CHAPTER V : SUMMARY AND CONCLUSIONS

Summary and Conclusions

The present study throws light on the effectiveness of psychological intervention on psycho-social development of day school and residential school children with moderate Intellectual Disability. The study particularly focuses on the effectiveness of behavioural techniques in the adaptive skills development among moderate Intellectually Disabled students.

In the present scenario of Globalization and Privatization, rearing even a normal child is a sort of challenge for the parents. Hence, having a Intellectually Disabled child in the family is an additional burden on the family members especially the parents.

The inadequately informed parents can be more dangerous to his/ her son/daughter than others. No amount is sufficient to respond to the growing worries and issues of parents of today. We need to come out with awareness building materials that suit the needs of parents of different strata, literate, illiterate, those residing in remote rural and tribal areas and those residing in urban areas. Their doubts, worries and concerns are the same, though the forms in which they are manifested are different.

The parents of Intellectually Disabled child are apparently busy throughout life in daily chores. In fact, they are afraid of rearing such a non-normal child due to lack of knowledge. Hence, the parents from upper to lower class prefer to send their child in residential institutions to cope up their fears as well as to rationalize. However, due to lack of knowledge about the possible development of their children they make them
deprived of their family, siblings and other significant persons. Still parents remain more confused whether the hostel facility will benefit their child or not.

Hence to meet the needs of the parents, to make them aware it is essential to provide proper guidelines regarding the residential set up and its benefit for the further development of the child. This makes necessary to train the staff including the attendants to use the strategy that has been known to develop in learner, vocation relevant skills, life long learning skills and enhance their living. It is a strategy that ought to be incorporated in the day school as well as residential institutions.

5.1 Need for the Study

The application of psychological intervention requires a clear understanding of its concept and process. The review of literature on psychological intervention shows a dearth of research in the application of Psychological literature in training adaptive skills amongst the moderate Intellectual Disables. Studies on the applicability of Psychological intervention on psycho-social development would help the special educators to adopt and adapt the strategy to suit the needs of the Intellectually Disabled students.

5.2 Review of Related Literature

Many research studies were referred to and were presented under three broad areas:

1. Specific Characteristics in Relation to Intellectual Disability

2. Research on Residential and Non-Residential Institutional Intellectual Disables

3. Studies on Psychological Interventions for the Intellectually Disabled
The review of literature related to psychological intervention of day school and residential school reveals plenty of studies done on the causes, cognitive and learning characteristics. There has been studies on curriculum development as well also on adaptive skills development amongst the intellectual disables. Very few studies are available in the psychological intervention for residential institutions.

5.3 Statement of the Problem

Efficacy of psychological intervention on psycho-social development of children with moderate intellectual disability in day schools and residential schools

5.4 Objectives

1. To study comparatively the psychological and social development of the moderate intellectual disables admitted in residential schools and those staying with their parents.

2. To study if intervention strategies could facilitate to the improvement of Children with moderate intellectual disability.

3. To study the gender difference with respect to psycho-social development of day school and residential school Intellectual Disables.

4. To prepare the guidelines for improvement of moderate Intellectual Disables in residential schools.

5.5 Hypotheses

The following hypotheses were formulated for the study:

1. Psycho-social development of the children with moderate Intellectual Disability of day schools would be better than those of residential schools at pre-testing level.
2. At both, day schools and residential schools, intervention strategies will facilitate
the performance of children with intellectual disability.

3. Day school Intellectual Disables will show better psycho-social development than
residential school Intellectual Disables as a result of Psychological intervention.

4. There would be no gender difference with respect to psycho-social development of
the Children with intellectual disability.

5.6 Variables

- Independent Variables:
  - Type S. - RS and DS
  - Type E. - Psychological intervention.

- Dependent Variable: Adaptive behavior (The scores on Behavior assessment
  scales for Indian Children with mental Retardation by Reeta Peshawaria and S.
  Venkatesan)

- Control variables
  - Children with moderate intellectual disability (I.Q.- 35-49)
  - RS students staying in the institution for last 3 years. Age range was
decided to be between 12yrs and 16yrs. Moreover, only those who have
admitted in the hostel since last 3years were considered for research
purpose.

5.7 Sample

Total 66 Moderate intellectually disabled children i.e. 35 of residential schools and 31
of day schools each consisting of 50% male and 50% female, were comprised the
sample.

5.8 Tools
5.8.1 Self structured questionnaire consisting of 18 items seeking information regarding name, date of birth, I.Q., sex, name of the school, date of admission, etc. The questionnaire was filled up by the researcher on the basis of the information provided by the social worker and the personal files of the concerned students.

5.8.2 “Behavior assessment scales for Indian Children with mental Retardation” (BASIC-MR) has been developed as part of the project to develop material for teachers in the use of Behavioural Technology in training intellectually disabled children in special schools. An attempt has been made by the authors Reeta Peshawaria and S. Venkatesan to include the items which are culturally relevant to Indian special school settings. The scale published in 1992 has been designed to elicit systematic information on the current level of behaviors in school going children with Intellectual Disability. The scales are suitable for mentally handicapped children between 3-16 (or 18) years. The scales are relevant for behavioural assessment and can also be used as a curriculum guide for Program planning and training based on the individual needs of each mentally handicapped child. The scales have been field tested on a selected sampled population.

5.8.3 Intervention programme

Intervention Program was designed on the basis of functional level of each of the respondents and somewhat common achievements of the respondents. The appropriate intervention program was designed by the researcher and was implemented after initial assessment.

Six step sequence:

Successful application of behavioural technique followed a six step sequence.
Step I: Simply involves defining the target behavior. In the current research the target behavior was according to the domains selected and the items within it. For example, in the domain I motor domain the target behavior was students should be able to turn the pages singly. Within step-I the researcher had to observe each student with the following questions in mind and accordingly give rating to the particular behavior of the student.

a. What observable behavior do you want to increase or decrease
b. Has the behavior been defined in objective terms
c. What do you want the child ultimately to do?

When questions in step I have been operationally specified, the researcher would move to Step- II.

Step II: Deciding on an appropriate measurement procedure. In the given example while placed the book the student should pick up book and turn the pages. Once the behavior has been pinpointed it becomes necessary to maintain accurate measurement. So that behavior can be charted for analysis. The target behavior selected will influence the types of measurement used. Questions related to this step include the following:

a. What is the time/ period/ interval required for measuring the target behavior?
b. What type of material will be used in data collection? (e.g. books, letters etc.)
c. How will be the data charted? (Ratings on the observation sheet)
d. What evaluation design should be used? (E.g. Baseline design, rating on the basis on observation.)

Step III: Baseline is taken and an ABC analysis is developed. Baseline is merely a record of behavior under the classroom conditions. The reason for taking baseline
measurement is to provide a basis for comparing the behavior under normal condition in which a special technique is being applied.

An ABC procedure involves analyzing the antecedent stimuli (A) and consequences (C) maintaining the target behavior (B).

Step-IV: the researcher implements the training strategy. After that the training was divided into sessions.

Session I: the students were demonstrated with proper method according the domains for example, to turn the page. As per the progress such as the one in the beginning needed to provide physical support to turn page, showed willingness/ preparedness to turn the page, was reinforced verbally saying very good or providing physical support. But when the student actually demonstrated the action, he or she was supplied with mild reinforcement such as chocolate, colour pencils etc. After continuous 3 appropriate responses, the student was supplied with the reinforcement. This was continued for approximately 20-25 minutes in a group. At the end of the session I the response of the student was recorded. Homework was given, e.g., see the pictures from a book at home.

Session II: review of the homework was taken. Only few students among the residential school showed favourable response of completing the task. The next day also the same task was repeated, presented the same book, on completion of the task, without considering the number of responses with variable ratio reinforcement was provided.

Session III: in this session the review was taken and continued with the same task. But this time after correct response only verbal reinforcement was provided.

Session IV: students were introduced with the new book than the one used in the training phase and the responses were recorded.
Session V: No reinforcement was provided and the responses were recorded.

The sessions as well as intervention strategies were planned on the basis of the domain as well as significance of the strategies for the students.

Step-V: The researcher evaluates the effectiveness of the intervention. Essentially step V asks the question, “Did the intervention strategy substantially affect the baseline score? (On the basis of the post-test ratings)

Step-VI: The researcher develops a generalization and / or discrimination procedure. It sometimes happens that a new behavior is learned in one situation but not transferred to another, or behavior learned in one situation is not appropriate in another. To avoid generalization the researcher practices new behavior in numerous settings.

5.9 Procedure of data collection

Permission for working with the children with Intellectual Disability, special educators and caregivers was taken from the principals of the institutions. Data were collected from four institutions (2 DS and 2 RS) over a period of approximately one and half year from Pune District.

Initially, a self structured questionnaire was filled up for each selected student with the help of the social worker and the personal file. The questionnaire consists of questions regarding demographic variables such as date of birth, I.Q., family background, education and academic qualification of the parents and date of admission etc.
Pre-testing was done for all the selected students by administering Behavior assessment scales for Indian Children with mental Retardation by Reeta Peshawaria and S. Venkatesan

Then, the students were randomly assigned to Intervention Group and no intervention group.

- Day school group- i) No intervention Group  ii) Intervention group
- Residential school- i) No intervention Group  ii) Intervention group

Intervention Program was planned. Approximately five sessions for every item from each domain for each student from experimental groups of residential and day school during the period of 9-10 weeks were conducted

After the intervention Program post-testing was done by administering Behavior Assessment Scales for Indian Children with Mental Retardation by Reeta Peshawaria and S. Venkatesan (1992).

5.9 Statistical Technique

- Due to the size of sample and ordinal scaling type of variables, chi-square statistics from correlation instead of the traditional chi-square analysis was decided and implemented.

- It was decided to apply Two Way Analysis of Variance instead of ‘t’ test to compare the difference between the performances of No intervention and Intervention Group of each type of school. The item wise performance on each domain was analyzed with the help of ANOVA.

5.10 Results
1. Psycho-social development of the moderate intellectual disables of day schools would be better than those of residential schools at pre-testing level. In the verification of first hypothesis, it was proved on 5 out of 28 items and on 1 out of 28 items, it was proved in reverse direction. Hence it is concluded that as such there is no difference between psycho-social developments of the children with moderate intellectual disability of day schools and those of residential schools.

2. The second hypothesis stating at both, day schools and residential schools, intervention strategies will facilitate performance of moderate intellectual disables could be accepted. It can be observed that out of 28 items on 15 items the intervention group performed better as compared to no intervention group in both the type of institutions. This difference was found statistically significant. Whereas on 6 items the DS participants performed better than RS participants, no matter whether intervention provided or not. These results indicate two important issues: i) positive impact of intervention on the performance of intellectually disabled children and ii) importance of parents’ involvement in the development of children with intellectual disability.

3. The third hypothesis stating day school children with intellectual disability will show better psycho-social development than residential school Intellectual Disables as a result of Psychological intervention was verified. The RS and DS experimental group did show significant relationship with respect to improvement score. Out of 7 domains, only on one domain viz., language, the improvement score was significantly related with type of school. Item 8 i.e. Follows post positions like in, on, under \( (\chi^2(1) = 3.62, p<0.05) \) was found statistically significant relationship out of 28 items. The residential school children showed
improvement as a result of intervention as compared to day school children with moderate intellectual disability.

However, while thinking about all the domains and all results in consolidated manner, a thought arises in the mind that except on motor and ADL domain, on remaining five domains, viz., language, reading-writing, number-time, domestic-social and prevocational, overall the children with intellectual disability show poor performance at pretesting level. To lift them up from that level, the intervention has to be more rigorous. For the present project it could not be done.

To say candidly, the third hypothesis stating day school Intellectual Disables will show better psycho-social development than residential school Intellectual Disables as a result of Psychological intervention could not be accepted.

4. There would be no gender difference with respect to psycho-social development of the children with moderate intellectual disability. The fourth and last hypothesis was accepted. No gender difference between male and female Intellectual Disables of day school as well as residential school with respect to psycho-social development was found, significant.

5.11 Suggestions for further Research

- To apply the intervention strategies for the residential school Intellectual Disables, what seems to be needed is nothing short of a new theory of learning and instruction, a theory that will provide, on the one hand, principles for guiding authentic inquiry, knowledge construction and learning for Intellectually Disable students.
• On the other hand models for designing efficient and productive (standard-based) residential institutions. A Program planning, implementation and its evaluation should be facilitated.

The need of Research on residential institutions can be identified in the following areas:

1. Intervention Research:
There is need for more research on the effects and effectiveness of various psychological intervention strategies. It would be very useful to know through the research, the feasibility of psychological approach in terms of cost and effect against custodial care.

a. Psychological intervention and the traditional approaches could also be compared for their influence on psychosocial development of the Intellectually Disabled children.

b. The present study has shown few trends that Psychological intervention helps in psycho-social development of moderate Intellectual Disables. It can be re-established with larger sample size, more number of intervention sessions and qualitative analysis.

c. The same can be applied at the various levels such as severe and profound retardation.

d. Moreover, it would be useful to know, whether the same results could be obtained from students of different age groups and different categories of retardation.

e. It would be worthwhile to study the effects of psychological intervention on the other aspects of development such as vocational skills, sex education, etc.

The effectiveness of strategy can be measured by follow up sessions for its long term benefits. The psychological intervention strategies claim to develop skills
amongst the Intellectual Disables which are helpful in supporting themselves in the mainstream.

2. Application Research:
   a. Studies are needed in the field of special school education, residential school, and special educator’s education to find out the factors that influence the successful implementation of the psychological intervention strategies.
   b. It would be useful to study the material, technological and assessment requirements for psychological intervention strategies for the residential institutions and day schools that would result in productive inquiry and maximum achievement on the part of the Intellectual Disables.
   c. A study of teacher and student factors those are necessary for the successful implementation of psychological intervention would help to increase the productivity of the intervention groups.
   d. Psychological intervention would be more effective in bringing about the desired outcomes in Intellectual Disables if it is integrated into institution that is if it is institutionalized. It would also be necessary to study the challenges faced by special educators and other care takers in the development and application of the psychological intervention. To sustain the effectiveness of the psychological intervention it would be essential to know how special students perceive the strategy of psychological intervention.

5.12 Guidelines for improvement

With reference to the fourth objective that was to prepare the guidelines for improvement of moderate mentally Intellectual Disables in residential schools, the
researcher wishes to put forth few guidelines for residential schools for intellectually disabled children.

- The residential institutions should be set up in the community where the Intellectually Disabled individuals get an opportunity to interact with their normal peers.
- Instead of programs for medical need the emphasis should be placed on programmes for training. The institutionalized Intellectually Disabled children should be provided with intensive residential education program over a period of one, two or three years, which would help the youngsters sufficiently so that they could return to his home and make a satisfactory adjustment there.
- The institutions should provide specialized education program woven into a pattern of group living. This is suggestible for the adolescent group with special management needs which cannot be met adequately at home or in community programs.
- Thorough knowledge of the subject matter and the content, learning outcomes, planning of activities as per the individual needs, to be imparted to the specialized personnel, such as clinical psychologist, special educators, social workers and the attendants.
- A systematic and progressive reflective practice, in order that Intellectual Disables consider the act effectively and develop skill required in day to day life. All children be trained to make maximum use of their abilities.
- A communication system to be maintained between the parents and specialized personnel to provide continuing and effective guidance of the ward.
• Within an institution psychotherapy should be an integral part of a total program which is designed to maximize the healthy development of the residents.

5.11 Limitations of the study

• Samples are too small. In spite of sincere attempts, the sample size could not be enlarged.
• There are floor and ceiling effects operating in the items selected for intervention purpose.
• Significant others such as parents, school teachers were not included in the intervention programme as co-therapists.

To conclude with……

If by my love and understanding,
I can keep one heart from aching
If I can wipe another’s tears
And with my care smooth out his fear
If to one unloved I can give affection,
Thereby find his life a sense of direction
If I could strengthen another failing courage
In his hour of despair or help rebuild a broken life,
Once thought beyond repair
If I can lift another’s pain,
Make him want to live again
I shall not have lived in vain…..

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