

ACADEMIC ACHIEVEMENT OF CHILDREN WITH WRITING DIFFICULTIES IN RELATION TO THEIR PSYCHO-SOCIAL VARIABLES

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ABSTRACT

Writing is the most important form of communication, and in the hierarchy of language abilities, it is usually the last to be learned. Written language allows one to communicate with others, to express ideas and feelings, and share knowledge. The present study is conducted on 93 children with writing difficulties of five Taluks of Kerala state. Writing Difficulties Diagnostic Test is used to collect data. The different components of the test include letter formation, letter slope, letter size, letter space, word space, letter-word alignment and letter joints. The collected data were analysed using number and percentages, t-test, F-test and Product Moment Correlation. This article helps to understand what the writing difficulties are?, characteristics of children with writing difficulties and psycho-social correlates of writing difficulties. Further, the authors suggest the remedial programmes to overcome writing difficulties in children.

INTRODUCTION

Written language is a highly complex form of communication. It is both a skill and a means of self expression. It integrates visual, motor and conceptual abilities and is a major means through which students demonstrate their knowledge of advanced academic subjects. Hamill and Mc Nutt (1981) reported that writing skills are among the best correlates of reading. Such skills include competence in writing, spelling, punctuation, capitalization, studying, making sound letter correspondence, knowing the alphabet and distinguishing one letter from the other.

Writing problems are technically known as dysgraphia. It is a written language disorder related with the mechanical writing skill of an individual. It manifests itself in poor writing performance in children of atleast average intelligence who do not have a distinct neurological ability or an overt perceptual motor handicap. Researchers have indicated that poor handwriting constitutes one of the major learning deficiencies found in the learning disabled. Most learning disabled children hate to write and avoid it wherever possible. Writing difficulties are often found in children who have reading and spelling disabilities. It is also found in children who can read and spell orally. Smith (1981) identified that

learning disabled students need direct, concentrated instruction to become proficient in written communication.

Children show a variety of handwriting problems such as slowness, incorrect direction of letters and numbers, too much or too little slant, spacing, messiness, inability to stay horizontal, illegible letters, too much or too little pencil pressure and mirror writing. Sometimes basic problems of motor co-ordination, perceptual motor difficulties and left-handedness must be attached in conjunction with the child's difficulty in handwriting.

STAGES OF WRITING

- a) **Planning:** This helps the student to consider the purpose of their writing and to keep in mind for whom their writing is intended (i.e., why am I writing, whom am I writing for).
- b) **Organising:** In this stage, writers usually organise their ideas in terms of explaining them, describing them and comparing and contrasting them (i.e., what are the steps, what is happening).
- c) **Writing:** After planning and organising the writers are now ready to translate their thoughts into the first draft. Thus knowledge is transformed into purpose.
- d) **Editing:** During this stage, the writers re-

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read their draft. They retain what is important and eliminate what is not required. Thus in this stage the writers reduce words, do paragraph development, improve sentence structure and correct errors in grammar, punctuation and spelling.

CHARACTERISTICS OF CHILDREN WITH WRITING DIFFICULTIES

A child with writing difficulties/ disorders

1. Has problems in planning, organising and writing his / her thoughts.
2. Has problems in explaining the sequence of activities. e.g., what is happening in the story / picture?
3. Has problem in describing events / people / objects (i.e., in answering questions such as how does it look like).
4. Has problems in dealing with questions such as "How are they alike" or "How do they differ" (i.e., compare and contrast).
5. Cannot deal with finer details.
6. Is deficient in knowledge about writing.
7. Does not consider writing to be a meaningful activity.
8. Cannot describe events and ideas in the same order as they come in the mind.
9. Does not understand for whom, is his / her writing piece is intended.
10. Problems in expressing self in the writing.
11. Cannot assimilate through writing.
12. Dislikes / avoids written work in the classroom.
13. Intermingles letters frequently.
14. Shows inadequate sentence structure in his / her written work.
15. Has no idea of paragraph formation.
16. Is untidy in his / her written work.

The causes of writing difficulties are; Brain damage, Brain injury, Information processing (problems with attention, memory and encoding which are important for writing), Maturational delay, Visual deficiencies, Writing positions (too much slant, writing too straight, writing too heavy etc., writing too angular, writing too irregular and spacing too wide), Left handedness and Motor disturbances. Environmental factors like - social class, family

size, geographical location, first generation learners, level of parent education, overcrowding, broken home, home environment etc. are also the causative factors of writing difficulties in children.

OBJECTIVES OF THE STUDY

1. To develop a diagnostic test to identify the children with writing difficulties.
2. To find out the significant differences, if any, in the writing difficulties of children due to variation in their Gender, Community, Father's educational qualification, Mother's educational qualification, Occupation of father, Occupation of mother, Number of children in the family, Exposure to different media, Locale of the school, Type of management of school and Medium of instruction.
3. To find out the level of Achievement motivation, Self concept, Personal adjustment, Social adjustment and Home environment of children with writing difficulties.
4. To find out the relationship between Achievement motivation and Academic achievement, Self concept and Academic achievement, Personal adjustment and Academic achievement, Social adjustment and Academic achievement, and Home environment and Academic achievement of children with writing difficulties.

HYPOTHESES OF THE STUDY

1. There exists a significant difference in the writing difficulties of children due to variation in their Gender, Community, Father's educational qualification, Mother's educational qualification, Occupation of father, Occupation of mother, Number of children in the family, Exposure to different media, the type of management of school, the locale of the school and Medium of instruction.
2. There exists a significant relationship between Achievement motivation and Academic achievement, Self concept and

Academic achievement, Personal adjustment and Academic achievement, Social adjustment and Academic achievement, and Home environment and Academic achievement of children with writing difficulties.

METHODOLOGY USED IN THE STUDY

Survey method is used for the study. The investigator constructed Writing Difficulties Diagnostic Test in order to identify the children with writing difficulties. The different components of Writing Difficulties Diagnostic Test are letter formation, letter slope, letter size, letter space, word space, letter word alignment letter joints. The developed diagnostic test contains 50 objective type questions. Each question carries 'one' mark for right answer and 'zero' for the wrong answer.

For collecting the data related to personal and Psycho-Social variables, the investigator used the Achievement Motivation Scale, Self concept Scale, Personal Adjustment Inventory for Upper primary school children, Social Adjustment Inventory for upper primary school children and Home Environment Inventory.

SAMPLE

The study was confined to five Taluks of Kottayam district of Kerala state. The Taluks which come under Kottayam district are Kottayam, Meenachil, Vaikom, Changanacherry and Kanjirappally. Out of 203 upper primary schools of Kottayam district, the investigator selected 22 schools which comprise 7 Government schools, 8 Aided schools and 7 Unaided schools using simple random technique. There were 2312 students studying in the selected schools. The children with reading difficulties were identified on the basis of three phases. They are (i) identifying phase, (ii) scientific confirmatory phase, and (iii) counter check phase.

For the first phase the teachers' observation on students' curricular activities was given due consideration. In addition to these the quarterly and half yearly examination results were analysed by the investigator. In the second phase, the identified learning disabled children

were subjected to scientific confirmatory test. For this purpose Raven's Coloured Progressive Matrices (1986) is used. The students with 5th, 25th, 25th to 75th percentile point in RPM test along with observation of teachers and poor performance in English in the terminal examination were considered as students with writing difficulties. Lastly, the writing difficulty children were counter-checked on the basis of scores in the Writing Difficulties Diagnostic Test. Thus, 93 children with writing difficulties were identified. The identified writing difficulties children have been subjected to administer the intended research tools for obtaining the relevant data.

RESULTS AND DISCUSSION

The obtained data were analyzed by using appropriate qualitative and quantitative techniques and presented in form of descriptive and differential analysis.

Table1: Number and Percentage of Children in Different Components of Writing Difficulty in English

Components of Writing difficulty	No. of Children facing the difficulty	Percentage of Children facing the difficulty
Letter formation (Visual motor perception)	39	41.94
Letter slope (Visual motor co-ordination)	64	70.33
Letter size (Revisualization difficulty)	77	84.62
Letter space (Visual motor discrimination)	41	44.09
Word space (Visual formation disorders)	45	48.39
Letter word alignment (Visual memory, motor perception)	91	97.84
Letter joints (Spatial planning deficits)	89	95.70

Table-1 shows the number and percentage of children having difficulty in different components of writing. There are 39 children out of 93 children who face difficulty in the area of letter formation. Many have difficulty with alphabet symbols to copy shapes, confusion with direction and cursive script. 64 children out of 93 children face difficulty in letter slope. Difficulty related to letter slope is due to deficit in visual motor co-ordination. The children face difficulty in writing letters in correct angles. Some children write too much slant because they keep their arms too near to their bodies and thumbs too stiff. Many children write with too straight because they keep arms too far from their bodies and fingers are too near the nib. Incorrect position of the paper also leads to wrong slant in writing. Train the children in correct sitting postures, holding the pen in correct position can help to overcome this difficulty.

Letter size difficulty is experienced by 77 children. The children commit errors in letter size by making letters too large, too small or inconsistent. Revisualization difficulty is a cause for this. Students have committed mistakes mostly in forming letters like p and q, b and d, m and n, y and j. To overcome this difficulty, it is better if the classrooms have charts of letters and words. Letter space difficulty is experienced by 41 children. Difficulty in the formation of correct letter space is due to lack of visual motor discrimination. Understanding of spatial concepts such as up, down, top and bottom are important for correct letter formation and spacing of words. Word space is the space between words. Correct word spacing is a necessary skill of writing. 45 children face difficulty with correct word space. Children have given wide space between words, narrow space or no space at all between words. Drill and practice is the best remedy to overcome this difficulty.

91 children show difficulty in letter word alignment. Alignment is the act of adjusting to a line or arrangement in a line. Difficulty in letter word alignment is due to disorder in visual memory and motor perception. This disorder is due to incorrect writing position, finger movement, exaggerated arm movement and poor understanding of baseline concept. Check all writing position and rhythmic writing movements, use repetitive exercise with emphasis on relationship of baseline to written word. Difficulty related to letter joining is due to difficulty in spatial planning and incorrect use of joining strokes. 89 children face difficulty in this area. The students experience difficulty in joining letters like a, b, e, f, o, m and n. Language games will be of great help in remedying this problem.

Table2: Mean and SD scores of Children with Writing Difficulties and the calculated t/F values based on their Personal Variables.

Variable	Subvariable	N	Mean	SD	Calculated F/t value
Gender	Boys	43	11.33	0.81	1.09@
	Girls	50	11.74	2.37	
Community	FC	42	11.57	1.68	0.02@
	BC	34	11.50	1.97	
	SC/ST	17	11.59	1.97	
Father's Educational Qualification	Primary	25	10.64	1.04	6.28**
	High School	57	11.72	1.77	
	College	11	12.73	2.61	
Mother's Educational Qualification	Primary	25	11.00	1.50	2.06@
	High School	55	11.85	2.06	
	College	13	11.31	0.95	

Father's Occupation	Agriculture	41	10.56	0.87	28.10**
	Business	52	12.35	2.02	
Mother's Occupation	Unemployed	63	11.30	1.26	4.37*
	Self-employed	22	11.64	1.94	
Number of children in the family	Employed	8	13.25	3.81	2.08*
	1 to 2 children	62	11.82	1.98	
Exposure to Different Media	3 or more children	31	11.00	1.34	7.54**
	Radio	27	10.81	1.00	
Locale	TV	47	11.47	1.56	10.22**
	Radio, TV and Magazine	19	12.79	2.64	
Type of Management	Urban	12	15.00	1.91	4.98**
	Rural	81	11.04	1.13	
Medium of Instruction	Government	47	11.09	1.68	2.93**
	Aided	35	12.29	2.01	
	Unaided	11	11.18	0.98	
	English	24	11.86	1.79	
	Malayalam	69	10.67	1.66	

**** Significant at 0.01 level; * Significant at 0.05 level; @ Not significant at 0.05 level**

From table-2, it is evident that the obtained t- value with respect to 'gender' (1.09) is not significant at 0.05 level. It implies that boys and girls are similar in their writing difficulties. For the variable 'community', the obtained F-value (0.02) is not significant at 0.05 level. It means, the variable community has no significant bearing on the writing difficulties of children. Contrary to this, for the variable 'Father's educational qualification', the obtained F-value (6.28) is significant at 0.01 level. The children of college educated fathers experience less writing difficulties than their counterparts with fathers having primary and high school educational qualification. The obtained F value (2.06) is not significant at 0.05 level for the variable 'Mother's educational qualification'.

Father's occupation has significant influence on the writing difficulty of children, as the F-value (28.10) is significant at 0.01 level. Further, the mean value states that children with their fathers engaged in business experience less writing difficulty than the children of parents with agricultural background. For the variable 'Mother's occupation', the obtained F-value (4.27) is significant at 0.05 level. From this, it can be inferred that mother's occupation has significant bearing on the writing difficulty of children. The children of employed mothers have less writing difficulty than their counterparts who are self employed or unemployed.

The variable 'number of children in the family' has significant influence on the writing difficulties of children. The obtained t-value (2.08) is significant at 0.05 level. The families with 1 to 2 children have more writing difficulties than their counterparts with more than 3 children in the family. The variable 'Exposure to different media', has significant influence on the writing difficulties of children, as the obtained F-value (7.54) is significant at 0.01 level. The children with exposure to radio or TV alone are experiencing more writing difficulties than those with exposure to radio, TV and magazine together.

From the table -2 it is clear that the variable Location of the school has significant bearing on the writing difficulties of children. The obtained t value (10.22) is significant at 0.01 level. The children from the rural schools face more writing difficulties than children from urban schools. For the variable

'Type of management of the school', the obtained F-value (4.98) is significant at 0.01 level, indicating that the type of management of school has significant influence on the writing difficulties of children. Government school children experience more writing difficulties than their counterparts studying in aided and unaided schools. From the calculated t-value (2.93), it is inferred that the variable 'medium of instruction' has significant influence on the writing difficulties of children. Further, from the mean values, it is clear that Malayalam medium school children experience more writing difficulties than English medium school children.

Table 3: Number and Percentage of Children having Writing Difficulties with their Levels of Achievement Motivation, Self Concept, Personal Adjustment, Social Adjustment and Home Environment

Variable	Low		Moderate		High	
	No.	%	No.	%	No.	%
	Achievement motivation	37	39.8	42	45.2	14
Self concept	4	4.3	79	84.9	10	10.8
Personal adjustment	35	37.6	55	59.1	3	3.2
Social adjustment	31	33.3	50	53.8	12	12.9
Home environment	33	35.5	60	64.5	-	-

Table 3 demonstrates that under the category of children with writing difficulties, 37 children (39.8%) fall in low achievement motivation, 42 children (45.2%) fall under moderate achievement motivation and 14 children are with high achievement motivation. For the personality variable Self concept, 4 children (4.3%) are with low Self concept, 79 children (84.9%) come under the category of moderate Self concept and only 10 children (10.8%) have high Self concept.

In Personal adjustment of children with writing difficulties, 35 children (37.6%) have low level of personal adjustment. Only 3 children (3.2%) have high level of personal adjustment.,

whereas 55 children (59.1%) have moderate level of personal adjustment. For Social adjustment with children having writing difficulty it is observed that 31 children (33.3%) have low level of social adjustment, 50 children (53.8%) are with moderate and only 12 children (12.9%) with high level of social adjustment. Under the variable 'Home environment', 33 children (35.5%) have less favourable home environment, whereas 60 children (64.5%) come under moderately favourable home environment. Surprisingly no children are with highly favourable home environment background.

Table 4: Correlation Between Each of the Psycho-Social Variable and Academic Achievement of Children with Writing Difficulties

Variable	Subjects		
	English	Mathematics	Other Subjects put together
	r-value	r-value	r-value
Achievement motivation and Academic achievement	0.21*	0.22*	0.99**
Self concept and Academic achievement	0.51**	0.32**	0.12@
Personal adjustment and Academic achievement	0.17@	0.19@	0.85**
Social adjustment and Academic achievement	0.13@	0.1@	0.72**
Home environment and Academic achievement	0.30**	0.27**	0.74**

N=93

**Significant at 0.01 level; * Significant at 0.05 level; @ Not significant at 0.05 level

From table-4, it is clear that the r-value for achievement motivation and other subjects (0.99) is significant at 0.01 level. While the obtained r-value for academic achievement in English (0.21) and Mathematics (0.22) are significant at 0.05 level. It indicates that the achievement motivation has a strong positive correlation with academic achievement in English, Mathematics and other subjects put together. The obtained r-value for self concept and academic achievement in English (0.51) and Mathematics (0.32) is also significant at 0.01

level. But at the same time, the r-value is not significant for other subjects.

For the variable personal adjustment and academic achievement in other subjects, the obtained r-value (0.85) is significant at 0.05 level. But for the academic achievement in English (0.17) and Mathematics (0.19), the r-value is not significant at 0.05 level. Similarly, the variable social adjustment and academic achievement of other subjects, the obtained r-value (0.72) is significant at 0.05 level. But, it is not significant for academic achievement in English (0.13) and Mathematics (0.1). Further, the obtained r-values for home environment and academic achievement in English (0.30) Mathematics (0.27) and other subjects put together (0.74) are significant 0.01 level.

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