

## CHAPTER 6

### SCHOOL PERFORMANCE MEASUREMENT

#### 6.1 DEFINITION:

This is defined as an index which has a collection of the following indicators: School attendance and class grades. However, these indicators are assigned weight of good, average, and poor bearing numbers 4, 2, and 0 respectively. An Index will have a minimum total score of 4 that is if a school child obtains average for each indicator, and will be compared to total score for each school children. Any school child who will get a total score less than 4 (minimum score) will be regarded as had a poor school performance. Otherwise, if a child obtains total score equal to minimum index score or above will be regarded as had a good school performance.

However, if higher percentage of pupils will be classified by an Index as being under poor performance category, then we can conclude that Schistosomiasis morbidity do affect school performance in this endemic area. contrary to that, if higher percentage of pupils are identified by an index to have good school performance then, we can conclude that Schistosomiasis morbidity in endemic area does not necessarily affect childrens' school performance.(see school performance index table).

#### 6.2 SCHOOL PERFORMANCE INDICATORS:

In order to develop school performance index it is worthwhile to pinpoint how and where information concerning each indicator will be obtained.

##### 6.2.1 SCHOOL ATTENDANCE:

This information for each household child is collected by using a simple school children questionnaire. The questionnaire is simple in the sense that it bears simple language and clear questions which can be understood by pupils during interview. However, the questionnaire emphasizes on the knowledge about Schistosomiasis, identification of the reasons for school absenteeism, whether is due to schistosomiasis, other diseases or other family problems. In order to ensure

consistence of answers school attendance registers are used to countercheck accuracy.

#### 6.2.2 CLASS GRADES:

The grades under consideration in this indicator are those arises from semester examinations.

Table 6.1 School performance Index

	INDICATOR	GOOD WEIGHT(4)	AVERAGE WEIGHT(2)	POOR WEIGHT(0)
1	School attendance	G > 80%	80% ≥ A ≥ 50%	F < 50%
2	Class grades	G > 80%	80% ≥ A ≥ 50%	P < 50%
	Total score Vs INDEX SCORE			

### 6.3 RATIONALE FOR ADOPTING SCHOOL PERFORMANCE INDEX:

The index has been elected based on preceded studies which attempted to measure impact of Schistosomiasis on school performance. All previous studies, measured school performance by looking on class grades, tests for mental ability and score ranking, Tanner (1989). However, this study focuses on Tanzanian environment, thus the researcher prefers indicators which are usually used in measuring school performance within the country. This being the case, school attendance and class grades becomes reasonable indicators.

On the other hand, the weights assigned to each indicator are arbitrary numbered, thus any other numbers can be used to weigh the index provided the numbers chosen are in descending order, so as to reflect higher weight to "GOOD" variable and lower weight to "POOR" variable.

Although, it is pinpointed that the weights assigned to each indicator are arbitrary weights, this does not mean the percentages obtained are baseless. The percentages reflects Tanzanian educational system, especially class grades. At primary and secondary school

level, a pupil who obtains a grade greater than 80% is assigned "A", below 80% to 51% is "B", and below 50% down to 40% is "C". Any grade below 40% is regarded as failure.

Thus, from this background information the weights of school performance indicators were determined. However, any arbitrary numbers could be also used in a descending order and yet will not change the effectiveness of the index to identify and measure school performance.

#### **6.4 EVALUATION OF SCHOOL PERFORMANCE INDEX**

##### 6.4.1 DEFINITION OF INDEX WEIGHT SCALES:

###### 1. GOOD:

For any school child, in order to be regarded as has "GOOD" school attendance as well as class grades, he/she must get a total score of not less than 80% or more. This means, a pupil must attend classes 80% or more of the total days in all semesters.

###### 2. AVERAGE:

For a pupil to be regarded as has "AVERAGE" score in either school attendance or class grades must get any score less than 80% but not less than 50%.

###### 3. POOR:

However, if a pupil obtains a total score less than 50% in either of the indicators, then will be classified as had poor school attendance or class grade. In all cases, respective weights will be assigned i.e. 4 for "good", 2 for "average" and 0 for "poor".

##### 6.4.2 HYPOTHETICAL DATA ON CLASS ATTENDANCE AND CLASS GRADES OF SCHOOL CHILDREN.

###### CASE I:

After interview and going through school attendance registers as well as school examination report, a certain pupil obtained the following weights in the two indicators: (i) He attended the classes very well, and the calculation on average shows he/she attended class for 84% days of all days. (ii) His/her class grades from semester examinations were determined to be 47% Using index table, in terms of school attendance the

pupil is classified as GOOD hence assigned weight of 4, and 0 weight is assigned for class grades as 47% is a score less than 50% hence, classified as POOR. Total score is  $4 + 0 = 4$ . When total score is compared to minimum index score (4 weight), this pupil is identified by the index as had GOOD SCHOOL PERFORMANCE, because he obtained at least a minimum score of the index.

#### CASE II:

A pupil obtained the following results after analyzing interview responses as well as school reports. (i) His/her school attendance is 32% of all total school days. (ii) His/her class grade is revealed on average to be 55%. Using the index table criteria, the pupil is classified as poor in terms of school attendance, because the number of days attended class is only 32%, hence assigned zero weight. For the case of class grades, the pupil is classified as AVERAGE, because 55% score is above 50% though less than 80% as a result weight assigned is 2. Total score is  $0 + 2 = 2$ . However, minimum index score requires a total score of 4 in order to have good school performance. Thus, this pupil is identified by the index as had POOR school performance.

#### 6.4.3 RESULTS:

Cases 1 and 2, represents two pupils as have been identified by the Index. In the first case, a pupil has good school performance whereas in the second case has poor performance. In order to reach a general conclusion, whether schistosomiasis affects school performance of the school children in endemic area we need to present each of the two categories of school performance in percentage form. This means any category which will reveal higher percentage of pupils belongs to it, conclusion will be drawn towards it.