

**Failing To Succeed the First School: Exploring Phonological Factors and Letter
Reading Ability In Grade 1**

By

Dr K Abdul Gafoor
Associate Professor,
Department of Education & Junior Research Fellow
University of Calicut Department of Education
gfr.abdul@yahoo.co.in University of Calicut

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Introduction

Evidence from rural South Africa has shown that children, who were enrolled in Grade 2 and had low achievement, were less likely to complete Grade 7 than children who had high achievement (Liddell and Rae, 2001). Poor academic achievement, as early as elementary school, is one of the strongest predictors of dropping out (Rumberger & Lim, 2008). Low levels of academic achievement and disengagement from school as early as fourth grade, as these factors have been significantly linked with an increased risk of dropping out (Kennelly & Monrad, 2007). The term 'dropout' lacks a uniform definition. Many terms are used synonymously with this term they are educational mortality, disaffiliated student (one no longer wishing to be associated with the school), capable dropout (family or cultural situation did not agree with school demands), stop outs (dropouts who return to school usually within the same academic year) (Morrow, 1987), pushouts (individuals who feel, sometimes quite accurately, that people in the school want them to leave (Bachman, Green, & Wirtanen 1971.). Steinberg, Blinde, & Chan (1984) noted that official statistics do not include youngsters who drop out during the elementary and junior high school years, and most certainly they do not include the substantial number of youngsters who have not officially dropped out, but whose attendance is so irregular that they may as well have left school.

Need and Significance of the Study

Both, better school grades and higher non cognitive skills reduce the risk to become an educational dropout (Coneus, Gernandt and Saam, 2009). Although it is expected that children with low achievement are more likely than those with higher achievement to drop out, empirical evidence is scarce (Boyle et al, 2002; Hunter and May, 2002). Language skills are important for elementary school children to attain academic success and thus successful completion of the school. Developing phonological awareness helps reading development (Roman, Kriby, Parrila, Wade, & Deacon, 2009). Generally children with reading difficulties present deficits in phonological processing and language. These deficits seem to be a result of attentions of the phonological representations and poor language skills that are prior to literacy period. Goldschmidt and Wang (1999) identified low achievement and limited English

proficiency as indicators of risk for dropping out. Early identification of these alterations can be very useful for the prevention of future literacy problems and, hence, in retaining the students in the school.

Phonological Awareness is very important in development language skills. Phonological Awareness in kindergarten predicted the accuracy of word recognition at the end of grade 2 (Verhagen, Aarnoutse and Van, 2009). Phonological awareness helps in the development of vocabulary and cognitive ability (Lonigan et. al, 2009), early reading skills (Peeters, Vehoeven, DeMoor and Van 2009), and reading comprehension (Jarmulowicz, Hay, Tarm, and Ethington, 2008).

This paper analyses data obtained during a longitudinal study of school and pupil factors that leads to language difficulties in lower primary classes. The sample was cohort of students enrolled in grade 1 in the year 2010, in 11 coastal primary schools in Thrissur district (include government and aided schools). The sample was followed until 2013, through four academic years. This paper analyses phonological awareness and letter reading in Grade 1 of two distinct groups in the initial sample of 199 lower primary students. In this study there are four categories of students, they are regular (successfully reached 4th grade from 1st grade) stagnated(failed in the lower class) transferred (transferred from the present school) and mentally challenged. The last three categories practically considered as dropout because they cannot complete the 4th grade same school with regular students. Thus, this study tests difference, if any, in the performance of Phonological awareness and letter reading skills of groups that succeed and fail to successfully complete lower primary grades in their first school.

Objective of the Study

This study probes whether the level of Phonological awareness and letter reading skills in Malayalam of standard 1 student influences the status (regular, stagnated transferred) of student in the fourth year of elementary schooling.

Methodology

Survey method with longitudinal design and individual testing of variables was employed.

Sample

Sample used for this study constitute elementary school students from 11 rural lower primary schools of Thrissur District of Kerala (N=199). The schools were either government or government aided.

Tool Used for the Study

1. Test of Phonological Awareness

This test of phonological awareness is designed to measure the phonological awareness of Lower Primary students. It has three subtests, i) picture-sound recognition, ii) Rhyme recognition and iii) Rhyme production. 45 colour pictures of objects familiar to children whose names contain 47 phonemes identified from syllabus for grade 1, was administered individually. Oral instruction was given to the students to find the picture which has the pronounced sound (pronounced by the investigator) from among the 4 pictures presented at a time. The right response is the identification of the picture whose name contains the pronounced sound. In rhyme recognition, there are two sets of pictures - prompt pictures and target pictures. Name of each prompt picture rhymes with that of one of the target pictures. The child has to choose the rhyming target for the prompt picture. The test consists of two practice items followed by five test items. In rhyme production child produce words that rhymes with prompt words given in this test. The rhyming words can be with or without meaning.

The three subtests together require 20 minutes per child for administration.

Test of Letter-Reading

This letter reading task for students in grade 1 is used to find out at what extent children read Malayalam letters with correct pronunciation. This test was developed to be used with students in grade 1. The textbooks and sourcebooks are analyzed by the investigator and found that 47 letters has to be learnt by the students in 1st standard. Then 47 letter cards in different

colours are prepared. The letter-cards were shown to the child individually by the investigator. One card was presented at a time for 5 seconds and the child is asked to read it.

Categorizing students based on their status in successful completion of grades 1 to 4

The data collection began three years back when the sample students were in the middle of their grade 1. Students who moved to grade 4 in the school by the third year of the study are categorized regular. Those who remain in the same school but in lower grades are categorized as stagnated. Those who got transferred from the school before the completion of grade 4 is termed transferred. Students who are identified by teachers as Mentally Challenged are categorized as such.

Chi-square Test and contingency coefficient used for data analysis

Results

Is successful completion of grade 4 in first school dependent on student ability for Picture-sound recognition?

Table 1 Association of student status with Picture-sound recognition

	Student Status				χ^2	C
Level of Picture-sound recognition	Regular %	Stagnated %	Transfer %	M C %	18.49*	0.29
Low	67.4	13.0	17.4	2.2		
High	90.7	1.9	7.5	0.0		
Total	79.9	7.0	12.1	1.0		

* $P < .01$

Table 1 shows chi-square values ($\chi^2 (3, N=199) = 18.49, P < 0.01$) which indicates that there exists significant association between student status and Picture-sound recognition of lower primary students. Hence, success status of Lower Primary students is significantly associated with their Picture-sound recognition. Contingency C (0.29) indicates low but significant relationship between the variables. The dependence of student status on their picture sound recognition is visible in figure 1.

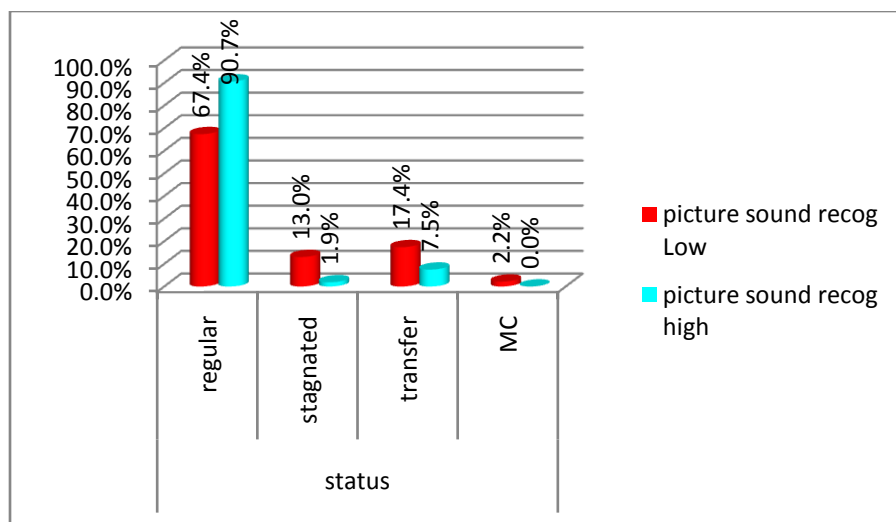


Figure 1 Association between student status and Picture-sound recognition

Is successful completion of grade 4 in first school dependent on student ability for Rhyme recognition?

Table 2 Association between student status and Rhyme recognition

Level of Rhyme recognition	Student Status				χ^2	C
	Regular %	Stagnated %	Transfer %	M C %		
Low	47.1	17.6	29.4	5.9	14.52*	0.26
High	83.0	6.0	10.4	0.5		
Total	79.9	7.0	12.1	1.0		

* P < .01

Table 2 shows chi-square values ($\chi^2 (3, N=199) = 14.52, P < 0.01$) which indicates that there exists significant association between student status and Rhyme recognition of lower primary students. Hence, success status of Lower Primary students is significantly associated with their Rhyme recognition. Contingency C (0.26) indicates low but significant relationship between the variables.

The dependence of student status on their Rhyme recognition is visible in figure 2.

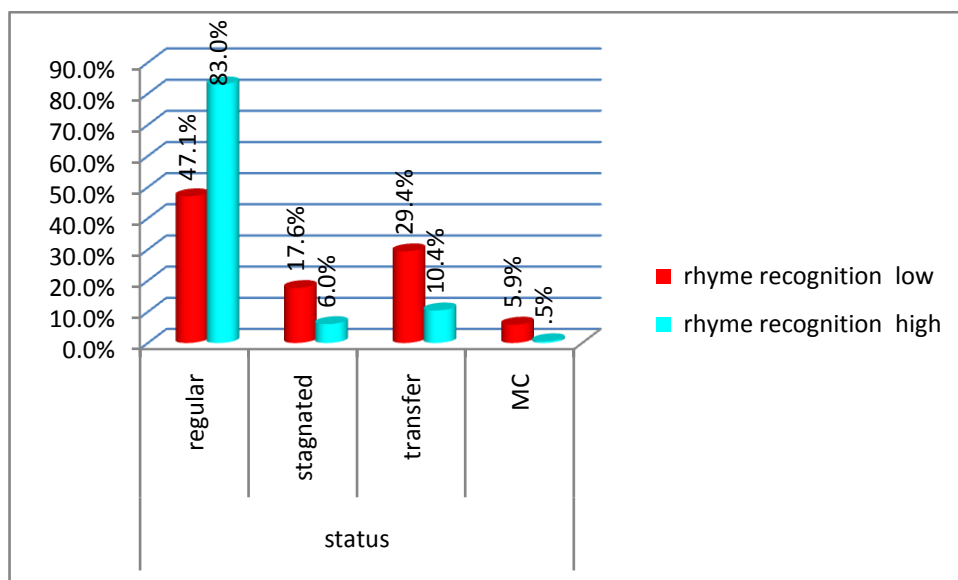


Figure 2. Association between student status and Rhyme recognition

Is successful completion of grade 4 in first school dependent on student ability for Rhyme production?

Table 3 Association between student status and Rhyme Production

Level of Rhyme production	Student Status				χ^2	C
	Regular %	Stagnated %	Transfer %	M C %		
Low	64.3	14.3	17.9	3.6	17.16*	0.28
Average	86.0	2.3	11.6	0.0		
High	86.0	7.0	7.0	0.0		
Total	79.9	7.0	12.1	1.0		

* $P < .01$

Table 3 shows chi-square values (χ^2 (6, N=199) = 17.16, $P < 0.01$) which indicates that there exists significant association between student status and Rhyme Production of lower primary students. Hence, success status of Lower Primary students is significantly associated with their Rhyme Production. Contingency C (0.28) indicates low but significant relationship

between the variables. The dependence of student status on their Rhyme Production is visible in figure 3.

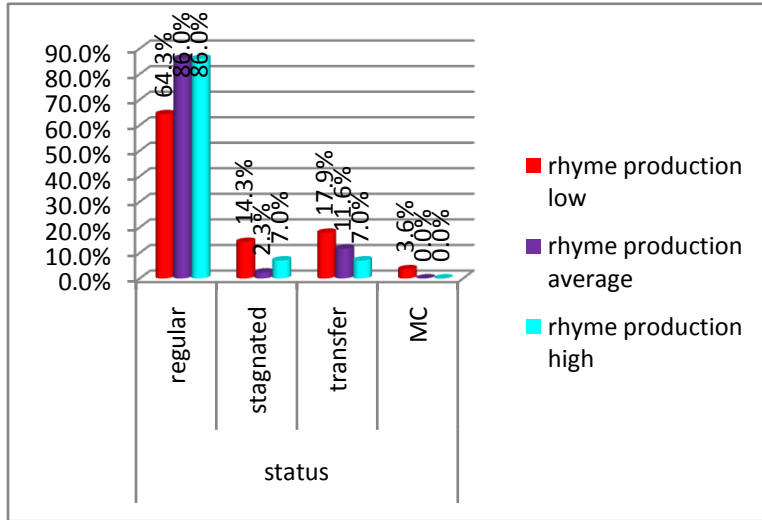


Figure 3 Association between student status and Rhyme Production

Is successful completion of grade 4 in first school dependent on student ability for Letter Reading?

Table 4 Association between student status and Letter Reading

Level of Letter Reading	Student Status				χ^2	C
	Regular	Stagnated	Transfer	M C		
	%	%	%	%		
Low	51.0	21.6	23.5	3.9	42.49*	0.42
Average	92.7	1.0	6.2	0.0		
High	84.6	3.8	11.5	0.0		
Total	79.9	7.0	12.1	1.0		

* P < .01

Table 4 shows chi-square values (χ^2 (6, N=199) = 42.49, P < 0.01) which indicates that there exists significant association between student status and Letter Reading of lower primary students. Hence, success status of Lower Primary students is significantly associated with their

Letter Reading. Contingency C (0.42) indicates moderate but significant relationship between the variables. The dependence of student status on their Letter Reading is visible in figure 4.

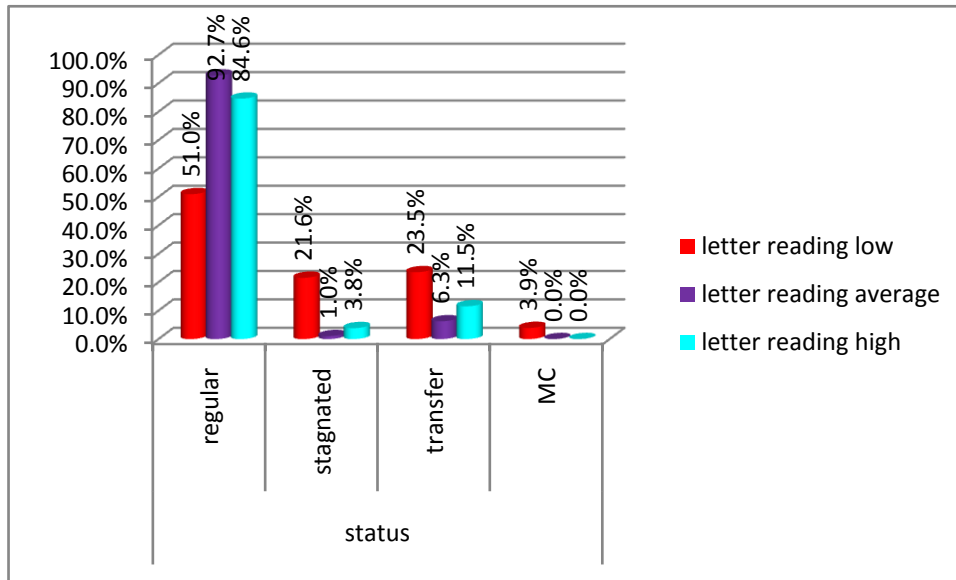


Figure 4 Association between student status and Letter Reading

Implications and Conclusion

The results showed that student status tends to associated with Phonological awareness and letter reading. It is a necessary to take essential steps for improving Phonological awareness and letter reading among lower primary students. These are the fundamental requirements of language learning and the factors which seem to be keep the students regular in the school. For this, individual attention is mandatory in the case of lower primary students. Following steps can take to improve Phonological awareness and letter reading skills:

Training in phonological awareness should be given to the Grade 1 and 2 students. Some training methods are suggested below.

- Practice phoneme blending through games.
- Practice rhyming by small rhyming poems.
- Conduct competition in making rhyming words in the classroom.
- Give proper training for pronunciation

- Instruct the students the way of formation of different groups of letters

For giving individual attention following steps can be apply:

- Reduce teacher-student proportion
- Allowing teachers to know students better by building relationships and enhancing communication
- Provision of individual assistance in academic and behavioral
- Center on helping students to attend to personal and family issues through counseling and access to social services; and
- Relating students to an realistic future

Try to bring community agencies together to deliver services to students. Such services might include:

- Managing individual student cases;
- Individual and group counseling;
- Volunteers and mentors;
- Teaching life skills and employment-related topics; and,
- Classes providing remedial education.

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