 1930, Smith 1935) it is understandable why institutionalised children show marked retardation. They associate much more with other children, especially contemporaries, and have far fewer contacts with, and attention from adults. Kellmer Pringle also found that deprived children are backward in language development. It seems very likely that this is at least to some extent functional and due to adverse environmental factors. Prior to separation the majority of children live in homes where verbal stimulation is minimal; overworked and under-privileged mothers, often burdened with too many pregnancies or forced by economic necessity to go out to work, have little time and energy available to encourage the baby in his early experiments with sound and to elicit continued trial and effort by taking delight in his pre-speech vocalizations. Similarly once the child is beginning
to speak there is likely to be less verbal stimulation in the form of nursery rhymes, stories, songs and general conversation.

Pringle (1968) also found a very serious degree of backwardness in comprehension reading in her sample of deprived children. Retarded speech development and a limited vocabulary inevitably handicap the deprived child in learning to read.

She summarised her conclusions by saying "the results of the individual intelligence testing showed that the majority of our sample of deprived children fell within the average range of ability although the mean IQ was considerably below 100. Moreover the proportion of educationally subnormal and dull children was considerably higher than that of bright and very able children. In addition they tended to differ from ordinary children in many of their personal attitudes and reactions and a considerable proportion showed symptoms of maladjustment. Both in the residential home and at school, social competence was the only developmental aspect in which the deprived equalled ordinary children."
Deprivation studies in Indian context:

In India the children of economically backward classes are supposed to be deprived children. Economic deprivation leads them to educational backwardness. Thus educationally backward castes and tribes may be taken as culturally deprived and socially disadvantaged children.

In Orissa, for example, lot of work has been done taking only caste as a effective factor for determining the socio-cultural deprivation. R. Rath who has pioneered the work in the area of deprivation in Orissa studied the effect of deprivation on children from the following castes - Brahmins, Scheduled caste and Scheduled tribes. But A.K. Singh (1975) has taken caste plus economic condition as his criteria for deprivation in Bihar. Here is the work on the effects of deprivation on Indian children.

2.3.1 R. Rath's work:

The basic purpose of this investigation is to assess the intellectual and other cognitive manifestations of three groups of children reading in class five of primary schools in Orissa. These three groups consist
of sample taken from children of the following groups - Brahmins, Scheduled Tribes, and Scheduled Castes, reading together in the same class. The size of each group in the sample is 110 and altogether 330 children are taken for study. It is broadly hypothesised that the three groups of children being to three distinct social classes with different educational background. They are likely to differ significantly in intellectual, cognitive and various kinds of academic achievements. The cumulative deficit concept might be very well marked at this stage of class V in the case of the disadvantaged. All the subjects were administered the following tests -

a) Raven's Progressive Matrices test to measure intelligence.

b) Rotters' Level of Aspiration Test Board to measure a particular kind of level of aspiration and achievement.

c) Auditory vigilance test to measure attentional processes involved in signal detection and vigilance.

d) Stroop's Colour-Word Inference test to obtain an index of linguistic development.
e) Verbal concept formation test to assess the range and quality of concepts based on class-IV language book.

f) Marks secured by the children in the various school examinations in all the subjects of study to assess their academic achievements.

g) The motivational and aspirational problems of the subjects and their parents were investigated by interviewing all the children and their parents.

h) The family and parental educational background was assessed by finding out the educational attainment of all the members of the family.

i) The interest and attitudes of children towards school and school studies were assessed with the help of structured interviews.

j) Data on attendance and stagnation was collected from school records.

k) Parental interview for assessing their opinion about children's interest in studies.

l) Estimation of teachers about the abilities, behaviour and future academic possibilities was attempted.
The conclusions of the study -

(1) In the Rotter’s Board Test the tribal children have done best while the Brahmin and Scheduled Caste children are similar to each other in scoring low. It is a test of finger manipulation.

(2) In the Auditory vigilance test the tribal children have done the best among all these groups.

(3) The Brahmin children are consistently better than the other children in both comprehension and association of all three kinds of concepts i.e. scientific, concrete, and abstract.

(4) The scheduled caste children are superior to scheduled tribe children only in comprehension of all concepts but they are inferior like the tribal children in respect of all the three types of concepts.

(5) In regards to association of words the Brahmin children score significant correlation with intelligence in the areas of scientific and abstract concepts but the other two groups do not have single correlation on this area.

(6) Brahmin children are superior to all the disadvantaged in all the school subjects except in drawing which is by far the best subject for the
scheduled tribe children. The tribal children are slightly better than the scheduled caste children in all subjects except arithmetic.

(7) The family educational index as well as the parental educational attainment is highest in the case of Brahmins and lowest in case of scheduled tribes groups.

(8) The aspirational levels for education, occupation and monthly income are extremely low in both the children and parents of the socially disadvantaged groups compared to Brahmin children and their fathers.

2.3.2 The Study of Shantilata Sahu and Saral Kumar Sahu

(a) The study included tribal and non-tribal children (Socially disadvantaged and advantaged) reading in the second grade of schools. They were divided into four groups - tribal unilinguals (TU), tribal bilinguals (TB), non-tribal unilingual advantaged (NTUA) and non-tribal unilingual disadvantaged (NTUD) groups - 30 in each group.

Subjects' achievement level of linguistic proficiency was assessed by applying Language Achievement Test Battery (LATB) (Sahu, Patnaik & Mishra, 1978) which consisted of the following tests:
1. A test of word reading.
2. A test of word writing.
3. A test of sentence comprehension.
4. A test of sentence completion.

Psycholinguistic competencies were assessed by applying the following sub-tests of Illinois test of psycholinguistic abilities (ITPA) after translation and proper modification wherever necessary:

1. Test of auditory reception.
2. Test of auditory association.
3. Test of visual sequential memory.
4. Test of verbal expression.

Sahu and Sahu found that there were overall group differences so far as word reading, word writing and sentence completion subjects of LATE were concerned. Similar differences existed for the auditory association and verbal expression sub-tests of I.T.P.A. These results indicate that on the tests of psycholinguistic competence, more specifically on tests of auditory reception, auditory association and verbal expression, it is the NTUA group which has scored significantly higher than the other three groups of subjects.
(b) In S. Sahu's study "Effect of social disadvantage on verbal competence and language achievement", socially advantaged and disadvantaged subjects were drawn from three grade levels (i.e. II, III, V) with 35 subjects in each of the six resulting sub-groups. Indian adaptations were made of WISC (Wechsler Intelligence Scale for Children) verbal sub-scales, with necessary ordering, and language achievement test battery, after which they were administered. The language tests were developed on the basis of concepts and words used in standard language text books.

The LATB for second graders contained:

1. A test of word reading.
2. A test of word comprehension.
3. A test of passage comprehension.

The LATB for third and fifth graders contained tests of:

1. word spelling,
2. word comprehension,
3. passage comprehension,
4. word fluency.
The number of correct responses elicited from each section of LATB make up the individual scores for that sub-test. Social dimension variances and grade variances were significant for WISC verbal scores. LATB scores showed favourable trend for advantaged subjects. (WISC verbal scores were significantly related to word reading, spelling scores, passage comprehension scores and word fluency scores). Similar trend was also present for word comprehension scores of advantaged subjects, but not for disadvantaged subjects.

2.3.3 S. Sahu & B. Devi

Sahu and Devi have compared competence and intelligence of socially advantaged with disadvantaged children. Pre-school children within the age range 3 to 6 years were used as subjects for the study. There were 35 children in each group. Measures of psycholinguistic competence included a test of auditory reception, a test of auditory association and a test of visual sequential memory. Columbia mental maturity scale was used as the measure of intelligence. 'Home' scale was used to assess the quality of home environment.

Results show that in case of both the groups of subjects, the 'Home' measure in general contributes
significant variances to the three psycholinguistic measures, i.e. auditory reception, visual sequential memory and Columbia mental maturity scale. The extent of variance contributed in these measures ranged from 40.08 percent. But when the contribution of specific 'Home' variables was examined the two groups of subjects projected different pictures. Results confirm the previous findings that linguistic and intellectual functions are to a great extent controlled by the home variables.

2.3.4  *Panda and Das*  

These investigators took up school achievement and other achievement-related measures of low income group elementary school children belonging to three different castes, four educational levels and two groups on the basis of sex. The primary objective of the study was to see whether there is a progressive deficit over the years. Is progressive deficit attributable to caste membership where economic status is a constant? Are boys and girls equally affected by such depriving conditions or do they cope differently with the situations? To what extent does deprivation affect performance of these young pupils over a variety of situations having different educational relevance and achievement-related dynamics?
The results of the study show that Brahmin and Harijan children are significantly different in the style of information processing i.e. the Brahmin children were more analytic than the Harijan children. They had also more positive self-esteem compared to the Harijans and the discrepancy increased with increasing educational levels. The low caste children did show deficits in personality and intellectual achievement, and in information processing modes. And the deficit also showed progressive or cumulative retardation in most of the measures. Hence membership in low caste and low income family does predispose children to an impoverished environment and the consequences of this deprivation are cumulative over time.

2.3.5 A.K. Singh:

In a report on an empirical study, Singh has clearly highlighted the role of caste, income and tribal background in contributing to cognitive performance. Six hundred school students in Ranchi district (Bihar) were administered the Porteus Maze Test to measure intelligence and language, and Arithmetic Test to measure scholastic achievement. A sample of five categories was taken.
1. Hindu high caste, high income.
2. Hindu high caste, low income.
3. Hindu low caste, low income.
4. Tribal Hindu, low income.
5. Tribal Christian, low income.

Hindu high caste, high income had significantly higher scholastic achievement.

2.3.6  Rajlaxmi Muralidharan and Uma Banerji:

These investigators have studied a number of aspects of children from age 3½ to 5 years at kindergarten level, coming from deprived backgrounds.

a) In "Home stimulation and child development", the authors report a study undertaken to find out how far the enrichment provided in nursery school goes to bridge the gap between the children coming from stimulating and unstimulating homes. The sample was drawn from children aged between 3 years to 5 years, enrolled in the laboratory nursery school of the National Institute of Education, Delhi. 25 percent of the children were from the lower middle income group, another 25% of the children were from the upper middle income group and 50% from the middle income group. Each one of the children had received at least six
months of pre-school education in the laboratory school. Rating scales were used to study all aspects of development. The results show that home stimulation makes a significant difference in the activity level and in the social, linguistic, emotional, and intellectual growth of children but not in their motor growth or height or weight.

The whole sample was divided afterwards into two groups -

1. High stimulation homes,
2. Low stimulation homes.

The stimulation was determined in terms of the following criteria -

1. Leisure time activities of the parents.
2. Quality of food.
3. Availability of toys.
4. Availability of picture books.
5. Availability of space.

The conclusions are: -

1. Inspite of the compensatory education received in school, a stimulating home background still makes a difference in the development of children.
2. Regular attendance in the nursery school makes a significant difference in the intellectual development of highly stimulated children and in the social and language growth of low stimulation children.

(b) "Language development of Kindergarten children in relation to their paternal occupations." 36

This study was undertaken to find out the extent to which disadvantaged children differed from advantaged ones in their language development at the time when they were ready to enter primary school. The sample consisted of 55 kindergarten children whose fathers came from different occupational strata. The technique used was story narration. The findings were as follows:

1. The general trend is that language retardation increases as paternal occupational level decreases.

2. The differences attain a level of significance in number of sequences repeated, in quality of language used, and in the degree of comprehension.

3. The differences are not significant in the number of words used by children to narrate the story.
4. It is seen that in spite of the best efforts of the school, the differences between the children of professionals and those of the skilled and semi-skilled workers persist with regard to the sequence recalled, quality of language used and degree of comprehension.

(c) "Effect of pre-school education on the language and intellectual development of under-privileged children." 37

The study discusses the effect of pre-school education on the language and intellectual development of under-privileged children. The sample consists of children of semi and unskilled workers. The experimental group formed was from the kindergarten class of the nursery school and the controlled group was formed from Class-I of the primary school.

It was interesting to note that children from pre-school are doing consistently better in all aspects of language and intellectual development.

Though the trend is that children in the preschool are doing consistently better than the primary school children in all aspects of language development, it reaches the level of significance only in number of words used and in the degree of comprehension.
A second finding is that the preschool group is found to have a much higher score in intellectual development than the primary school group. The differences are found to be highly significant.

(d) "Effect of pre-school education on the school readiness of under privileged children of Delhi." 38

The results showed that the group with preschool education performed significantly better than the group without preschool education, when the children who have received education in corporation nursery schools before coming to class-I and group of children who were without any preschool education were tested. The tests consisted of reading and number readiness tests. The components of the reading readiness test were word meaning, visual perception and auditory discrimination.
Chapter II - References


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