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# EFFECT OF PROGRAMMED INSTRUCTION ON MONEY MANAGEMENT SKILLS OF ADOLESCENTS WITH INTELLECTUAL DISABILITY

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## Abstract

### AIM

To Evaluate the Effect of programmed instruction on money management skills of adolescents with intellectual disability.

### OBJECTIVES

- To assess the money management skills of adolescents with intellectual disability.
- To evaluate the effect of programmed instruction on money management skills of adolescents with intellectual disability.

### Procedure

The sample of 10 subjects were included in this study. Subjects were selected based on selection criteria, informed consent was obtained from the parents and caretakers. JKMM rating scale for money management skills has been used to collect data in pre and post test. 35 sessions of programmed instruction intervention was given to all the subjects. Pre and post test scores were statistically analysed with 't' test.

### Result

Statistically significant is present ( 't' 3.8412 , p ; 0.0040 ) between pre and post test scores. It indicates that programmed instruction has significant effect on money management skills of adolescents with intellectual disability.

### Conclusion

From the above results it is concluded that there is significant improvement with programmed instruction on money management skills of adolescents with intellectual disability. Programmed instruction proved as effective protocol for teaching money management skills for intellectual disability.

**Key words :** Intellectual disability, programmed instruction, money management

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## INTRODUCTION

Intellectual disability is defined as “ a disability characterized by significant limitations both in intellectual functioning and in adaptive behaviour as expressed in conceptual , social , and practical adaptive skills. Therefore, the limitations related to Intellectual Disability, in addition to intellectual functioning well below average, focus on the following areas; communication, self-care, home living , social skills, community involvement , autonomy, health and safety, functional academic skills, leisure and work. In this regard, their main features are: impulsive behaviour, deficiency in discernment, short attention span and slow learning.

The intellectual disability(ID) is that are usually first diagnosed in infancy, childhood, or adolescence is for convenience only and is not meant to suggest that there is any clear distinction between “ childhood” and adult disorders. Although most individuals with these disorders present for clinical attention during childhood or adolescence. Mental retardation can affects about 1-3% of general population. The majority of cases are idiopathic<sup>1</sup>. Most common mild MR ( 75-90%) often goes unrecognised. The idiopathic account for 30- 50% of cases and about 5% of cases are inherited from a person’s parents. The epidemiological surveys in India showed the prevalence of psychiatric disorder varying from 9.5 to 370/1000 population<sup>2</sup>. Recent census data reported that only 2.7% has mental illness and 5.6% has mental retardation.

People with ID often experience serious difficulties to perform daily activities independently. It is particularly relevant that people with ID should be as fully integrated as possible into the daily routines of people in society. Although there is the figure of a “ support supervisor” , they need to be able to perform their own daily routines like shopping, personal finance, hygiene, etc. And, therefore, it is essential to provide them with previous training<sup>3</sup>. It is in this frame work that the research project described in this paper has been proposed and tested.

Money plays role in most functions of daily living, especially for doing tasks like shopping at centers. Money can be thought of as something agreed upon by a group, society,

or across the globe which has value. Conveying such a concept to children who have disabilities is essential in helping them prepare for adult life. Every child isn’t the same in their exposure to the value and use of money.

Money management is an important life skill, which children can start learning early. As children get older, they can learn about needs, wants, budgeting, saving and value. Financial literacy is the ability to manage money in ways that help you achieve your goals in life. Money management and financial literacy are important life skills, which even young children can start learning. When children understand the difference between needs and wants, they can start learning about basic budgeting and saving. The money skills help our students navigate through life with fewer financial struggles and better prepare them for the real world. It is more essential for mental retardation children to generalize and apply these skills in real life transactions.

Money management skills are an everyday part of our lives. For individuals with disabilities, learning to manage money can increase independence and access to their communities. In order to make purchases in various community settings, individuals with disabilities need to know how to access their money (e.g., cash checks, use an automated teller machine), as well as how to budget their money. Browder and Grasso identified the following skills involved in money management: a) computation and record keeping, (b) banking, (c) budgeting, (d) comparing prices, purchasing and (e) saving and investing<sup>4</sup>.

Progressive time delay and general case programming can be used to teach students with disabilities to make purchases using a calculator, the one-more-than strategy paired with modelling can be used to teach individuals with intellectual disability simulated purchasing<sup>5</sup>.

The primary purpose of education for students with intellectual disabilities (ID) is to prepare them for independent living in adulthood. Therefore, teaching life-related functional skills to students with intellectual disabilities is considered important, such as vocational, self-grooming , cooking, and public transportation skills. Among the fundamental skills critical

for community life is money management skills<sup>6</sup>, which include earning, budgeting, and spending skills that enable individuals with disabilities to be less reliant on caregivers, and more self-determined and focused on independence.

While purchasing skills are among the most frequently taught money managing skills, they remain difficult to master. Purchasing includes selecting items one needs, following social rules to make payments (e.g., waiting in line to pay), and paying the appropriate amount of money. Among these purchasing skills, money transaction skills- paying the appropriate amount of money – requires many math related sub-skills that include understanding money concepts, reading numbers, and recognising bills and coins<sup>7</sup>. These math-related sub-skills largely remain difficult for individuals with intellectual disabilities to master; as such individuals have difficulty with abstract thinking, short-term memory, and motivation.

Frequently used interventions include using picture cards<sup>4</sup>, video modelling<sup>5</sup>, verbal instruction<sup>8</sup>, faded prompt procedures<sup>9</sup>, and/or role-playing<sup>10</sup>. Some strategies that have proven to be effective are simplification, the use of calculators<sup>11</sup>.

Most of learners with mild and moderate mental retardation (MR) are in the units in primary schools and majority still lack Daily Living Skills (DLS) for independent living. This was exhibited by the way they were discriminated, segregated, rejected and abused by the society. Consequently they were not well integrated in their communities. Their parents/guardians spent most of their time caring for them, which limited their contribution towards national development.

Although there is the figure of a “support supervisor”, they need to be able to perform their own daily routines like shopping, personal finance, hygiene, etc. And, therefore, it is essential to provide them with previous training. Hence this study has been attempted with programmed instruction as intervention for teaching money management skills of persons with intellectual disability.

## AIM

To find out the effect of programmed instruction on money management skills of adolescents with intellectual disability.

## OBJECTIVES

- To assess the money management skills of adolescents with intellectual disability.
- To evaluate the effect of programmed instruction on money management skills of adolescents with intellectual disability.

## METHODOLOGY

The present study used single group pre test and post test Quasi experimental design. The study was conducted at Sri sarvavidya multi speciality therapy centre and Occupational therapy foundation in Erode. A total of 10 subjects with 7 males and 3 females were participated in this study. This study includes the samples of both male and female, age group between 13- 17 years with mild intellectual disability diagnosed by paediatrician or clinical psychologist. Other associated conditions with mild intellectual disability were excluded. The total study duration was 6 months with 2 months of intervention. After two months of intervention post-test was conducted using same JKMM Rating scale for money management. All 10 subjects were given money management skill training based on programmed instruction 45 minutes per session and each subjects attended 5 sessions per week for the period of two months.

## SESSION 1-7

### Teaching the numbers

- Number concept was trained and strengthened during these sessions from one to hundred.
- Generalization of numbers were done by doing functional activities
- Symbols of +, -, ×, ÷, and = were trained.

## SESSION 7-14

### Teaching and identifying the rupees

- In this session common Indian rupees were given to identify. It includes rupees 1, 2, 5, 10, 20, 50, 100. Both the coins and notes were given to identify and differentiate. Simulated training was given with by rupee notes.

**SESSION 15-35**

• Subjects were trained to use calculator. With the calculation the subjects were allowed to purchase the things which was essential for them with in rupees 100. Subjects were

allowed to receive flipkart, amazon and swiggy parcels. Budget planning, making and purchase list with in hundred rupees were trained. After these intervention post test have been calculated and scores were statistically analysed.

**DATA ANALYSIS AND RESULTS****Table 1: COMPARISON OF MONEY MANAGEMENT SKILLS BETWEEN PRE TEST AND POST TEST.**

S.No	Test	Mean	Standard Deviation (SD)	't' value	P value
1.	Pre test	6.20	2.90	3.8412	0.0040
2.	Post test	8.30	3.77		

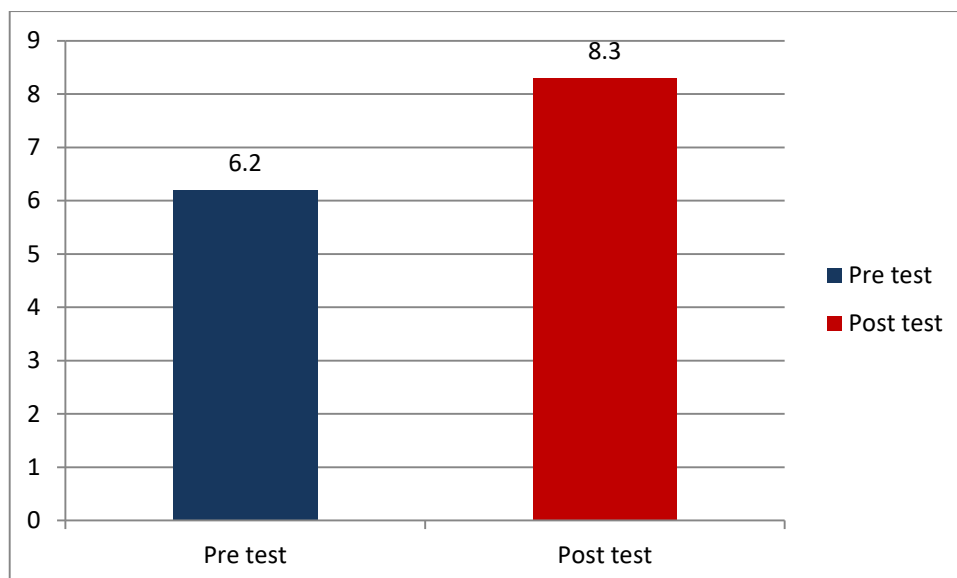
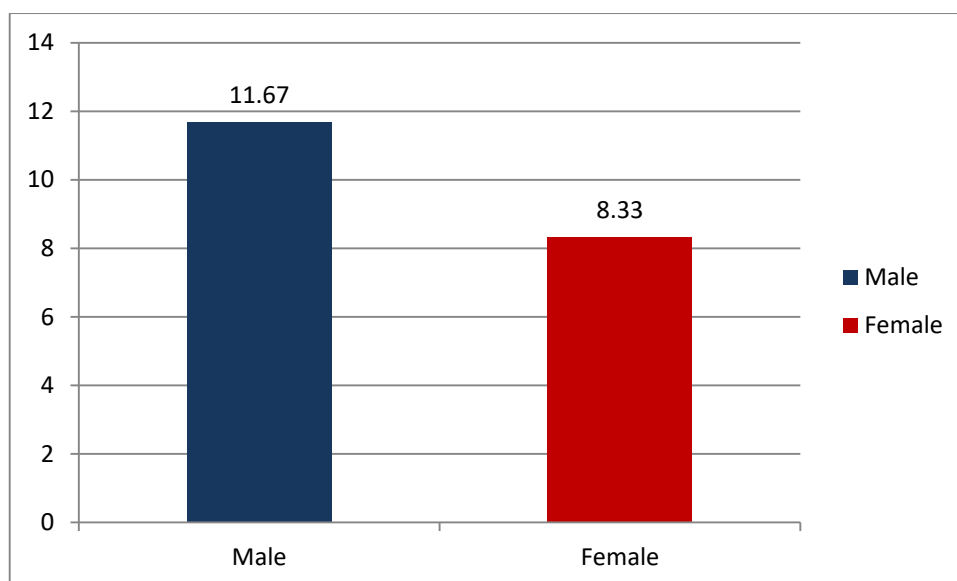
**GRAPH 1: COMPARISON OF MONEY MANAGEMENT SKILLS BETWEEN PRE TEST AND POST TEST**

Table 1 and graph 1 : shows that comparison of money management skills between Pre-test and Post-test, mean values are (6.20) and (8.30), "t" (3.8412) , "p" value (0.0040). So it is considered to be statistically significant.

**Table 2: COMPARISON OF MONEY MANAGEMENT SKILLS BETWEEN MALE AND FEMALE**

S.No	Gender	Mean Value	Standard deviation (SD)	't' Value	'p' value
1	Male	11.67	1.53	1.6440	0.2419
2	Female	8.33	2.08		



**Graph 2: COMPARISON OF MONEY MANAGEMENT SKILLS BETWEEN MALE AND FEMALE**

Table 2 and graph 2 : shows that comparison between Male and Female in money management skills values of Male (11.67) and Female (8.33), “t” (1.6440) , “p” value (0.2419). So it is considered to be not statistically significant.

## DISCUSSION

The purpose of study was to find out the effect of programmed instruction on money management skills of children with intellectual disability.

A total of ten mild intellectual disabled people were taken in this study through convenient sampling method. Money management skills were assessed using JKKM money management skills rating scale before and after intervention. 35 sessions of money management skill training were given through programmed instruction. Scores were calculated and analysed statistically with ‘ t ‘ test.

Table 1and graph 1; Paired ‘t’ test shows the comparison of pre test and post test values of experimental group, mean values are 6.20 and 8.30; standard deviation values are 2.90 and 3.77 and t value is 3.8412 and p value is 0.0040 which shows there is a considered to be statistically significant between pre test and post test values in experimental group.

Table 2 and graph 2: shows the comparison between male and female in money management skills post test mean values are 11.67 and 8.33, ‘t’ values are 1.6440, and ‘p’

values are 0.2419. Hence it is considered statistically not significant.

These findings are also supported by Diane M. Browder, Edward Grasso and Stanley R. Aeschleman, computation and record keeping, banking, budgeting and comparing prices skills are involved in money management skills. Moreover they insisted to teach students with disabilities to make purchase use calculator and the one – more – than strategy paired with modelling can be used to teach individuals with intellectual disability.

With these findings and supportive studies this study accepts alternative hypothesis and reject null hypothesis. Hence the study proves programmed instruction is effective in improving money management skill among children with intellectual disability.

## CONCLUSION

From the above results it is concluded that there is significant improvement with programmed instruction on money management skills of children with intellectual disability. Programmed instruction proved as effective protocol for teaching money management skills for intellectual disability.

### Limitations

- Study was done on limited sample size.
- Convenient sampling was taken which may not be representative of all the population.

### Recommendation

- The study can be done on a larger sample size
- Same intervention can be provided on money management skills and other detailed outcome can be evaluated
- Separate gender based study can be conducted

### REFERENCES

1. Simone M. Karam, Sandra L. Segal, Temis M. Felix (2015). "Genetic causes of intellectual disability in a birth cohort: A population-based study". *American Journal of medical genetics*. Jun; 167(6): 1204-1214.
2. Jean- Francois Lemay, Anthony R. Herbert (2003). "A rational approach to the child with mental retardation for pediatrician". *Pediatric Child Health*. 8(6): 345-356.
3. Asier Lopez-Basterretxea, Amaia Mendez-zorrilla., (2014). A Telemonitoring Tool based on serious games addressing Money Management Skills for People with intellectual Disability, vol 11, pp.2361-2380.
4. Browder, D. M., & Grasso, E. (1999). Teaching money skills to individuals with mental retardation: A research review with practical applications. *Remedial and Special Education*, 20, 297-308
5. Bellini, S. and Akullian, J. (2007) 'A meta-analysis of video modeling and video self-modeling interventions for children and adolescents with autism spectrum disorders', *Exceptional Children*, Vol. 73, No. 3, pp.264-287
6. LaCampagne, J., & Cipani, E. (1987). Training adults with mental retardation to pay bills. *Mental Retardation*, 25, 293-303.
7. Yan Ping Xin, Edward Grasso, & Caroline M. Dipi-Hoy., (2005). 'The effects of purchasing skill instruction for individuals with developmental disabilities: A Meta Analysis, Vol. 71, (4), 379-400.
8. Davies, D. K, and Stock, S, E., & Wehmeyer, M. L.,. (2003). Utilization of computer technology to facilitate money management by individual with mental retardation, education and training in mental retardation and developmental disabilities, 38(1), 106-112.
9. Denny, P. J., & Test, D. W. (1995). Using the OneMore-Than technique to teach money counting to individuals with moderate mental retardation: A systematic replication. *Education and Treatment of Children*, 18, 422-432.
10. Marholin, D., O'Toole, K. M., Touchette, P. E., Berger, P. L., & Doyle, D. A. (1979). "I'll have a Big Mac, large fries, large coke, and apple pie, ... or teaching adaptive community skills. *Behavior Therapy*, 10, 236-248.
11. Aeschleman, S. R., & Schladenhauffen, J. (1984). Acquisition, generalization, and maintenance of grocery shopping skills by severely mentally retarded adolescents. *Applied Research in Mental Retardation*, 5, 245- 258.