

ORIGINAL ARTICLES

**PRACTICES IN SPECIAL EDUCATION FOR CHILDREN WITH
INTELLECTUAL DISABILITIES**

L. Govinda Rao*, K.C Panda**

ABSTRACT

Special educational practices followed by special educators of intellectually disabled children in 284 organisations were studied using a questionnaire with the domains of academic activity, behaviour problem management, therapeutics, students' performance, co-curricular activities and organisational activities. The 132 item based questionnaire with a five point response category was content validated and results were analysed using Means, SDs, and F test. Organisational variables such as rural-urban location did not produce any differential practice whereas number of services and human resource development activities of the organisations showed differences in non-academic domains of practice. Characteristics of special educators such as gender, experience, general education background and age showed some impact on special education practices in core areas such as academic activity, behaviour management and student performance. The findings have implications for planning for expansion of services.

INTRODUCTION

Over the last few years, there have been many changes in the delivery of special education services, including the roles of special educator, therapist, parents and community, and the management process that takes into account academics and other interventions such as control of undesirable behaviour, regulating students' growth and achievement, interpersonal development through co-curricular activities, organisational activities and therapeutic interventions. The training curriculum for special educators in the earlier years had emphasised skill development that is essential for the classroom transaction of learning experiences. Over time, the role and functions of a special educator have undergone a major metamorphosis.

She is now a facilitator of learning experiences, planner, classroom manager, therapist, a clinician dealing with behaviour management and control. These functions go beyond curricular concerns to include co-curricular activities, aimed at a holistic development of the child with whom the educator interacts and for whom she is responsible.

Today, there are over 1200 organisations offering special education services in India. Service quality is often determined by how special educators focus on certain practices which they perceive to be important. It is thus important to study the practices in special education focusing on the various responsibilities undertaken by trained special educators, their individual characteristics and organisational factors that may have an impact on the practices.

AIM AND OBJECTIVES

The aim of the study was to examine different practices in special education with emphasis on the roles and responsibilities of special educators.

The objectives were:

1. To develop a questionnaire to assess special education practices in institutions providing interventions for children with intellectual disability.
2. To determine the intercorrelations among the subscales in the questionnaire dealing with various practices.
3. To test the reliability of the subscales and the total scale.
4. To examine the practices relating to
 - a. academic activities undertaken by the special educator
 - b. management of behaviour problems in intellectually disabled children
 - c. therapeutic practices and responsibilities undertaken by the special educator
 - d. co-curricular activities
 - e. students' performance
 - f. other organisational activities
5. To make a comparative analysis of each of the practices in relation to;
 - a. rural-urban location in which the special educators work
 - b. number of services provided by the centre where the special educators work
 - c. human resource development activities undertaken by the centre

METHOD

Development of the questionnaire

The questionnaire had two parts. Part I (A) dealt with information about the organisation e.g., location, number of services provided, number of intellectually disabled children, levels of intellectual disability, human resource development programmes conducted, number of professionals working in the organisation, and post-school placement of intellectually disabled children. Part I (B) elicited information about the characteristics of special educators in terms of gender, age, academic qualifications (general and professional), years of experience, salary, levels of intellectual disability taught and so on. Part II dealt with special education practices performed by the special educator as per their perception of the importance and advantage of such practices.

A list of 200 items was formulated at the initial phase covering the domains of academic activity, management of behaviour problems, therapeutics, co-curricular activities, students' performance and organisational activities. These items were given to professionals working in the field of mental handicap (N=20) to judge their relevance and appropriateness. The assessors were requested to include items if any particular activity was omitted. On the basis of hundred percent consensus on content validation, a final set of 132 items was selected for the final questionnaire. The composition of the items in the questionnaire was as follows:

Academic activities (52 items): Annual action plan, teaching material, techniques, classroom environment, monitoring and evaluation of student performance, lesson planning, staff meetings, feedback, individual education plan, use of aids, parent conferences, educational visits and so on.

Management of behaviour problems (12 items): Consultation with psychologist and implementation of suggestions, progress observation, parental training, case analysis and so on.

“Therapeutic activities (11 items): Organisation of physiotherapy, speech therapy and occupational therapy exercises, maintaining records thereof, training in therapies, interaction with therapists, progress observation, parent training and so on”

Co-curricular activities (29 items): Preparation for music, audiovisuals, dance, drama, play activities, sports, arts, crafts, peer volunteering, periodical celebration of activities and so on.

Student performance (10 items): Evaluation of student performance, feedback to authority and parents, parent counseling, maintenance of records, and so on.

Organisational activities (18 items): Up keep of the environment, schedule of work for other employees looking after neatness, cleanliness, health conditions of the classrooms, maintenance of stock register, advocacy material preparation and so on.

A five point rating scale with 'not at all', 'seldom', 'sometimes', 'mostly', and 'always' was used to elicit responses from the special educators, with 'not at all' scoring 1 and 'always' scoring 5.

Sample

The sample consisted of special teachers (78.2%) working in organizations with special schools, principals of special schools (12.3 percent) and other staff dealing with intellectual disability (9.5 percent), thus totaling 284 persons. The demographic characteristics of the sample are given in Table 1.

Table 1: Demographic information on the sample (N=284)

Variable	Group	%
Organisation		
Location	Rural	26.1
	Urban	73.9
Number of services available	<=3	15.1
	4-6	44.8
	>6	40.1
Presence of HRD	No	46.8
	Yes	53.2
Staff strength	Below 15	36.3
	15and above	63.7
About Special Teachers:		
Gender	Male	27.5
	Female	72.5

Qualification (General)	Inter	20.4
	Degree	53.5
	PG	26.1
Qualification (Professional)	Less qualified	14.1
	Degree	53.5
	PG	26.1
Experience (years)	Below 5	41.2
	5 and above	58.8
Salary (Rs./p.m)	< =3000	41.9
	Above 3000	58.1
Designation	Principal	12.3
	Special teachers	78.2
	Others	9.5

The questionnaire was mailed to the organisations to be filled up by the special educator and the principal of the school. 284 completed questionnaires formed the basis for analysis.

RESULTS

1. Inter-scale correlation and reliability

The split-half reliability coefficients were calculated for each of the sub scales. The values of coefficients are as follows:

Academic activity	.92
Management of behaviour problem	.91
Therapeutics	.92
Cocurricular activities	.93
Students' performance	.79
Organisational activities	.89
Total scale	.96

These values indicate consistency of response among the respondents. The inter scale correlations were computed using means as raw scores to ensure whether the subscales contribute to, and are related to each other in terms of practices in special education. These coefficients are presented in Table 2.

Table 2: Pearson correlation between subscales

Area	Academic activity	Mgt Beh. Prob.	Thera peutic	Co-curricular activities	Student performance	Oraganisational Activities	Grand Score
Academic activity		59**	32**	46**	58**	40**	78**
Management Beh. Prob.			46**	52**	51**	42**	76**
Therapeutic				37**	31**	36**	59**
Cocurricular activities					47**	59**	83**
Student performance						47**	69**
Oraganisational Activities							73**

** significant at 0.01 level

All correlations are highly significant underscoring the relevance of each area of activity as an integral part of special education practices. The therapeutic sub-scale has a lower correlation with other sub-scales, but it is still significant. In fact, this is a separate function conducted by therapists, and the role of the special educator tends to be nominal.

2. Organisational factors

Location of organisation

A one way analysis of variance was conducted using means as raw scores for inter group (rural-urban) comparison for each of the subscales and for the total scale. As seen in Table 3, none of the F ratios were significant, indicating that special educational practices in rural and urban centres are virtually the same.

Table 3: Comparison of scale means by location

AREA	Group	N	Mean	SD	F-ratio
Academic Activity	Rural	74	224.76	24.437	NS
	Urban	210	224.81	21.092	
Management Beh.Prob.	Rural	74	47.24	9.242	NS
	Urban	210	46.91	11.076	
Therapeutic	Rural	74	38.28	10.676	NS
	Urban	210	38.25	11.581	
Co-curricular act	Rural	74	102.97	23.606	NS
	Urban	210	96.80	24.035	
Students Performance	Rural	74	41.43	7.547	NS
	Urban	210	41.45	6.473	
Organi.activites	Rural	74	70.09	14.458	NS
	Urban	210	70.51	14.682	
Grand score	Rural	74	524.78	67.931	NS
	Urban	210	518.73	67.076	

P>0.05, Not Significant

Number of services offered

The organisations were grouped into 3 types, those with 3 or less services (N=43), those with 4 to 6 services (N=126) and those offering more than 6 types of services (N=115). Table 4 shows the Means and SDs along with F ratios.

Table 4: Comparison of scale means by number of services offered

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Activity	<=3	43	226.28	22.556	NS
	4-6	126	223.38	23.685	
	above 6	115	226.22	19.774	
Management Beh. Prob.	<=3	43	46.98	7.869	NS
	4-6	126	45.92	11.077	
	above 6	115	48.19	10.935	
Therapeutic	<=3	43	34.44	12.125	P<0.001
	4-6	126	36.01	12.155	
	above 6	115	42.16	8.734	
Co-curricular Activities	<=3	43	105.30	20.507	P<0.05
	4-6	126	94.60	25.377	
	above 6	115	100.00	23.165	
Students performance	<=3	43	41.28	6.378	NS
	4-6	126	40.89	7.239	
	above 6	115	42.11	6.190	
Organisational Activities	<=3	43	76.47	6.708	P<0.01
	4-6	126	68.67	7.239	
	above 6	115	70.03	13.234	
Grand Score	<=3	43	529.74	56.873	NS
	4-6	126	509.43	73.402	
	above 6	115	528.70	62.340	

Table 4 shows that number of services offered did not lead to any difference with regard to academic activities, management of behaviour problems, student performance and total scores. This means that all organisations have action plans, lesson plans, use of aids, monitoring, evaluation, student assessment, parent counseling, feedback and behaviour management, irrespective of the number of service delivered.

However, therapeutics are emphasised more by organisations providing more than 6 services; while co-curricular activities are emphasised more by middle level organizations and organisational activities are undertaken more by smaller organisations.

Human resource development activities

The Means, SDs, and F ratios are presented in Table 5 for organisations with and without HRD activities.

Table 5: Comparison of scale means by HRD activities

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic activity	No	133	225.96	22.872	NS
	Yes	151	223.77	21.163	
Management Behaviour Problem	No	133	48.11	8.895	NS
	Yes	151	46.02	11.868	
Therapeutic	No	133	37.04	11.590	NS
	Yes	151	39.34	11.029	
Co-curricular activities	No	133	102.60	21.572	P<0.01
	Yes	151	94.72	25.517	
Students performance	No	133	41.74	7.077	NS
	Yes	151	41.18	6.472	
Organisational activities	No	133	73.51	14.314	P<0.001
	Yes	151	67.66	14.348	
Grand score	No	133	528.97	65.051	P<0.05
	Yes	151	512.68	68.405	

NS - not significant

Organisations without HRD activities laid greater emphasis on the role of special educators in co-curricular activities, organisational activities and in over all practices, compared to those with HRD programmes. This is to be expected as these practices are non-academic in nature.

3. Characteristics of special educators

Gender

The means, SDs, F ratios for male and female educators are presented in Table 6.

Table 6: Comparison of scale means by respondent gender

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Activity	Male	78	218.12	24.006	P<0.01
	Female	206	227.33	20.648	
Management Beh.Problem	Male	78	47.22	8.117	NS
	Female	206	46.92	11.434	
Therapeutic	Male	78	38.74	11.545	NS
	Female	206	38.08	11.275	
Co-curricular activities	Male	78	98.69	23.547	NS
	Female	206	98.30	24.307	
Students performance	Male	78	39.83	7.353	P<0.05
	Female	206	42.05	6.430	
Organisational activities	Male	78	72.00	14.424	NS
	female	206	69.80	14.655	
Grand score	Male	78	514.60	67.644	NS
	Female	206	522.47	67.114	

NS - not significant

Female special teachers were found to be more practice oriented in terms of academic activities such as annual planning, lesson planning, monitoring, evaluation, use of aids, feedback parent counseling, compared to their male counterparts. It is the same with practices related to students' performance. In the remaining practice areas, there were no significant gender differences.

General academic qualifications

The special educators were grouped under three levels on the basis of general education: intermediates (N=58), graduates (N=52) and post graduates (N=74).

Table 7 shows the Means, SDs, and F ratios for the 3 groups.

Table 7: Comparison of scale means by qualification (General)

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Beh.Prob.	Inter	58	220.52	22.962	NS
	Degree	152	224.38	21.533	
	PG	74	229.01	21.613	
Management Beh. Prob.	Inter	58	45.63	9.278	NS
	Degree	152	46.70	11.149	
	PG	74	48.77	10.359	
Therapeutic	Inter	58	37.22	11.564	NS
	Degree	152	28.28	11.779	
	PG	74	39.03	10.252	
Co-curricular act.	Inter	58	95.45	24.050	NS
	Degree	152	97.74	25.055	
	PG	74	102.09	21.630	
Students performance	Inter	58	40.24	6.845	P<0.05
	Degree	152	41.05	6.702	
	PG	74	43.19	6.549	
Organisational activities	Inter	58	70.69	11.999	NS
	Degree	152	68.84	15.186	
	PG	74	73.39	14.923	
Grand score	Inter	58	509.66	63.068	NS
	Degree	152	516.99	70.989	
	PG	74	535.49	60.390	

NS - not significant

There were no differences between the groups on all domains except for students' performance. The higher the general education the greater the emphasis on activities to improve educational outcomes and achievements of intellectually disabled children.

Professional qualification.

The special educators were grouped as 'less qualified' e.g., those who had undergone foundation courses or bridge courses (N=40), and 'qualified professionals', e.g., those with diplomas or degrees in special education(N =244). The Means, SDs and F ratios for these groups are presented in Table 8.

Table 8: Comparison of scale means by professional qualifications

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Activity	Less Qualified	40	228.28	21.586	NS
	Professional	244	224.23	22.021	
Management Beh. Prob.	Less Qualified	40	45.93	14.10	NS
	Professional	244	47.18	39.952	
Therapeutic	Less Qualified	40	37.53	12.862	NS
	Professional	244	38.38	11.088	
Co-curricular activities	Less Qualified	40	92.65	28.493	NS
	Professional	244	99.35	23.156	
Student Performance	Less Qualified	40	41.15	10.242	NS
	Professional	244	41.49	6.025	
Organisational Activity	Less Qualified	40	69.25	16.092	NS
	Professional	244	70.59	14.368	
Grand Score	Less Qualified	40	514.78	77.652	NS
	Professional	244	521.22	65.503	

NS - not significant

None of the F ratios were significant, showing that the groups did not differ on any domain.

Years of teaching experience

The special educators were categorised under two groups: those with less than 5 years experience (N=117) and those with experience of 5 years and above (N=167). The Means, SDs and F values for these groups are presented in Table 9.

Table 9: Comparison of Scale means by years of Experience

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Activity	Below 5	117	219.53	21.93	P<0.001
	5 and above	167	228.49	21.30	
Management of Beh. Prob.	Below 5	117	43.75	11.61	P<0.001
	5 and above	167	49.28	9.23	
Therapeutic	Below 5	117	37.10	12.11	NS
	5 and above	167	39.07	10.72	
Co-curricular activities	Below 5	117	92.81	24.19	P<0.001
	5 and above	167	102.33	23.20	
Student Performance	Below 5	117	40.23	6.54	P<0.05
	5 and above	167	42.29	6.79	
Organisational Activity	Below 5	117	66.87	15.02	P<0.001
	5 and above	167	72.87	13.82	
Grand Score	Below 5	117	500.30	71.52	P<0.001
	5 and above	167	534.33	60.43	

NS - not significant

Years of teaching experience appeared to be a significant variable influencing practices in special education in all domains except therapeutics, which is not a primary responsibility of the educators.

Income level of special educators

The sample was divided into two groups, those with less than rupees 3000 per month as salary (N=119), and those with more than rupees 3000 (N=165). Table 10 presents the Means, SDs and F ratios for the two groups.

Table 10: Comparison of Scale means by years of Experience

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Activity	Upto 3000	119	223.61	21.045	NS
	Above 3000	165	225.65	22.635	
Management of Beh. Prob.	Upto 3000	119	44.72	11.058	P<0.01
	Above 3000	165	48.64	9.997	
Therapeutic	Upto 3000	119	37.91	11.411	NS
	Above 3000	165	38.52	11.305	
Co-curricular activities	Upto 3000	119	96.33	23.942	NS
	Above 3000	165	99.91	24.064	
Student Performance	Upto 3000	119	40.66	7.926	NS
	Above 3000	165	42.01	5.728	
Organisational Activity	Upto 3000	119	69.82	14.524	NS
	Above 3000	165	70.82	14.685	
Grand Score	Upto 3000	119	513.06	69.079	NS
	Above 3000	165	525.54	65.582	

NS - not significant

Income differences did not significantly influence practices in special education in all domains except management of behavioural problems, where the higher salaried special educators demonstrated significantly greater use of interventions in this activity.

Age

Three groups are formed: below 30 years (N=87), 30-39 years (N=131) and 40 years and above (N=66). The Means, SDs and F ratios are presented in Table 11.

Table 11: Comparison of Scale means by Teachers age (Years)

Area	Groups	N	Mean	Std. Deviation	F-ratio
Academic Activity	Below 30	87	221.52	18.442	P<0.001
	30-39	131	222.71	23.702	
	40 and above	66	233.26	20.780	
Management of Beh. Prob.	Below 30	87	44.91	11.005	P<0.001
	30-39	131	46.11	10.454	
	40 and above	66	51.52	9.139	
Therapeutic	Below 30	87	37.46	12.476	NS
	30-39	131	38.54	10.201	
	40 and above	66	38.76	11.996	
Co-curricular activities	Below 30	87	94.66	23.716	NS
	30-39	131	101.37	23.377	
	40 and above	66	97.48	25.315	
Student Performance	Below 30	87	40.39	5.788	NS
	30-39	131	41.37	6.203	
	40 and above	66	42.98	8.575	
Organisational Activity	Below 30	87	66.43	15.016	P<0.001
	30-39	131	71.83	14.013	
	40 and above	66	72.80	14.349	
Grand Score	Below 30	87	505.36	71.798	P<0.05
	30-39	131	521.93	63.113	
	40 and above	66	536.80	65.669	

NS - not significant

Table 11 shows that older age and experience (which is a related variable) significantly influence practice under academic activity, management of behaviour problems, organisational activities and the overall practice activities. In the area of therapeutics, co-curricular activities, and student performance no significant inter group differences were observed.

Discussion

This study on special educational practices followed by special educators in India revealed some interesting findings. Although it is generally expected that urban centres would be more effectual compared to rural ones because of better accessibility or infrastructure

facilities, there were no differences in practice between rural and urban samples, demonstrating generality of practices followed by special educators across different locations. Another point to note was that number of services offered or involvement in HRD activities did not by and large significantly affect core areas of practice in special education.

Women are generally believed to be better teachers of younger children and of children with disabilities. This study showed that women emphasised academic activity and students' performance significantly more than their male counterparts. Women were also more involved than men in other domains, with the exception of organisational activities.

It was expected that special educators with higher general education would be more competent and would function at a higher level in their practices across the different domains. Although this trend is seen in the results, the only significant difference was in the area of student performance, where the more educated teachers emphasised educational outcomes and achievement. However, level of professional education had no influence on special education practices.

The findings that there are no differences in practices across urban and rural areas, and that professional qualifications may not be a major influence on special education practices have implications for planning for greater coverage of these services in rural areas. Community based rehabilitation programmes in particular can capitalise on these findings, and utilise people with lower qualifications from the community, particularly female family members of children with disabilities, to expand coverage of special education.

In selection, recruitment and retention of special educators experience has always been valued and given preference. The results of this study support this assumption, showing that experienced and older educators were more competent than less experienced counterparts. Salary was not a major influencing factor on most domains of activities, which again is an encouraging trend when considering service expansion in developing countries.

*National Institute for the Mentally Handicapped
(Govt. of India, Ministry of Social Justice & Empowerment)
Manovikasnagar, Secunderabad-500 009, India
hyd2_dirnimh@sancharnet.in

**D-25, Maitrivihar
Bhubaneswar-751023, India