

CHAPTER 5

CHAPTER V

SUMMARY

INTRODUCTION

One of the major problems faced by academicians is why some children in the class room are not able to learn like other children. The experts have their own reasons for explaining the phenomenon of non learning based on the presence of categories of students. From a sociologist's view there are tribal children, urban children and so on. Similarly according to psychologists there are mentally deficient, bright, or backward children. The economists offer another category, that is economically weaker child, affluent child etc. followed by medical practitioner who have their own classification to offer. In addition to all these categories a new order has been introduced recently bearing the name the "Deprived child". The experts consider the problem of 'Deprivation' as a global one because it could be cultural, economical, psychological intellectual, developmental, physiological etc.

The dictionary definition of "deprivation" emphasises the idea of "loss" but, as generally applied in the literature, the term suggests not only "loss" but also a "lack" of what is essential for adequate development. The concept of deprivation indeed, is a relative one, implying as it does that some individuals lack what others have and since individuals vary greatly in their views of what constitutes deprivation for themselves. It is never easy to determine what essential or desirable needs must be satisfied if adverse consequence are not to follow from lack of satisfaction of these needs.

From psychological point of view deprivation means dispossession or withholding of something from or taking away of something from. The dispossession or taking away can be either whole or partial, either full

or half or part there of. Used as a construct in psychology it means a state resulting from withdrawal or taking away of a thing from the person which in normal course should have been with him. It needs to be remembered that 'taking away' or withholding supply of a thing to the person would become deprivation only when the possession of or availability of it is required for his survival and growth and such an act could endanger his existence either partially or wholly. Although this, in general is the meaning of the term deprivation, it has been used differently by different investigators. This is to say, the term, in course of its usage has acquired narrow as well as broad connotations in contemporary psychological literature. Then one can also speak of objective and subjective meaning of deprivation for one may be actually deprived of certain thing but may not feel so.

During the past four decades there has been tremendous spurt in psychological, research on culturally deprived and impoverished communities and social group in the United States of America, Israel, England, Latin American Countries, Mexico, and India. These studies have been initiated as a consequence of growing awareness that there is a pressing need for improving the lot of deprived people on one hand, and as an outcome of growing curiosity among social scientists for understanding the effects of deprivational environment on behavioral and social processes.

Social economic and deprivation other types of deprivation have been found to be major sources of individual and social pathology, and it is believed that they lead to overwhelming accumulation of psychological deficiencies. Empirical evidence for such effects has been found in several studies. Jensen (1966) found that due to decreased exposure to varied stimulating environmental conditions disadvantaged children are found to be extremely underdeveloped in perceptual discrimination.

Jones (1966) observed that disadvantaged children's recognition ability, vocabulary and sentence structures are significantly below normal.

Personality development is also hampered due to socio-economic deprivation. It has been observed by Symmonds (1968) and Langmeier (1972) that deprivational conditions result in hardening of emotional feelings, insecurity and inferiority. Devis (1968) observed close connection between social deprivation and cognitive functioning in lower class children. Whiteman and Deutsch (1968) found that self - concept and verbal ability are significantly related to deprivation. Schooler (1972) has shown that psychological characteristics of adults can be explained in terms of early experiences Cox (1969) has reported that perceptual skill and field articulation become impoverished in culturally deprived children. Deprivation, though conceptualized in diverse ways, has also been shown to result in deficient learning and conceptualization (Birren and Hess, 1968; Stodoloski and Lesser, 1967).

Singh (1976, 1977) has reported a study on social disadvantage, intelligence and academic achievement. He found that the difference in intelligence and scholastic achievement between the socially advantaged and disadvantaged group increases with the increase in degree of social disadvantage. The degree of disadvantage was based on four factors, namely income, caste/ethnicity status, rural/urban residence and sex. The socially advantaged group had higher intelligence in rural and urban samples. Even after matching the socially advantaged and disadvantaged groups on intelligence, age, sex and rural - urban residence, the former had significantly higher scholastic achievement. Keeping in mind the importance of deprivation the present research is aimed to study deprivation in relation to age, sex and academic achievement of primary school pupils.

STATEMENT OF THE PROBLEM

The problem of the present investigation is "Effect of prolonged deprivation on learning difficulties and academic achievement of boys and girls"

OBJECTIVES AND HYPOTHESIS

As an exploratory study, in present research has three objectives.

Objective No. I

To study the effect of age, sex and deprivation on six learning difficulties and five type of scholastic achievement. In the light of these objectives following hypothesis were developed.

HYPOTHESIS

- a. Sex will have no effect on learning difficulties. In other words boys and girls will not differ significantly from each other on learning difficulties.
- b. Age will have no effect on learning difficulties. In other words young students (below 12 years) and old students (above 12 years) will not differ significantly from each other on learning difficulties.
- c. Deprivation will have no effect on learning difficulties. In other words high deprivation and low deprivation will have no effect on learning difficulties.
- d. Sex and age jointly will have no effect on learning difficulties.
- e. Sex and deprivation jointly will have no effect on learning difficulties.
- f. Age and deprivation jointly will have no effect on learning difficulties.

g. Sex, age and deprivation jointly will have no effect on learning difficulties.

h. Sex will have no effect on scholastic achievement. In other words boys and girls will not differ significantly from each other on scholastic achievement.

i. Age will have no effect on scholastic achievement. In other words young students (below 12 years) and old student (above 12 years) will not differ significantly from each other on scholastic achievement.

j. Deprivation will have no effect on scholastic achievement. In other words high deprivation and low deprivation will have no effect on scholastic achievement.

k. Sex and age jointly will have no effect on scholastic achievement.

l. Sex and deprivation jointly will have no effect on scholastic achievement.

m. Age and deprivation jointly will have no effect on scholastic achievement.

n. Sex, age and deprivation jointly will have no effect on scholastic achievement.

Objective No. II

To study the relationship between fifteen deprivation factors (independent variables) and six learning difficulties and five scholastic achievement (eleven dependent variables) for boys and girls separately.

Objective No. III

To make prediction of learning difficulties and scholastic achievement on the basis of fifteen deprivation factors.

DEPENDENT AND INDEPENDENT VARIABLES OF THE STUDY

In the present investigation learning difficulties and academic achievement are studied as dependent variables, while age, sex and deprivation are studied as independent variable. There are six types of learning difficulties namely (1) Spoken Language, (2) Motor Coordination (3) Personal Social Behaviour (4) Memory (5) Visual Perception (6) Auditory Comprehension. Similarly there are five type of academic achievement namely marks in the subjects of (1) Mathematics, (2) Hindi, (3) Science, (4) Social Studies, (5) Gujarati. In this way there are eleven dependent variables. The independent variables are (1) Age, (2) Sex, and (3) Deprivation. Deprivation variable has fifteen areas namely (1) Housing Conditions, (2) Home Environment, (3) Economic Sufficiency, (4) Food, (5) Clothing, (6) Formal Educational Experiences, (7) Rearing Experiences, (8) Childhood Experiences, (9) Parental Characteristics, (10) Interaction with Parents, (11) Motivational Experiences, (12) Emotional Experiences, (13) Religious Experiences, (14) Travel and Recreation, (15) Miscellaneous Socio-cultural Experiences.

SAMPLE

There are about 163 corporation schools in Baroda, which are located in six different localities namely, Sayaji Gunj, Raopura, Fatehpura, City area, Babajipura and Wadi. Out of 163 schools 52 are for boys, 45 for girls, and 66 are co-educational or mixed. The schools cater to the need of the poor, underprivileged population and provide education free

of cost. They also provide scholarships to deserving children, belonging to scheduled castes and scheduled tribes.

In the present study a sample of 504 students was selected from 6th and 7th standard of which 252 were boys and 252 were girls the age range of all the students irrespective of their sex was from 9 to 16 years with median age of 12 years. The class, sex, school and area wise distribution of the subjects is shown in the table given below :

	Girls School		Boys School		Co-educational School				
	Std.VI Std.VII		Std.VI Std.VII		Std.VI Std.VII				
	Girls	Girls	Boys	Boys	Boys	Girls	Boys	Girls	
Sayajigunj	15	15	15	15	6	6	6	6	84
Raopura	15	15	15	15	6	6	6	6	84
Fatehpura	15	15	15	15	6	6	6	6	84
City Area	15	15	15	15	6	6	6	6	84
Babajipura	15	15	15	15	6	6	6	6	84
Wadi	15	15	15	15	6	6	6	6	84
Total	90	90	90	90	36	36	36	36	504
Grand Total	180		180		144				

RESEARCH TOOLS

PROLONGED DEPRIVATION SCALE

To measure the prolonged deprivation of the subjects, deprivation scale constructed by G.S. Misra (1980) was used. The scale consists of 96 items measuring fifteen deprivation areas. There were about eight items specifically meant for rural conditions which were not applicable to the urban setting, hence they were eliminated. Thus, the final scale was consisted of 88 items. The different areas of deprivation and number of items to measure each of them are shown below :

DEPRIVATION	NO. OF ITEMS
1. HOUSING CONDITIONS	5
2. HOME ENVIRONMENT	8
3. ECONOMIC SUFFICIENCY	6
4. FOOD	4
5. CLOTHING	4
6. FORMAL EDUCATIONAL EXPERIENCES	6
7. REARING EXPERIENCES	5
8. CHILDHOOD EXPERIENCES	7
9. PARENTAL CHARACTERISTICS	7
10. INTERACTION WITH PARENTS	6
11. MOTIVATIONAL EXPERIENCES	10
12. EMOTIONAL EXPERIENCES	8
13. RELIGIOUS EXPERIENCES	3
14. TRAVEL AND RECREATION	4
15. MISCELLANEOUS SOCIO-CULTURAL EXPERIENCES	5
TOTAL	88

TEACHERS RATING SCALES

To measure the learning difficulties of the pupils "Teachers Rating Scale" constructed by Mohite (1986) was used. This scale was specifically constructed to identify children facing difficulties in reading and writing. The scale is divided into five sub scales namely (1) Spoken Language, (2) Motor Coordination, (3) Personal Social Behaviour, (4) Memory, (5) Visual Perception and (6) Auditory Comprehension. In all there were 41 statements for the above learning difficulties is rated by the teachers.

SCHOOL RECORDS

In the present study annual marks of the students were taken as an index of academic achievement. Thus the previous years final

examination marks of the sixth and seventh grade students in the subjects of Mathematics, Hindi, Science, Social Studies, and Gujarati were obtained from the school records.

DATA COLLECTION

ADMINISTRATION OF PROLONGED DEPRIVATION SCALE

As has been mentioned earlier that prolonged deprivation scale was translated into Gujarati. It was cyclostyled and the copies were distributed to the students of sixth and seventh standards. The test includes 88 questions and each question has five alternate responses namely a, b, c, d, e. Which indicated degree of deprivation from most to least. The subjects rated each question carefully and checked one of the five response which described their response in a best way. On an average, the students took minimum two hours to complete the questionnaire. When the students completed the questionnaire they were collected by the investigator.

The researcher administered the questionnaires to one class at a time. In this way the required data for prolonged deprivation scale was collected.

The first page of prolonged deprivation scale contained instructions as well as personal information columns like students name, father's name, sex, age, standard, caste, subcaste, religion, date of birth, mother tongue, address and name of the school. The investigator saw that these informations were properly filled in by each students.

ADMINISTRATION OF THE TEACHERS RATING SCALE

The information about learning difficulties was collected by distributing the Teachers Rating Scale to the class teachers who rated each student on six learning difficulties namely, Spoken Language, Motor

Coordination, Personal Social Behaviour, Memory, Visual Perception and Auditory Comprehension. The Spoken Language had 12 dimensions and for each dimension there were 12 statements. Motor coordination ability had six dimensions and for each dimension there was one statement, personal social behaviour had nine dimensions and for each dimension there was one statement memory had three dimensions and for each dimensions there was one statement. For visual perception there were four dimensions and each of them had one statement. Auditory comprehension had seven dimensions and for each dimension there was one statement.

Thus, in all there were 41 statements for six types of learning difficulties. The teacher rated each statement on a three point scale namely A, B and C. Category A, indicated below average ability, category B, average ability and category C, above average ability. The teacher rated each students by selecting one of the three categories which described his learning difficulty in a best possible manner. it may be remembered that the teachers rated only those students who were administered prolonged deprivation scale.

SCHOLASTIC ACHIEVEMENT DATA

The scholastic achievement of the students was collected in the form of annual marks obtained by the students at the last examinations. Thus, marks in the subjects of Mathematics, Hindi, Science, Social Studies and Gujarati were collected by the investigator from the school records.

SCORING OF THE PROLONGED DEPRIVATION SCALE

As has been mentioned earlier each question in prolonged deprivation scale had five response categories namely A, B, C, D, E. Category A to E show increased magnitude of deprivation. The scoring procedure for

different response categories is as follows. Category A was given a score of one. B, a score of two, C, a score of three. D, a score of four and E, a score of five. Thus, high score indicates high deprivation and low score indicates low deprivation. In this way all the items were scored and total deprivation score for each subject was found out.

THE SCORING OF THE TEACHERS RATING SCALE

The teachers rating scale was a three point scale with category A, B, and C. Category A, indicates below average ability, B, indicates average ability, and C, indicates above average ability. Category A was given a score of 0, B a score of 1 and C, a score of 2. All the score on 41 items were totaled and for each individual a total rating score was found out, unlike prolonged deprivation scale a high score on learning difficulties indicated lesser degree of learning difficulty and low score indicated high degree of learning difficulty.

ANALYSIS OF DATA

In order to study the effect of age, sex and deprivation on learning difficulties and scholastic achievement, analysis of variance was used. The relationship between dependent and independent variables was determined by Pearson Product Moment Correlation method. Prediction of dependent variable was made by utilizing step wise regression analysis technique.

MAJOR FINDINGS

PART I : RESULTS OF ANALYSIS OF VARIANCE

With regard to spoken language as a dependent variable it was found that there was no significant difference between male and female pupils on this variable. Similarly there was also no significant difference between young and old pupils on this variable. However there was

significant difference between high and low deprived groups on this variable. The performance of high deprived group was poor in comparison to low deprived groups. There were no significant interaction effects of sex, age and deprivation on spoken language.

With regard to motor coordination ability there were no significant effects of sex and age but deprivation did affect the motor coordination ability. In other words highly deprived and lowly deprived group significantly differed from each other on this variable. Sex and deprivation and age and deprivation jointly affected motor coordination ability.

On personal social behaviour which is another dependent variable it was found that there was significant difference between male and female, young and old, high and low deprived pupils. Sex and age and sex and deprivation jointly affected personal social behaviour.

On memory which is another dependent variable it was found that there was significant difference between male and female, young and old, high and low deprived pupil. Sex and age, sex and deprivation age and deprivation; and sex, age and deprivation jointly influenced memory.

With regard to visual perception, it was found that there was no significant difference between male and female pupils on this variable. Similarly there was also no significant difference between young and old pupils on this variable. However there was significant difference between high and low deprived groups on this variable. The performance of highly deprived groups was poor in comparison to low deprived group. There were no significant interaction effect of sex, age and deprivation on visual perception ability.

With regard to auditory comprehension ability there were no significant effect of sex and age but deprivation did affect the auditory comprehension

ability. In other words highly deprived group and lowly deprived group significantly differed from each other on this variable. There were no significant interaction effect of sex, age and deprivation on auditory comprehension ability. Regarding mathematic achievement it was found that there was significant difference between male and female, young and old, high and low deprived pupils. There were significant interaction effects of sex and age; sex and deprivation on mathematics achievement.

With respect to achievement in Hindi there were significant effect of sex and deprivation, but there was no significant effect of age. In other words male and female and highly deprived and lowly deprived groups significantly differed from each other in achievement of Hindi. Sex and deprivation; and age and deprivation jointly affected Hindi language performance. Similarly there was significant interaction effect of sex, age and deprivation variables on Hindi performance.

Regarding science achievement it was found that there was significant difference between male and female pupils in learning of science. Similarly there was significant different between high and low deprived pupils also on this variable. High deprived group performing poorly than the low deprived group. However there was no significant difference between young and old pupils on this variable. Sex and deprivation in combination did bring change in science learning.

With respect to Social Studies achievement there was significant effect of sex and deprivation in learning of this subjects. In other words there was significant difference between male and female students. Similarly there was significant difference between high and low deprived children. However there was no significant difference between young and old pupils in Social Studies performance. There was significant interaction

effect of sex and age; sex and deprivation; age and deprivation; and sex, age and deprivation on achievement in social studies.

In learning of Gujarati language subject it was seen that there was significant difference between male and female students on this variable, but there was no significant difference between young and old pupils in learning of this subject. There was significant difference between high and low deprived students in learning Gujarati. There was significant interaction effect of sex and age, sex and deprivation and sex, age and deprivation on the performance of Gujarati language.

PART II : CORRELATION BETWEEN LEARNING DIFFICULTIES AND ACADEMIC ACHIEVEMENT AND DEPRIVATION

Correlations between learning difficulties and academic achievement and deprivation areas were computed separately for boys and girls.

In the case of boys it was found that housing condition as an independent variable highly correlated with spoken language, motor coordination, personal social behaviour, memory and visual perception. Similarly housing condition home environment, economic sufficiency, food, clothing, formal educational experiences, rearing experiences, characteristic of parents, interaction with parents, Motivational experiences, emotional experiences, travel and recreational experiences, religious experiences and socio-cultural experiences and childhood experiences were significantly related with all the learning difficulties namely spoken language, motor coordination ability, personal social behaviour, memory, visual perception and auditory comprehension. It was observed that there were very few significant relationship between deprivation areas and academic achievement. For example clothing was significantly related with performance in mathematics. Interaction

with parents was significantly related with performance in mathematics and Gujarati. Similarly motivational and emotional experiences are significantly related with performance in Hindi. Religious experiences was found to be related with performance in social studies. Childhood experiences were significantly related with performance in social studies. All the above relationship were significant at either .05 or .01 level.

Housing condition, home environment, economic sufficiency, food, educational experiences and rearing experiences, parental characteristics, travel and recreational experiences and socio cultural deprivation were not at all related with any of the academic achievement variables.

In the case of girls it was found that housing condition as an independent variable was highly related with spoken language and performance in mathematics, and science. Similarly, home environment variable correlated with spoken language, motor coordination, personal social behaviour and performance in mathematics. Next independent variable namely economic sufficiency was highly correlated with spoken language, performance in mathematics and science. Other independent variable that is deprivation of good food was correlated with spoken language, achievement in mathematics, science and social studies. Clothing was found to be related with spoken language, motor coordination ability, personal social behaviour, achievement in mathematics and science. Educational experiences was significantly related with spoken language, motor coordination ability, memory, visual perception, performance in mathematics, hindi, science, social studies and gujarati. Other independent variable such as rearing experiences, parental characteristics interaction with parents, motivational experiences, emotional experiences, travel and recreation, religious experiences, socio-cultural experiences, childhood experiences were significantly related with the learning difficulties namely spoken language, motor

coordination ability, personal social behaviour, visual perception and achievement in mathematics, hindi, science and social studies.

Housing condition, home environment, economic sufficiency, food were not related with motor coordination ability, personal social behaviour, memory, visual perception, auditory comprehension, achievement in hindi, Social studies and gujarati language. All the above correlations were significant at either .05 or .01 level.

Auditory comprehension ability was not related with any of the independent variables.

PART III : PREDICTION OF LEARNING DIFFICULTIES AND ACADEMIC ACHIEVEMENT ON THE BASIS OF DEPRIVATION FACTORS

An over all observation of regression analysis shows that out of fifteen variables very few variables were operative in prediction of learning difficulties and academic achievement.

In the case of boys spoken language as a dependent variable was significantly predicted by only one variable namely clothing to the extent of seven percent.

Motor coordination learning difficulty was predicted significantly to the extent of 13 percent by two variables namely interaction with parents and housing condition.

Personal social behaviour was significantly predicted to the extent of 13.12 percent by two variables namely recreational experiences and housing conditions.

Memory ability was significantly predicted to the extent of 10.88 percent by only one variable namely recreational experiences.

Visual perception ability at a dependent variable was significantly predicted by one variable namely religious experiences to the extent of 4.68 percent.

Auditory comprehension ability was significantly predicted by two variables viz. interaction with parents and educational experiences to the extent of 3.20 percent.

Achievement in Mathematics was significantly predicted by two variables namely clothing and socio cultural experiences to the extent 3.38 per cent.

Achievement in Hindi language was significantly predicted by two variables namely interaction with parents and educational experiences to the extent of 4.5 percent.

Achievement in Science was not predicted significantly at all by any of the 15 deprivation conditions.

Achievement in Social Studies was predicted significantly to the extent of 1.61 percent by the only variable namely travel and recreational experiences.

Achievement in Gujarati language was predicted significantly to the extent of 6.30 percent by two variables namely parental characteristics and emotional experiences.

In the case of girls spoken language as a dependent variable was

significantly predicted by two variables namely childhood experiences and religious experiences to the extent of 13.32 percent.

Motor coordination learning difficulty was predicted significantly to the extent of 5.80 percent by only one variable namely childhood experiences.

Personal social behaviour ability was predicted significantly to the extent of 2.20 percent by one variable namely motivational experience.

Memory Power was predicted significantly to the extent of 2.70 percent by only one variable namely childhood experiences.

Visual perception ability as a dependent variable was significantly predicted by childhood experiences to the extent of 4.5 percent.

Auditory comprehension ability as a dependent variable was not significantly predicted by any of the 15 variables.

Achievement in Mathematics was significantly predicted by one variable namely childhood experiences to the extent of 6 percent.

Achievement in Hindi language was predicted significantly to the extent of 10.90 percent by two variables namely socio-cultural experiences and religious experiences.

Achievement in Science was predicted significantly to the extent of 9 percent by two variables namely religious experiences and parental characteristics.

Achievement in social studies was predicted significantly to the extent of 9 percent by three variables viz. parental characteristics, socio cultural, and travel and recreational experiences.

Achievement in Gujarati language was significantly predicted by only one variable namely religious experiences to the extent of 5 percent.

CONCLUSIONS

1. Boys have more learning difficulties in personal social behaviour, and memory as compared to girls.
2. Girls scholastic achievement is significantly higher in mathematics, hindi, science, social studies and gujarati as compared to boys.
3. Old pupils irrespective of their sex have more learning difficulties on personal social behaviour and memory as compared to young pupils.
4. Old pupils achieve more marks in mathematics than young pupils.
5. High deprived students irrespective of their sex and age face more learning difficulties on spoken language, motor coordination ability, personal social behaviour, memory, visual perception and auditory comprehension as compared to low deprived students.
6. Highly deprived children achieve less marks in Mathematics, Hindi, Science, Social Studies and Gujarati as compared to low deprived children.
7. Sex and age jointly affected personal social behaviour, memory, achievement in Mathematics, Social Studies and Gujarati.
8. Sex and deprivation jointly affected personal social behaviour, memory, achievement in mathematics, Hindi, Science, Social Studies and Gujarati.
9. Age and deprivation jointly influenced motor coordination ability, memory, achievement in Hindi, Social Studies.

10. Sex, age and deprivation had a combined effect on memory, achievement in Hindi, Social Studies and Gujarati.

11. In the case of boys there was significant relationship between all the fifteen deprivation areas and six learning difficulties. Implying that deprivation had positive effect on learning difficulties and a more simple way the finding shows that as the deprivation increases learning difficulties also increase in other words deprivation any of fifteen areas is major cause of learning difficulties. Home environment which is one of the area of deprivation is significantly related with social studies. Clothing was found to be significantly related with scholastic achievement and Gujarati.

12. In the case of girls all the fifteen deprivation areas were significantly related with spoken language and motor coordination learning difficulties and achievement in Mathematics, Hindi, Science and Social Studies. These indicates that the deprivation area are responsible for learning difficulties and scholastic achievement.

13. In terms of their importance in predicting learning difficulties and academic achievement religious experiences, childhood experiences, interaction with parents, socio cultural experiences parental characteristics clothing, housing condition, rearing experiences, travel and recreational experiences, emotional experiences motivational experiences were found to be the best predictors.

14. Childhood experiences significantly contributed in the prediction of five dependent variable namely spoken language motor coordination ability, memory visual perception, achievement in mathematics religious experiences significantly contributed in the prediction of visual perception, spoken language, achievement in Hindi, Science and Gujarati.
