

Daily Living Skills on Differently Abled Children across the Special Schools

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Abstract

The child who is being considered for special education services will often receive assessments, evaluations or psycho testing (this depends on the educational jurisdiction) to determine if they qualify to receive special education programming/ supports. Once, the child qualifies for additional support, an Individual Education Plan/ Programmes (IEP) is then developed for the child. IEP's will include goals, objectives, activities and any additional supports needed to ensure the child reaches his/her maximum educational potential. The IEP is reviewed and revised regularly with input from the stakeholders.

Differently abled are often described in terms of lack normal functioning of physical, mental or psychological processes. It is also defined as learning difficulties or difficulties in adjusting socially, which interfaces with a person's normal growth and development. A disabled child has been defined as one who is unable to ensure himself, wholly or partially the necessities of a normal individual or social life including work as a result of deficiency whether congenital or not in his physical or mental capabilities.

Differently abled persons include hearing impairment, visual impairment, mental retardation, Down syndrome, cerebral palsy, autism and so on. Activities of daily living (ADL) refers to daily activities that individuals normally do, unassisted to take care of them. These activities include bathing, eating, cooking, walking, dressing, house chores. All children are different and do things in different ways. When working with differently abled children, it is important to identify and recognize the areas to be worked on to develop the skill of daily living.

Life skill activities teach children with special needs on how to care for themselves, like brushing the teeth, dressing, undressing, washing hands, bathing, using the toilet and so on. These can be achieved through training and repetition. Each task needs to be broken down into simpler constituent's stages. Motor performance in children varies and children need to be encouraged to do the activities by providing some assistance. Consistently coaching children toward mastery, guiding with small, manageable steps, encouraging them by giving positive and specific feedback make them more observant to meet the accepted standards.

Having started late as a consequence of the existing schools not being able to address the needs completely, special schools have not attained complete process maturity and are still evolving. Increased awareness and institutional support from the state is a very contemporary issue today. Increased collaboration with western counterparts and breaking of communication barriers will set the pace for high levels of process maturity in special schools.

Introduction

The paper serves to introduce the research topic and its neighborhood. Necessary that various terms interchangeably referred to in the context of the research topic by domain experts as well as within this document are explained. The paper transitions from the basic definitions to the specific area of research

interest namely “Daily Living Skills of Differently Abled Children across Special Schools”.

Research Domain

The canvas of special education traverses across multiple domains and calls for high levels of specialization and many years of intimate association for a complete understanding. The present research is a modest attempt at looking at a specific area of special education namely Activities of Daily Living of Differently abled Children.

Activities of Daily Living (ADL)

The term “Activities of Daily Living” or ADL’s refers to the basic tasks of everyday life, such as eating, bathing, dressing, toileting and so on. An activity of Daily Living (ADL) refers to a set of common, everyday tasks, performance of which is required for personal self-care and independent living. When children are unable to perform these activities, they need help in order to cope, either from other human beings or mechanical devices or both.

General measures of health status, such as diagnoses or medical conditions are limited indicators of the independence and functional capabilities of an individual (Fillenbaul, 19984; Kane and Kane, 1981). Therefore researchers have devoted considerable attention to developing measures that tap practical dimensions of everyday life as a way of measuring a person’s functional status. The Activities of Daily Living (ADL) are increasingly being used to measure disability. They are key elements in efforts to measure quality of life and functional status (Spitzer, 1987). Activities of Daily Living (ADL) are further categorised into Self Help Skills that is Basic ADL, and Instrumental ADL which consists of Functional Academics and House work.

Self Help Skills

Differently Abled Children of every kind need to learn hygiene and self help skills as soon as they are able. These skills should be taught from the time the child is very young, because the sooner and in more ways the child can become independent, the happier he /she will be. The child who has developed sufficient self help skills is more likely to be integrated into regular classroom setting and have better experiences with peers.

The term can be defined as “those basic skills needed to take care of one’s own needs”. Self Help Skills include brushing teeth, washing hands, buttoning, unbuttoning drinking from a tumbler, zipping a zipper, wearing/ taking off shirt, grooming and so on. These Self Help Skills are used for rest of a child’s life, these skills are life skills. Self Help Skills are important for parents and educators of young children to realize that just like numbers, colours and shapes. These skills need to be included in the curriculum, need to be introduced and reinforced through a wide variety of hands, developmentally appropriate activities.

Functional Academics

Functional academics are defined as academic areas that will be used by the student for the rest of their life. For example, Reading (read signs: stop, go, men, women, read a recipe and so on), Mathematics (numbers, money, time, shopping). Functional is the keyword as it is related to community validity. Functional academics includes pre-requisite concepts, Mathematics, Reading, Writing, Social

skills which include Communication Skills – Expressive Language. The children who is actively involved in functional academic skills, which are intended to lead to greater participation in the community and to maximise the child's sense of control over his/ her environment.

Domestic Activities

Domestic Activities of Daily Living are activities related to maintaining a home and getting on with everyday life. Domestic Activities gives the opportunity to use muscles and hands. Instrumental Activities of Daily Living (ADL) may include typical domestic tasks. Some activities can be very simple, like unpacking the groceries and putting them in the cupboard, washing vegetables, dusting, cleaning the table, washing clothes and utensils, cooking and so on.

Statement of the Problem

The present study is “Activities of Daily Living (ADL) skills of differentially abled children across special schools.

Objectives of the Study

a) To study the difference in the Activities of Daily Living (ADL) Skills of differently abled children with respect to

- (i) Gender
- (ii) Diagonsis

b) To study the difference in Self Help Skills of differently abled children with respect to

- (i) Gender
- (ii) Diagonsis

c) To study the difference in Domestic Activities of differently abled children with respect to

- (i) Gender
- (ii) Diagonsis

Hypothesis of the Study

a) There is no significant difference in the Activities of Daily Living (ADL) Skills of differently abled children with respect to

- (i) Gender
- (ii) Diagonsis

b) There is no significant difference in Self Help Skills of differently abled children with respect to

- (i) Gender
- (ii) Diagonsis

c) There is no significant difference in Domestic Activities of differently abled children with respect to

- (i) Gender
- (ii) Diagonsis

Method of Study

Among the different methods of study survey method has been used in this research. The survey method is the technique of gathering data by asking questions to people who are thought to have desired information. The respondents are asked questions on their demographic interest opinion. They are concerned with existing conditions or relations, prevailing practices, beliefs, attitudes etc., ongoing processes and the emerging trends, so survey method is used.

The survey is a non-experimental, descriptive research method. Surveys can be useful when researcher wants to collect data on phenomena that cannot be directly observed.

Tools used in the study

Personal and institutional information sheet

To collect the personal and institutional related data, a separate data sheet has been prepared and attached as a front page of the questionnaire.

Activities of Daily Living (Adl) Of Differently Abled Children

The tool “Madras Developmental Programing System (MDPS) Behavioral Scale” Developed by Prof.P.Jeyachandran and Prof.V.Vimala (1992) was used in this study. The MDPS behavioural scale was designed to provide information about the functional skills of the persons with mental retardation for the purpose of individualized programme planning. The scale comprises 360 items grouped into 18 functional areas or domains of 20 items each. The tool was developed for early intervention till vocational training i.e., for 3 to 18 years. Here, the study has been limited to the age group of 6 to 16. So, the relevant dimensions and activities have been selected and the questionnaire prepared accordingly.

Adminstrative of the Tool

The special schools for differently abled children were selected for the present day. The differently abled children include Mentally Retarded (MR), Autism, Cerebral Palsy (CP), Down syndrome, Hydrocephaly, Microcephaly, Attention Deficit Disorder (ADD) and Attention Deficit Hyperactive Disorder (ADHD). The investigator visited three special schools and had an interactive session with the principals of the selected schools. The investigator had collected 80 questionnaires.

Collection of Data

With the permission of the principal, the investigator had a discussion with the special educators on how to collect the information. The investigator spent more time in observing and recording the data, due to the inability of the differently abled children to respond to the items of the questionnaire. As this was time consuming, the investigator took help from the special educators to get the relevant information. Also data regarding activities of daily living (ADL) skills of the differently abled children was collected from their parents with the permission of the Principal of the special school. This was made feasible by an interactive session with the parents of the differently abled children.

Sample and Sampling Technique

Totally 80 samples were collected from three special schools. The data were collected on Activities of Daily Living Skills (ADL) of differently children. Differently

abled children included children with mental retardation, cerebral palsy, down syndrome, autism, ADHD, ADD and Microcephaly.

Data were collected and entered into SPSS 14 program for statistical analysis. Reliability estimates were determined using Cronbach's Alpha. The objectives were answered by descriptive and inferential statistics. To examine whether there were activities of daily living (ADL), measures of central tendency (mean and standard deviation) were calculated for all dimensions taken in this study. To examine whether there was any significant effect on the activities by the related skills, independent sample t-tests and f-test were used.

Mean and Standard Deviations of Activities of Daily Living (ADL) Skills of Differently Abled Children for the entire sample

The Mean and Standard Deviations of Activities of Daily Living (ADL) Skills were calculated for differently abled children with the respect to entire sample and the results of the same are summarized in Table - 1.

Table -1

Mean and Standard Deviations of Activities of Daily Living Skills (ADL) of Differently Abled Children for the entire sample

Variables/ Dimensions	N	Mean	Standard Deviation	Mean Percentage (%)
Gross Motor Activities	80	29.11	10.69	80.86
Fine Motor Activities	80	15.85	6.45	79.25
Meal Time Activities	80	17.71	7.42	73.79
Dressing	80	20.64	12.19	64.50
Grooming	80	15.78	9.69	56.36
Toileting	80	21.03	12.41	65.72
Expressive Language	80	13.79	11.04	49.25
Reading	80	16.13	10.71	50.41
Writing	80	19.50	12.45	54.17
Numbers	80	15.19	11.90	54.25
Time	80	12.26	12.25	34.06
Money	80	7.23	6.58	45.19
Domestic Activities	80	12.30	10.10	38.44
Total		216.50	112.62	56.

The perusal of Table - 1 reveals that the Mean and Standard Deviations of Overall Activities of Daily Living (ADL) Skills of differently abled children for the entire sample were 216.50 and 112.62 respectively. The Mean score percentage was the Highest (80.86%) for the dimension Gross Motor Activities and the same was the Lowest (38.44) for the dimension Domestic Activities.

Mean and Standard Deviations of Activities of Daily Living (ADL) Skills of Differently Abled Children with respect to Gender

The Mean, Standard Deviations and t-values were calculated for the scores of Activities of Daily Living (ADL) Skills of differently abled children with respect to Gender and the same are shown in Table - 2

Table -2

Mean Standard Deviations and t-values for the scores of Activities of Daily Living (ADL) Skills of Differently Abled Children with respect to Gender

Variables / Dimensions	Male (n1 = 60)		Female (n2 = 20)		t-value (df = 78)	Sig. (2-tailed)	Level of Significance
	Mean	SD	Mean	\SD			
Gross Motor Activities	29.13	10.77	29.05	10.73	0.030	0.976	p > 0.05
Fine Motor Activities	15.55	6.63	16.75	5.96	0.718	0.475	p > 0.05
Meal Time Activities	17.13	7.60	19.45	6.74	1.212	0.229	p > 0.05
Dressing	19.70	12.44	23.45	11.20	1.195	0.236	p > 0.05
Grooming	14.62	9.83	19.25	8.58	1.881	0.064	p > 0.05
Toileting	19.50	12.81	25.60	10.08	1.936	0.056	p > 0.05
Expressive Language	12.28	11.39	18.30	8.68	2.160	0.034	p < 0.05
Self Help Skills	127.92	60.70	151.85	56.01	1.555	0.124	p > 0.05
Reading	14.90	11.14	19.80	8.51	1.797	0.076	p > 0.05
Writing	17.80	12.61	24.60	10.67	2.165	0.033	p < 0.05
Numbers	13.80	12.40	19.35	9.33	1.834	0.071	p > 0.05
Time	10.97	12.65	16.15	10.27	1.657	0.101	p > 0.05
Money	6.17	6.54	10.40	5.73	2.581	0.012	p < 0.05
Functional Academics	63.63	51.49	90.30	40.46	2.106	0.038	p < 0.05
Domestic Activities	11.53	10.58	14.60	8.29	1.179	0.24	p > 0.05
Total	203.08	256.75	114.47	98.87	1.875	0.065	p > 0.05

From the above Table -2, it was found that the Gross Motor Activities of Male (29.13) and Female (29.05) were high in differently abled children compared to other Activities of Daily Living (ADL) Skills.

It was found that the activities of Money in Male (6.17) and Female (10.40) were low in differently abled children compare to other Activities of Daily Living (ADL) Skills.

The t-values were calculated for the scores of Activities of Daily Living (ADL) Skills of differently abled children with respect to Gender was no significant difference in Male and Female differently abled children in the Activities of Daily Living (ADL) Skills.

The t-values were calculated for the scores of Self Help Skills of differently abled children were calculated with respect to Gender was no significant difference in Male and Female differently abled children in Self Help Skills.

The t-values were calculated for the scores of Functional Academics of differently abled children of age group were calculated with respect to Gender was significant difference in Male and Female differently abled children in Functional Academics.

The t-values were calculated for the scores of Domestic Activities of differently abled children of age group were calculated with respect to was no significant difference in Male and Female differently abled children in Domestic Activities.

Mean, Standard Deviations and F-Ratio of Activities of Daily Living (ADL) Skills of Differently Abled Children with respect to Diagnosis

The Mean, Standard Deviations and F-Ratio were calculated for the scores on Activities of Daily Living (ADL) Skills of differently abled children with respect to Gender and the same are shown in Table -3

Table -3

Mean Standard Deviations and F-Ratio for the scores of Activities of Daily Living (ADL) Skills of Differently Abled Children with respect to Diagnosis

Variables / Dimensions	Mental Retardation (0) (n1 = 27)		Cerebral Palsy & Down Syndrome (1) (n2 = 25)		Autism & Others (2) (n3 = 28)		F-Ratio Df = (2, 77)	Sig.	Level of Significance	Groups Differed Significantly
	Mean	SD	Mean	SD	Mean	SD				
Gross Motor Activities	32.41	6.99	20.08	13.70	34.00	3.07	19.163	0.000	p < 0.01	(0 & 1), (1 & 2)
Fine Motor Activities	17.52	4.42	12.56	8.32	17.18	5.19	5.256	0.007	p < 0.01	(0 & 2), (1 & 2)
Meal Time Activities	20.11	4.71	13.00	9.47	19.61	5.48	8.817	0.000	p < 0.01	(0 & 1)
Dressing	22.44	11.55	14.00	12.90	24.82	9.80	6.434	0.003	p < 0.01	(0 & 1), (1 & 2)
Grooming	18.33	9.15	11.08	10.08	17.50	8.59	4.725	0.012	p < 0.05	(0 & 1), (1 & 2)
Toileting	24.33	11.26	14.60	13.86	23.57	10.10	5.451	0.006	p < 0.01	(0 & 1), (1 & 2)
Expressive Language	18.52	10.03	10.72	11.05	11.96	10.80	4.132	0.020	p < 0.05	(0 & 1)
Self Help Skills	153.67	10.64	96.04	69.39	148.64	44.56	8.665	0.000	p < 0.05	(0 & 1), (1 & 2)
Reading	18.96	10.45	14.60	12.25	14.75	9.22	1.449	0.241	p > 0.05	None
Writing	22.04	11.90	14.36	13.43	21.64	11.00	3.288	0.043	p < 0.05	(0 & 1)
Numbers	18.52	11.82	12.64	12.00	14.25	11.56	1.751	0.180	p > 0.05	None
Time	15.67	11.68	11.24	13.23	9.89	11.56	1.683	0.193	p > 0.05	None
Money	8.81	6.34	6.68	7.08	6.18	6.27	1.237	0.296	p > 0.05	None
Functional Academics	84.00	49.15	59.52	54.53	66.71	45.40	1.690	0.191	p > 0.05	None
Domestic Activities	15.93	10.64	9.20	9.75	11.57	9.07	3.155	0.048	p < 0.05	(0 & 1)
Total	253.59	104.59	164.76	125.47	226.93	92.82	4.609	0.013	p < 0.05	(0 & 1)

From the above Table -3, it was found that Gross Motor Activities of differently abled children with Mental Retardation (32.41), Cerebral Palsy and Down Syndrome(20.08), Autism and Others (34.00) were high in differently abled children s compared to other Activities of Daily Living (ADL) Skills.

It was found that activities of Money in Differently abled Children with Mental Retardation (8.81), Cerebral Palsy and Down Syndrome (6.68), Autism and Others (6.18) were low in differently abled children compared to other Activities of Daily Living (ADL) Skills.

The F – Ratio for Activities of Daily Living (ADL) Skills of differently abled children were calculated with respect to Diagnosis was significant difference in children with Mental Retardation and Cerebral Palsy & Down syndrome related to differently abled children of age group 6 to 16 years in the Activities of Daily (ADL) Skills.

The F – Ratio for Self Help Skills of differently abled children were calculated with respect to Diagnosis was significant difference in children of age group 6 to 16 years with Mental Retardation and Cerebral Palsy & Down syndrome in Self Help Skills and (ii) there was significant difference in children with Mental Retardation and Autism & other condition in Self Help Skills.

The F – Ratio for Functional Academics of differently abled children were calculated with respect to Diagnosis was no significant difference in children with Mental Retardation, Cerebral Palsy & Down syndrome and Autism & other condition in Functional Academics.

The F – Ratio for Domestic Activities of differently abled children were calculated with respect to Diagnosis was significant difference in children with Mental Retardation and Cerebral Palsy & Down syndrome related to differently abled children in Domestic Activities.

Findings of the Study

Findings based on descriptive and differential analysis of data related to activities of daily living skills (adl) of differently abled children.

1. Mean score percentage was the highest in Gross Motor Activities of differently abled children and lowest in domestic activities.
2. There was no significant difference in Male and Female differently abled children in the Activities of Daily Living (ADL) Skills.
3. There was no significant difference in Male and Female differently abled children in Self Help Skills.
4. There was significant difference in Male and Female differently abled children in Functional Academics.
5. There was no significant difference in Male and Female differently abled children in Domestic Activities.
6. There was significant effect of Gross Motor Activities on Dressing, Domestic Activities, of children and Mental Retardation at Moderate level.
7. There was significant effect of Gross Motor Activities on Grooming, Toileting of children with Mental Retardation at a low level.

8. There was significant effect of Fine Motor Activities on Meal Time Activities, Dressing, Toileting, Writing of children with Mental Retardation at a high level.
9. There was significant effect of Fine Motor Activities on Domestic Activities of children with Mental Retardation at a Moderate level.
10. There was significant effect of Expressive Language, Numerical Ability, Time, Money and Reading of children with Mental Retardation at high level.
11. There was significant effect of Gross and Fine Motor Activities on Dressing, Grooming, Toileting, and Domestic Activities of children with Mental Retardation at a Moderate level.

Conclusion

Information explosion and seamless communication across the frontiers of time and space have shrunk distances and brought knowledge and wisdom at the click of a mouse. Increased awareness of the Government authorities across all levels and the consequent humane and empathetic outlook of people at large is an encouraging sign and a precursor to the revolutionary developments awaiting to happen in the field of “Education of Differently Abled Children”. Rapid advancements in the field of medicine has led to better understanding of the underlying causes and the prognosis and diagnosis of the impairment conditions. Technological developments have endeavored to overcome the limitations of the differently abled children and personnel through technological inserts and aids. Getting the blind to see and the hearing impaired to hear are a few of them. Speech synthesizers used by the legendary Stephen Hawking is just one such example.

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