

Effect of Behaviour Modification Training Through Parents and Teachers Support Among Adolescents with Multiple Disabilities 2021

Dr. Blessy Ann Varughese

Assistant Professor (Former) Department of Psychology, Marudhar Kesari Jain College for
Women, Vaniyambadi, Tamil Nadu, India
E-mail id: blessyvarughese326@gmail.com

Dr. N. S, Rohini

(Retired) Professor and Former Head, Department of Psychology, Avinashilingam Institute
for Home-Science and Higher Education for Women, Coimbatore, Tamil Nadu, India

Dr. R. Subhashini

Dean (Self-Finance) and Former Head-Department of Counselling Psychology,
Madras School of Social Work, Egmore, Chennai, Tamil Nadu, India

Abstract

The study 'Effect of Behaviour Modification Intervention through Parents and Teachers Support among Adolescents with Multiple Disabilities' was conducted in Chennai, at the 'National Institute for the Empowerment of Persons with Multiple Disabilities' (NIEPMD) and the 'Spastic Society of Tamil Nadu' (SPASTN) by using Convenient Sampling Method. Initially, 50 adolescents were randomly selected. They were screened for categorization and final selection (n=30). The sample included 19 boys and 11 girls in the age range of 12-18 years. The tools used for assessment were the Case History Schedule (2015) developed by the researcher, Test of Non-Verbal Intelligence (Brown, Sherbenou & Johnsen, 2010), Swassing-Barbe Modality Test (Barbe & Swassing, 1979), the Developmental Behavior Checklist (Parent and Teacher Versions) Einfeld & Tonge, 2002. The Behaviour Modification Intervention was applied to the sample with the help of their parents and teachers as support system. After two months, the re-assessment was done using the same tools. The follow-up session was conducted to analyze the sustenance of the outcome. The aim was to manage the problematic behavior in the adolescents with the help of their parents and teachers. Repeated measures- One-Way ANOVA was conducted to obtain the statistical results. The findings indicated a significant reduction in the behavior tribulations. This indicates that the effect of behavior modification intervention show promising result among the sample.

Keywords: Multiple Disabilities, Adolescents, Parents, Teacher, Behaviour Modification Intervention.

INTRODUCTION

Disabilities CP and ID in combination were assessed and intervened. Behavior issues were assessed. Intervention was designed as a remedy to overcome the behavior challenges. Standardized measures were used for administration. The research topic is linked to the discipline of “Rehabilitation Psychology” since the data collection procedure involved assessment and intervention for clinical population. A board group of adolescents with disabilities were selected to expose them to improvement and modification as it is the transition stage between childhood and adulthood. Intervention sessions included rehabilitative strategies like counseling, behavior modification, and teacher workshops. The sample included adolescents, their parents and teachers as support system. They were taken from two institutes for the differentially abled in Chennai. The focus was on the following aspects for the benefit of the sample, like facilitation, practice, motivation and feedback. Behavioral component was taken as the main focus for the research. The study was taken to enlighten parents and teachers in managing the adolescents efficiently for their betterment.

The families having adolescents with CP and ID require constant support programs for the well-being of their wards. The teachers, as special educators, were supported in designing and implementing the educational plan based on the requirement and capacity of the adolescents. Considering the previous reviews, the researcher envisaged a behavioural approach (a tailor-made intervention package) to be effective in reducing behavioral issues, among adolescents with CP comorbid ID. It focuses on the providence of the basic essential knowledge and support for this combination of disability involving parents, teachers, and adolescents through psycho education and training modules. In the present study, as a psychologist the researcher made an earnest effect on the following aspects:

- Importance of awareness and acceptance of disability.
- The effect of behaviour modification, focusing on the behavioral, aspects of adolescents.
- To educate and demonstrate practical skills to the adolescents, parents and teachers.
- Involvement of the parents and teachers as support systems to assist their wards in creating and sustaining positive outcome.

Rehabilitation means to restore the ability of the disabled person. It is the health care, provided to the people with permanent or temporary disabilities, to help them learn to overcome their disabilities. (Teotia, 2018). The application of psychological principles on adolescents with disabilities due to injury or illness is called Rehabilitation Psychology (APA, 2019).

Disability is a condition of the body or mind that makes it more difficult for the person to do certain activities and interact with world (National Centre on Birth Defects and Developmental Disabilities-Centre for Disease Control and Prevention 2020). Multiple Disabilities is the simultaneous occurrence of two or more disabling conditions that affect learning or other important life functions. These disabilities could be a combination of both motor and sensory nature. In the present research adolescents refer to boys and girls between 12-18 years, enrolled in an institute for the differentially abled, diagnosed with Cerebral Palsy co morbid with Intellectual Disability.

Adolescents with disabilities are individuals experiencing various difficulties and delays in their developments and maturity. They also face social exclusion, discrimination and inequality. A heterogeneous group of conditions involving permanent non-progressive central motor dysfunction that affect muscle tone, posture and movement is termed as cerebral palsy (Barkoudah and Glader, 2019). Cerebral Palsy is a neurological condition involving limited physical movement and flexibility. CP varying across the spastic (including monoplegia, diplegia, hemiplegia and quadriplegia), ataxic and athetoid types were considered for the study. Intellectual Disability is defined as a reduced ability to understand new or complex information, learn and apply new skills. ID leads to the inability to cope independently. This condition begins before adulthood with a lasting effect on development (World health organization, 2019). Intellectual Disability is a condition involving limited cognitive abilities, affecting daily living skills and the IQ range of 35-69 was considered for the research.

Role of Parents: Family is the chief component in the life of disabled adolescents. Family is a platform to fulfill specific responsibilities: particularly generating income, protection, maintenance of love and education, sticking to the social norms. The families with disabled adolescents require excess expenditure, time and energy for satisfying the needs. Parents' reaction to the birth of these adolescents varies extensively. It is speculative in five emotional stages.

- A feeling of shock and disbelief.
- Denial.
- Anger and guilt.
- Depression.
- Shift from self-absorption to concentrating on the adolescent's need.

Parents take multiple roles that often overlap and share common elements. They are provided training to make them more resourceful for the betterment of their adolescents. It has been recognized that a family has the value of following and practicing the implemented program. They often gain unique insights from their day to day experiences living with disabled adolescents. Parents serve as a mechanism providing mutual support and information to each other. They have initiated efforts in education, residential facilities, recreational and vocational services. Therapists and educators have accepted the potentials of the parents as active participants in planning and implementing professional advice at home. (All Jung National Institute of Speech and Hearing Disabilities, 2018).

Significance of rehabilitation for parents: It is important to understand the fact that disabled adolescents face many hurdles and struggles to pursue his or her primary tasks. Once parents know that their child is born with a disability, they become shattered, experiencing pain with the inability to recognize and acknowledge the situation. This leads to grieving, regretting and agony. Life changes and the innocent child becomes a matter of attention and concern. These adolescents have complex needs that scare their parents. They cannot leave them in such a situation; hence, they take responsibility and choose to sacrifice their lives for the wellbeing of their adolescent. In addition to giving medications and taking personal care at home, another important aspect is the rehabilitation process that can miraculously change the focus and direct the life of an adolescent productively (All Jung National Institute of Speech and Hearing Disabilities, 2018).

Teachers Offering Special Education: Every citizen has the right to education, he or she being normal or disabled. Nevertheless, adolescents with special needs have a difficulty benefiting from regular classroom education on account of their condition. Hence modifications

are made in curriculum decisions, classroom adjustments, financial aids, and teachers are trained appropriately. The role of teachers in special education is competent as they conduct different service programs (Myreddi. V and Narayana. J, 2000).

Special education is a major element of 'Community-Based Rehabilitation' (CBR) giving opportunity for the development of self-confidence and independence. The purpose of all CBR programs is to enable adolescents to receive assistance with the existing structures of education, health, and social services. In India, the service provision for adolescents is more or less similar to global circumstances. Earlier commencement of special schools was more in urban areas, but off late CBR program has been initiated to deliver services closer to their homes.

Behavioural Issues are socially inappropriate and maladaptive behavior patterns, as observed among adolescents with CP co morbid with ID. Disruptive or anti-social behaviours are actions that harm or lack consideration for the well-being of others. It can also be defined as any conduct that violates the fundamental rights of another person and any behaviour that is considered to be disruptive to others in society. Behaviour Modification was a customized intervention module designed by the researcher to manage the behavioural problems. The current research was considered from two perspectives disruptive behavior according to parents: home environment and teachers: classroom setting utilizing them as support system throughout the data collection process.

Behaviour modification is a form of psychotherapy used to modify maladaptive behaviour patterns. Adolescents with disabilities are affected by the physical and psychological changes. Peer acceptance and relationships are essential for social and emotional development. Parents lay the groundwork for healthy and positive self-esteem by caring for their adolescents, giving him or her lots of love, cuddles and smiles. A calm and understanding teacher are being patient, approachable and trustworthy.

The study entitled, 'Effect of Psychosocial Intervention through Parents and Teachers Support among Adolescents with Cerebral Palsy and Intellectual Disability' aims to explore the impact of the intervention on Behaviour.

METHOD

Objectives

- To assess the level of behavioural issues among adolescents with cerebral palsy co-morbid intellectual disability through parents and teachers assessment.
- To design a behavior modification intervention to manage the behavioural issues through parents and teachers support.
- To assess the pre-post and follow-up effect of the intervention on behavioural issues among adolescents with cerebral palsy co-morbid intellectual disability through parents and teachers assessment.

Hypothesis

- There will be a significant decrease in Disruptive Behaviour among adolescents from pre to post and post to follow-up phases as a result of Behaviour Modification from parents and teachers perspectives.

Tools Used for Administration

The screening was done using the Test of Non-Verbal Intelligence (Brown et al, 2010) was applied to identify the level of intelligence quotient in the sample. International Statistical Classification of Diseases and health related problems 10th revision (ICD 10 by WHO, 2016) was applied to categorize the sample under mild, moderate, severe and profound intellectual disability. Gross Motor Functional Classification System (Rosenbaum (Rosenbaum, 2007) This tool was used to classify the type of cerebral palsy which helped in understanding the samples' physical ability. Swassing Barbie Modality Test (Swassing and Barbie, 1979) This tool was applied to identify the learning styles of the sample under 3 categories: visual, auditory and kinesthetic. The pretest, post and follow up assessment was conducted using the Developmental Behaviour Checklist-(Einfield and Tonge, 2002 Parent and Teacher Versions) the purpose is to assess the behavioural of children, adolescents and adults with Developmental and Intellectual Disabilities. This tool was used to measure the level of behaviour problems which were the foundation for the development of the training module.

Procedure

Informal experimental research: before and after without control design was adopted, with the experimental group as the study sample. At the onset of the research 50 adolescents diagnosed with Cerebral Palsy co morbid Intellectual Disability were screened from the selected institutions by using convenient sampling. After the screening process, 30 adolescents, (19 boys and 11 girls) their parents and teachers, were selected for the final study. Informed consent was obtained before data collection. The participants were briefed on the research and the data was collected using Case History Schedule, Developmental Behaviour Checklist (Parent and Teacher Versions). The module was designed incorporating the learning styles visual, auditory and kinaesthetic. The pattern of communication was Bilingual-English and Tamil. After the pretest, the behavior modification intervention was given for 8 months under the supervision of the researcher and allowed two months of practice without the researcher's supervision. The post-test was assessed after two months and the follow-up was done one month later. Though the focus was to bring about an improvement in the adolescents, the assessments and effect of the intervention was taken from their parents (n=30) and teachers (n=13) as they play an essential role in their wards progress.

Intervention Package

Behaviour refers to the actions by which an organism adjusts to its environment. Challenging Behaviours or Behavioural Issues is a term used to describe behaviour that interferes with the child's daily life. Adolescents with Cerebral Palsy and Intellectual Disability are more vulnerable to these struggles because of the challenges that the physical and mental disability presents or even because of the underlying brain damage that led to the condition. Anyone with a disability can struggle with behavioural conditions, challenging behaviours or disorders like aggression, impulsiveness, self-harm, etc. To be considered a behavioural disorder or problematic behaviour, a set of behaviours must be exhibited in an adolescent for six months or longer. There must be a pattern of problematic behaviours that persist, despite interventions by parents or other adults. Examples of problematic behaviours are those that are inappropriate for an adolescent's age or development status: harming self or others, being destructive, hyperactive, impulsive, lying, stealing, aggression, etc. It is hard to locate specifically why adolescents with cerebral palsy and intellectual disability are more likely to have behavioural challenges. Outside factors also contribute including lack of proper care and

inability to cope. Difficulty with communication seems to be a significant factor in challenging behaviours. Any behaviour that is inappropriate for an adolescent's developmental age is problematic (American Psychological Association, 2015).

The problem behaviours are dependency, being, anxious or prone to conflict with their peer group and exhibiting antisocial behaviours. Adolescents with CP and ID also have emotional problems such as intense emotional responses to new challenges. Teenagers and adults are more prone to depression and anxiety disorders. (Child Development Corporation, 2019)

An ABC model of behaviour modification includes a chart as a direct observation tool that is used to collect information about the events that are occurring within an adolescent's environment. It is used to organize information over several observational sessions by recording the types of behaviours and the events that precede and follow. Observing and recording ABC data assist the team in forming a hypothesis statement and gathering evidence that the problem behaviour has been identified.

Behaviour modification techniques were taught using the ABC model (Antecedent, Behaviour and Consequence). Parents, teachers and adolescents were educated on effective tools and techniques to create positive behaviours. The goal was to create healthy systems within the family structure and classroom environment. In the present study, behaviour modification intervention eliminated undesirable behaviours and increased acceptable behaviour. It reduced aggressive impulses in adolescents. The manual 'Behavioural Approach in Teaching Mentally Retarded Children' by Reeta Pashwaria was also used in designing the package.

Techniques in Behaviour Modification.

Shaping: refers to slowly moulding or training an adolescent to perform a specific response. Modeling occurs when an individual intentionally displays a behavior. The token economy is designed to increase desirable behaviour and decrease undesirable behaviour with tokens. Adolescents receive tokens immediately after showing desirable behaviour. Reinforcement is a technique that strengthens or weakens behaviour. Chaining builds, a series of behaviour. Each provides the cue for the next. Prompting is defined as a cue or hint to induce

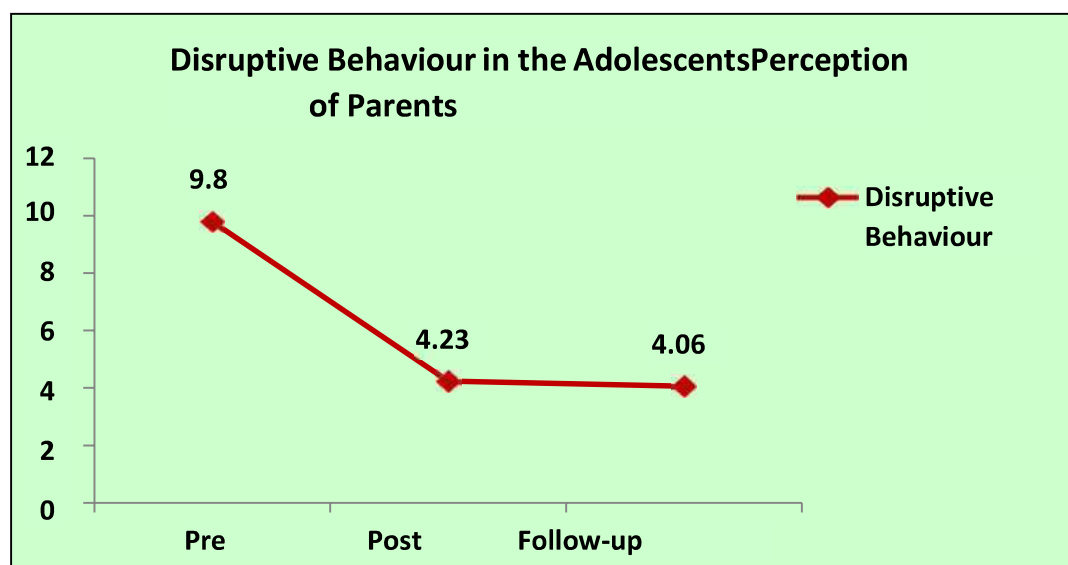
an adolescent to execute the desired behaviour. The researcher applied these methods in the current research to minimize the inappropriate behaviour in the sample.

Statistical Analysis

The comparison of the pre, post and follow-up stages was analyzed using the Repeated-Measures One-Way Analysis of Variance (ANOVA), performing pair-wise comparison of the within-group condition, using the Sidak Method of the post hoc analysis. The results were illustrated using line graphs to pictorially represent the changes that happened during the different phases. Statistical analysis was done using the Statistical Package for Social Sciences, Version 20.0.

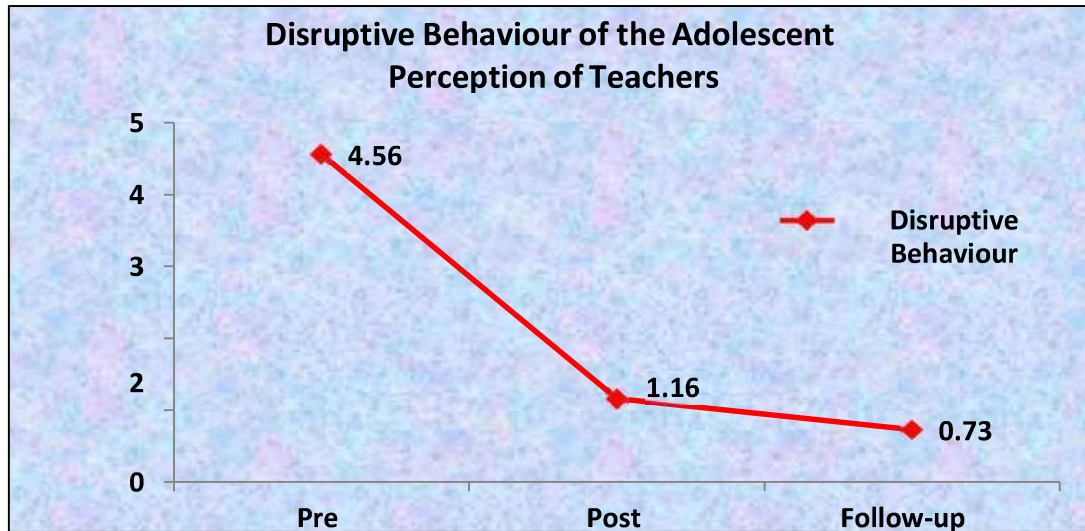
Results

Figure:1- Disruptive Behaviour in the Adolescents Perception of Parents



- On the graph the horizontal X axis represents the time duration of the Behaviour Modification Intervention (Pre, Post and Follow-Up Phases). The vertical Y axis represents the Estimated Marginal Means for the dimension measured. The above graph shows that there is a significant difference in the perception of parents on Disruptive Behaviour from pre-test to post-test scores, and further reduction from post-test to follow up scores. It is evident that Behaviour Modification strategies have helped the parents to deal with their adolescent's aggressive behaviour.

Figure: 2- Disruptive Behaviour of the Adolescent Perception of Teachers



- On the graph the horizontal X axis represents the time duration of the Behaviour Modification Intervention (Pre, Post and Follow-Up Phases). The vertical Y axis represents the Estimated Marginal Means for the dimension measured. The above graph shows that there is a significant difference in the perception of teachers on Disruptive Behaviour of their adolescents from pre-test to post-test scores, with sustenance from post-test to follow up scores. It is evident that Behaviour Modification has helped the teachers to handle their adolescents' Disruptive Behaviour appropriately.

DISCUSSION

Behaviour modification, has given a productive result: with the reduction in the disruptive behavioural problems, among peers and family in the classroom and home environment. The teachers and parents have tried their best in applying the strategies and techniques provided in training. The obtained outcome is maintained to a certain extent. This shows the weight age of the intervention package, supporting the population and the trainers' effort in executing it successfully.

The supportive reviews included in the results and discussions were relevant to the current research in terms of type of disability, interventions, variables and intension. At the same time there were differences in sample chosen, size, geographical area, nature of the study and age group. The uniqueness of the present investigation is that it was purely experimental with no control group, rare combination of disability category and two different perspectives

(parents and teachers). Adolescents, parents and teachers participated in the experimentation simultaneously where the caretakers were the support system. The customized intervention package was broad and in-depth that helped in managing behavioural issues. Effectiveness of the intervention was seen in this aspect. The sustenance of the outcome was maintained to a larger extent.

Conclusion

From the key findings of the study, it is appropriate to arrive at a reasonable conclusion regarding the effectiveness of the behaviour modification intervention on adolescents with cerebral palsy and intellectual disability. The perception of parents and teachers revealed that Behaviour Modification intervention was useful in reducing the Disruptive Behaviour in adolescents. This study intended to develop a Behaviour Modification Intervention. It was designed for the Indian culture with significance in the areas of disabilities and rehabilitation. The Behaviour Modification intervention has helped the adolescents to replace the negative behaviours with positive ones. The results of this study have opened a window for psychologist and other mental health professionals in understanding the efficacy and importance of tailor-made interventions in managing various problems of the disabled population.

REFERENCES

- All India Jung National Institute of Speech and Hearing Disabilities (2018) Guide to Parents and their Role- Retrieved from <http://ayjnihh.nic.in>.
- Barbe W.B and Swassing R.H (1979) Swassing Barbe Modality Test, Published by Zaner-Bloser, Inc Retrieved from <http://people.umass.edu>
- Dr. Teotia .A. (2018) Rehabilitation Psychology 1st Edition, Publisher- Notion Press, 210 pages, Chennai - Tamil Nadu- India.
- Einfeld. L and Tonge. J (2002) Developmental Behaviour Checklist 2nd Edition Publisher- Western Psychological Services, Torrance- Los Angeles, California, United States of America (USA).
- Johnsen. K, Sherbenou. K and Brown. L (2010) Test of Non-Verbal Intelligence 4th Edition, Pro- Ed- An International Publisher, Austin –Texas, United States of America (USA).

Myreddi .V. and Narayan .J. (2000) Preparation of Special Education Teachers: Present Status and Future Trends, Journal of Asia Pacific Disability Rehabilitation, Vol. 10 (1)
Retrieved from <http://www.dinf.ne.jp>.

National Center on Birth Defects and Developmental Disabilities, Centres for Disease Control and Prevention (2020) Disability and Health Overview, retrieved from <https://www.cdc.gov>.

Palisano. R, Rosenbaum. P, Walter. S, Bartlet. D and Livingston. M (2007) Gross Motor Functional Classification System (Expanded and Revised) Can Child Centre for Childhood Disability Research Institute for Applied Health Sciences, McMaster University, Retrieved from <https://www.canchild.ca>.