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# **Communication Abilities as A Correlate of Academic Achievement**

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Academic achievement, Communication, Speech language disorders.

#### Author's Contribution

<sup>1</sup> Discussion,<sup>2</sup>Conception, synthesis, <sup>3</sup>Planning of research, <sup>4</sup>manuscript writing, <sup>5</sup>Interpratation and Manuscript writing, 6 Data analysis

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### Introduction

Speech and language are the most convenient form and effective tool of communication. Children with speech and language disorders can be found in every type of educational setup. The severity and type of speech and language disorders may vary, and the impacts can also be related to the age of the child. Children in normal educational setup may suffer from one or more speech and language disorders. Speech is a dynamic neuromuscular process which entails phonation and articulation. Speech problems may include voice, fluency and articulation. On the other hand, language includes vocabulary, pragmatics, sequencing and ABSTRACT

**Background:** Communication is the essential link between two persons. The communication competency of a person relates to the ability of the communicator who can render successful information processing at the other end, i.e. the listener. While talking of verbal abilities, oral skills, vocabulary and pragmatics are some key communication requisite for a successful encounter. The academic achievement generally is evidenced in the form of class achievement tests, especially in the language related content.

**Objective:** The objective of the study is to identify co-relation between Speech & Language disorder and academic performance of children in mainstream schools.

**Methodology:** it was survey based research identifying correlation between speech, language disorders and academic performance of children in mainstream schools. A Stratified random sampling technique was used for the study. The population of the study comprised of regular students studying in grades I-V in primary schools in Federal Capital territory, Islamabad. Duration of the study was February, 2016 to February, 2017.Out of 214 primary schools, 31 were selected though ensuring a representation of both urban and rural population. Both formal and informal procedures were adopted to identify the existing communication disorder while the academic scores were retrieved from the last annul exams.

**Conclusion:** It was concluded that not only a prevalence of communication disorders in children going to mainstream schools but also established respective impacts on the academic performance in terms of type of communication disorder, gender and age.

syntactical skills. According to <sup>1</sup> "the speech disabled youngster experiences a variety of potentially handicapping consequences in virtually all the areas of development including, most importantly cognitive and educational achievement and personal social development."

Depending upon the age, type and extent of speech the impact of the disorders may vary. Moreover, the disorders of speech and language may have mild to severe impact upon the academic performance of the child and especially in the language subjects that demand more oral and written performance.

Language and communication disabilities in middle and late childhood may result in inability to cope with increasing social demands. During preadolescence and adolescence, language disabilities may cause adjustment problems and widespread academic difficulties. Speech and language deficits may have a severe impact upon child's overall performance.<sup>2</sup> Pakistani society being multilingual, carries an additional burden of teaching language content other than its own, i.e. Urdu. English is a key language and identified as Language for learning (L4L), that is yet a choice available at such federally run school system. The objective of such content revolves around developing skills of both reception and expression where by students can become competent language users. "The language skills focused in the academics at schools include active and passive skills". Active language skills include writing and speaking skills while passive language skills encompass reading and listening skills. Poor communication skills were associated with poor educational scores in a study. A study's results indicated that verbal ability predicted communication and reading abilities, with executive functioning abilities contributes towards adaptive behavior, communication and socialization skills.<sup>3</sup>

The frequency and type of communication breakdowns that takes place in the speech affect the narration and conversation level of a child and yet affect education. Communication types were examined including stalls, repairs and abandoned utterances.<sup>4</sup>

Recent research suggests that children's linguistic competence may play a central role in establishing social and educational acceptance. This was concluded by evaluating children's peer interaction in a preschool classroom.<sup>5</sup> Referring to the existing literature, speech and language disorders influence both the skills of reception and expression. The additional challenges of being a part of multilingual society, respective prevalence of such communication disorders in terms of gender and age were some key links that led the researchers to find answers to this problem. In particular, the agenda to find out the impacts of speech language disorders on the academic performance and to see it as a correlate was a key concern of this effort. <sup>6</sup>

The objective of the study is to identify corelation between Speech & Language disorder and academic performance of children in normal schools.

# Methodology

Survey based research identifying correlation between speech, language disorders and academic performance of children in mainstream schools. A Stratified random sampling technique was used for the study. For this purpose data was collected through formal and informal sessions within the target area. The data were supplemented by the academic achievements of the respective students in their previous final examination.

Population for the study comprised school going children having speech language disorders, studying in the primary levels of Federal Government schools in District Islamabad, in grades 1-5 and having an age range of five to eleven years. The delimitation of the study included English language, age and grade range as mentioned. The sample comprised 247 students identified through screening and diagnostic procedures. The identified students suffered speech and language disorders in varied combinations and were selected from 31 different schools through stratified random sampling technique. School going children with any speech and language disorder were included in the study while School going children with any other disorder than speech and language disorder, were excluded in the studv.

# Results

Data was analyzed by the application of both descriptive and inferential statistical procedures available in SPSS.

Referring to the table I male students (57 percent) predominantly exhibited more communication disorder. Speech disorders including articulation, fluency and voice have shown higher prevalence in male students and seem gender biased.

Table I: Cross Tabulation of Students having SingleSpeech and Language Disorder and Gender				
	Gender			
	Male	Female		
Articulation	54	39		
Fluency	37	27		

Voice	19	9
Expressive Language	5	
Receptive Language	2	3
Receptive & Expressive Language	6	8
Hearing Impaired	1	1
Articulation & Expressive Language	4	9
Articulation & Voice	3	3
Articulation & Fluency	1	1
Voice & Fluency	2	1
Voice & Expressive Language	2	
Receptive & Expressive Language & Hearing Impaired	2	1
Fluency & Articulation & Voice	2	
Receptive & Expressive Language & Articulation	2	3
	142	105

Table II shows a cross tabulation of students having single speech and language disorder and their academic performance. The table indicates that 100 percent of the children having expressive language disorders failed, however the fail percentage of students having other problems were less than 50 percent.

Table II: Cross Tabulation of a Single SpeechandLanguageDisorder& AcademicPerformance						
	Marks obtained					
Speech and	Less % 17 and Percent Total					
Language	than 17		above			
Disorder						
Articulation	23	35	42	65	65	
Fluency	9	17	44	83	53	
Voice	10	43	13	57	23	
Hearing	1	50	1	50	2	
impaired						
Receptive	2	40	3	60	5	
language						
disorders						
Expressive	2	100	-	-	2	
language						
disorders						
Total	47	31	103	69	143	

Table III shows a cross tabulation of students having two speech language disorders and their respective academic performance in English. The table indicates that 33 percent of the children having two speech and language disorders failed in their English exams.

Table III: Cross Tabulation of Students havingTwo Speech Language Disorders & AcademicPerformance					
Speech and language disorder	Less than 17	%	17 and above	Marks ob Percent	otained Total
Articulation and voice	3	50	3	50	6
Articulation and fluency	-	-	1	100	1
Voice and fluency	1	33	2	67	3
Voice + Expressive language	-	-	2	100	2
Total	4	33	8	67	12

Table IV a cross tabulation of students having multiple speech language disorders and their academic performance in English. The table indicates that 100 percent of the children having multiple speech and language disorders failed their English exam. This signifies a severe impact of speech language disorder, when present in different combinations.

Table IV: Cross Tabulation for Students having Multiple   Speech Language Disorders & Academic Performance						
Speech a	nd	Marks obtained				
language disorder		Less than 17	%	17 and above	%	Total
Receptive	&	3	100	-	-	3
expressive						
language	+					
Hearing						
impairment						
Fluency	+	2	100	-	-	2
Articulation	+					
Voice						
Receptive	&	5	100	-	-	5
expressive						
language	+					

## 100 Discussion

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Besides other combination of speech and language disorders the most common are articulation, voice and fluency disorders, however the most common one is articulation. Being a significant correlate to gender, speech and language disorders are more commonly found in males. Males are more vulnerable than females.

Articulation Total

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A study was conducted using child-friendly methodologies to have understanding of children with speech sound disorder (SSD) in school environment. Results stated that these children are dependent in many ways because of their disorder.<sup>7</sup>

Another study's findings suggest that speech and language disorders are common in boys usually and do not certainly have any other associated disorder. Moreover, it was observed that child may suffer from language skills and language issues because of their articulation and speech issues.<sup>8</sup>

Language and communication disabilities in middle and late childhood may result in inability to cope with increasing social demands. During preadolescence and adolescence, language disabilities may cause adjustment problems and widespread academic difficulties. Speech and language deficits may have a severe impact upon child's overall performance.<sup>2</sup> Pakistani society being multilingual, carries an additional burden of teaching language content other than its own, i.e. Urdu. English is a key language and identified as Language for learning (L4L), is yet a choice available at such federally run school system. The objective of such content revolves around developing skills of both reception and expression whereby students can become competent language users. "The language skills focused in the academics at schools include active and passive skills".

The academic evaluation in our school system includes writing and speaking. It is evidenced from the study that speech language disorders affect these two language skills the most; hence the academic performance of such children is adversely affected. Odom et al, while developing an integrative approach for children with disabilities have already mentioned a likelihood of academic impacts as a consequence of speech disabilities. <sup>9</sup>

Articulation, voice and fluency disorder when present alone, or in a group of two can have a mild to moderate impact on the academic performance of the children. However, expressive language disorders have a more adverse effect than others. It may be concluded that children having impaired communication skills have a negative impact upon academic performance in language content. These findings correspond to the evidence reported in literature by Reynolds and Janzen.<sup>10</sup>

On the basis of discussion above it may be assumed that students having speech language disorders as compared to their peer group will show poor academic performance in language subjects.

### Conclusion

Majority of the students in the sample identified to have communication challenges were male and suffered in the areas of active language skills, i.e. reading and writing. Likewise, the incidence of articulation disorder, voice disorders and fluency disorders is also more common in males. However, this distinction becomes less evident in the case of different combinations of speech and language disorders.

Expressive language challenges (language disorders) have a severe impact on the academic performance when compared to a single speech and language impediment. Articulation, fluency and voice are the most common, single occurring speech disorder and have a milder impact on the academic performance of children. Children having multiple speech and language disorders categorically failed, implying that multiple communication problems severely affect the academic performance.

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