

## **Teaching of A.D.L through Behavior Modeling: A Case Study in Special Education**

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**Abstract:** Learning anything by seeing others and repeating the behavior by one's self is called Modeling. Activity for daily life, which includes bathing, brushing, grooming etc, is learned mostly by seeing others either at home or anywhere else, by the normal children. But when a matter comes of the mentally challenged child, in special education, who is mild in retardation and cerebral palsy in physical condition, then learning and understanding becomes a challenge for the trainer as well as for the trainee. The present study is an experimental intervention in which, one of the activity in ADL behavior is taught. The selected activity is divided into many sub-tasks through task-analysis. Completion of each sub-task was the targeted behavior, for which variable-ratio schedule was maintained along with 'Primary reinforcement' and External Prompting'. Date of progress was recorded through routine chart. Each sub-task got completed in sequence, which led towards the completion of selected major task. Finally the targeted activity of ADL was learned by the case, which drawn the conclusion that behavior modeling can't only help a mentally challenged person to perform the ADL activity but also it can make a person self-dependent.

### **Keywords-**

**Behavior modeling:** when anyone learns anything by seeing others & repeating the seen behavior is called Behavior modeling.

**Case study:** Case studies are in depth investigations of a single person, group, event or community.

**Special Education:** Special Education is an educational program which is designed for those students who are mentally, physically, socially or emotionally delayed.

**A.D.L-** Activity of daily life like bathing, grooming etc.

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### **I. Introduction**

Social learning theory, which provides the foundation for behavior modeling, asserts that most behavior are learned by observation and modeling. The theory says that we learn not only by doing but by watching what others do. Behaviour modeling uses the innate inclination for people to observe others to discover how to do something or to do something new.

ADL or activity for daily living is a term used in health care to refer to daily self-care activities within an individual's place of residence, in our environment or both, which includes feeding ourselves, bathing, dressing, grooming work, homemaking and leisure.

Through modeling ADL can be taught not only to the normal ones but to a person with mentally retarded and cerebral palsy too. The progress in behavior of such special case can be studied through a case-study, which is a depth study of a subject's life. It is a deep process of gaining all knowledge either negative or positive.

### **Nature of Case being Examined-**

The case is sixteen in chronological age. The mental status of the case is C. P (cerebral palsy), who is mild in retardation and has problem in behavior. In physical status the muscle tone is hypo tone (floppy) as well as hemiplegic at left side. The case shows 'Down's Syndrome', at the level of abnormality, but in mode of communication, is able in verbal and non-verbal, both. The development status shows the ability of the case in head holding, sitting, standing and walking. So the case is considered as non-costodial. So far as self-care is concerned the case is semi-independent.

### **Topic or field of study-**

The case study has been done in the field of special education. This stream of education is related to the whole educational process of the disabled children. The case is selected from the mentally challenged group. In ADL or activity for daily living a major task i.e. "brushing teeth". The case, who has been selected is since cerebral palsy, whose muscle is floppy in tone and shows mild in retardation. So the topic is Teaching of ADL through behavior modeling: A case study in special education.

**Reasons for choosing this particular case as an instance of the study being conducted-**

After the application of exercise therapy for hypo tone muscles, will behavior modeling help this case learning ADL behavior, i.e. brushing teeth, especially when the case is mild in retardation and Cerebral palsy too. It raised the curiosity of a researcher to choose this particular case.

**Details of the kind of study conducted the materials of research and external source-**

The study is : An Experimental intervention.

The materials of research, which are used were (i) material rewards and social rewards (verbal & non-verbal),(ii)wide mirror,(iii) light and (iv)sound .

A woman as a helper was used as an external prompting or support, at the initial stage of activities.

**Definition of the skills to be build-**

- To see the brush lying on the lighting surface and holding it.
- Taking brush near to the tooth powder.
- To turn the brush downwards and touch the tooth powder.
- To turn the applied brush upwards.
- To insert the brush in the mouth.
- To move hands forward and backward inside the mouth.
- To bring the brush out from the mouth after brushing.
- Taking the brush to the tap and wash it.
- To keep the brush aside.
- To hold the water in palm and moving upwards the held water.
- To touch the edge of the palm up to the lips while holding water.
- Sucking the water held in palm with the mouth.
- To blow and squeeze the cheek muscles.
- To release/squeeze the cheek muscles with full of water inside the mouth after use.

**A brief overview of the theory provided to the trainer-**

The trainer was instructed to do each and every task in front of a wide mirror, which the trainee could see and might observe the trainer and himself while doing the activity. Every minute task or per task was done very slowly, so that the case or trainee might observe it nicely.

For sensory development the brush was kept on a lighting place and for drawing attention musical sound was used with the brush. As well as chocolate was tied up with brush (as the case liked it most) as material reinforcement .At the initial stages of the task a person was used as an external prompting.

**The specific behavior to be watched by the trainer-**

- The trainer was instructed to watch the attention or diversity of a trainee and the endeavors what he made for per task completion.
- A person was used as an external prompting while endeavors were made for task completion at the initial stage by the trainee. Positive reinforcement was used after completion of per task.
- An expert is used to model the suitable behavior.
- The trainee was encouraged for initiating and practicing every subsequent task done by a model, which was being shown in the wide mirror of which the case was sitting in front.

Material reinforcement which include chocolates were provided to the trainee.

**Inferences drawn-**

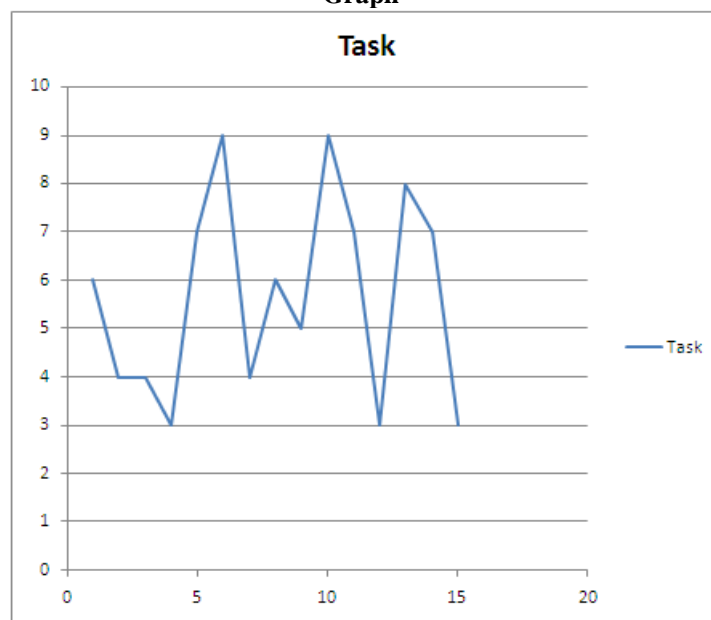
- ✓ The case learned holding brush through modeling within 6 days, where the targeted days were also six.
- ✓ The case learned taking brush near powder within 6 days, where the targeted days were also six.
- ✓ The case learned taking brush near powder within 4 days, where as the targeted period was 6 days.
- ✓ The case learned turning brush downwards and touching the tooth powder within 4 days, where the targeted period was 6 days.
- ✓ The case learnt inserting the brush in the mouth through behavior modeling within 7 days
- ✓ Whereas the targeted period was 6 days.
- ✓ The case learnt moving hands forward & backward inside the mouth within 9 days, where as the targeted period was 6 days.
- ✓ The case learnt to take the brush to the tap and wash within 6 days, whereas the targeted period was 6 days.
- ✓ The case learnt to keep the brush aside within 5 days, whereas the targeted period was 6 days.

- ✓ The case learnt holding water in palm and moving upwards the held water within 9 days whereas the targeted period was 6 days.
  - ✓ The case learnt touching the edge of the palm up to the lips while holding water within 7 days, whereas the targeted period was 6 days.
  - ✓ The case learnt blowing and squeezing the cheek muscles within 8 days whereas the targeted period was 6 days.
  - ✓ The case learnt releasing /squeezing the cheek muscles with full of water inside the mouth within 7 days whereas the targeted period was 6 days.
  - ✓ The case learnt releasing the water from the mouth after use within 3 days whereas the targeted period was 6 days.
  - ✓ The case will learn releasing the water from the mouth after use within 6 days.
- The conclusion arrived at and the process by which these inferences have been drawn-
  - The major task was divided into many sub-tasks .The completion of the major task was targeted for 3 months.
  - Light as a stimulus was used for seeking attention towards the brush.
  - Completion of each sub-task was the targeted behavior, for getting , Variable -ratio Schedule was maintained in which after one or two successful try, researcher gave the primary reinforcement to the trainee, which he liked most. Following chart of daily routine was followed-

Chart of daily routine

Sr.no	Task	Expected days	Taken time	Progress in completion of task within days	Reinforcement
1	1	6	1hour	6	Primary(1 <sup>st</sup> ,2 <sup>nd</sup> ,3 <sup>rd</sup> &6 <sup>th</sup> trial )
2	2	6	1hour	4	Primary(2 <sup>nd</sup> ,3 <sup>rd</sup> &4 <sup>th</sup> trial )
3	3	6	1hour	4	Primary(3 <sup>rd</sup> &4 <sup>th</sup> trial )
4	4	6	1hour	3	Primary(2 <sup>th</sup> & 3 <sup>rd</sup> trial )
5	5	6	1hour	7	Primary(5 <sup>th</sup> & 7 <sup>th</sup> )
6	6	6	1hour	9	Primary(3 <sup>rd</sup> ,7 <sup>th</sup> &9 <sup>th</sup> )
7	7	6	1hour	4	Primary(in 3 <sup>rd</sup> &4 <sup>th</sup> trial)
8	8	6	1hour	6	Primary(4 <sup>th</sup> &6 <sup>th</sup> trial )
9	9	6	1hour	5	Primary(4 <sup>th</sup> &5 <sup>th</sup> trial)
10	10	6	1hour	9	Primary(5 <sup>th</sup> ,8 <sup>th</sup> & 9 <sup>th</sup> trial)
11	11	6	1hour	7	Primary( 5 <sup>th</sup> &7 <sup>th</sup> )
12	12	6	1hour	3	Primary(3 <sup>rd</sup> )
13	13	6	1hour	8	Primary(7 <sup>th</sup> &8 <sup>th</sup> )
14	14	6	1hour	7	Primary( 4 <sup>th</sup> ,6 <sup>th</sup> & 7 <sup>th</sup> trial)
15	15	6	1hour	3	Primary( 3 <sup>rd</sup> )

Graph-



Horizontal line- Task  
Vertical line- Days

## II. Conclusion

The experimental intervention, was targeted for the period of 90 days, but the result shows that the completion of work by the case was done within 85 days, which was less time than the targeted period., which draws a conclusion that behavior modeling is not only effective for normal people, normal people with some mental disorders, but also for the special children with mental retardation and cerebral palsy too.

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