CHAPTER THREE

METHODOLOGY

3.1. INTRODUCTION

The early school-effectiveness research had its roots in various quantitative sociological input-out studies and in economic research on educational production functions (Hanushek, 1979). The underlying premise of these studies was that school outputs such as student achievement on standardized tests could be associated statistically with measures of school input such as student characteristics and instructional practices (Hanushek, 1986).

The studies of school-effectiveness in the late seventies emphasized the process rather than the input correlates of school output. It investigated smaller samples of schools (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979). The focus was on the achievements of all students, concern with the progress over time, and a wider range of outcomes. Studies of differences between effective and ineffective schools appeared to reveal certain correlates of effectiveness (Edmonds, 1979; Purkey and Smith, 1983). In the early eighties, studies examined why schools serving at-risk students seemed to be doing so poorly by extensive observations of organizational practices, interviews with school personnel at all levels, and reviews of research on

More recent research also recognize the crucial importance of school intake, and attempts to control, usually statistically, for intake differences between schools before any comparisons of effectiveness are made (Mortimore, 1991b; Mortimore, Sammons & Thomas, 1995).

In the study of school climate and school culture as determinant of school effectiveness, despite decades of empirical investigations, the meanings of both terms have remained elusive and vague (Anderson, 1982). Data on the perceptions of individuals had been collected through paper-and pencil tests consisting of items that were conceptualized to be representative of the two terms (Maxwell & Ross-Thomas, 1991). Many researchers believed that tacit assumptions, values, and beliefs commonly shared in an organization could shape members' perceptions, feelings, and behavior (Mitchell & Willower, 1992; Schein, 1985). In addition, institutions worked best when people were committed to certain commonly held values and were bonded to one another and to the organizations by means of symbols (Peters & Waterman, 1982). Dimensions of school culture that were identified as being important in explaining secondary school effectiveness were norm of teamwork (Lightfoot, 1983), norm of orderliness (Tal, 1978), norm of continuous school improvement (Louis & Dentler, 1988), norm of encouraging students to take responsibility (Reynolds, 1985), norm of adaptation to customers' demands (Harnish, 1987), norm of valuing teacher competency (Goodlad, 1984), and norm of valuing principal competency (Heck, 1992).
According to literature, the order of values of effective schools were academic achievement, continuous school improvement, and orderliness. For average schools, the order of values were orderliness, teamwork, and academic achievement (Dagan, 1993; Chen, Shiloah, and Vanesky, 1984). Gaziel (1997) indicated that to be effective in a disadvantaged environment, where education was less highly valued, a school must, first, have a school culture that valued academic achievement. Second, continuous school improvement and teamwork. Only then, the creation of an orderly environment. Gaziel (1997) studied the impact of school culture on the effectiveness of secondary schools with disadvantaged students in Isreal. Schools were identified in terms of weighted mean scores in the national matriculation examinations. Answers from the questionnaires were analyzed by using varimax rotation which yield six factors.

In another study, Zigarelli (1996) analyzed data taken from the Isreali National Longitudinal Study for the years 1988, 1990, and 1992 by regression analysis. He found that effective schools had a cultural norm which emphasized mastery of course material, students placed a high priority on learning, there was plenty of classroom time to learn, teachers got along with one another and were satisfied with their work environment.

In Malaysia, Rahimah Haji Ahmad and Zulkifli A. Manaf (1994) studied the profiles of effective and less effective schools. They used The School Climate Profile to measure four constructs: Interpersonal relationships, Teaching and learning, Administration, Physical facilities.
The instrument had thirty-one items which consisted of statements in which respondents had to respond on a four point scale based on the degree of agreement with the statement. The lowest value, 1, was for strongly disagree, and the highest value, 4, was for strongly agree. In this study, both separate sub-scale scores and composite scores were used in the analysis. The One-way ANOVA was used to compare the differences among the schools on the four main themes.

Thus, the aim of this study is to investigate the status of a secondary school in relation to seven effective schools correlates as perceived by the teachers and students in the school. In addition, it is hoped that this study would create an awareness amongst the teachers and the students of the need for consensus regarding school improvement strategies. It is also hoped that the identification of weak effective schools correlates would provide a guide for planning effective strategies.

3.2. METHOD AND INSTRUMENT

The survey method was used to conduct the study and the unit of analysis was the school. The instrument used was a pencil- and- paper questionnaire with 42 items. The instrument was adapted from a questionnaire in the Florida Educational Research Association, November 10, 1994. In the original instrument, there were seven effective schools correlates and a total of 74 items:
1. Clear School Mission: 9 items;
2. Frequent Monitoring of Student Progress: 5 items;
3. Safe and Orderly Environment: 13 items;
4. High Expectations: 11 items;
5. Opportunity-to-Learn: 12 items;
6. Instructional Leadership: 11 Items;

The instrument was used for a study which consisted of Florida Chapter 1 schools that served children in high poverty environment. For the study, eight high-performing and eight low-performing schools were selected in the sample. These sixteen schools represented both urban and rural schools. The instrument was based on staff questionnaires from the Connecticut Department of Education and The San Diego Public Schools. Items for the elementary school staff were modified where necessary to reflect instructional practices that were not included when the San Diego and Connecticut questionnaires were developed. Scores were based on a five-point scale of -2 (strongly disagree) to +2 (strongly agree) with a mid-point of 0 (don’t know). As the score approached the upper/positive range of values, it signified the staff agreed that this component was present in their school. Conversely, as the component total score approached the lower/negative range of values, it indicated that staff perceived that a component was missing in their school. A score that was around 0 indicated that staff had no predominate perception about the component. An analysis of 829 completed questionnaires showed high internal reliability and
predictive validity of effective schools components.

For this study, the modified questionnaire retained the original seven effective schools correlates but each contained only 6 items. The questionnaire was also translated into the Malay language for the teachers and the students who were not familiar with the English language.

The San Diego County Public Schools’ definitions of the seven correlates of Clear School Mission, Frequent Monitoring, Safe and Orderly Environment, High Expectations, Opportunity to Learn, Instructional Leadership, and Home-School Relations, were adopted for this study.

All items were simple descriptive statements. The respondents had to indicate the degree of their agreement to each statement along a 5-point Likert scale from strongly disagree (1), disagree (2), don’t know (3), agree (4), to strongly agree (5). The mean of each effective schools correlate was used as the measure of presence of each component in the school. A mean which was above the value of 3 would indicate the presence of the component in the school. As the value approached the upper range of values, it would indicate that the component was perceived as strongly present in the school. Conversely, a mean which was below 3 would indicate that a component was perceived as weakly present, and the lowest value of 1 would indicate that a component was perceived as not present at all in the school.

School factors such as the grade and size of the school, the students’ home social-economic status, the school achievement in the Lower Secondary School Assessment (PMR) for the Form Three and the Malaysian Certificate of Examination (SPM) for
the Form Five, and average student attendance rate for the year 1995-98, were obtained from records kept in the school and the District Education Office of Kluang, Johore.

3.3. THE SAMPLE

The school was one of the two secondary schools in Simpang Renggam, Johore. The school was chosen because the other school has just established at the beginning of 1999 and it has no Form Three and Form Five classes. The chosen school was established in 1975. It was awarded the title ‘Sekolah Harapan Negara Untuk Kategori Luar Bandar’ or Effective Rural School in 1995.

The school was a Grade A and two-session school. Based on school records, in January 1999, the school had an enrolment of 2885 students, 135 academic staff and 16 non-academic staff. There were 72 classes ranging from Remove to Form Five. From this total, two classes were Remove with 60 students, thirteen classes were Form One with 471 students, fourteen classes were Form Two with 686 students, sixteen classes were Form Three with 629 students, fourteen classes were Form Four with 619 students, and thirteen classes were Form Five with 420 students.

The Form Three, Four, and Five classes were in the morning session and the Remove, Form One, and Two classes were in the afternoon session.

The school served students from disadvantaged environment. Of all the fathers,
46.9% had only elementary school education, 44.5% had secondary school education, and only 8.6% had college and tertiary education. For the mothers, 60.9% had elementary school education, 33.2% had secondary school education, and only 5.9% had college and tertiary education. In terms of occupation, 70.3% of the fathers compared to 25% of the mothers worked as manual workers in the agricultural sector and factories; only 11.5% of the fathers compared to 9.3% of the mothers worked in the service sectors as teachers, police and prison staff. 17.2% of the fathers compared to 55.7% of the mothers were not working at all.

The respondents comprised 127 Form Five students and 112 full-time teachers. The students represented 30 percent of the total 420 Form five students chosen at random. Only the Form Five students were chosen because they were in Form One in 1995 and had sat for the PMR examination in 1997. Thus, they were considered to be more mature, had a better and detailed understanding of the school situation.

Of the 125 full-time teaching staff, only 112 responded.

3.4. ADMINISTRATION OF THE RESEARCH

The translated questionnaire was pilot-tested on ten teachers and some changes were made to the wordings of the items. The corrected questionnaires were then administered to 30 students. 10 of these students were randomly selected to be interviewed regarding their understanding of the items in the questionnaire. When the
students indicated they had no difficulty in understanding the items, the questionnaires were distributed to all the teachers and the students. The Student Counselor gave a brief explanation regarding the purpose of the study and definitions of effective schools correlates. Anonymity was guaranteed and the importance of sincere responses was emphasized. Each respondent was given between 30 to 45 minutes to complete the questionnaire.

3.5. DATA PROCESSING AND ANALYSIS

The data were processed by using SPSS 7.5 For Windows to get the means and standard deviations. The analysis of the means and standard deviations was used to interpret the status of the school along a continuum of effectiveness. It was also used to rank the seven effective schools correlates. A correlations analysis was conducted to ascertain the relationships among the seven variables. Finally, analysis of variance was performed to establish whether or not the difference in perceptions among the various age-group is significant.