

1998

Factors Influencing Senior Secondary School Retention in Malaysia

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**Factors Influencing
Senior Secondary School Retention
in Malaysia**

Michael Liau Tet Loke

**A Thesis Submitted in Fulfilment of
the Requirements of the Award of
Doctor of Philosophy
at the
Faculty of Education, Edith Cowan University**

Date of Submission: March, 1998

USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.

Contents

| | |
|-------------------------|------|
| Table of Contents | ii |
| Abstract | iv |
| Declaration | v |
| Acknowledgements | vi |
| List of Tables | vii |
| List of Figures | viii |
| Dedication | ix |

CHAPTER ONE

| | |
|---|----|
| Introduction and Rationale for the Study | 1 |
| The Malaysian Context | 4 |
| Theoretical Framework | 10 |
| Definition of Terms | 17 |
| Investigation of Factors Influencing Secondary School Retention in Malaysia | 20 |
| Summary | 25 |

CHAPTER TWO

| | |
|---|----|
| Review of Related Literature | 26 |
| Theoretical Background | 27 |
| Achievement Motivation, School-to-work Transition, Occupational Choice, Career Aspirations, and Reasons for Wanting to Stay on at School | 34 |
| Occupational Choice | 45 |
| Career Development | 49 |
| Career Decisions | 52 |
| Career Aspirations | 54 |
| Reasons for Wanting to Stay on in School | 56 |

CHAPTER THREE

Research Design and Methodology..... 76
Methodology..... 80
Independent Variables..... 85
Dependent Variable..... 88
Instrumentation..... 88

CHAPTER FOUR

Results and Findings..... 100
Instruments..... 107

CHAPTER FIVE

Conclusion, Implications and Recommendations..... 138
Summary..... 138

REFERENCES..... 149

APPENDIX ONE

APPENDIX TWO

APPENDIX THREE

Abstract

In this thesis a model to predict whether Form Five students in six secondary schools in Malaysia would continue with their Form Six studies and maintain their career aspirations was tested and the influence of motivation as a mediating variable was examined. There are two public examinations in Malaysia, which are not only important to the students themselves but also to their parents and to the employers who will be seeking credentials. The aspirations of students for their future careers are dependent on their performance at the Form Five public examination and the second Form Six public examination. This study sought to examine whether their performance at the Form Five examination was affected by their family background, goal commitment, school achievement, school commitment, social integration, and academic integration, and to examine whether these factors could separately or together influence a student's motivation to enter Form Six and later pursue tertiary education. Questionnaires were administered to 377 Form Five students before their Final Form Five Examinations. Interviews were conducted after the administration of the questionnaires and after the release of the Form Five examinations results, some months later. Statistical analysis making use of the SPSS/PC statistical package and the Windows for SPSS was used, and it was found that the theoretical model did predict which students would proceed to Form Six and which would leave school at the end of Form Five.

Declaration

I certify that this thesis does not incorporate, without acknowledgement, any material previously submitted for a degree or diploma in any institution of higher education; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signature..

Date..... *1-3-1998*

Acknowledgements

I am most grateful to a number of persons who have helped me to complete this thesis.

I want to acknowledge with great thanks the advice, encouragement and guidance given to me by my Supervisor, Professor Nerida F. Ellerton. Without her patience and untiring efforts, I would have found it difficult to carry out my research study.

I am also very much indebted to Professor Lourdes Arandor of RECSAM (Regional Centre for Education in Science and Mathematics) who has assisted me a great deal in the statistical analysis. I am also grateful to my former colleagues who have helped me and especially to Professor Irene Valencia and Mr. Hong Kian Sam for their many meaningful assistances. Also I would like to thank the Canadian and Australian consultants to RECSAM who had discussed and clarified matters with me in the early stages of this thesis.

I would like to thank the Headmasters, teachers and students without whose help and cooperation this research study would not have been possible at all.

Finally I would like to thank the Government of Australia for awarding me with the Overseas Postgraduate Research Scholarship (OPRS) to enable me to pursue this course and to be able to study in Edith Cowan University, one of the finest universities in Australia.

List of Tables

Table 1.1

The Number of Students Registered in the Lower Six and Upper Six Classes for the Years 1994, 1995, 1996 in Penang State 7

Table 3.1

Transition Rate of Enrolment from Lower Secondary Level and from Upper Secondary to Post-Secondary Level in Assisted Government Schools in Malaysia 1986-1993 81

Table 3.2

Organisation of Items in the Questionnaire to Test Hypothesis #1 89

Table 3.3

Organisation of Items in the Questionnaire to Test Hypothesis #2 90

Table 3.4

Organisation of Items in the Questionnaire to Test Hypothesis #4 90

Table 3.5

Sijil Pelajaran Malaysia (SPM) Examination Results: Analysis of National Grades and the Number of Students Offered Places in Form Six 94

Table 3.6

Total School Population, Enrolment in Form Five, Results in Form Five (SPM) Examination: Places Offered in Form Six Classes in the Six Secondary Schools for 1994, 1995, 1996. . . .95

Table 4.1

Classification Table Showing the Percentages of Students Wanting to Stay at School or to Leave School 104

Table 4.2

Alpha Values for Each Instrument 108

Table 4.2

Factors Extracted from the Eight Independent Variables Used in the Study 128

Table 4.4

Number of Factors Found for Each Variable 130

Table 4.5

Logistic Regression Showing the Predictors of Students Who Would Proceed to Form Six or Who Would Not Proceed to Form Six 132

Table 4.6

Intercorrelation of the Variables 133

Table 4.7

Number of Students Interviewed While in Form Five, Form Six and "Not Proceeding with School," and Their Schools 135

List of Figures

| | |
|--|-----|
| Figure 1.1 | |
| An explanatory sociological model of the dropout process (Spady, 1970) | 11 |
| Figure 1.2 | |
| A conceptual schema for dropout from college. | 12 |
| Figure 1.3 | |
| A conceptual model for the prediction of achievement and career aspiration. | 16 |
| Figure 3.1 | |
| Questions used in interviews with sub-sample of students | 99 |
| Figure 4.1 | |
| Histogram of estimated probabilities of respondents who will proceed or will not proceed to Form 6. | 126 |

Dedication

This thesis is dedicated to Nicole, my wife; Agnes, my daughter; and to Alvin and Albert, my two sons; for their thoughtfulness and encouragement on so many occasions so that I could persevere to the end of this research study.

Introduction and Rationale for the Study

Background

Youth is the time when critical choices are made. It is the period in a person's lifetime which apparently has much to do with the outcome of that person's life in the future. Thus for all youth this age is transitional but preparatory for what is awaiting them at the threshold of adulthood. At this age, young people do not have the advantages associated with the diverse life experiences of adults nor do they take on all the responsibilities associated with adulthood. Biologically, the changes associated with puberty at the average age of 14.5 years for boys and 13.5 years for girls (Tanner, 1962) to the onset of adolescence define the period for youth. On the other hand, adults would be employed, be financially independent, would often have acquired homes of their own, are likely to ascribe to some political leanings, and may be married with children. Youth is intrinsically related to preparation for adulthood. In order to make crucial choices in the careers they would like to follow, young people must therefore rely on past experiences, and on their achievements in education and in social life.

Aspirations of Youth

The choices made by the young, however fundamental or deterministic are not made in isolation. Evidently each young person is influenced by

forces associated with cultural groups, social class, gender, and ethnicity, and these affect career aspirations (Banks, Bates, Breakwell, Bynner, Emler, Jamieson, & Roberts, 1992). With regard to job aspirations, youth are influenced by parents' views, opinions from relatives, friends, youth leaders; teachers also affect the decisions of youth career aspirations. It has always been true that the advice offered by teacher counsellors and form teachers in general may affect the choices of what careers a youth will want to follow in his/her future life. That youth faces a dilemma whether to remain in school or to leave to get a job. If the young person is to stay on in school, this could mean an opportunity for enhancing his/her career in the future, or if he/she leaves school early at this age, it would mean having the opportunity to earn a living and to be independent from the family. But for those who stay on at school, there is the difficulty of pursuing further courses. This means having to choose to study certain subjects in Form Six, deciding whether to take academic courses, which could be science or arts courses or to make decisions to follow vocational technical courses, and deciding whether to have their studies interspersed with part-time work or to follow the courses in formalised classes. In this sense according to Banks et al. (1992), career patterns have crystallised into a permanent route to a destination in the labour market.

Gender

Career aspirations for men and women differ after they leave school.

Despite more females staying on in education after the age of sixteen, fewer of them go on to higher education which will lead them to professional careers (Redpath & Harvey, 1987). Those females who get a job or enter training schemes, go into different and more restricted range of occupations. Raffe and Courtenay (1988) have reported that more than half of the females in Scottish and English school-leaver surveys worked in just two occupational categories as clerks or in personal services while two more occupations, the sales and the materials processing services, accounted for most of the remainder.

Career Development

Researchers in many countries have long recognised the central role of career development for adolescents. Super (1957, 1980), for example, mentioned that career development occurs throughout one's life-span and maintained that this process of choosing a career is central to the life of an adolescent. Also, evidence has been found to suggest that with increasing age, there is greater concern with, and awareness of, career development (Osipow, 1983). On the other hand, some researchers purport to show that this task of crystallisation can go beyond the period of adolescence, as some adolescents might not make realistic or lasting career decisions (Gribbons & Lohnes, 1968; Super & Overstreet, 1960). Super (1980) confirmed such findings when he mentioned that the main roles which make up the life-space during adolescence are preoccupational and do not necessarily lead to a definite choice of an occupation.

Research pertaining to career development and related areas has been carried out mainly in Western contexts, with studies in the Malaysian context notably absent. A detailed literature review can be found in Chapter 2.

The Malaysian Context

In Malaysia, the number of students who proceed to Form Six classes appears to be decreasing. There are several reasons why students who have completed six years of primary school education and a further five years of secondary school education may not wish to continue with another two years of schooling to complete their Sixth Form education. Three easily identifiable reasons appear to be:

1. At present there are a number of institutions which take in some of the Form Five students who might otherwise wish to continue their Sixth Form education. These institutions offer courses which are designed for students to continue with a tertiary level of education via twinning programmes with foreign universities. In some of the institutions, the courses are very job-oriented and students who enrol here are assured of jobs after graduation.

2. Another reason is that the government has enlarged the scheme to allow students to enter tertiary institutions by taking a matriculation course examination. The number of students who have opted into this scheme has increased.

3. A number of students proceed directly to foreign universities without taking the Form Sixth examinations.

Although it appears possible to identify some of the reasons why an increasing number of students proceed to tertiary or further study without attendance in Form Six classes in Malaysia, nonetheless other writers have made a strong case why Form Six study is necessary. Williams (1987) for example, has argued that senior secondary school participation equips students with both specific and general skills which allow these students to contribute more to society. Likewise in Australia it has been reported that senior secondary students are better able to contribute to informed decision-making and productivity improvement in the work place as a consequence of their post-compulsory schooling (Report of the House of Representatives Standing Committee on Employment, Education and Training, 1989). They are also able to cope with technological complexity, advances and changes (Williams, 1987). Understandably increasing the years from the required 11 years in school will increase maturity and enhance self-confidence in students (Karmel, 1985; Walker, 1988).

On the other hand, there are studies which tend to show that this experience may not prove to be useful and beneficial to all students (Connelly, 1988). Also it appears that additional schooling prolongs the transition from school-to-work phenomenon and some students actually find such prolongation restrictive (Eckersley, 1989; Husen, 1987; Maas,

1990). But there is a benefit for students who stay on in school after Form Five in terms of gain in status. This achievement in status is significant in a professional sense to the student (Williams, 1987) and this was seen to be recognised in that “a more highly educational and better trained population” can be achieved (Anderson, 1983, p. 95). A wider range of career options is open to students who take the Sijil Tinggi Pelajaran Malaysia (STPM) examination in Form Six. According to Saha (1987) “the choice to continue to some form of higher education represents the most effective means for the attainment of satisfying and high status occupational positions” (p. 49).

This Study as it Relates to Form Five Classes in Malaysia

Today’s society changes with the demands made by a workforce which is much influenced by the pace of industry and technology. The role of the school in producing students who will fill the many places in the workplace continues to be questioned. It is hoped that students who leave school after eleven years of primary and secondary schooling will be able to fit the jobs created through an improved economy and increasing population. It is clearly desirable that, although students themselves might be eager to join the workforce after eleven years of schooling, provision is made for students to continue with their education in Form Six so that they can take up tertiary study. A study which predicts whether students are likely to proceed to Form Six classes is relevant at this time.

Recent data have shown that there is a downturn in the number of mainstream students enrolling in Form Six classes (Penang Education Department, 1996). This report shows that, for the Arts and Science Form Six classes in the State of Penang, the number of students seeking these places has dropped appreciably as shown in Table 1.1.

Table 1.1

The Number of Students Registered in the Lower Six and Upper Six Classes for the Years 1994, 1995, 1996 in Penang State

| Class | Year | | |
|-----------|------|------|------|
| | 1994 | 1995 | 1996 |
| Lower Six | 2590 | 2250 | 1866 |
| Upper Six | 1518 | 1550 | 1691 |

Possible reasons for this trend have already been mentioned. Increased enrolments in MARA Institutes, which provide job-oriented courses, have occurred. Students have been registering for a number of academic and professional courses with local colleges, and there are at present 13 private colleges in Penang which take in Form Five school leavers.

Entrance into Form Six Classes

In the education system of many countries, students have the option of a total of 11 or 12 years of elementary and secondary schooling. In Malaysia, students usually sit for a public examination at the end of their five years (for those entering from Malay medium primary schools) or six

years (for those entering from Tamil medium and Chinese medium primary schools) of secondary school education, and the results of this examination determine whether the students are eligible to continue for a further two years in school to undertake Sixth Form study as a pre-University requirement, or whether they have to leave school to commence a suitable career. It is clearly of interest to schools if predictions can be made whether these students are likely to stay on at school or college, or whether they will leave school.

The Malaysian education system is examination oriented. There are two public examinations which are of paramount importance not only to the students themselves but also to their parents and to their employers who will be requiring applicants' credentials. After six years of primary (elementary) school and five years of secondary school, all students sit for the SPM (Sijil Pelajaran Malaysian) examination, which is the equivalent of the former School Certificate Examination. The national passing rate of the SPM examination is approximately 67% (1995). Successful students at this examination are in a good position to seek employment in the private sector as well as in the civil service where their qualifications will be acceptable. A number of the successful students start business on their own and/or apply for admission to universities abroad.

Less than 25% of the students who pass the SPM examination are admitted to Form Six. To be admitted to Form Six, students must also have a credit in Bahasa Malaysia. At the end of Form Six, students sit for the Sijil Tinggi Pelajaran Malaysia (STPM) examinations, and successful

candidates are eligible to apply for admission to seven local universities, three polytechnics, thirty teachers' colleges and/or private colleges with overseas linkages. Some seek admission to universities and colleges abroad. Students with appropriate grades may also seek employment in the Government or in the private sector.

The aspirations of students for their future careers are clearly dependent on their performance at the public examination after they have completed Form Five and when they have done a further two years work in Science or in Arts classes at Form Six level. How well they perform in the examination at the Form Five level depends on cogent factors among which are family background, school achievement, school commitment, social commitment, and goal commitments. An examination of these factors could show how each of the factors, separately or together, enhance students' motivation to undertake Form Six studies. This study sought to examine the relationship between students' motivation and their academic achievement, and in particular, their performance in the SPM examination.

The development of a coherent model which could be used to predict whether Form Five students are likely to continue with their Form Six studies, and maintain their career aspirations, would be of interest to schools, education systems and employers alike.

Focus of the Study

This research is concerned with testing a theoretical model designed to

predict whether Fifth Form students in Penang, Malaysia, will continue to the Form Six level and whether they are likely to continue to aspire to careers which require tertiary level study.

In this thesis, the term “careers” is taken to mean the progress of youth through their encounters and enlightenment in education, employment and everyday living. “Aspirations” applies to those job positions which youth would hope to occupy on completion of courses of study. Young people’s career aspirations will vary in form according to how they are brought up, the schools they attend and the friends they attach themselves to for advice and encouragement. The interactions of such factors as schooling, parental influence, home background, motivation and influence from friends and teachers will mediate the final outcomes of the choices made by the students for future employment. This study will examine how these factors influence the choice of Form Five students to remain in school. More specifically, this study will look into the factors which can influence students’ decisions to remain in school for another two years to enable them to pursue tertiary study.

Theoretical Framework

A theoretical model for student dropout was developed by Spady (1970), and is shown in Figure 1.1.

In his study Spady (1970) concluded that dropouts are depicted “as individuals who lack at least some of the attributes commonly associated

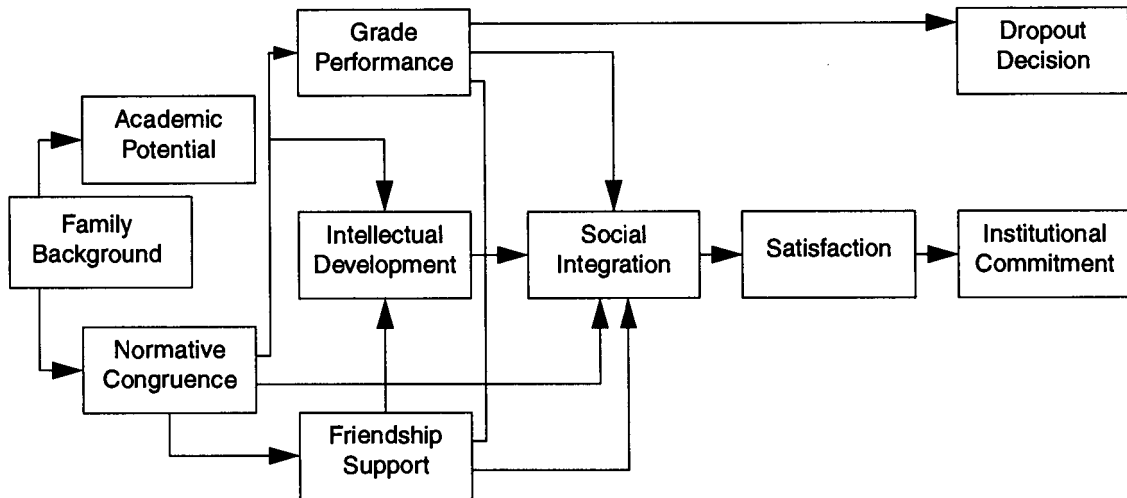


Figure 1.1. An explanatory sociological model of the dropout process
(Spady, 1970)

with psychological maturity” (p. 75). Spady outlined studies dealing with interpersonal relationships and reached the conclusion that such relationships facilitate greater integration of the student into the social system of the college. Using the information synthesised from research, Spady created a sociological model of the dropout process.

The starting point for Spady’s (1970) model is the assumption that the dropout process is best explained by an interdisciplinary approach involving the interaction between students and their college environment where the students’ individual attributes are exposed to influences, expectations and demands from a variety of sources.

The dropout process model (Spady, 1970) was tested by Tinto (1975), whose model is shown in Figure 1.2.

Both Spady (1970) and Tinto (1975) have used social integration in

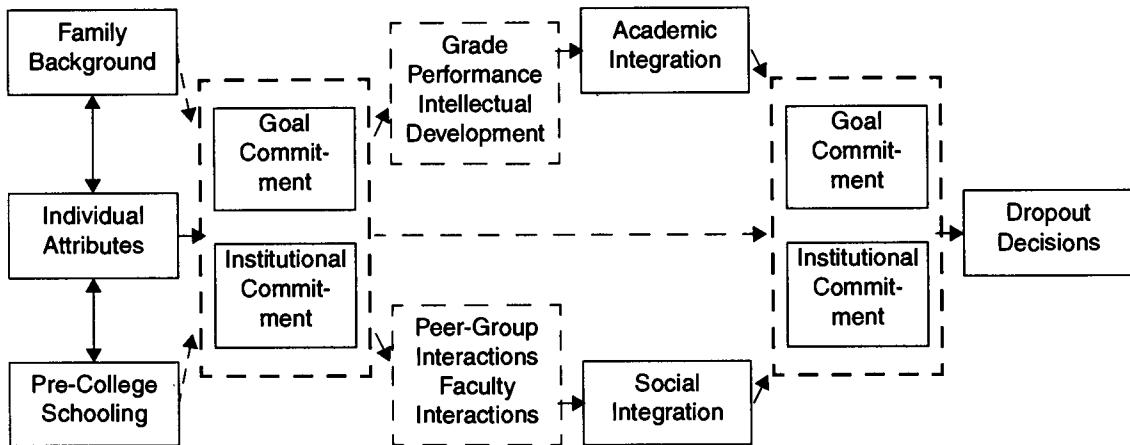


Figure 1.2. A conceptual schema for dropout from college

their theoretical models. They have argued that social integration is the extent to which a student is incorporated into the social fabric of the college environment. This construct has been operationalised by measuring items such as the students' satisfaction with their peer relationships and the frequency of meeting with their friends and teachers (Hemmings & Hill, 1995). On the other hand, goal commitment as used by Tinto (1975) referred to students' commitment to college graduation.

Tinto's (1975) theoretical model is used to argue the case that the dropout process from college, when viewed longitudinally, can be seen as a process of interactions between the individual and the socio-academic systems of the college. During this process, the students' experiences in the system (as measured by their normative and structural integration) continually modify the set goals and the commitments to the institution,

leading to a decision to persist or to leave. Tinto asserted that in the final analysis:

It is the interplay between the individual's commitment to the goal of college completion and his commitment to the institution that determines whether or not the individual decides to drop out from college. (p. 96)

Tinto also asserted that forces external to the social system of the college can affect the students' social and institutional integration and he allows for these forces in the model.

The major difference between these two models is that, while the Spady model is relatively static and descriptive, the Tinto model is predictive.

The Development of an Appropriate Model

A number of researchers including Terrenzini and Pascarella (1977, 1978, 1980), Pascarella and Chapman (1983), Pascarella and Terrenzini (1979, 1980), Apps (1981), Bean (1980), Winteler (1986) and Hemmings and Hill (1991) also used the Spady-Tinto studies. The basic model for describing individual and family background variables, commitment variables (goal and school), integration variables (social and academic) and satisfaction with study variables appears to be both valid and robust under a variety of settings at both the secondary and tertiary levels of education for predicting which students will drop out or stay on at school or university. It would appear that the model may be appropriate for use in the school milieu in Malaysia, although to date it has not been tested in this setting.

In this study, a model which draws on the Spady-Tinto models but which attempts to apply a predictive model to the Malaysian context, has been developed. (See Figure 1.3)

The model presented in this study contrasts in three ways with the Spady-Tinto models described above, which were solely concerned with predicting dropouts.

First, the theoretical model proposed in this study is one which will seek to predict whether the students stay on in school and aspire to careers which require higher education. One of the main features of the new model will be inclusion of motivation as a mediating variable. Motivation has been defined as the way teachers, parents and students conceptualise the relationship between academic achievement and effort. The aim will be to capture such conceptualisations in the everyday language of the culture of those included in the study sample.

Achievement motivation is known to be a predictor of achievement and career aspiration and is related to the same kind of background factors as those included in the Spady-Tinto family of models. The extent of students' motivation to achieve academically influences their declared intention to stay on at school and pursue a career requiring further education or to leave. In the Malaysian context, it would appear that achievement in school and in public examinations is a key factor in the final decision about whether or not to stay on at school, either to repeat the year or to proceed to the next level. Each year in Malaysia about 300,000 students, including private candidates who do not enter for the

SPM examination through regular schools, sit for the SPM examination. Students' achievement in their classwork throughout the years spent in secondary school and their performance in the SPM examination will determine whether they can be admitted to Sixth Form classes, and subsequently to tertiary courses after they have completed their schooling.

Second, in contrast with the Spady (1970) and Tinto (1975) studies, the model proposed in this thesis will include measures of academic achievement, both in school and in public examinations, as a variable. In the United States where the Spady-Tinto models were developed, public examination results are not considered as important as school examination results. The Spady-Tinto models only take account of variables which affect the school dropout situation.

The third difference between the Spady-Tinto models and the model proposed in this study is the inclusion of a career aspiration factor. For students, the decision to complete Form Five is not simply one of deciding whether to leave school or to continue with their education. It involves a review of career aspirations of those who return to Form Six to ascertain if these careers appear attainable.

This study tested a theoretical model designed to predict student decisions. Such a design has a number of implicit hypotheses. Each of the variables is hypothesised to be significantly related to one or more of the independent variables and/or to the dependent variable, the decision to drop out, stay on and maintain career aspirations or to change the latter.

The theoretical model to be tested is set out in diagrammatic form in Figure 1.3, with possible interactions represented by lines and arrows. This model builds on and extends the conceptualisations made by Spady (1970) and Tinto (1975)..

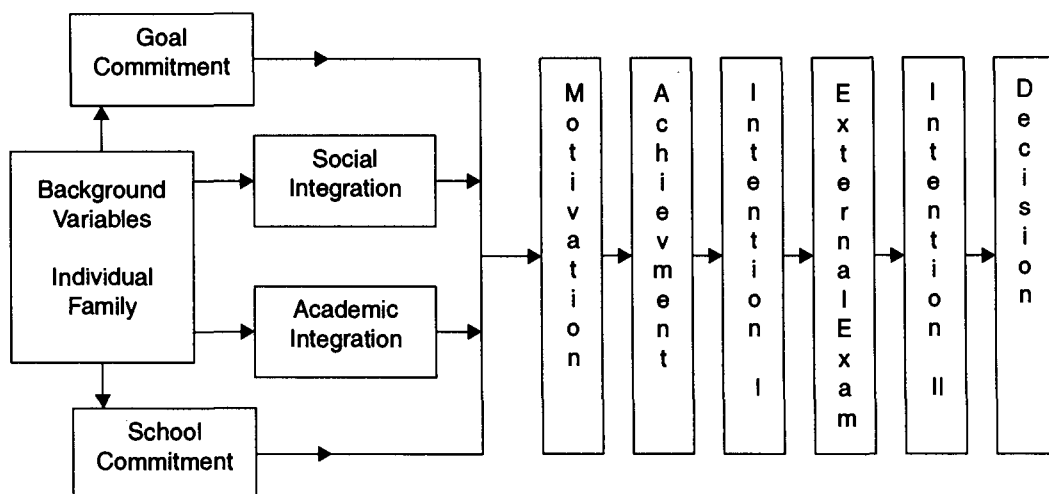


Figure 1.3. Proposed Model for the prediction of achievement and career aspiration.

Spady (1970) made use of five independent variables: grade performance, intellectual development, friendship support, normative congruence and social development. To these five independent variables Spady (1970) added two intervening variables—satisfaction with college experience and institutional commitment (Apps, 1981). On the other hand, Tinto (1975), basing his study on that of Spady, has carried out a predictive rather than a descriptive study on drop-out behaviour.

The present study examined the following independent variables: background factors, home background, goal commitment (past and future

plans), school commitment, school integration, academic integration, motivation, achievement (marks obtained from examinations held in the students' schools) and the external SPM examination. These variables are discussed in Chapter 3 of this thesis.

While Spady (1970) and Tinto (1975) carried out their studies to examine the drop-out process from college (relevant in the United States at the time), this study has sought to examine factors which influence students' decisions to stay on for another two years at secondary school (of current relevance in Malaysia).

Definition of Terms

In this thesis, several specific terms have been used in relation to the theoretical model. These terms have been adapted from the definitions used in the study by Hemmings and Hill (1991). The terms are described below, and are defined operationally through the instruments which have been developed and applied in the research reported in this thesis.

Background Variables

These include students' attributes (gender, age, and motivation to achieve), and family background characteristics (for example, the occupation of father/guardian, mother/guardian, and financial support available for the student).

Goal Commitment

Students who have set for themselves short- and long-term goals which relate to their studies and their future choice of career, and who commit themselves firmly to these goals, are more likely to realise such goals. The extent to which a student has established a commitment to such goals is termed goal commitment.

School Commitment

Most students will have a commitment to the rules, regulations, and philosophy of the school they attend. It is also the case that students who have expressed loyalty to a given school will continue to be associated with that school. School commitment is described as the extent to which students show their loyalty to a given school, and the degree of satisfaction students have with their school experiences.

School Integration

The nature of peer-group interactions, and the manner in which students interact with teachers and school administrators, reflect how well students integrate socially in the school. This variable is termed school integration.

Academic Integration

This is determined by the students' academic performance and can also be determined by the level of intellectual development. Students who take pride in their studies will integrate academically.

Motivation

This term has been used to describe how motivated the student is with respect to his or her school studies. Motivation is taken to include how determined the student is to succeed in his/her school studies, and to aspire to a tertiary level of education.

Achievement

In this study, the achievement of a student is defined as the average score obtained in the two school examinations taken in Form Five—the mid-year examination, and the school trial examination (“forecast” examination), taken before the externally-set SPM examination.

External Examination

In this thesis, external examination refers to the SPM (Sijil Pelajaran Malaysia) examination conducted by the Examinations Syndicate, Ministry of Education, Malaysia, for all Form Five students. This examination is taken after a student has completed five years of secondary school education. The examination is equivalent to the previous Overseas School Certificate Examination.

Decision

Each student was asked whether he/she would like to remain at school to complete Form Six studies.

Investigation of Factors Influencing Secondary School Retention in Malaysia

The research undertaken in this study sought to investigate the factors which influence secondary school retention in Malaysia. The following research questions were chosen to help focus the investigation, and the hypotheses were derived from these.

Research Questions

This study sought answers to the following questions:

1. Is the decision taken by Form Five students to remain in Form Six influenced by factors other than a wish to continue at school and sit for the STPM examination?
2. Does the background of the students influence the students' choice to proceed to the Sixth Form?
3. Do the variables Goal Commitment, School Commitment, Social Integration and Academic Integration influence students' decisions to remain in the Sixth Form, as well as their choice of career when they leave school after completing Form Six?
4. Can students' Achievement Motivation act as a mediating variable on Achievement Levels? Is Motivation a major factor influencing students' decision to remain in the Sixth Form and their career aspirations when they leave Sixth Form?

Hypotheses

The following hypotheses formed the basis of this research study:

1. That specific antecedents, such as Family Background, Goal Commitments, Social Integration, Academic Integration and School Commitment, affect the motivation as observed of Form Five students in Penang schools.

2. That Achievement Motivation acts as a mediating variable on the school achievement levels of Form Five students in Penang.

3. That Motivation acts as a mediating variable for Form Five students in schools in Penang, and influences their decisions and/or aspirations to proceed to Form Six.

4. That antecedent variables, such as Family Background, previous achievement (school examinations), Goal Commitments, School Integration, Academic Integration and School Commitment, and Academic Achievement (SPM results) affect students' decisions to proceed to Form 6

Limitations of the Study

There are a number of factors which may have influenced the career aspirations of Form Five students and their choice to remain in the Sixth Form, which will not be addressed in this study.

These factors are:

1. The possible influence of teacher-counsellors who assist students in their choice of future careers will not be taken into account except in cases where students changed their career aspirations after counselling. These students will be excluded from the sample.

2. Parental pressure on students' selection of career aspirations based on parents' choices will not be taken into account. Students whose motivation and/or career aspirations have been significantly affected or reversed by changes in their family fortunes will be excluded from the sample.

3. Ethnic and religious factors which might influence the students' motivation levels will not be considered directly in the research design.

The Importance of the Study

This study used the proposed model in seeking to relate student motivation to the rational and non-rational actions of students (Weiner, 1984). The motivation component of the model was investigated using both attribution theory and achievement theory. Whereas the aim of attribution and achievement theory is to explain how individuals try to know why an event has taken place (Heldeer, 1958; Kelly, 1967; Weiner, 1980), this study will identify the relative contribution of the antecedent factors present in the theoretical model, and will investigate the extent to which these same factors bring about motivation among secondary school students.

Motivation was studied using the proposed model with respect to several antecedent factors, including SES, gender, previous school achievement and personal attributes. It is expected that these factors will have significant contributory effects on the extent of motivational build-up of individual students.

This study will attempt to measure the effects of the above-mentioned antecedents on motivation, and to investigate the extent to which these antecedents are interrelated. Factor analysis will be used to determine whether these different antecedent factors can be clustered according to the concept of motivation. Factor loadings to determine how much influence the antecedents have on career aspirations stated by the students will be given. This study will investigate the extent of the influence which motivation has on academic achievement in Malaysia. In western countries, it has been established that correlations between self-esteem and academic achievement are usually positive. Studies carried out in Europe have not drawn attention to the importance of motivation in the affective, moral and cognitive domains of the students' learning but have helped researchers to understand how well students are likely to do in their school work (Entwistle and Kozeki, 1988).

A further aim of the study will be to find out the extent to which the academic achievement of students in their last year of secondary school influences the career aspirations of students. The results obtained can be used by teachers and parents in similar situations. In the questionnaire administered to the sample of students, questions pertaining to the

family background, academic and social integration, goal commitments and achievement motivation were posed to the students. The students were also asked whether they wanted to continue with another two years of education in the Sixth Form and the careers to which they aspire. The students were asked to name the careers to which they aspire, and whether they have kept or changed their career choices between the time they took the SPM and STPM examinations. In the Malaysian context, it is of interest, for example, for employers to have some indication whether prospective employees have been consistent in their career aspirations over the final years of schooling, as this might enable employers to plan on ways of helping them to achieve their aspirations.

Relative Influence of Important Variables

Data obtained from this study will be used to estimate the influence of antecedent variables on students' decision to leave school or to continue to Form Six. The study will examine the responses which students gave to questions related to the following: background factors: goal commitment factors, social integration factors, academic integration factors, school commitment factors and their motivation to succeed. A correlation matrix will be used to find out the amount of correlation which existed among these variables. The different variables were used to predict the students' intentions of remaining in school. The variables were used to find out whether students continue to aspire for careers of their choice.

Summary

Chapter One has introduced the rationale for the thesis. This Chapter also provides background to the issue of the choice faced by Form Five students who have completed their SPM examination—whether or not to continue studying for another two years in the Sixth Form. This problem is addressed by applying an adapted theoretical model to predict whether Form Five students in Penang, Malaysia, will continue to Form Six study, and whether they will continue to aspire to careers which require a tertiary level of education.

The following chapter will present a synthesis of research studies from the literature which relate to this problem. The literature search has focused on studies carried out on motivation, school-to-work transitions, occupational choice, career development, and reasons for wanting to stay on at school.

Review of Related Literature

Introduction

In any education system it is useful to be able to predict which students are likely to stay on at school or college and which are likely to leave, and to be able to explain why. In the past, research has focused on individual factors which have been found to influence retention rates and then has suggested ways of combining these to develop a coherent model. The aim of this study is to test a theoretical model which will predict whether Malaysian Form Five students are likely to stay at school to continue studies in Form Six, and maintain their career aspirations.

As students progress through secondary school, they begin to define their career aspirations. In general, all senior school students are aware of the need to work towards choosing suitable careers. These decisions appear to be made in terms of the perceived status, working conditions and accessibility of these careers to the students. The latter factor is clearly related to school achievement and to other factors which influence school retention.

Although in early research much was written about dropouts from high schools and tertiary institutions, little progress was made towards the generation of a model (Spady, 1970). Subsequently, however, a model was developed which takes into account persistence/withdrawal decisions

as influenced by the relationship between students and the academic and social systems of the school (Tinto, 1975). Considerable research has been carried out with regard to this dropout phenomenon in the United States and to a lesser extent in the United Kingdom (Apps, 1981).

The review of literature presented in this thesis will summarise the research undertaken which was concerned with motivation, school-to-work transition, occupational choice, career aspiration, the influence of background factors, and the influence of school, peers and gender. The review will give a synthesis of the salient factors which affect students' decisions about whether they should remain in school after completing their Form Five studies, and how this relates to their career aspirations.

Theoretical Background

Definition of Motivation

Motivation can be defined as a process involved in arousing, directing and sustaining human behaviour (Ball, 1977). Taken in this context, motivation is a hypothetical construct in the sense that motivation is difficult to measure or observe directly; a person's motivation is inferred from his/her behaviour in the environment in which he/she is acting. Motivation, particularly human motivation, is concerned with "the springs of action" which cause any organism, human or animal to give up one activity and to go in pursuit of another (Evans, 1982). From this perspective, motivation can cause people to change from one activity to

another. If motivation can influence people's actions, then clearly it is of considerable importance in explaining and interpreting human affairs (Maehr, 1984).

Artists and musicians, for example, are disturbed by the loss of creative verve (Henahan, 1982), and business people are disturbed by the loss of productivity (Ouchi, 1981). Considering the broader issue of motivation in adult living, it is useful to draw attention to the impact of achievement motivation in education and to the importance of such motivation for school success (Howe, 1984). Research carried out by Keeves (1986) indicated that the performance of pupils in school is strongly influenced by pupils' prior performance, by their particular approach to learning and by their motivation to learn.

Historical Perspective

Many studies have been undertaken to interpret and understand the reasons why people behave in the ways they do. In this context, there was an early belief that human behaviour is essentially rational (Murray, 1964).

Achievement motivation and its bearing on education are topics which have been the focus of many education research studies. Considerable research has been carried out to examine and evaluate the extent of the influence of motivation on human learning. Psychologists and educators alike have attempted to define "motivation" in terms of the desires, interest and satisfaction which can cause behaviour. Ryan (1958) pointed

out that a postulated “x” which energises and directs behaviour, is the common core for a wide variety of theories of behaviour.

Much of the present research in motivation and how it relates to education falls back on the earlier work of Charles Darwin who indicated the usefulness of studying animal behaviour in a systematic and scientific way (Cofer, 1972). In a sense it was Freud who made motivation a significant part of scientific psychology (Boring, 1950). Despite this interest in motivation and despite this wide currency in its interpretation and application both in education and in other fields, the word did not appear until 1911, in J. M. Baldwin’s 3-volume *Dictionary of Philosophy and Psychology*. The term “motivation” appears to have been invented for propaganda purposes by the metaphysician Schopenhauer, and has frequently been used in ordinary speech, psychology and related fields with quite different connotations (Morgan & Dickman, 1979). This being the case, particularly in psychology but to a lesser extent in the other behavioural sciences, Cofer (1972) has suggested that the earlier part of this twentieth century could be referred to as the “motivation decades.”

Rationalism and Motivation

There have been two opposing views regarding human nature. One viewpoint sees a rational being as one who is able and willing to make choices and conduct his or her affairs in a reasonable way. This was the basis for rationalism and it held sway for a considerable period of time in the history of western philosophy and religion dating from early Greek

times. In “The Republic,” Plato argued that knowing the right things was associated with doing the right things, and he believed that it was the duty of citizens to obey the laws of the State and the State was responsible for formulating such laws (Windelband, 1957). According to Plato, writing over two thousand years ago, it is the mind that determines human behaviour. Such a cognitive view with respect to how humans are motivated is still relevant to contemporary motivation theory.

There is another viewpoint which regards a person as being irrational, and his or her actions are kept in check by the demands of society. People in such a situation would be regarded as constantly controlled by the forces in their environment and therefore quite unaware of their actions. Motivation as conceived from the irrational behaviour perspective is different from motivation as conceived from a rationalist perspective view, since the latter viewpoint purports to show that each individual is free to choose the course of his or her life according to his or her reasons. Each person is responsible for his or her actions (Cofer, 1972).

Locus of Control

According to the ancient Greeks, individual human beings were helpless and could do nothing to change their fate. Shakespeare’s plays abound with reference to philosophical predestinations (“The fault, dear Brutus lies not in our stars, but in ourselves”: Julius Caesar). Fanelli (1977) mentioned that, in the 1930s, the German philosopher, Nietzsche, wrote that the idea of locus of control was an important psychological

phenomenon, and that the German psychologist Adler had also suggested that feelings of inferiority complex could be overcome by the exercise of personal power.

The notion of “locus of control” was a term introduced to describe what a person experiences when he or she enters a situation with certain expectations regarding the probable outcomes of his or her personal behaviour. These expectations are presumed to be based on past experiences (Rotter, 1954). Later, Rotter (1966), devised a questionnaire which attempted to determine the degree to which a person generally attributed responsibility to himself or herself rather than to other factors. In general, psychologists have not found the concept of will—free or otherwise—to be useful in explaining why a person acts in a certain way (Murray, 1964).

An attempt to move away from rationalism was initiated by Descartes in the seventeenth century. He asserted that animals as automata are controlled by internal forces, and he asserted that he had observed this to be the case in human behaviour. However, besides such a mechanistic explanation for individuals, Descartes held the view that man had a soul which interacted with the pineal gland. He explained that the mind and the body were in fact separate entities interacting with the pineal body. However it was left to English philosophers like Thomas Hobbes, John Locke, David Hume, James Mill and his son John Stuart Mill to make a more lasting break from rationalism.

Hedonistic Theories

Hedonism encompassed assertions that reflected a departure from rationalism. Hobbes (1588-1679) maintained that a person would behave in ways which sought pleasure and avoided pain, and that these actions were the underpinnings of human behaviour. Clearly, then, the hedonistic principle violates rationalistic accounts of human activities.

Hedonistic theories have resurfaced in the twentieth century (McClelland, 1961; Young, 1961). McClelland, for example, postulated an affective-arousal model in which he suggested that several environmental stimuli arouse a state of pleasure or pain with a corresponding tendency to approach or to avoid such stimulus goals. The resultant pleasure or pain was dependent on the person's prior adaptation to stimuli.

Instinct Theories

Scientific theories of motivation originated from Charles Darwin who held the view that instincts arose through "natural selection." McDougall (1908), in upholding such instinct theories for motivation, spoke of "an instinct as an inherited or innate psychological disposition which predetermines its possessor to perceive, or pay attention to objects of a certain class, to experience an emotional excitement of a particular quality upon perceiving such an object and to act in regard to it in a particular manner or, at least, to emphasise an impulse to such action" (p. 30).

McDougall (1908) was not so much concerned with the problem of “why do people ever behave rationally?” but rather with the influence of motive forces on their behaviour. McDougall’s influence, on the discussion presented in the present review, lies not in his specific theory of instincts and their organisation, but rather in the importance he accorded to motive forces in a person’s behaviour (Cofer, 1972).

Drive Theories

Today important theories for motivation centre around the concept of drive which was formally introduced by Woodworth in 1918, but which had been studied physiologically earlier by Cannon and Washburn (1912), and by Carlson (1916). However, the ideas of Hull, first introduced in 1943, were perhaps the most influential, and were in vogue until the 1950s (Evans, 1982). Hull postulated that all behaviour is motivated by homeostatic drives or secondary drives based on them. Internal drive states or situations in this Hullian concept are set up by depriving an individual of food, water, and/or sexual experience. These drives represent homeostatic imbalances, and an animal would therefore seek to correct imbalance. Thus the Hullian concept held that the performance of any act depended on the strength of the habit being considered, and that motivation to perform an activity was a consequence of drive.

Modern Theories

In the 1970s theorizing in this area has led to the development of mini

theories which sought to throw light on limited areas of human behaviour. The tendency today is to assume that motivation can be identified and traced to certain human needs and more importantly that the strength of these motives can be measured. Further, it is assumed that predictions can be made about how specific motives interact with an environmental context to bring about the behaviour which was related to the motive. Prediction, resulting from the observation of motivational forces acting on an individual, appear to be important. Maslow (1970) identified a hierarchy of needs, providing a psychological approach to understanding why people work at all. The main points considered in this introduction have sought to introduce the importance of achievement motivation as it relates to students' career aspirations.

Achievement Motivation, School-to-work Transition, Occupational Choice, Career Aspirations, and Reasons for Wanting to Stay on at School

Achievement Motivation

The study of motivation, especially as it concerns schooling has been influenced by theories of achievement motivation (Atkinson & Raynor, 1974; Hill, 1980; Maehr, 1974a; Nicholls, 1983; Weiner, 1979). Achievement motivation theory considers the requiring and demonstrating of competence and the doing of things which require skills. However, not all of those involved in the education of the next generation

place much emphasis on such achievements. On the contrary, while all may be attending to the need for competence and to demonstrating particular skills, attention to achievement motivation might not be found in a particular school or setting. Achievement in the classroom can take place in response to non-achievement concerns. This is illustrated in instances where children do their homework not to acquire skills but to be good at managing their weekly allowance (Maehr, 1974b; Maehr & Nicholls, 1980).

One of the objectives of this study is to determine whether achievement motivation mediates students' choice to remain in secondary school for another two years to complete their Sixth Form studies. With respect to the amount of achievement motivation present in individuals, McClelland, Atkinson, Clark and Lowell (1953) stressed that individuals can vary in their motivation for achievement and that such differences can be measured. Achievement motivation has been defined in terms of "competition" and "standards of excellence," and it has been argued that individuals high in motivation usually strive for high goals that they set for themselves (McClelland, 1955a, b; 1961; McClelland et al., 1953; McClelland, Clark, Ruby & Atkinson, 1958).

Achievement motivation has been discussed from a range of perspectives in the literature. Rosen (1959) for example stated that achievement motivation provided an impetus or drive for a person to excel, and that certain value orientations, as well as educational or occupational aspirations, seemed to channel an individual's actions

towards certain standards or goals. For Rosen, achievement motivation was closely associated with one's needs to excel. On the other hand, Maehr's (1974b) theory emphasised the need to strive towards excellence and stressed the predisposition of an individual to respond to challenge.

Katz (1967) questioned whether achievement motivation was general or independent for specific achievement domains. In a similar way to the approach used by Rosen (1959), Katz speculated that socio-economic status differences contributed more to achievement motivation than those which could be attributed to ethnic differences. Following on from what Katz had postulated, Maehr (1974b) maintained that the development of achievement motivation should be considered in the light of an individual's membership in a cultural or ethnic group.

Numerous studies have been produced in the intervening years to highlight on achievement motivation (see, for example, Ames & Ames, 1984; Atkinson & Birch, 1979; Covington & Omelich, 1984; Heckhausen, 1991; McClelland, 1987; Maehr & Pervin, 1990; Pintrich, 1991). Researchers such as Weiner (1990) have recognised the need to find more effective and appropriate procedures for understanding achievement in students. Cooper (1982), maintained that more rigorous methods need to be used in research reviews if results are to be taken more objectively. Since societal malaise is sometimes attributed to the quality of education available (Dertouzos, Lester, & Solow, 1989), Maehr and Midgley (1991) have argued that research should focus on proving the quality of education in today's schools and on the role of student motivation. Cross

(1990) has called for the need to establish priorities in educational research: assessment, collaboration, dissemination and motivation:

We know that schools improve one at a time, each according to its own circumstances and conditions. Unfortunately, neither Lincoln High School nor King Elementary nor any school in America will improve unless its teachers want to improve and its students want to learn. That is why this question of teacher, student and parent motivation is one of the single most important questions we face. Because motivation is a multi-faceted issue touching many dimensions of education, we want each centre to address it. We also want more scholars—both inside and outside the federal education research system—to explore it.

(p.22)

Although it is true that successful development of theories of achievement motivation are derived from laboratory experimentation, it must be remembered that the vitality of achievement motivation research comes from a willingness of researchers “to look out into the world, to examine the phenomenon in relation to historical, sociological and social psychological variables” (Adelson, 1969, p. 229). This is well documented in McClelland’s (1961) illuminating study which emphasised the importance of giving priority to research on achievement motivation.

There is now a revival in interest in achievement, performance, productivity and excelling in the world of work as well as in education (Maehr & Midgley, 1991). It appears most individuals are returning to what McClelland (1961) termed the “achieving society.” Motivation is necessary for society to have an active and ongoing economy (Covington, 1991; Inkeles, 1980; Steers, 1981; Thurow, 1983; Yankelowich, 1979). It is also a prerequisite for change in education (Cuban, 1990) and above all,

for student change (Maehr & Midgley, 1991).

Numerous researchers have correlated achievement-related responses with different aspects of children's and adolescents' experiences and the manner these individuals behaved (Santrock, 1990). Results from these research studies indicate that achievement-oriented adolescents have a stronger hope for success than fear of failure, are moderate rather than high or low risk takers, and persist for a long time in attempting to solve problems (Atkinson & Raynor, 1974). What is relevant to this study is that research indicated that independence training by parents can promote early achievement. More recent research tends to show that parents need to set high standards for achievement, model achievement-oriented behaviour and reward adolescents for their achievements to increase achievements (Huston-Stein & Higgins-Trenk, 1978).

Inkson (1971) hypothesised that high levels of achievement motivation are associated with a tendency for individuals to be attracted to occupations which they feel they are likely to have a moderate, rather than a high or low chance of being able to enter. Evidence for such a hypothesis came from Morris (1966), who found that achievement-oriented individuals tended to be attracted to difficult occupations in preferred occupational-interest categories. Furthermore Burnstein (1963) suggested that individuals at the low or high extremes of achievement orientation were found to be more likely to aspire to "celebrity" occupations such as Prime Minister, astronaut or racing-driver.

School-to-Work Transition

Maehr (1974b), presented the following definition for achievement motivation in terms of three elements:

Achievement motivation refers first of all to behaviour that is reference to a *standard of excellence* and can thus be evaluated in terms of success and failure. A second defining condition is that the individual must in some sense *be responsible for the outcome*. Third, there is some level of *challenge* and, therewith, some sense of uncertainty involved (p. 888)

Achievement motivation appears to play an important role in students' educational achievement and performance (Rosen, 1956). It is envisaged that motivating factors have a large part to play when students choose their future careers. (Osipow, 1983; Super, 1951; Super, Starishevsky, Matlin & Jordan, 1963). However, it appears that not much research has been carried out on possible relationships between the levels of students' achievement motivation and on career aspirations when they leave school. Maizels (1970) described this school-to-work transition as a focal point in adolescent development, associated with uncertainties, disappointments, frustrations and stress situations. This was further taken up by Roberts (1975), who said that many problems associated with the process of growing up in a modern society are largely found to be linked with how young people choose their future careers.

Teachers, parents, and career counsellors are concerned with transitions or what has been defined by researchers as "discontinuities" in people's life spaces (Bradley, 1994; Adams, Hayes, & Hopson, 1976;

Zunker, 1990). It is difficult to identify all of the factors which may affect the achievement motivation of both school leavers and students who aspire to tertiary education in order to increase their job opportunities. Davis (1988) for example, writing about research on the school-to-work transition, has commented that youth unemployment rates bear little relation to school-to-work transition policies.

In the 1970s and 1980s a much discussed topic was the difficulty faced by young people in finding employment when they leave school. In Australia, for example such concerns inspired official programmes (Hawke, 1982; Kirby, 1985). Prior to this Reubens (1977) had pointed to a number of results which had emerged from the career transition research of the 1960s and 1970s, and which pointed to the need for further research. These included:

- the transition from school-to-work was too quick and abrupt;
- the initial transition was crucial and exerted a decisive influence on a young person's occupational future;
- there were insufficient studies to highlight specific difficulties associated with such transitions.

Reubens (1977) had, in fact, identified such problem areas, when she stated that school was distinguished from work in the method and manner of supervision, the exercise of responsibility, interpersonal competition and social relationships, daily tasks and routines, penalties

and sanctions, values and moral codes, and financial and social status.

This does not appear consistent, however, with the later findings of Davis (1988) who concluded that youth unemployment rates bear little relation to school-to-work transition policies.

Apparently running counter to the problems cited by Reubens (1970), a different perspective of the school-to-work transition was developing. Morton-Williams and Finch (1968), conducted a survey and found that, among young leavers, three quarters of those who planned to leave school at fifteen felt that being at work was preferable to being at school. Bazalgette (1978), who studied the transition between school and work, concluded that schools were, in fact, less satisfactory than work settings in a number of ways.

It can be a different matter, however, when the transition is from school or further education college to higher education. Often, when students are admitted to tertiary institutions, they do not succeed in the courses they have chosen in the first year of their studies. Researchers in this area have found that the students who do not succeed are more likely to do so early in a course — in the first year, and, indeed often in the first term. The problem, apparently, lies with poor decision-making, inappropriate expectations, and sometimes the lack of support and help in reorientation when faced with unexpected difficulties (Holdsworth, 1979).

Dowling and O'Brien (1981) undertook a study of school leavers from the time they left school to one year later when they were either

employed, unemployed, or had become students of post-secondary courses. These results are relevant to an understanding of the transition from school to employment or to unemployment. It is generally accepted that students develop aspirations about the kinds of jobs they would like to have when they complete their final year of secondary education. In such a context, the desired attributes of a job are its “work values,” and Dowling and O’Brien (1981) anticipated that such values held by young employees would affect their job satisfaction and personal adjustment. The results of the Dowling and O’Brien study suggested that for both males and females the work values of school leavers tend to increase when they continue their education, and that school leavers do not lower their work values.

An important study into work-related values of male and female workers was carried out by Walker, Tausker and Oliver (1982). Their study derived from the work of Kaufman and Feters (1980), and suggested that the commonly observed gender differences on certain work values could be attributed to the inappropriate distribution of women workers in poorly paid jobs. Walker, Tausker and Oliver found that there is one area where women differ from men in their work values. This finding parallels that of Miller (1980) who found that although men and women appear to evaluate work along several similar lines, women tend to attach more value to what might be termed “job pressure” commitments.

Gender differences on vocational behaviour, career management and employee development in the work place have also been researched by

Beutell and Brenner (1986), who investigated areas of vocational behaviour, career management, and employment development. Several studies have shown that the work values of an individual help to determine the suitability of his/her career-choice, the type of training considered, and the aspired career (Pryor, 1979; Super, 1970; Zytowski, 1970). In those studies, the term "work values" was associated with those qualities which people want from their work. These values are seen to play an important role in self-concept theories regarding vocational choices (Beutel & Brenner, 1986).

Researchers have addressed themselves, both to the work environment and to associated stress as well as to the effects of these on workers (see for example, Andrisani & Nestel, 1976; Elder, 1974; Hughes, 1958; Kanter, 1977; Kohn, 1977; Moore, 1969; Mortimer & Lorence, 1979; White, 1952). The work environment can be taken to include rewards and punishments that workers receive and researchers have included other rewards, such as adequate pay, challenging work and the opportunity to develop one's own abilities. In effect, occupational experiences define work values and may lead to personality changes in individuals.

Vocational Interests

Career development is complex and its study should include investigations on several facets of a person's life (Madaus & O'Hara, 1967). Research on the vocational interests of school leavers could throw light on career patterns for science or non-science careers (see for

example, Cass & Tiedman, 1960; O'Hara, 1963) and why school leavers prefer careers such as business, law, and teaching.

Borow (1961) also pointed out that movement through major prevocational choices subsequent to vocational choice is lawful and predictable. The study carried out by Madaus and O'Hara (1967) focused on the relationship between the "vocational years" of high school and career aspiration. Their results indicated that science or non-science careers chosen by boys were almost the same as the careers the boys had chosen when they were in high school. These results were in keeping with other studies (Cooley, 1963; O'Hara, 1963).

Other researchers, such as Maar (1965), have also noted that studies in vocational choice have focused on what has been chosen rather than on how the choice was made. Maar (1965) set out to investigate how a wide range of students made vocational choices. Out of a total of 129 students, 96 (or 74.4%) had made a choice and 33 (or 25.6%) had not made one by age 25. Also, a higher proportion of those who made a choice had a father or a father substitute whom they could accept than for those who had not made a choice. Furthermore, Maar (1965) found that choosing an occupation was not related to parental occupational levels, or to self-regard, or to intelligence. The result of the study suggested that a student's father or other substitute influences the student's vocational choice than for those who had not made a choice. This is related to an earlier study which demonstrated that an individual learns much from an appropriate role model (Friend & Haggard, 1948). Hilton (1962) found

that some boys made particular choices because they were keen to pursue a certain occupation, or because they felt that this was what was expected of them. Role models have been shown to be influential for job preferences (Bandura, 1963), and for students' choice of academic track (science *vs* humanities) in high school (Myeong & Crawley). Boys appear to be influenced more by role models than girls (Tyler, 1951) and the most important person to model a work role has been found to be the father (Super, 1957).

Occupational Choice

Much research has gone into investigating the difficulties and complexities faced by adolescents with regard to their career aspirations. The discussion which follows is divided into three sections, to enable comparisons to be made between the various theories which have emerged.

Theories of Occupational Choice

Five theories will be introduced in this section to explain why individuals choose certain occupations.

Trait and Factor Theory

“Trait and factor” theory promotes the view that individuals seek jobs which have specific requirements rather than consider whether the job is

consonant with their personality traits (Brown & Brooks, 1984). Although trait and factor theory in the field of occupational choice produced much empirical research, some researchers are of the opinion that the results are no longer tenable (Brown, 1987). However, Osipow (1983) suggested that trait and factor conceptualisations have continued to be used in other theories, even though Weinrach (1979) and Crites (1981) pointed to a decline in trait-oriented ideas. Weinrach attributed this decline to the rise of Carl Rogers' non-directive philosophy (Brown, 1987).

John Holland's Theory

Quite different from the ideas put forward in the trait and factor theory, is Holland's (1973) personality type theory which posits that an individual's selection of a career matches his/her personality (Santrock, 1990). Holland's theory of vocational choice is based on the assumption that the description of an individual's vocational interests also describe the individual's personality (Holland, 1973). Holland's work on personality may be called "typology," as his work focuses on personality types. West and Newton (1983) further suggested that individuals will seek occupations which will provide outlets for themselves. Holland's theory can be applied to everyone without regard to gender, race or age. In fact, Weinrach (1984) concluded that Holland's theory of career development or vocational choice has been researched or commented on more extensively than any other.

If all individuals fell conveniently into Holland's personality types, career counsellors would have an easy time counselling students (Santrock, 1990). Holland (1987), however, has concluded that most individuals cannot be classified as belonging to a single personality type are not pure types. Even so the basic notion of matching vocational interests with personality types is recognised as an important contribution in the study of careers (Brown, 1987).

Theory of Roe and Co-workers

Roe's theory, on the other hand, sought to explore the relationship between personality and occupational choice. It made use of Maslow's (1954) hierarchical need theory and on the psychoanalytic interpretations of the importance of early childhood experiences (Roe & Siegelman, 1964). Roe and Siegelmann had hypothesised that, although the degree of a person's orientation in later life is generally positively related to the amount of love and attention received in childhood, the degree of casualness or demandingness is irrelevant to later person orientation (Roe & Lunneborg, 1985). Roe (1956) made use of information obtained from biographical interviews and Rorschach ink blot tests to differentiate between life scientists, physical scientists and social scientists. She suggested from her studies that personality differences exist between different occupational groups and that such personality differences are rooted in childhood. However, the theory appears to have its limitations, as recent research tends to show that early childhood experience may not

be as important as what she suggests (Clarke & Clarke, 1976; Rutter, 1976).

Bordin's Theory

Bordin's (1985) "psychodynamic model" of career choice postulated that persons with multiple talents and interests may be attracted to occupations which permit maximum moulding to fit self. Bordin suggested that entry into the professions of law, medicine and psychology permitted much further self-differentiation and fulfilment. Of particular interest is Bordin's observation that one of the keys to understanding what was taking place at each turning point in a career path was understanding the reasons for the continuing search for self-fulfilment as represented at each turning point (Bordin, 1985).

Sociological Theory

Unlike the four theories described above, sociological theories of occupational choice stress the cultural and social determinants of career attainment. Social theorists view individuals as being steered by socioeconomic factors toward occupational roles to match this social standing. In "status-attainment" models, career statuses such as education, occupation and income are handed down from generation to generation (Hotchkiss & Borow, 1985). Thus, parental influence is important in shaping children's status achievement. Research in occupational mobility—generally occupational change from father to

son—has been addressed in status-attainment research (Slocum, 1974). Little research in Malaysia has been carried out to date, on the influence of parents on students' choice of whether to continue on to their tertiary studies.

The theories on occupational choice as expounded by Holland (1973), Roe (1972) and Bordin (1985) introduce fundamental ideas based on psychological domains regarding the reasons why individuals make occupational choices. However, there appears to be a lack of studies on occupational choice in which data from Malaysia and the South East Asian region have been analysed.

Career Development

Theories of Career Development

Two theories on career development are outlined below, not so much to explain career choice as to describe the process or the way that choice has developed. The focus of these theories is on life stages, and on the kind of career-related issues which occur during the stages of development.

The first of the two theories, Ginsberg's theory, sees career choice as a result of a series of decisions which take place in predictable stages from birth to the early twenties and beyond this age (Ginsberg, 1972; Ginsberg E., Ginsberg S.W., Axelrad, & Herman, 1951). Ginsberg and his colleagues conceptualised occupational choice as a sequence of developmental stages leading to entry into an occupation. In their theory,

children and adolescents are described as going through career-choice stages—fantasy, tentative and realistic stages.

Ginzberg et al. (1951) stated that until the age of 11, children are in the fantasy stage of choosing a career. From the stages of 11 to 17, young adolescents are in what he calls the tentative stage in their career development. He is of the opinion that adolescents progress from evaluating their interests (11-12 years of age) to evaluating their capacities (13-14 years of age) to evaluating their values (15-16 years of age). Then adolescents shift from being less subjective to becoming more realistic when they are around 17-18 years of age. This period of around 17-18 years of age to about 20 years of age was defined as the realistic stage of career. At this stage, a person furthers his/her intentions with respect to academic improvement, and focuses on a particular career choice (Santrock, 1990). It is a crucial stage as the adolescent explores all avenues possible for a right career and finally selects the job or the preparation needed for that job.

The realistic stage in early adulthood marks the end of Ginzberg's developmental theory. Critics of Ginzberg's theory argue that the initial data were collected from middle-class youth who were white, were probably educationally successful, and had various career options open to them (Roberts, 1975).

Another theory of career development, that presented by Super (1957, 1978), is based on career self-concept theory. Super's theory draws upon the works of Buehler (1933), Havighurst (1953) and the earlier career

development theory of Ginsberg et al. (1951). Super holds that it is during adolescence that individuals construct a career concept. He sees individuals undergoing five stages in their development of a career. From 14 to 18 years of age, adolescents develop ideas about work which have to do with their own self concept. Between 18 and 22 years of age, the adolescents narrow their career choices. Between 21 and 24 years of age, young adults complete their educational training and enter the world of work. Then adults stabilise themselves at between 25 and 35 years of age. Finally there is the consolidation stage after they have reached 35 years of age. These stages should not be thought of as being rigid. Super, like Ginsberg, is concerned about the developmental stages which take place throughout the life-span.

From the discussion carried out earlier, career development has been shown to be important to young adolescents. Research has indicated that career development is a complex process and extends over a large period in the life of an individual (Madaus & O'Hara, 1967). Because of this extended period of interest, a number of researchers and allied theoreticians (Cass & Tiedeman, 1960; O'Hara, 1963; Super, 1957) are of the opinion that there is a need to isolate certain time segments or choice points for detailed analysis as "movement through major prevocational choices subsequent to vocational choice is lawful and predictable" (Borow, 1961).

A crucial stage in the life of an individual is the mid-teenage period when major choices related to education options must be made.

Adolescent development can and is associated with exploration and preparation for the future (Douvan & Adelson, 1966; Erikson, 1959; Poole & Cooney, 1987; Seginer, 1988) for a number of reasons. It is true that adolescents are faced with several normative tasks and expectations (Dittman-Kohli, 1986; Havighurst, 1948/1974) set by their parents, peers and teachers and these bear heavily on what they will be doing in the future.

Career Decisions

Theories of Career Decision

Two theorists have related their ideas to decision making for careers. The first is Krumboltz's Social Learning Theory and the second a theory put forward by Miller-Tiedeman and Tiedman. The Social Learning Theory of career decision making (Krumboltz, 1979; Krumboltz, Mitchell & Jones, 1976) built on the work of Bandura (1977) which was concerned with a general social learning theory of behaviour. The Social Learning Theory of Career Decision-Making was designed to address questions related to the reasons individuals have for entering particular educational programmes or occupations at selected points in their lives. The theory leans on such factors as genetic predisposition, environmental conditions and events, learning experiences, as well as cognitive, and performance responses and skills (Mitchell & Krumboltz, 1985).

The Social Learning Theory of Career Decision-Making posits that

individuals will very likely take actions that lead to employment in a given occupation if such individuals have been exposed to learning or employment opportunities in that occupation. Horner, Buterbaugh and Carefoot (1967) examined studies which investigated the educational, sociological, psychological and economic factors which influenced adolescents making career decisions. Their results showed that (a) the occupation of farming tends to be transmitted from father to son; and (b) on-the-job experiences is an important influence on occupational choice.

Krumboltz's Social Learning Theory posited that individuals are more likely to seek entry into given occupations if their learned skills match the educational or occupational requirements. This has been affirmed by another study which showed individuals aspire to occupations for which they feel qualified rather than to occupations for which they feel they are not qualified for (Mansfield, 1973),

The second theory related to career decision was that postulated by Tiedeman and Miller-Tiedeman (1975). Their theory differed from Krumboltz's (1979) theory in that they incorporated developmental concepts into their decision-making model. According to Tiedeman and Miller-Tiedeman the selection of an occupation takes place within stages and the process of decision making is an ongoing interaction between self and environmental expectations. Tiedeman and Miller-Tiedeman postulated that awareness of one's decision making in careers is related to the advance of career prospects. They also contended that how one advances in one's career depended on the language that one uses.

Such a theory may be particularly useful in considering the decision which the students have to make vis a vis their intentions of remaining at school. By extrapolating Tiedeman and Miller-Tiedeman's (1975) theory to the context of career choice of the language used by students in discussing their career choice, consideration of the language used by students in discussing their career choice may be fruitful in reflecting their commitment to that career. The language that the students use to explain the reasons for their decisions they are about to make for their future careers mirrors the self as Tiedeman and Miller-Tiedeman suggest. The individual has become both a reactor and an actor in disclosing personal assumptions about careers.

A study carried out by Maar (1965) suggested that students who make early decisions concerning careers were self-directing, and that they readily found their place in the world of work.

Career Aspirations

Investigating factors which influence careers and achievement motivation are particularly relevant and useful to schools and to educators because motivation affects achievement (Atkinson, 1978), the level of occupation achieved (Sewell & Hauser, 1975) and career satisfaction (Dubin, 1956).

The multifarious factors which influence career and achievement derive from social learning theory and have been found to interact with

each other (Bandura, 1978). These factors include variables such as gender, ethnicity, ability, attitudes, beliefs, and social and cultural environment. Those involved in the school-to-work transition are the students themselves, their peers, their family members, their teachers, guidance officers and tertiary level staff.

Carpenter and Western (1982) reported that the aspirations of youth are moulded by the structures of society, and are influenced by social-psychological processes and mechanisms. The influence of parental encouragement (Punch & Waugh, 1980; Spenner & Featherman, 1978), teacher expectations (Williams, 1975), the influence of peers (Picou & Carter, 1976), personal academic performance (Brookover, Beady, Flood, Schweitzer, & Wisenbaker, 1979) on career aspirations have been investigated. Carpenter and Western (1982) reported that social-psychological factors were significant in aspiration formation.

Carpenter (1983) used an "aspiration" variable measuring whether or not students planned to continue their education at the tertiary level once they had completed high school. He found a correlation of 0.58 for males and 0.59 for females between the "aspirations" variable and students' retention level. Psacharopoulos (1982) found that, by the time most students had almost completed high school they were able to identify correctly the different types of occupations which required tertiary training. In an investigation into why students decided to proceed from school to higher education, Hayden (1981) concluded that those who pursued higher education had positive teacher encouragement, did not

have financial problems, and had friends who also wanted to continue their studies.

In Australia, research has shown that the social structure of society and several social-psychological variables can affect adolescent aspirations. Relevant studies include those by Carpenter, Fleishman and Western (1989), Carpenter and Western (1982), Carpenter, Western and Foster (1980), Jones and Davis (1986), Majoribanks (1990), Marks and Jones (1991), Poole (1985), Poole and Low (1985), Sara (1982), Sheridan (1976), and Waugh (1980).

Reasons for Wanting to Stay on in School

Decisions and Plans

Much of research has been directed towards finding out the aspirations, plans and career aspirations of young persons (Carpenter & Western, 1989). The ways which young adults think, make decisions and plan for the future all play important roles in crystallising their choices for future careers (Crites, 1989). Researchers have found that adolescents tend to go about such decision making with much ambiguity, uncertainty and stress (Fuqua, Blum, & Hartman, 1987; Neimeyer & Metzler, 1987; Schulenberg, Shimizu, Vondracek, & Hostetler, 1988).

The transition from secondary education to post secondary education or to the workforce which involves a complex interplay of sociological and psychological constructs. Carpenter and Western (1989) have stated that

family social background, ethnicity, home location, ability, motives for particular post-school intentions, perceived influence of parents, teachers, and peers and academic self-assessment all may be considered as possible influences. Haller (1982) has maintained that both psychological and sociological perspectives constrain the decision-making actions of young people. Lazarsfeld (1959, 1966) also carried out research into the transition from school to the workplace. He explained that the visible transition was made up of the interaction between internal and external components—the internalisation of plans and activities on the part of the individual and the external influences from the social environment.

The position this study has taken is that an interplay of interpersonal influences and young people's backgrounds and schooling, changes or causes to change their estimation of their own abilities and their views about the need for higher education in their choice of a future career (Carpenter & Western, 1989). Such factors which are hypothesised as being able to predict young people's post-school plans will be discussed under a cluster of headings.

Background Factors

In Australia, research has consistently identified two background factors which have been positively associated with a decision to remain in school. The two factors are having a high socio-economic status (SES) and being the child of a migrant from a non-English-speaking family (Ainley, Foreman, & Sheret, 1991). This result is consistent with studies carried

out with individual students by Rosier (1979), Williams, Clancy, Batten and Girling-Butcher (1980), and Williams (1987), and at the school level by Ainley, Batten and Miller (1984a, 1984b), who found that a higher SES was linked with staying in school. An earlier study by Rosier (1978) in Australia found that within the family background, the socio-economic level of the home showed a strong monotonic relationship with a student's decision to remain at school. Differences in retentivity between States (in Australia) could be related to this factor: the States with higher levels of school retentivity had been able to achieve this situation by managing to retain, in their schools, a higher proportion of students from lower socio-economic levels. Similar results have been obtained in the United Kingdom (Burnhill, 1984; Ryrie, 1981), and in the United States (Mare, 1980).

Buriel and Cardoza (1988) carried out research to investigate the relationship between the Spanish -language-background to students' achievement among first-second-, and third- generation Mexican American high school seniors. The effects of students' and mothers' aspirations were also examined. Consistent with previous research, their study showed that students' aspirations had the strongest positive relationship to achievement for all groups in general. Studies in the United States have shown that socio-economic status is positively related to achievement for all children (Coleman et al. 1966; Sewell & Hauser, 1976). However, the strength of this association appears greater for Euro-Americans than for Hispanics (So & Chan, 1982). A study was carried out

to find whether there were differences in social mobility and academic achievement between Israelis of Afro-Asian (A-A) origin and Israelis of European-American (E-A) origin (Kfir, 1988). This study, by Kfir (1988) recognised that the family background variables—in the main, the socio-economic background—was equated to the individual modernity; in Israel, a negative relationship was found by Yogev (1986) between Afro-Asian origin and individual modernity. Earlier research had shown that there is a difference in other socio-economic variables and educational attainment between the two main Jewish groups (Peres, 1976). Although this might indicate a less-than-expected line of reasoning for such a result, a more careful examination of the circumstances is needed. Studies have been done to show that SES has been found to be related to aspirations (Sewell, Haller & Straus, 1957; Sewell & Shah, 1968). A longitudinal study of 9,007 high school seniors by Sewell and Shah (1968) reported that, although students from higher SES homes typically aspire to higher levels of educational attainment, some lower SES students have also been found to have high aspirations (Voekl, 1993).

Studies have concluded that the observed association between socio-economic background participation in schooling resulted more from the social aspects of the background than from the economic aspects (Ainley, Foreman, & Sheret, 1991).

The Influence of Parents

Sociologists have maintained that families are basic units in society.

The family plays an important role in helping young people achieve their goals. Many factors influence the parent's role in the adolescent's career development (Bogenschneider, 1989). Positive parental attitudes, as shown in their providing educational materials, together with parents' educational level, all reinforce the construct of "cultural level of the home" (Keeves, 1978) which affects the educational and intellectual achievement of students. One factor in the social environment which may influence young people's realisation of their ambitions is the occupation of their father. The plans young people may have for jobs or further education may be reflections of the kind of work to which they have been exposed (Roberts, 1968). However, research studies in Canada have suggested that the occupations of fathers appear to influence sons more than daughters (Boyd, 1982). A number of researchers have concluded that parental encouragement is a stronger influence than the economic aspect of SES in the transition from secondary to tertiary education (Beswick, Hayden, & Schonfield, 1983; Hayden & Schonfield, 1983; Power, 1984; Williams, 1987). Australian studies have shown that a higher proportion of students of non-English speaking background complete year 12 at a secondary school than students from English-speaking homes (Williams, Clancy, Batten, & Girling-Butcher, 1980; Ellsworth, Day, Hurworth & Andrews, 1982).

In Singapore a survey carried out on 1380 secondary school and junior college pupils (Tan, 1987), has shown that 56.1% of the sample had discussed their career plans with their fathers and that 65.1% had

consulted their mothers at one time or another. On the whole, it appeared that mothers were consulted more often than the fathers, probably because the majority of the mothers were not working and were therefore more readily available for consultation.

School Factors

Individuals spend of the order of 15,000 hours in schools. Thus, schools represent a major influence with enormous impact on the course of people's lives, and in turn on how they are likely to behave as members of society (Deci, Vallerand, Pelletier, & Ryan, 1991). The type of curriculum and school program found in schools will influence the length of time students spend at school. Students with more self-determined forms of motivation for doing schoolwork appear to be more likely to stay at school than students with less self-determined motivation (Daoust, Vallerand, & Blais, 1988; Vallerand, 1991; Vallerand & Bissonnette, 1991). Students who are intrinsically motivated towards doing schoolwork and who have developed more autonomous regulator styles are more likely to stay in school (Deci, et al., 1991). An Australian study found that, after allowing for social background influences, progression rates from Year 11 to Year 12 were higher in schools that offered alternative programmes at Year 12 than schools which offered the traditional programmes (Ainley, Batten, & Miller, 1984b).

In the United Kingdom, Smith and Tomlinson (1989), found that the school one attended can make an enormous difference to one's

achievement level in public examinations. Research has indicated that several factors may combine to produce different categories of school ethos which can predict scores on measures of achievement, behaviour, attendance, and level of delinquency (Rutter, Maughan, Mortimore, Ouston & Smith, 1979). On the other hand in the United States, Yaffe (1982) and Maurer (1982) described successful school programmes which were effective in raising student achievement and in reducing dropout rate.

Institutional Tracks

Adolescents have to face changes in their social life along institutional lines (Elder, 1985; Klaczynski & Reese, 1991) which have been described in terms of institutional tracks (Mayer, 1986). Such tracks comprise the age-graded changes in their educational and schooling careers, such as moving from lower forms to higher forms (Enwistle, 1990). Such institutional tracks play important roles in the development of adolescent future orientation (Greene, 1990; Nurmi, 1987; Poole & Cooney, 1985; Tyler, 1978) in addition to influencing how adolescents explore their future and seek career commitments (Grotevant, 1987). How adolescents set up realistic goals will depend on how they assess their own motives and values in the face of different expectations of future options (Nurmi, 1991, 1993). A cross-cultural study was carried out by Nurmi, Poole and Seginer (1995) to show how age-related demands and institutional tracks were important in the development of the future orientation, identity

explorations and commitments made by adolescents. Altogether, 49 girls and 71 boys from Australia, 23 girls and 23 boys from Israel, and 66 girls and 36 boys from Finland took part in this study. The results showed that developmental tasks, role transitions and institutional tracks were likely to play an important role in the development of adolescent future orientation, exploration and commitments. The study noted that Australian adolescents reported higher levels of commitment both in the domain of future education and work than Finnish youths. Further, it was also shown that Australians showed higher levels of exploration in the domain of future work compared with Israeli and Finnish youths. (Nurmi, et al., 1995).

An earlier study by Ainley et al. (1984b) of Year 10 and Year 12 students in Victoria, Australia, found that a decision to complete Year 12 was strongly linked to students' perceived ability and to quality of school life. When asked to identify the most important influences on their decision to leave or to stay at school, both intending stayers and leavers identified reasons which were strongly linked to school achievement and future career. Reasons associated with enjoyment of school and interest in school work were less strongly linked to their decision to leave or to stay at school. Parental influence was of some importance to school stayers but not to school leavers. The least important reasons were the influence of teachers and friends.

Aspirations and Expectations

Carpenter and Western (1989) carried out a study in Queensland, Australia to investigate the movement of a sample of Year 12 students into higher education or the workforce. The investigators wished to find out (a) the extent to which such transitions depend on the abilities and aspirations of individuals; (b) the ways in which the abilities and aspirations of individuals were related to their social origins; and (c) the part played by encouragement received from parents, teachers and friends, and other social-psychological processes, in the transition. The target population for their study was all Year 12 students who were studying in Queensland secondary schools in November 1978; a sample size of 14779 students was used.

The data for their study were collected in three stages. In the first stage the students were all asked to complete the main survey questions. A brief questionnaire was designed for those who responded and mailed together with a short report informing them of the findings from the first stage of the study.

In 1980, the respondents to the 1978 survey were again contacted at the home addresses which they had provided and asked to complete a further questionnaire. In 1982, the third stage of the survey was carried out and subsequently all the data were analysed. The analyses revealed the following patterns in the responses:

- Females were more likely to plan either to get a job or to enter higher

education direct from Year 12 than were men. Males were more likely to choose to be apprentices.

- Urban males were more likely than rural males to enter higher education. Rural females were more likely to enter higher education than urban females.

A link between academic achievement and self-evaluation as evidenced in aspirations and expectations has been demonstrated (Carpenter & Fleishman, 1987; Sewell & Hauser, 1980; Sewell & Shah, 1968a, 1968b). In general, a positive correlation has been found between academic achievement and self-evaluation such as aspirations and expectations.

Although only a few studies have examined the association which can exist between academic achievement and aspirations and expectations for African-American students, there is some suggestion that such an association exists although it may be weaker for African-American students than for white students. Research in differences between racial groups, particularly African-American and whites, on achievement levels was carried out as early as the 1920s (Thomson, 1928). On average, it was found that African-American students score below white students on tests of academic achievement. For instance in a study conducted by Coleman and his co-workers (1966), a nation-wide sample of African-American students was found to score about one standard deviation below that for white students on academic achievement tests.

However, Voelkl (1993), carried out a study on the academic achievement and expectations among African-American students. As suspected, despite lower-than-average levels of academic achievement among African-American students, higher-than-average levels of academic expectations were found. Voelkl's (1993) study identified home environmental characteristics that differentiated low-achieving African-American students with low academic expectations from those with unrealistically high expectations using a nationwide sample of eighth graders.

Voelkl's (1993) study indicated that low-achieving African-American students with high expectations come from homes characterised by greater discussion of school-related activities, class studies and school programmes with parents, higher aspirations for their children, more parental monitoring of homework, and a greater number of intellectual items compared with low-achievement/low-expectation students. Also the low-achievement/high expectation students came from homes with higher levels of socioeconomic status and parental education. No similar studies have been carried out in Malaysia, and few studies have examined the extent to which the SES and educational level of parents affects students' choice to remain at school.

The Influence of Family Members

A study carried out by Kotrlik and Harrison (1989) which examined the career-decision-making patterns of 3,858 high school students in

Louisiana, in the United States of America, addressed the relationship between participation in vocational education and the influence of this on student career decisions. Parents, particularly mothers were found to be most influential. On the other hand, in another study (Wall, 1987), 7383 Louisiana high school home economics students were asked who had influenced them in their career decisions and what they had been encouraged to do after high school. Students' responses indicated that family members and friends had had the most influence and that most felt encouraged to attend college.

A study by Poole (1983) analysed the career decision-making process of Australian youth and the influence of home and school in making decisions. For 14-year-olds, this study revealed that the major influence was parents; all students felt the need for career guidance.

Socio-economic Factors

A longitudinal study carried with rural youth in Ohio, in the United States of America (McCracken & Fails, 1989) investigated the aspirations of Grade 10 students. The same questions were given to the students when they were in Grade 12. The results revealed that the influence of school personnel was less than that of parents and friends; mother's educational attainment was related to student plans to attend college; girls had career expectations similar to those of boys, and students who followed the academic curriculum had higher occupational aspirations than those who followed the vocational curriculum.

A study involving the administration of questionnaires to 73 sophomore and senior high school students in 3 isolated rural Alaska towns (Adak, Unalaska and Dillingham) was carried to investigate the effect of socio-economic factors on rural Alaskan youth's educational aspirations and expectations (Chu & Culbertson, 1982). Adak was a typical middle class American suburb. Fishing and seafood processing were the major source of income in Unalaska and Dillingham. About half of Unalaska's population were Alaskan natives. The Unalaska-Dillingham dropout rate was high, and chances for education beyond high school were almost non-existent. The results of the study indicated that emphasis on academic preparation and further educational opportunities provided higher educational expectations for Adak youth, whereas lack of incentives for additional schooling severely limited the Unalaska-Dillingham youth's expectations. Also it was found that Alaskan Natives showed a much lower educational expectation and aspiration than any other ethnic group ever reported. No gender differences were found.

Idowu and Dere (1983) examined the effects of socio-economic status on the occupational aspirations of 198 high school seniors in Nigeria. Results indicated that a higher socio-economic status could be associated with a higher occupational aspiration level. Students with low socio-economic status aspired to medium-level occupations. Their study suggested the need for career guidance counselling to assist the students who were underprivileged.

Academic Achievement

Research studies carried out in the United States, Australia, the United Kingdom and other western countries, have found evidence of a range of factors which can influence the student's decision to complete secondary schooling or to leave school for employment outside of school. Job availability, for example may affect a student's decision to stay on at school but a study revealed that senior Australian students (unlike early school leavers) were not strongly influenced by job opportunities when deciding to stay longer to complete their secondary education (Merrilees, 1981). Researchers have found that, in Australia, high socio-economic status can be associated with high levels of student participation in education no matter which indicator of SES is used: family income (Burke, 1983; Miller, 1983), parent's education (Power, 1984), or parent's occupation (Rosier, 1978; Williams, Batten, Girling-Butcher & Clancy, 1981). As a result of this association between a high SES level and academic achievement (White, 1980,) one would expect that students from high socio-economic backgrounds would place more emphasis on the academic aims of schooling than students from lower socioeconomic backgrounds.

Gender Differences

A number of studies have revealed that there are gender differences in career aspirations. Ihinger-Tallman (1982) examined encouragement

patterns, parental opportunity awareness, and family influences in order to assess the impact of parent-child interactions on children's attainment values. She found that the variables examined accounted for more of the variations in a son's attainment than in a daughter's attainment.

A study carried out in Nigeria by Owuamanam (1983), examined relationships between motivation and the occupational aspirations of 560 Nigerian secondary school students. The research used an Academic Motivation Questionnaire and an Employment Aspiration Questionnaire, and results suggested that academic motivation and occupational aspiration complemented each other. Males tended to obtain higher scores on the motivation and aspiration instruments than females.

Tohidi (1984) studied the influences on career and achievement motivation of a group of 220 Iranian high school seniors. The results revealed that community discrimination and resources played strong roles in predicting career motivation. Girls as a group scored lower than boys in motivation, but girls of upper socio-economic status scored highest of any sub-group.

In a study carried out on 15 to 18-year-olds in Australia in 1970, Poole (1983) found that females had lower aspirations with regard to career and further education and a lower self-concept of ability than males. She concluded that socialisation processes at work within the school channelled females to particular career choices.

The finding that girls have lower aspirations than boys has been confirmed from a number of different perspectives—such as expectations

of success (Crandall, 1969), aspirations toward higher education, and the gaining of prestige (Marini & Greenburg, 1978). There appears to be a link between high aspirations and success in giving girls roles which are masculine and therefore not familiar to females (Kfir, 1988). Thus, the gender difference becomes less obvious in the level of aspiration than it does in the field of fulfilment. Female students are more interested in a broad education and their achievement motivation is less practical than that of the male counterparts (Shapira & Etzioni-Halvey, 1973).

Goals and Commitments

The goals and commitments of a student are sparked by the student's innermost feelings to achieve. Goal setting is hypothesised to be an important cognitive process which can affect motivation (Bandura, 1988; Locke & Latham, 1990; Schunk, 1989). The motivational benefits of goals depend on their proximity, specificity and difficulty. Near goals will lead to greater successes.

Recent research on motivation and achievement has focused on the role of goals and commitments in carrying out activities, especially those related to learning (Ames & Ames, 1984; Meece, Blumenfeld, & Hoyle, 1988; Nicholls, Cobb, Yackel, Wood & Patashnick, 1990; Pintrich & Garcia, 1991; Powell, 1990). Students perceive classrooms as places to emphasise ability goals and this perception is associated with motivation.

Hansell (1982) examined the effects of school organisation on students' commitment to educational goals and their sense of academic purpose in

an elite coeducational private school. Data were gathered through two years of participant observation as a teacher-researcher and through questionnaire interviews with 87 percent of the school's 254 high school students. The results revealed that three school characteristics fostered student commitment to achievement: the school's function as a close primary community, continuity over time in students' educational experiences, and students' substantial power over their own school lives. Further research would be needed to discover whether other private schools stimulate student commitment in similar ways and whether such strong motivation can help improve other schools.

School Commitment

In a study which focused on identifying how school commitment factors affect students' decision to stay at school, researchers (Williams, Clancy, Batten, & Girling-Butcher, 1980) gave a survey to a representative Australia-wide sample of 4919 individuals who were aged 17 years on 1 October 1978. The results of their study showed that the factors which affected the decision of the subjects to stay on at school or to leave included state of residence, type of school attended, sex, family characteristics and school achievement. Consistent with previous studies in Australia and other Western countries, high SES students were more likely to stay on than those born in a non-English speaking country.

Research in other countries has also revealed that parent-child interactions, and having educational resources at home, have great

influence both on student achievement and student expectations. A great deal of evidence supports the view that there is a positive relationship between family interactions and student achievement (Hess and Holloway, 1984; Scott-Jones, 1984). This is the case for African-American students, in particular (Slaughter and Epps, 1987).

Research has also examined the relationship of parental aspirations for their children with students' aspirations and achievement. As would be expected, high levels of parental educational expectations and aspirations have been found to be associated with high educational aspirations in children (Astone & McLanahan, 1991; Hossler & Stage, 1992; Prom-Jackson & Wallace, 1987; Sewell & Shah, 1968). In a similar way, levels of parental monitoring and discipline provide the environment for positive effects on students' achievement (Astone & McLanahan, 1991; Crouter, McDermid, McHale, & Perry-Jenkins, 1990; Slaughter & Epps, 1987). Johnson (1992) concluded that "achievement and aspirations are facilitated by the presence of optimistic, supportive parents who provide structure and feedback in the home" (p. 113).

Factors which influence the educational attainment of students arise from the school environment and from parents. However, research on educational achievement supports the conclusion that students' educational aspirations influence educational achievement positively (see for example, Levin, 1970; Michelson, 1970; Myers, Milne, Baker & Ginsburg, 1985). Similarly research has shown that family background indirectly affects educational attainment through educational

expectations (Sewell & Hauser, 1972; Sewell & Shah, 1967). Students are likely to do well in their studies if they have high personal aspirations and have parents who have high expectations of their future performance.

Summary

A number of research studies which concern motivation, family background of students including socio-economic status, aspirations of students, vocational theories, achievement motivation, and goal commitments have been reviewed. Generally these studies revealed that achievement motivation increased academic achievement, and that parental influence and students' aspirations were related to educational achievement. Also, although the socio-economic status of students and the influence from peers and teachers were important factors which influenced students' choice of career, these were not as important as personal aspirations. Goal commitment was an important factor influencing students' decisions to remain at school.

The question of whether Form Five students should continue their education in Form Six concerns many students and parents in Malaysia. However, little research has been carried out in Malaysia with regard to students' intentions to remain at school beyond Form Five.

The next chapter in this thesis will present the research design and methodology sections. The methodology section includes details on the instrument constructed for the research, and summarises the methods

used for the collection and analysis of data. Details will also be provided about the interviews which were carried out with a small sample of students.

Research Design and Methodology

This chapter gives a broad outline of the study, describes the research design, explains the role of the pilot study, outlines the way the questionnaire was constructed and administered, describes the characteristics of the schools where the questionnaires were administered and gives the questions used in the interview sessions. The chapter also gives the interview protocol and briefly mentions how the interviews were conducted.

A major focus of this chapter will be to describe the approaches used for analysing the data and for explaining how this relates to the research design used in the study.

Research Design

This study used an *ex-post facto* design (Campbell & Stanley, 1963) for predicting the career aspirations of students on the basis of data obtained for the independent variables. According to Kerlinger (1964) an *ex-post facto* study has these characteristics:

1. It is a systematic empirical inquiry into whether relationships between variables exist;
2. It is not possible to control independent variables;
3. There is a risk of improper interpretation.

Such limitations associated with ex-post facto design can be overcome by establishing relationships among the variables by means of structured interviews. Principal component analysis was carried out to compare the different variables as mentioned above.

This study investigated the extent to which achievement motivation and other independent variables influenced students' career aspirations when students leave Form Five, and whether achievement motivation is a mediating variable which influences the decisions of Form Five students to continue their studies in Form Six.

Two stages of analysis which involved both descriptive and inferential statistics were undertaken. Analysis was carried out using the SPSS.PC (1988) packages. In particular, the following statistical procedures were applied: frequency distributions, measures of central tendency, reliability analysis, and Logistic Regression Analysis.

The first stage in the analysis was primarily descriptive. The purpose of this stage of analysis was to describe the nature of the respondents and their responses. Breakouts and cross-tabulations were used in order to identify the responses made by different categories of respondents. This initial stage provided a context for the interpretation of the data, and assisted in the preparation of data for the next stage of analysis.

The second stage made use of inferential statistics. The first part of this stage involved reliability analysis, and an examination of each of the items contained within each scale. Information obtained from this process provided the basis for answers to be given to each of the following

questions:

1. Are there items in the scale which did not correlate well with the total score?
2. What are the alpha values and what would be the effects on alpha values if an item was dropped?
3. Which, if any, of those items should be dropped?
4. What was the alpha value for the total scale?

In the second part of this stage correlational analysis was used, and involved:

1. calculation of Pearson Product-Moment correlations between the nine variables;
2. finding the correlations between each independent variable and the dependent variable.

This approach determined the strengths of the relationships between pairs of variables and identified those variables with the strongest and those with the weakest relationships.

Pilot Study

A pilot study with 41 students was carried out to ascertain the suitability of the questions, and of the use of Bahasa Malaysia as the language for the instrument.

One of the aims of the Pilot Study was to find out whether the students

would have difficulty in responding to the questionnaire prepared for them. It was important to establish whether the areas covered in the questionnaire would engender responses by the majority of the students.

One coeducational secondary school close to the centre of the city of Georgetown on Penang Island was selected. According to the State Education Department (Penang), the school selected was not among the special top secondary schools in Penang, the school having produced average results in the SPM examination for the previous two years (1992 and 1993). The majority of the students attending this school have parents belonging to middle-income groups.

The instrument was administered to a group of 41 students comprising of 13 girls and 28 boys. The data collected were itemised into variables. Five variables were listed under "ID," "SEX," "MONTH," "STREAM," "TYPE" to give the identity, gender, month born, the curriculum followed in the school, and the type of school for each of the 41 respondents. The different questions in the instrument were then itemised as variables and 180 variables were considered.

The statistical analysis used for this study was the discriminant analysis method. The SPSS/PC statistical package was used for data analysis.

The objective of the pilot study was to find out the decisions of the students with respect to their intentions of "staying," "undecided," "not staying." For the discriminant analysis, these were given values of 0 for "STAY," 1 for "UNDECIDED" and 2 for "NOT STAY." The last three item

("v178," "v179," "v180") were taken to represent these intentions in the questionnaire, and the results reflected the choices which the students had made in their responses to the questions.

A discriminant analysis was conducted on the data to determine the extent to which it was possible to account for students' decision to stay on at school or to leave school, on the basis of responses to questions relating to the antecedent variables proposed in the model. The results of the discriminant analysis revealed that some students wanted to stay, some were undecided, and some did not want to stay at school to undertake Form Six studies. The results also showed that there were "missing values" reported in the statistical analysis, arising from the fact that some items were not answered. This suggested that, for the main study, students should be reminded to answer every item.

The results of the Pilot Study showed that more time should be allocated to the answering of the questions. Based on the results of the Pilot Study, it was found that it was preferable to use Logistic Regression Analysis for data analysis.

Methodology

Background

Researchers have mentioned that the traditional route, in the United Kingdom, after age 16 is for students to acquire A levels and then to proceed to higher education. (Banks, et al., 1992). This pattern is

paralleled in Malaysia as the traditional route towards gaining education qualifications.

The purpose of the study was to investigate the extent to which the model outlined in Chapter One provided a basis for predicting whether Form Five students in six randomly selected secondary schools in Penang, Malaysia, would continue to Form Six level and whether they would be likely to continue to aspire to careers which might have required them to enrol for tertiary studies in local Universities or in Universities abroad.

Table 3.1

Transition Rate of Enrolment from Lower Secondary Level and from Upper Secondary to Post-Secondary Level in Assisted Government Schools in Malaysia 1986-1993[†]

| Year | Enrol- ment in Form 3 | Enrol- ment in Form 4 | Transition rate (2)/(1) of preceding year x 100 (3) | Enrol- ment in Form 5 | Enrol- ment in Form 6 | Transition rate (5)/(4) of preceding year x 100 (6) |
|------|-----------------------------|-----------------------------|--|-----------------------------|-----------------------------|--|
| | (1) | (2) | | (4) | (5) | |
| 1986 | 271619 | 177545 | - | 158157 | 25097 | - |
| 1987 | 276908 | 179483 | 66.1% | 171426 | 26504 | 16.8% |
| 1988 | 271571 | 180192 | 65.1% | 179063 | 28111 | 16.4% |
| 1989 | 273637 | 180496 | 66.5% | 178112 | 28615 | 16.0% |
| 1990 | 272801 | 183824 | 67.2% | 177587 | 33976 | 19.1% |
| 1991 | 273021 | 185436 | 68.0% | 177869 | 29899 | 16.8% |
| 1992 | 285825 | 204677 | 75.0% | 180121 | 29875 | 16.8% |
| 1993 | 276867 | 228817 | 80.1% | 195884 | 26846 | 14.9% |

[†]Statistics are from the latest copy of the Educational Statistics of Malaysia 1993 (Ministry of Education Malaysia)

Entry into Form Six classes in Malaysia is seen as important for acquiring prerequisites for tertiary study, whether this be in relation to Malaysian Universities, or overseas. Table 3.1 reproduces data from the

book *Educational Statistics of Malaysia 1993*, and shows the transition route of enrolment from lower secondary level and from upper secondary level to post secondary level in assisted government schools in Malaysia for the years 1986-1993. Column 1 gives the enrolment in Form 3, column 2 the enrolment in Form 4. Column 3 gives the percentage of Form 3 students in a given year who were promoted to Form 4 in the following year. Column 4 gives the student enrolment in Form 5, column 5 the student enrolment in Form 6. Column 6 gives the percentage of Form 5 students in a given year who were admitted to Form 6 in the following year. On a national level, then, between 1986 and 1993, the average transition rate from Form 5 to Form 6 was 16.7%. In fact, Table 3.1 demonstrates how the percentage of Form 5 students who proceeded directly to Form 6 has remained at about 17% for the seven years considered.

Objectives of the Study

Specifically, this study attempted to determine whether:

1. the decision taken by Form Five students to proceed to Form Six was influenced by factors other than a wish to continue in school and to sit for the STPM examination;
2. the social and academic backgrounds of the students influenced the students' decision to return to school and undertake Sixth Form study;

3. the variables of Goal Commitment, School Integration and Academic Integration influenced not only students' decisions to return to school and study in the Sixth Form, but also influenced their career aspirations when they left school after completing Sixth Form;

4. achievement motivation, as indicated by their school examination results, was a major factor influencing not only the students' decision to return to school and study in the Sixth Form, but also their career aspirations when they left the Sixth Form.

The following hypotheses were tested in this study:

1. That specific antecedents, such as Family Background, Goal Commitments, School Integration, Academic Integration and School Commitment, affect the motivation as observed of Form Five students in Penang schools;

2. That Achievement Motivation acts as a mediating variable on the school achievement levels of Form Five students in Penang;

3. That Achievement Motivation acts as a mediating variable for Form Five students in schools in Penang, and influences their decisions and/or aspirations to proceed to Form Six.

4. That antecedent variables, such as Family Background, previous achievement (school examinations), Goal Commitments, School Integration, Academic Integration and School Commitment, and Academic Achievement (SPM results) affect students' decisions to proceed to Form 6;

Variables

This study used the definition of the *independent variable* as a presumed cause of the *dependent variable* (Kerlinger, 1973). However it was recognised that causal laws cannot be demonstrated empirically. Although researchers often refer to a relation existing between p and q and hope or believe that p causes q , no amount of evidence can show that p caused q (Kerlinger, 1973).

This study attempted to investigate the relationship between the independent variables and one dependent variable. Analysis of student responses to the questionnaire provided the basis for predictions of whether students would stay on in school and whether they aspired to careers which required higher education. The questionnaire making up the instrument was written in English, and was then translated into Bahasa Malaysia with the help of two language lecturers from a teachers' college. It was then translated back into English with the help of another school language teacher to check whether the correct translations had been made. This notion of "back translation" is an important one for establishing the validity of the instrument (Brislin, 1970, 1986). The instrument comprised 51 pages and was stapled into a booklet with a front cover on which the main instructions were presented. An English version of the instrument is given in Appendix 1 and the Bahasa Malaysia version is given in Appendix 2.

Independent Variables

Based on student responses to clusters of questions, the following ten independent variables were investigated in this study:

Background Factors

Home Background

Goal Commitment (Past)

Goal Commitment (Future)

School Commitment

School Integration

Academic Integration

Achievement Motivation

Previous Achievement (marks obtained in school examinations)

External Examinations (SPM)

Each of these variables consists of concept clusters which have been defined by a number of items given to students in the form of a composite questionnaire booklet. The headings on the different sections of the booklet do not always correspond exactly with the names chosen for the variables. The relationships between the cluster concepts, the item numbers, and the instruments used in the study have been summarised in Table 3.2.

Background Variables: Individual and Family

Seventeen items make up the cluster known as the “Background

Factors” variable. Thirty nine items represent the cluster for the “Family Background” variable (called “Home Background (SES)” in the students’ questionnaire booklet—see Table 3.2). The main items related to the father’s/mother’s educational background(s), interest in furthering of their child’s education, and time spent in the home by the student on academic study and on work around the home.

Achievement Motivation

Thirty one items make up the cluster relating to the “Achievement Motivation” variable. These items attempted to relate to the degree to which the student was motivated in his/her studies as revealed by his/her performance in school work, confidence in his/her academic work and expectation of leadership in the future.

Goal Commitment (Past and Future)

This cluster concept consists of 27 items which attempt to draw out the strength of the students’ commitment towards work assigned at school and their perceptions about achieving academic success. Two variables—Goal Commitment 1 and Goal Commitment 2—which relate to items which focus specifically on the past and future, respectively, are associated with this cluster concept.

School Commitment

For the “School Commitment” construct, 18 items were included in the

questionnaire. These items pertained to students' relationship with teachers, teacher counsellors, reading habits, and general activities offered in the school's extra-mural curriculum.

School Integration

This cluster concept comprising 26 items focused on how well the student could relate to others in the school, and in particular, on his/her contribution as a member of the school community.

Academic Integration

The "Academic Integration" cluster drew heavily on the students' formal and informal academic activities in the school and touched upon the encouragement obtained from the parent/guardian for progress in academic work in the school. This comprised 28 items.

Achievement Motivation

The "Achievement Motivation" construct was made up of the marks obtained from the school for the student's mid-year and final (forecast) examinations. It provided a useful indicator of how well the student performed in his/her studies.

External Examination

The only external measures of academic achievement used in the study were the results students achieved in the SPM (Sijil Pelajaran

Malaysia) examination. Given in three grades (grade 1, grade 2, and grade 3), these results form the basis of calculations which are used to determine entry into Form Six classes.

Dependent Variable

My Decisions

The decision to proceed to Form Six or to leave school after completing Form 5 was considered in relation to the concept clusters which constituted the independent variables. The single dependent variable was the response the students gave about whether they wanted to remain in the Sixth Form.

The questions in the instrument for the independent variables had been modified from other questionnaires and had been content validated by teachers and a University lecturer. The content validation was carried out by giving the questions to a counsellor in a secondary school and to the Senior Assistant of another secondary school to find out how relevant the questions were to the students. The questions used were adapted and modified from those developed by Apps (1981), Kozeki and Entwistle (1988), Hayden (1988) and Hemmings and Hill (1991).

Instrumentation

The main instrument used in this study was a questionnaire which was administered to a sample of students attending secondary schools in

Penang, Malaysia. The questionnaire contained eight sections in all, and was presented to the students in a booklet form.

The eight sections for the independent variables were titled:

- Background Factors (Self and locus of control)
- Home Background
- Achievement Motivation
- Goal Commitment 1
- Goal Commitment 2
- School Commitment
- School Integration
- Academic Integration

To test the first hypothesis that Family Background, Goal Commitment, School Commitment, School Integration, and Academic Integration had a significant influence on achievement motivation of Form Five students in Penang, the clusters of concepts in the instrument (see Appendix 1) were organised as shown in Table 3.2.

Table 3.2

Organisation of Items in the Questionnaire to Test Hypothesis #1

| Cluster Concept | Items in the questionnaire |
|---|----------------------------|
| Locus of Control and Family Background | Numbers 1 - 56 |
| Goal Commitment | Numbers 88 - 114 |
| School Commitment | Numbers 115 - 132 |
| School Integration | Numbers 133 - 158 |
| Academic Integration | Numbers 161 - 188 |

To test the second hypothesis that Achievement Motivation was a mediating variable influencing the school achievement levels (SPM results) of Form Five students in Penang, the cluster concept was enumerated as in Table 3.3.

Table 3.3

Organisation of Items in the Questionnaire to Test Hypothesis #2

| Cluster Concept | Items in the questionnaire |
|------------------------|----------------------------|
| Achievement Motivation | Numbers 57 – 87 |

To test the third hypothesis that achievement motivation was a mediating variable influencing Form Five students to remain in Form Six and in their career aspirations and/or their aspirations in Penang, the cluster concept was enumerated in the same way as for testing the second hypothesis (see Table 3.3).

Table 3.4

Organisation of Items in the Questionnaire to Test Hypothesis #4

| Cluster Concept | Items in the questionnaire |
|--|--|
| Locus of control and Family background | Numbers 1 - 56 |
| Goal commitment | Numbers 88 - 114 |
| School commitment | Numbers 115 - 132 |
| School integration | Numbers 133 - 158 |
| Academic integration | Numbers 161 - 188 |
| Previous Achievement | The Mid-Year and Final (Forecast) Examination results provided by the school |
| Academic Achievement | The SPM results as published by the Ministry of Education given in Grades (One-Three) for those who passed the examination |

To test the fourth hypothesis that the antecedent variables of Family Background, previous achievement (school examination results), Goal Commitment, School Commitment, School Integration, Academic Integration and Academic Achievement (SPM results) mediated in students' decision to proceed to Form Six, the cluster concepts were enumerated as in Table 3.4.

In two other sections in the questionnaire, students were asked to state their career preferences. Students were asked to complete the first of these sections, Intention I, before the SPM examination, and the second section, Intention II, after the SPM examination.

Some of the items were in the form of a five-point Likert scale, and the others were open-ended questions. The items were written first in English and then translated into Bahasa Malaysia. Back-translation into English from the Bahasa Malaysia version was subsequently accomplished in order to validate the original translation.

The instruments were administered to the students of the six schools on separate days after permission had been obtained from the Penang State Education Department in Georgetown to conduct the study for the schools randomly selected previously.

At the start of the session, the broad purpose of the study was explained to the students. They were asked to answer as many of the questions as they could. They were told that they would be permitted to take the questionnaires home but that they would be expected to return these to their teachers the following day.

It was also explained to the students that the questionnaire was not in any way a test of their ability, and that the responses they gave would not have any bearing on any of the examinations which they would be taking either in school or out-of-school. They were also told that their answers to the questions would not be revealed to any other person other than those involved in the study. It was explained that the study could help them to make a decision whether or not remain in the Sixth Form. Students were asked not to consult any one in answering the questionnaire except, perhaps, to seek clarification regarding the language used in the question from the class teacher assisting in conducting the administration of the instrument.

After the results of the external SPM (Form Five) examinations had been announced the students were asked to respond to the section on “decisions” once more. The main purpose at this stage was to find out whether the students had made changes in their earlier choices of careers and/or plans for future studies.

Achievement and External Examination

This study made use of students’ midyear examination and final (forecast) examination results which were obtained from their class teachers. The results of the SPM (Form Five) examination, published by the Malaysian Examination Syndicate, were used in the study to examine the extent to which academic achievement in school correlated with the SPM results. This was done by adding the two school scores and then

finding whether a student's total score was related to his/her decision to proceed to Form Six the following year.

Population and Sample

The population for this study were Form Five students attending secondary schools in Penang, Malaysia, in 1995.

Students in Malaysia complete six years of Primary education after which they continue their Secondary education for another five years. At this point they sit for the SPM (Sijil Pelajaran Malaysia) examination, the equivalent of the United Kingdom O-Levels.

However, not all students who take this examination obtain sufficiently good results to enable them to proceed to the Sixth Form which, in turn, may enable them to qualify for tertiary entry. How well a student performs in Form Five is likely, therefore, to define his or her future career aspirations. The selection of students into the Sixth Form depends on the number of "credits" and/or "distinctions" obtained in the SPM examinations. There are two cut-off scores which define the minimum entry into Sixth Form in Malaysia: one set is for students who intend to enter the Arts stream and the other is for those who aspire to enter the Science stream.

For the country as a whole, there was an improvement in the total percentage of candidates who passed the SPM examination in 1995 compared with 1994. However the proportion of those selected for Form 6 is small as seen in Table 3.5.

Table 3.5

Sijil Pelajaran Malaysia (SPM) Examination Results: Analysis of National Grades and the Number of Students Offered Places in Form Six[†]

| Year | Number Sat | Grades (Number and Percentage) | | | Total PASSES | Total Number of Students Offered Form 6 Places | Percentage (4) + (1) x 100 |
|------|------------|-----------------------------------|-------|-------|-----------------|---|----------------------------------|
| | | 1 | 2 | 3 | | | |
| | (1) | (2) | | | (3) | (4) | (5) |
| | | 40508 | 51842 | 39704 | 132054 | | |
| 1994 | 197491 | 20.5 | 26.3 | 20.1 | 66.9 | | |
| | | 41492 | 49678 | 38229 | | | |
| 1995 | 192729 | | | | 129399 | 43720 | 22.13 |
| | | 22.5 | 25.8 | 19.8 | 67.1 | | |
| 1996 | | | | | | 45458 | 23.58 |

[†] Figures obtained through the courtesy of the Examinations Syndicate, Ministry of Education Malaysia.

This study was undertaken in the State of Penang where there are 62 urban and rural secondary schools for a population of 1.1 million inhabitants. A stratified random sample of students was used to select the students to whom the questionnaire was administered. Four urban schools and two semi-rural schools were used. A total of 377 students were asked to respond to the questionnaires. Background details of the school populations are given in Table 3.6.

In order to facilitate stratified sampling (Borg & Gall, 1989), all Form Five students, in each school, were divided into the following groups: male students with a high SES, an average SES, and a low SES; female students with a high SES, an average SES and a low SES; above-average achieving males, above-average achieving females; average males and average females; low achieving males and low achieving females.

The following schools were used in the study:

- Sekolah Menengah Pertama (First Secondary School)
- Sekolah Menengah Kedua (Second Secondary School)
- Sekolah Menengah Ketiga (Third Secondary School)
- Sekolah Menengah Keempat (Fourth Secondary School)
- Sekolah Menengah Kelima (Fifth Secondary School)
- Sekolah Menengah Keenam (Sixth Secondary School)

Table 3.6

Total School Population, Enrolment in Form Five, Results in the Form Five (SPM) Examination and Places Offered in Form Six Classes in the Six Secondary Schools for 1994, 1995, 1996.

| | Total School Population | Total Enrollment in Form Five | | | Form Five Results in the SPM Examination | | | Offered Places in Form 6 [Lower 6] | | |
|------------------------------------|-------------------------|-------------------------------|------|------|--|--------|--------|------------------------------------|-------------|-------------|
| | | 1996 | 1994 | 1995 | 1996 | 1994 % | 1995 % | 1996 | 1994 | 1995 |
| 1. S. M. Pertama (1st Sec. School) | 999 | 172 | 196 | 206 | 73.0% | 71.3 | | 36 | 47 (27.3%) | 66 (33.7%) |
| 2. S. M. Kedua (2nd Sec. School) | 979 | 244 | 165 | 194 | 84.3 | 81.4 | | 109 | 134 (54.9%) | 101 (61.2%) |
| 3. S. M. Ketiga (3rd Sec. School) | 3200 | 622 | 507 | 533 | 95.8 | 92.7 | | 170 | 372 (59.8%) | 316 (62.3%) |
| 4. S. M. Keempat (4th Sec. School) | 1110 | 142 | 140 | 134 | 63.8 | 63.2 | | 15 | 27 (17.7%) | 36 (25.7%) |
| 5. S.M. Kelima (5th Sec. School) | 1823 | 240 | 260 | 269 | 68.9 | 71.9 | | 58 | 73 (30.8%) | 93 (35.7%) |
| 6. S. M. Keenam (6th Sec. School) | 2030 | 193 | 145 | 218 | 49.5 | 44.5 | | 20 | 32 (16.6%) | 17 (11.7%) |

For the six schools, the names of the four urban and the two rural schools were randomly selected from the list of 62 secondary schools in Penang to ensure that both rural and urban schools were included on the list of schools. The definitions for “rural” and “urban” schools were as defined by the State Education Department in Penang. Table 3.6 gives the

total enrolment in Form Five, the performance of the Form Five students in the SPM examination and the number of students given places in Lower Six classes for the six secondary schools involved in the study.

Characteristics of the Six Secondary Schools

The major research question investigated concerned how Form Five students responded to the questionnaires given to them prior to their taking the SPM examination in December 1995. The following is a brief description of each of the schools used in the study.

Sekolah Menengah Pertama (First Secondary School) is situated in the suburbs of Georgetown. This fairly new co-educational school has about 1000 students. There are two sessions, with the afternoon session catering for the Form Remove and Form One classes. There is no Sixth Form in the school, and students offered places in the Sixth Form proceed to other schools where there are Form Six classes.

Sekolah Menengah Kedua (Second Secondary School) is a long established school situated in the suburbs of Georgetown. It is close to two large housing estates with homes owned by families belonging to the middle-upper to lower-higher income groups of wage earners. The school population stands at about 1000 students. There are two sessions in the school but the school does not have Form Six classes.

Sekolah Menengah Ketiga (Third Secondary School) is situated in Bukit Mertajam which is about 10 miles from the city of Georgetown. It is a large co-educational secondary school with 3200 students. It has two

sessions for the students, and there are Form Six classes in the school. The parents of the students can be considered as belonging to the middle income group of wage earners. This school can be considered as suburban in character.

Sekolah Menengah Keempat (Fourth Secondary School) is situated in a rural setting in Balik Pulau about 12 miles from Georgetown. It is a co-educational school with just over 1000 students. There are no Form Six classes in the school and students offered places in Form Six have to proceed to the schools with Form Six classes in Georgetown. The students can be considered as belonging to the upper lower to the lower middle income group of wage earners in the village of Balik Pulau.

Sekolah Menengah Kelima (Fifth Secondary School), a comparatively "old" school, is situated in the City of Georgetown. It is a large secondary school with a population of over 1800 students. This school has Form Six classes and is a one-session school. Females are admitted only to Form Six classes. The students come from average middle-class families.

Sekolah Menengah Keenam (Sixth Secondary School) is situated in the suburbs of Georgetown. It is a large secondary school with over 2000 students. It is a co-educational school and there is an afternoon session for the Form Remove and Form One classes, and a morning session for the Forms Two, Three, Four and Five classes. As the school does not have Form Six classes, those students offered places have to go to other schools which have Form Six classes. The parents of the students in this school are from the lower to lower-middle income groups of parents. The school

population is predominantly Chinese.

Protocol for Interviews

After the questionnaires had been answered by the students, they were collected. Interviews were conducted with a sub-sample of twenty students who had returned to school. Interviews were also conducted with a sub-sample of students who did not return to school. The purpose of the interview was to seek confirmation of whether the students wanted to remain in school for a further two years in Form 6. An interview protocol was constructed for the sessions so that, during the analysis of data, students' responses could be used to confirm/refute/elaborate their questionnaire responses.

Appropriate questions for individual students were selected from the questions in Figure 3.1, depending on the student's particular circumstances..

Combining with Factor Analysis

The study proposed to address itself to finding out whether Form Five students would remain another two years in Form Six. It was felt important to construct a wide spectrum of questions in an attempt to unravel the deep-seated psychological reasons that the students might have regarding their decision to proceed (or not to proceed) to Form Six. In order to make the analysis more manageable, clusters of questions relating to the eight independent variables were chosen.

Do you remember about writing down your choice about returning to school for Form 6?
 How do you feel now about your wanting to go to Form 6?
 Would you like to change your mind about the answer you gave?
 Why did you want to go to Form 6?
 (In which school?)
 Is Form 6 difficult?
 Has anyone talked to you about going to Form 6?
 Some one told me that Form 6 is a waste of time. Do you agree with this?
 Why do you not want to go to Form 6?
 So you intend to go to a College?
 Why do you intend to take A-levels with a College?
 Where is this College?
 What are you going to do after your Form 5?
 How well have you done in your Form 5 so far?
 Will there be someone to support you at College in Form 6?
 What do you intend to do after College/when you enter the University?
 Have your friends spoken to you about going to Form 6?
 Did you make this decision yourself?
 Did your parents speak to you often about the kind of job you should do?
 Did your parents ask you to go to Form 6?
 Have you given some thought about going to a University?

Figure 3.1. Questions used in interviews with sub-sample of students

Factor analysis was carried out on these cluster groups, in an attempt to condense the information from the original variables into a smaller set of new composite dimensions (factors) with a minimum loss of information.

Chapter Four presents the data and analyses obtained from applying the instruments, developed in this study, to the stratified random sample of 377 students from six randomly selected secondary schools in Penang.

Results and Findings

The Theoretical Model

One of the major aims of this thesis was to test a theoretical model. This model was designed to predict whether Form Five students in Penang would choose to attend a further two years of schooling in Form Six. Upon completion of the examination in Form Six, these successful students will have the opportunity to proceed to Universities—local or overseas—with expectations of better careers.

The study proposed to investigate the factors influencing such decisions which are made at a crucial time when the students are about to take their SPM examinations—the results of which would, in effect, actually “decide” their careers. This is in line with some of the literature related to choosing a time frame for making career decisions. The study focused on the various factors which affect Form Five students’ decisions which will determine their future aspirations and their opportunities to be gainfully employed.

This study addressed those factors which can be considered to affect the students’ decisions. The discussion which follows examined those factors which were found to have an impact on the decisions of the students to remain at school to complete their Sixth Form education. In focusing on the plans of Form Five students (see Chapter One of this

thesis), at the completion of their eleven years of schooling, to move into higher education or the workforce, the study is investigating a decision which will have a profound influence on the lives of Form Five school leavers for many years to come.

The position this study has taken was the interplay of interpersonal influences as well as young people's background and schooling, which were likely to change or cause to change their estimation of their own abilities and their views about the need for higher education in their choice of a future career (Carpenter & Western, 1989).

The conjectured model predicted that there is an interplay of interpersonal influences which will affect the future academic and/or career plans of Form Five students. These influences, when put together with background and school effects, change or cause to change the students' estimation of their own abilities and their views about the need for higher education in their choice of a future career (Carpenter & Western, 1982).

The Instruments

Questionnaires were administered to the stratified random sample of 377 students from the six randomly selected secondary schools in Penang. The responses used in the analysis of the data were the students' responses to the questions in the form of the five-point Likert scale. The responses were coded and used as the raw data entries for analysis with the use of the SPSS/PC statistical package for Windows.

Goal Commitments and Academic Achievements

The thesis did not examine the association between a high SES and high academic achievement among Form Five Malaysian students. However the results from the SPM examination, which was chosen as an indicator of academic achievement for the Form Five students, showed that those who did well in the SPM examination were from the schools where the parents of the students could be regarded as “upper middle class.” SPM achievement levels differed markedly between the six schools used in the study.

One of the concept clusters considered was the goal commitment of a student. As the goals are in the future, the area is a difficult one to investigate. In this study, a number of items included in the questionnaire sought information which might lead to finding out the students’ goal commitments. This research therefore set out to examine the association of the goal commitment for students with their decision whether or not to remain at school.

An investigation of the future plans of adolescents was one of the overarching objectives of this study. In line with previous research (Lewin, 1948; Nurmi, 1991; Nuttin, 1984; Poole & Cooney, 1987; Seginer, 1988a; Trommsdorf, Burger, & Fuchsle, 1982), in which investigations have been carried out to find out how young people see the future in terms of goals, hopes, expectation, and concerns, the present study attempts to uncover the reasons why made their decisions. Other researchers (Nurmi, 1989; Nuttin, 1984) have attempted to ascertain why young adolescents

have decided on particular future-oriented goals by comparing their individual motives to their view of the future (Seginer, 1988) and their personal perceptions of what they can do in the future (Poole & Cooney, 1985).

The position taken in the present study is that students are not passive individuals whose behaviours simply reflect external forces. On the contrary, research has indicated that individuals respond consciously and guide their behaviour towards some fixed goals (Harre & Secord, 1972). It is also true, however, that the aspirations and choices young people make are partly moulded by societal norms.

This study examined the extent to which goal commitments helped students to decide on their post-Form Five education.

Results

Quantitative Results

Predicting whether an event is likely or unlikely to occur, as well as identifying the variables which may be useful in making this prediction, are important not only in the “real” world but also in most academic disciplines. In this research study, one of the main concerns was why some students choose to remain at school and undertake Form Six studies while others do not. The Logistic Regression Model using “Forward Wald” was used because it regresses a dichotomous dependent variable on a set of independent variables (Aldrich & Nelson, 1984; Fox, 1984). The

dependent variable is the students' decision about whether they will return for Form Six or not. Using the SPSS/PC statistical package for Windows, factor scores of the eight independent variables—Background Factors, Home Background, Goal Commitment 1, Goal Commitment 2, School Commitment, School Integration, Academic Integration and Achievement Motivation—with factor loadings of 0.5 and higher were saved as factor scores and used as predictors.

The quantitative results obtained appear to support the theoretical model in this study.

Table 4.1

Classification Table Showing the Percentages of Students Wanting to Stay at School or to Leave School

| Observed | Predicted | | % correct |
|-------------------------|---------------------|-------------------------|-----------|
| | <i>Leave school</i> | <i>Remain at school</i> | |
| <i>At school</i> | 151 | 40 | 79.1% |
| <i>Remain at school</i> | 42 | 120 | 74.1% |
| | | Overall | 76.8% |

Table 4.1 summarises the results with respect to the students' indications of whether they wanted to remain in Form Six or leave school after completing the Form Five examinations.

The model correctly predicted the decision of 151 of the 191 students (out of a total of 353 students whose data was analysed) who chose not to

proceed to Form Six. The model also correctly predicted the decision of 120 of the 162 students who chose to proceed to Form Six.

Incorrect predictions were made for a total of 82 students—42 students who decided not to proceed to Form Six and 40 students who decided to proceed to Form Six. Of the students who decided not to proceed to Form Six, 79.1% were correctly classified. Of the students who decided to proceed to Form Six, 74.1% were correctly classified. Overall 76.8% of the 353 students were correctly classified.

The classification table does not reveal the distribution of estimated probabilities for respondents in the two groups. For each predicted group, all the table shows is whether the estimated probability is greater or less than one-half. For example, it is not possible to tell from Table 4.1 whether the 42 respondents who had *false negative* results had predicted probabilities near 50%, or whether the predicted probabilities were lower than this. Ideally, one would like the two groups to have very different estimated probabilities. In other words, the discussion would be simplified if there were *small* estimated probabilities for all respondents *not proceeding* to Form Six, and *large* estimated probabilities for all respondents who *do* want to proceed to Form Six.

However not all of the independent variables affected the dependent variable in the manner proposed in the study. This is to be expected, of course, for no single model should be expected to generate a perfect (or even near perfect) fit to the data (Tukey, 1977).

Factor analysis

Since the main instrument had sections for which the data were found to be highly correlated (using the Pearson-Product Moment correlation), these data were factor analysed in an attempt to condense the information from the original variables into a smaller set of new composite dimensions (factors) with a minimum loss of information. That is to say, an attempt was made to identify fundamental constructs or dimensions which might be assumed to underlie the original variables. These new, composite constructs might define appropriate variables for subsequent regression and correlation analyses.

In order to identify which variables in the instrument should be retained, criteria for retention needed to be specified. It was decided that only variables with factor loadings of 0.3 and higher, and factors with eigen-values of 1 and higher would be retained. Tabachnick and Fidell (1983) mentioned that, as a rule of thumb, loadings in excess of 0.3 should be retained, whereas those with lower loadings should not. That is because a factor loading of 0.3 indicates at least 9% overlap in variance between the variable and a factor. The greater the overlap between a variable and a factor, the more likely it is that that variable and factor have conceptual overlap (Tabachnick & Fidell, 1983). It has also been suggested that loadings in excess of 0.71 (50% variance) are considered excellent, 0.63 (40%) very good, and 0.45 (20%) fair. (Comrey, 1973). In the present study, the influence of variables was double checked by using the term item-total correlation when the reliability was computed using

Cronbach Alpha. The following statements summarise data and decisions made with respect to the cluster concepts which were embedded in the overall instrument.

Instruments

Academic Integration

The alpha value was 0.84 and 19 items were retained. These items were highly correlated with the total items as revealed in the item-total correlation values.

Goal Commitment 1

All 9 items were included. The alpha value was 0.74 and all of the items were highly correlated.

Goal Commitment 2

The alpha value was 0.74 and 15 items were included.

Home Background Factors

The value of alpha was 0.58 and only 15 items were included (for some items, there were missing values because they were not answered by the students).

Motivation

The alpha value was 0.90 and 27 items were retained.

Locus of Control

The alpha value is 0.52 and 14 items were included.

School Commitment

The alpha value was 0.86 and 18 items were included.

School Integration

The alpha value was 0.64 and 11 items were included. Items with many missing values were deleted.

To analyse the cluster concept scales, in order to test the theoretical model, the alpha values for each of the concept scales was examined.

Reliability

The item total correlation for all the instruments was more than 0.20.

Table 4.2 shows the alpha value for each of the instruments.

Table 4.2
Alpha Values for Each Instrument

| Instrument | Alpha |
|--------------------------------|-------|
| <i>Academic Integration</i> | 0.84 |
| <i>Goal Commitment 1</i> | 0.74 |
| <i>Goal Commitment 2</i> | 0.74 |
| <i>Home Background Factors</i> | 0.58 |
| <i>Motivation</i> | 0.90 |
| <i>Locus of Control</i> | 0.52 |
| <i>School Commitment</i> | 0.86 |
| <i>School Integration</i> | 0.64 |

Principal Component Analysis

It was found that the factors for each of the items were highly related. No rotation was done for the items. The following summary gives details of the factors which were identified through factor analysis for each of the independent variables. Relevant questions identified in these factors have been reproduced here in order to provide a comprehensive picture of the key items involved for each of the independent variables.

Academic Integration

Five factors were considered. Out of the 22 questions subjected to factor analysis, Factors 1, 2, 3 and 5 picked out 21 questions with loadings greater than 0.5. Only one question had a loading of less than 0.5 and this question was:

1. Have you tried to get a full time job? Were you successful?
 Yes [] No []

All of the other questions were accepted (see Appendix 2). The following seven questions, all of which were accepted, will give the reader an appreciation of the types of questions which were used to define the Academic Integration cluster concept.

1. I am able to find suitable school library materials for all my subjects.
- | | |
|-----------------------|-----|
| (a) strongly agree | [] |
| (b) agree | [] |
| (c) sometimes | [] |
| (d) disagree | [] |
| (e) strongly disagree | [] |

2. The computers at this school are suitable for my senior school needs.
- (a) strongly agree []
- (b) agree []
- (c) sometimes []
- (d) disagree []
- (e) strongly disagree []
3. I have been able to study the subjects this year that I wanted.
- (a) strongly agree []
- (b) agree []
- (c) sometimes []
- (d) disagree []
- (e) strongly disagree []
4. My overall school needs will be met at this school this year.
- (a) strongly agree []
- (b) agree []
- (c) sometimes []
- (d) disagree []
- (e) strongly disagree []
5. I am glad that I have decided to study Form Five at this school.
- (a) definitely yes []
- (b) probably yes []
- (c) undecided []
- (d) probably no []
- (e) definitely no []
6. The change from Form Three to Form Five has been easy.
- (a) strongly agree []
- (b) agree []
- (c) sometimes []
- (d) disagree []
- (e) strongly disagree []

7. I am coping with the amount of school work in Form Five.
- (a) much better than I expected []
- (b) better than I expected []
- (c) as I expected []
- (d) worse than I expected []
- (e) much worse than I expected []

Goal Commitment 1

For this group two factors were considered.

Of the nine questions, six loaded on Factor 1 and one on Factor 2. The question which loaded on Factor 2 also loaded on Factor 1 (with a loading of more than 0.5).

The following six questions were those which loaded on Factor 1:

1. How important is it to you to complete Form Five?
- (a) essential []
- (b) very important []
- (c) important []
- (d) not very important []
- (e) not important at all []
2. How confident are you that you have made the right choice to continue your schooling at this school?
- (a) certain []
- (b) very confident []
- (c) confident []
- (d) not very confident []
- (e) I'm sure I made the wrong decision []

3. How important is it to you to finish your schooling at this school?
- (a) essential []
- (b) very important []
- (c) important []
- (d) not very important []
- (e) not important at all []
4. How confident are you that you will reach your goals through doing your schooling at this school?
- (a) certain []
- (b) very confident []
- (c) confident []
- (d) not very confident []
- (e) I'm sure I will not reach my goals at this school []
5. How confident are you that you will be able to pursue the career of your choice?
- (a) certain []
- (b) almost confident []
- (c) confident []
- (d) unconfident []
- (e) very worried []
6. Would you rather work or would you rather continue completing your Form Five?
- (a) definitely work []
- (b) prefer work more than study []
- (c) do not feel strongly either way []
- (d) prefer study more than work []
- (e) definitely study []

Goal Commitment 2

For this group 4 factors were considered.

Of the 15 questions, seven loaded on Factor 1, two on Factor 2, and two on Factor 3. The two questions which were loaded on Factor 3 were also loaded on Factor 1.

The first seven of the following nine questions loaded on Factor 1. The last two of the nine questions loaded on Factor 2.

1. What is the highest academic qualification that you think that you will receive?
 - (a) School Certificate (SPM) []
 - (b) Higher School Certificate (STPM) []
 - (c) College Diploma []
 - (d) University Degree/Diploma []
 - (e) Post-graduate Studies at a University []

2. Which year of school would you like to complete and then leave?
 - (a) Form Five []
 - (b) Form Six Lower []
 - (c) Form Six Upper []

3. Which year of school do you expect to complete before you leave?
 - (a) Form Five []
 - (b) Form Six Lower []
 - (c) Form Six Upper []

4. How good an education do you think you get at this school?
 - (a) excellent []
 - (b) very good []
 - (c) good []
 - (d) fair []
 - (e) poor []

5. How important do you think spent at this school will be for getting future work?
 - (a) extremely important []
 - (b) important []
 - (c) could be important []
 - (d) not important []
 - (e) irrelevant—not important at all []

6. How pleased is your father/guardian with your future job choice?
- (a) very pleased []
- (b) pleased []
- (c) uncertain []
- (d) not pleased []
- (e) most unimpressed []
7. Do you have (or do you expect to have) any special responsibilities this year e.g. prefect, school council, library duties, games/athletics duties?
- Yes [] No []
8. Next year do you expect to be chosen as a school prefect and/or school council member, library prefect, society committee member, games/athletics committee member?
- Yes [] No []
9. Tick the one which completes the following sentence:
- I expect next year I will...
- (a) be very satisfied with school []
- (b) be satisfied with school []
- (c) be partly satisfied with school []
- (d) be dissatisfied with school []
- (e) be very dissatisfied with school []

Home Background

For this group of questions posed to the students, eight factors were considered. Five loaded on Factor 1, two on Factor 2, two on Factor 3, and two on Factor 5 (only questions with loadings of more than 0.5 were accepted). These questions were considered to be important for finding out whether the students wanted to stay at school or to leave school.

1. How far would your father/guardian like you to go at school?
To leave school before Form Five []
To the end of Form Five []
To the end of Form Six []
Beyond Form Six []
Don't know []

2. How far would your mother/guardian like you to go at school?
To leave school before Form Five []
To the end of Form Five []
To the end of Form Six []
Beyond Form Six []
Don't know []

3. How important does your father/guardian think it good for you to continue at school next year?
Very important []
Important []
Not sure []
Not important []
Not very important at all []

4. How important does your mother/guardian think it is for you continue at school next year?
Very important []
Important []
Not sure []
Not important []
Not very important at all []

5. How sure are you that your parents will be able to afford to keep you at school until the end of Form Six?
Very sure []
Fairly sure []
Undecided []
Probably not []
Almost certainly not []

6. About your father/guardian: since leaving school he has completed:
- S.P.M. []
- S.T.P.M. []
- College Diploma []
- Undergraduate Degree []
- Graduate Degree []
7. About your mother/guardian: since leaving school she has completed:
- S.P.M. []
- S.T.P.M. []
- College Diploma []
- Undergraduate Degree []
- Graduate Degree []
8. How many hours per week, on average, do you spend doing family/household jobs (during school term only)?
- 0 []
- 1 - 5 []
- 6 - 10 []
- 11 - 15 []
- 16 - 20 []
9. How many hours per week, on average, do you spend reading newspapers/ magazines in your home?
- 0 []
- 1 - 5 []
- 6 - 10 []
- 11 - 15 []
- 16 - 20 []
10. Compared with others in your year, how much spending money do you have?
- Much more []
- A bit more []
- About the same []
- Less []
- Much less []

11. Do you receive any financial support from a scholarship?

Yes []

No []

Motivation

Eight factors were considered. Altogether, 21 questions loaded on Factor 1, and 1 question loaded on Factor 4. Only questions with loadings of greater than 0.5 were considered. Nine questions were rejected because they had loadings of less than 0.5 on all eight factors.

The following were some of the questions which were related to the theoretical model:

1. The strength of my determination to succeed in school examinations is:
 - (a) very strong []
 - (b) strong []
 - (c) moderate []
 - (d) fair []
 - (e) weak []

2. Compared with others in my school my motivation to achieve is:
 - (a) well above average []
 - (b) above average []
 - (c) average []
 - (d) below average []
 - (e) well below average []

3. Compared with others in my year, the amount of effort I put in my school studies is:
 - (a) well above average []
 - (b) above average []
 - (c) average []
 - (d) below average []
 - (e) well below average []

4. Compared with my friends at school, my will to succeed is:

- (a) very strong []
- (b) strong []
- (c) about the same []
- (d) a bit less []
- (e) much less []

5. At this time of the school year, working hard is:

- (a) extremely important []
- (b) very important []
- (c) important []
- (d) of some importance []
- (e) not important at all []

6. For my academic achievement is:

- (a) extremely important []
- (b) very important []
- (c) important []
- (d) of some importance []
- (e) not important at all []

7. I think that high attainment for me in the SPM is:

- (a) very likely []
- (b) likely []
- (c) possible []
- (d) unlikely []
- (e) not unlikely at all []

8. For my parents, it is:

- (a) very important that I do well at school []
- (b) important that I do well []
- (c) important that I try to do well []
- (d) less important that I do well []
- (e) not important that I do well at all []

9. For me, it is:
- (a) very important that I do well at school []
 - (b) important that I do well []
 - (c) important that I try to do well []
 - (d) less important that I do well []
 - (e) not important that I do well at all []
10. In terms of the career I wish to follow, doing well in the SPM is:
- (a) absolutely essential []
 - (b) essential []
 - (c) important []
 - (d) possibly important that I do well []
 - (e) not important at all []
11. How motivated are, on average are you to study despite other things going on in your life?
- (a) highly motivated []
 - (b) motivated []
 - (c) slightly motivated []
 - (d) poorly motivated []
 - (e) not motivated at all []
12. Compared with other students in your year, how good are your study skills?
- (a) very good []
 - (b) good []
 - (c) about the same/average []
 - (d) below average []
 - (e) very poor []

Locus of Control

For this group, six factors were considered. Factors 1, 3, 4, 5 picked out Five, two, two and two questions loaded onto Factors 1, 3, 4 and 5 respectively with loadings of more than 0.5. Of the 17 questions, six questions were not selected.

The following eight items require you to give your opinion on some general statements. Please tick (✓) the box which best matches your opinion (tick one box for each line).

- | | SA | A | U | D | SD |
|---|-----------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| | Strongly agree | Agree | Undecided | Disagree | Strongly disagree |
| | SA | A | U | D | SD |
| 1. If somebody studies hard enough he or she can pass any subjects. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Most of the time you can change what might happen tomorrow by what you do today. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. When bad things are going to happen there's nothing you can do to stop them. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Planning ahead make things turn out better. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Do you live in an area which is located within 5 km of a population of more than 5000 persons? | | | | | |
| Yes <input type="checkbox"/> | No <input type="checkbox"/> | | | | |
| 6. Do you live in an area which is located within 5 km. of a population of more than 10000 persons? | | | | | |
| Yes <input type="checkbox"/> | No <input type="checkbox"/> | | | | |
| 7. Most of the time I am tolerant of others. | | | | | |
| (a) strongly agree | <input type="checkbox"/> | | | | |
| (b) agree | <input type="checkbox"/> | | | | |
| (c) sometimes | <input type="checkbox"/> | | | | |
| (d) disagree | <input type="checkbox"/> | | | | |
| (e) strongly disagree | <input type="checkbox"/> | | | | |
| 8. I think that moral education is important to me. | | | | | |
| (a) strongly agree | <input type="checkbox"/> | | | | |
| (b) agree | <input type="checkbox"/> | | | | |
| (c) sometimes | <input type="checkbox"/> | | | | |
| (d) disagree | <input type="checkbox"/> | | | | |
| (e) strongly disagree | <input type="checkbox"/> | | | | |

School Commitment

For this group 5 factors were considered. There were 18 questions and 13 questions loaded on Factors 1 and 2, with loadings of more than 0.5.

The thirteen questions are as follows:

1. How good are you at school work compared with other students in your year?
 - (a) a lot more average []
 - (b) a little above average []
 - (c) about average []
 - (d) a little below average []
 - (e) a lot above average []

2. How motivated, on average, are you to study despite other things going on in your life?
 - (a) highly motivated []
 - (b) slightly motivated []
 - (c) neutral []
 - (d) poorly motivated []
 - (e) not motivated at all []

3. Compared with other students in Year 10, how good are your study skills?
 - (a) excellent []
 - (b) good []
 - (c) fair []
 - (d) poor []
 - (e) very poor []

4. My teachers are really interested in helping me get good results.
 - (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []

5. How many of your teachers are really interested in helping you gain better school results?
- (a) all of them []
 - (b) most of them []
 - (c) about half of them []
 - (d) a few of them []
 - (e) none of them []
6. How many of your teachers are easy to approach about the problems you have with your school work?
- (a) all of them []
 - (b) most of them []
 - (c) about half of them []
 - (d) a few of them []
 - (e) none of them []
7. How often do you contact a teacher out of class about your school work?
- (a) very often []
 - (b) often []
 - (c) sometimes []
 - (d) rarely (about once a week) []
 - (e) never []
8. Has your experience at school helped you to become a better learner?
- (a) Yes, definitely []
 - (b) Yes, mostly []
 - (c) perhaps []
 - (d) not very much []
 - (e) Definitely not []
9. How useful are your compulsory school subjects in terms of your future plans?
- (a) very useful []
 - (b) useful []
 - (c) unsure []
 - (d) only partly useful []
 - (e) useless []

10. How useful are your elective school subjects in terms of your future plans?
- (a) very useful []
 - (b) useful []
 - (c) unsure []
 - (d) only partly useful []
 - (e) useless []
11. Are you confident that you will do well in your compulsory subjects?
- (a) very confident []
 - (b) confident []
 - (c) unsure []
 - (d) not very confident []
 - (e) not confident at all []
12. How confident are you that you will do well in your elective subjects?
- (a) very confident []
 - (b) confident []
 - (c) unsure []
 - (d) not very confident []
 - (e) not confident at all []
13. Most of the time I feel like going to school.
- (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []

School Integration

Nine factors were considered. The following questions loaded onto Factors 1, 2, 3 and 4 with loadings greater than 0.5.

How often do you take part in any one of the following organised school activities?
 (Please tick (✓) only one box on each line)

| | |
|----|------------|
| VO | Very often |
| O | Often |
| S | Sometimes |
| R | Rarely |
| N | Never |

- | | | VO | O | S | R | N |
|----|---|-----|-----|-----|-----|-----|
| 1. | Clubs (non-sporting) | [] | [] | [] | [] | [] |
| 2. | Dances | [] | [] | [] | [] | [] |
| 3. | Musicals | [] | [] | [] | [] | [] |
| 4. | Plays | [] | [] | [] | [] | [] |
| 5. | How would you rate your social life in this school? | | | | | |
| | (a) excellent | [] | | | | |
| | (b) good | [] | | | | |
| | (c) average | [] | | | | |
| | (d) poor | [] | | | | |
| | (e) very poor | [] | | | | |
| 6. | How many of your teachers are really interested in your outside of school activities? | | | | | |
| | (a) all | [] | | | | |
| | (b) most | [] | | | | |
| | (c) some | [] | | | | |
| | (d) few | [] | | | | |
| | (e) none | [] | | | | |
| 7. | How many of your teachers do you think are easy to approach about the problem you may have outside of school? | | | | | |
| | (a) all | [] | | | | |
| | (b) most | [] | | | | |
| | (c) some | [] | | | | |
| | (d) few | [] | | | | |
| | (e) none | [] | | | | |

8. How often do you talk to your teachers out of class time about your outside-of-school activities?
- (a) very often (at least once a week) []
 - (b) often []
 - (c) sometimes (once a term) []
 - (d) rarely []
 - (e) never []
9. How helpful has your Form Five teacher adviser been?
- (a) very helpful []
 - (b) helpful []
 - (c) occasionally helpful []
 - (d) unhelpful []
 - (e) very unhelpful []
10. Most of my classmates take their work seriously.
- (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []
11. I think that most of my teachers are understanding.
- (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []
12. I am eager to cooperate with most of my teachers.
- (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []

Loadings on other factors were rarely as high as they were on the first factor.

Histogram for Estimated Probabilities

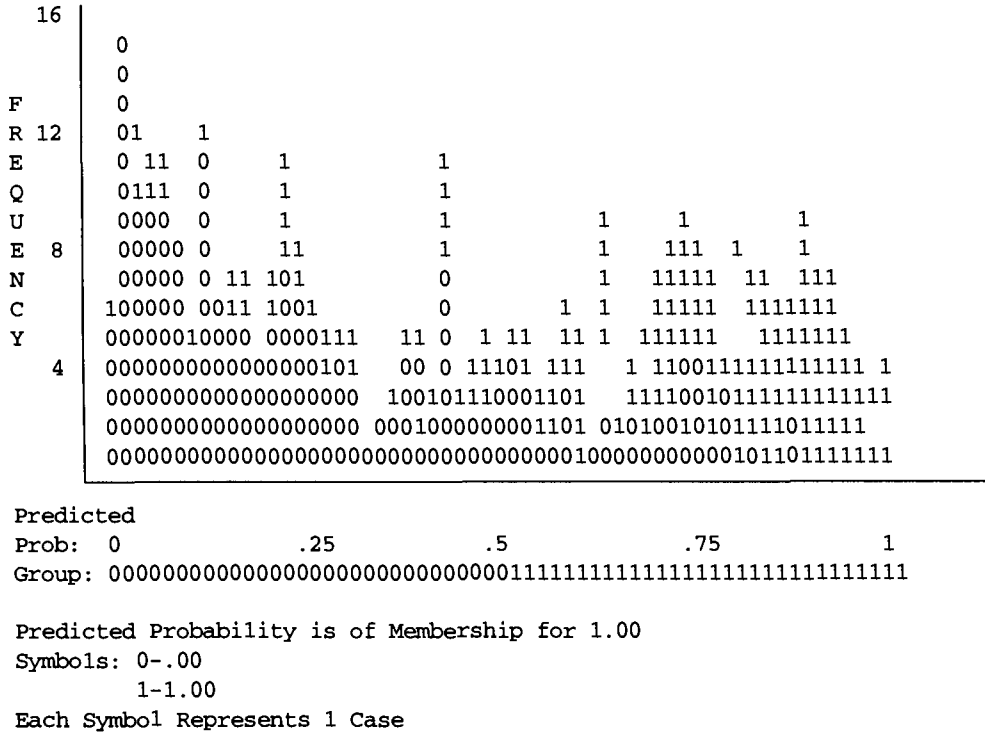


Figure 4.1. Histogram of estimated probabilities of respondents who will proceed or will not proceed to Form Six.

Figure 4.1 is a histogram of the estimated probabilities of students who would like to proceed to Form Six. The symbol used for each case designates the group to which the case actually belongs. The cases for whom the event has occurred should be to the right of 0.5, while those cases for whom the event has not occurred should be to the left of 0.5. The more the two groups cluster at their respective ends of the plot, the more appropriate the model (SPSS/PC, 1989).

Figure 4.1 shows that respondents who decided to return for Form Six studies (represented by “1”) and those who opted not to proceed (“0”), cluster at the respective ends of the plot. It can therefore be concluded that the logistic model performed well with the data from this study.

Figure 4.1 confirms that, for some students who would like to proceed to Form Six, there is a small estimated probability of not returning for Form Six, and for some students who do not wish to proceed to Form Six there is a small estimated probability that they will proceed.

The histogram of estimated probabilities shows which students will stay at school. Figure 4.1 further shows there are a few students who decided not to proceed to Form Six, but had a high estimated probability of deciding to proceed to Form Six. The students were identified with the symbol “0” at a probability value of about 0.77 and 0.80 respectively.

Table 4.3 gives the cumulative percentages of variance, eigen-values and factor-loadings for the groups of instruments used in the study. From Table 4.3, the following regression equation can be derived.

$$z = -1.0778 + 0.5348 (\text{GMT}) - 0.5415 (\text{GMT}) - 0.6324 (\text{HBCK}) \\ + 0.3758 (\text{GMT}) - 0.2973 (\text{GMT}) - 0.3137 (\text{MTV}) \\ - 0.4806 (\text{SINTG}) + 0.2834 (\text{MTV}) + 0.3458 (\text{MTV}) \\ + 1.2755 (\text{FINT})$$

$$z = -0.528$$

Cumulative Percentages, Eigen-values and Factor Loadings

Table 4.3

Factors Extracted from the Eight Independent Variables Used in the Study

| Independent Variables/Factors | Eigenvalue | Percentage of Variance | Cumulative Percentage of Variance |
|----------------------------------|------------|------------------------|-----------------------------------|
| <i>1. Academic Integration</i> | | | |
| Factor 1 | 6.719 | 30.5 | 30.5 |
| Factor 2 | 2.086 | 9.5 | 40.0 |
| Factor 3 | 1.492 | 6.8 | 46.8 |
| Factor 4 | 1.425 | 6.5 | 53.3 |
| Factor 5 | 1.212 | 5.5 | 58.5 |
| <i>2. Goal Commitment 1</i> | | | |
| Factor 1 | 3.285 | 36.5 | 36.5 |
| Factor 2 | 1.898 | 13.9 | 50.4 |
| <i>3. Goal Commitment 2</i> | | | |
| Factor 1 | 3.467 | 23.1 | 23.1 |
| Factor 2 | 1.898 | 12.7 | 35.8 |
| Factor 3 | 1.598 | 10.7 | 46.5 |
| Factor 4 | 1.268 | 8.5 | 54.9 |
| <i>4. Home Background</i> | | | |
| Factor 1 | 2.639 | 14.7 | 14.7 |
| Factor 2 | 1.967 | 10.9 | 25.6 |
| Factor 3 | 1.635 | 9.1 | 34.7 |
| Factor 4 | 1.445 | 8.0 | 42.7 |
| Factor 5 | 1.336 | 7.4 | 50.1 |
| Factor 6 | 1.208 | 6.7 | 56.8 |
| Factor 7 | 1.136 | 6.3 | 63.1 |
| Factor 8 | 1.063 | 5.9 | 69.0 |
| <i>5. Achievement Motivation</i> | | | |
| Factor 1 | 9.393 | 30.3 | 30.3 |
| Factor 2 | 1.930 | 6.2 | 36.5 |
| Factor 3 | 1.503 | 4.8 | 41.4 |
| Factor 4 | 1.345 | 4.3 | 45.7 |
| Factor 5 | 1.232 | 4.0 | 49.7 |
| Factor 6 | 1.095 | 3.5 | 53.2 |
| Factor 7 | 1.046 | 3.4 | 56.6 |
| Factor 8 | 1.030 | 3.4 | 59.9 |
| <i>6. Locus of Control</i> | | | |
| Factor 1 | 2.621 | 15.4 | 15.4 |
| Factor 2 | 1.767 | 10.5 | 25.9 |
| Factor 3 | 1.461 | 8.6 | 34.5 |
| Factor 4 | 1.429 | 8.4 | 42.9 |
| Factor 5 | 1.211 | 7.1 | 50.0 |
| Factor 6 | 1.085 | 6.4 | 56.4 |

Table 4.3 (Continued)

Factors Extracted from the Eight Independent Variables Used in the Study

| Independent Variables/Factors | Eigenvalue | Percentage of Variance | Cumulative Percentage of Variance |
|-------------------------------|------------|------------------------|-----------------------------------|
| <i>7. School Commitment</i> | | | |
| Factor 1 | 5.641 | 31.3 | 31.3 |
| Factor 2 | 1.716 | 9.5 | 40.8 |
| Factor 3 | 1.290 | 7.2 | 48.0 |
| Factor 4 | 1.096 | 6.1 | 54.1 |
| Factor 5 | 1.021 | 5.7 | 59.8 |
| <i>8. School Integration</i> | | | |
| Factor 1 | 5.054 | 17.4 | 17.4 |
| Factor 2 | 2.873 | 9.9 | 27.3 |
| Factor 3 | 2.526 | 8.7 | 36.0 |
| Factor 4 | 1.747 | 6.0 | 42.0 |
| Factor 5 | 1.503 | 5.2 | 47.2 |
| Factor 6 | 1.457 | 5.0 | 52.2 |
| Factor 7 | 1.375 | 4.7 | 56.9 |
| Factor 8 | 1.241 | 4.3 | 61.2 |
| Factor 9 | 1.032 | 3.6 | 64.8 |

This is the value needed to calculate the probability of whether the students would proceed to Form Six or would not proceed to Form Six.

Eigenvalues are the column sum of squares for a factor, and are also referred to as the *latent root*. Each eigenvalue represents the amount of variance accounted for by a factor. In this study, only factors with eigenvalues of 1 and higher were considered.

A factor is a linear combination of the original variables. Factors also represent the underlying dimensions (constructs) which summarise or account for the original set of observed variables. A factor loading is the correlation between the original variables and the factors, and the key to understanding the nature of a particular factor. Squared factor loadings

indicate what percentage of the variance in an original variable is explained by a factor. A factor score is the composite measure of all of the original variables which were important in making the new factor. Component analysis is a factor model in which the factors are based upon the total variance. With component analysis, units (1s) are used in the diagonal of the correlation matrix; computationally, this procedure implies that all of the variance is common or shared.

Consider Academic Integration, for example, from Table 4.3. Five factors have been retained, representing 58.5% of the variance of the 22 items associated with the Academic Integration variable. Using the eigenvalue for Academic Integration, 6.7% of the variance can be explained by Factor 1. Table 4.4 summarises the number of factors found for each variable.

Table 4.4
Number of Factors Found for Each Variable

| Variable | Number of Factors |
|--------------------------------|-------------------|
| <i>Academic Integration</i> | 5 |
| <i>Goal Commitment 1</i> | 2 |
| <i>Goal Commitment 2</i> | 4 |
| <i>Home Background Factors</i> | 8 |
| <i>Motivation</i> | 6 |
| <i>Locus of Control</i> | 6 |
| <i>School Commitment</i> | 8 |
| <i>School Integration</i> | 6 |

Of the eight independent variables which were subjected to factor

analysis, Table 4.3 shows that Factor 1 for Achievement Motivation has the highest eigenvalue (9.393). This means that 9.39% of the variance of Achievement Motivation can be explained by Factor 1 (Items 1, 21, 22, 13). The eight factors retained represent 59.9% of the variance of 31 items associated with achievement motivation.

Raw Scores

It was found that the raw scores of the eight independent variables were highly correlated. When these variables were used as predictors of the dependent variable, only one variable came out as a significant predictor. By creating a new and smaller set of composite variables with factor analysis to replace the original set of variables, the factor scores could be used as predictors of the dependent variable—namely, whether or not students would choose to continue at school for Form 6 studies. The results of finding these factor scores are presented in Table 4.5.

For Goal Commitment

Those who answered Form Five or Form Six Lower were the ones who had the highest probability to proceed to Form Six. The coding was inverse and the regression coefficient was negative.

For Background Factors

Those who answered that they wished to leave school at Form Five or who were to seek work at the end of Form Six were given a negative coding and this accounted for the regression coefficient being negative.

For socio-economic status, students who were uncertain or who gave a negative answer indicated that they were not certain whether their parents were going to support them. This was reflected in a negative coefficient of regression.

Table 4.5
Logistic Regression Showing the Predictors of Students Who Would Proceed to Form Six or Who Would Not Proceed to Form Six

| Variable* | B | S.E. | Wald | df | Sig | R | Exp(B) |
|-----------|--------|------|-------|----|-------|-------|--------|
| FAC1_4 | .535 | .142 | 14.11 | 1 | .0002 | .158 | 1.71 |
| FAC2_4 | -.542 | .141 | 14.75 | 1 | .0001 | -.162 | .58 |
| FAC2_5 | -.632 | .146 | 18.66 | 1 | .0000 | -.185 | .53 |
| FAC3_4 | .376 | .144 | 6.77 | 1 | .0092 | .099 | 1.46 |
| FAC4_4 | -.297 | .135 | 4.84 | 1 | .0277 | .076 | .74 |
| FAC4_7 | -.314 | .141 | 4.96 | 1 | 0.260 | -.078 | .73 |
| FAC4_9 | .481 | .174 | 7.62 | 1 | .0058 | -.107 | .62 |
| FAC5_7 | .283 | .141 | 4.03 | 1 | .0447 | .065 | 1.33 |
| FAC8_7 | .346 | .143 | 5.86 | 1 | .0155 | .089 | 1.41 |
| FINT | 1.278 | .315 | 16.39 | 1 | .0001 | .172 | 3.58 |
| Constant | -1.078 | .254 | 18.08 | 1 | .0000 | | |

*Variable Codes: Goal Commitment 1 (FAC1_4); Goal Commitment 1 (FAC2_4); Home Background (FAC2_5); Goal Commitment 2 (FAC3_4); Goal Commitment 2 (FAC4_4); Motivation (FAC4_7); School Integration (FAC4_9); Motivation (FAC5_7); Answers to Decisions (FINT)

For Motivation

The factor scores were negative because these related to self-concept. Students were uncertain about how useful the compulsory school subjects were likely to be for them in the future, and about the amount of homework they did. This accounted for the negative coefficient of regression. Another factor which was negative concerned their academic ability. Some students were uncertain of their school achievement, and the coefficient of regression was negative.

Table 4.6
Intercorrelation of the Variables

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 |
|-----------------------|--------|---------|--------|----------|--------------|---------|----------|-----------|-----------|----------|----------|-----------|-----------|----------|-----------|-----------|
| | DECSN4 | ACDINTG | UNVSTY | COURSE | MIDYR GRD | FINLGRD | FINT | SPMGRD | SPMGRT | SCHINTG | SCHCMT | LCSTRL | HBCK | MTV | GMT1 | GMT2 |
| DECSN4 | 1.0000 | .0345 | -.0220 | -.1395** | .1748** | .1722** | .4169*** | -.1027* | -.1610* | .0748 | .0701 | .0119 | -.112 | .0983 | .1960*** | .3263*** |
| ACDINTG (2) | .0345 | 1.0000 | -.0306 | -.0409 | -.0715 | -.0697 | .0892 | -.0787 | .0308 | .4927*** | .5934*** | .2899*** | .3542*** | .6781*** | .4395*** | .4144*** |
| UNVSTY (3) | | | 1.0000 | .0442 | .0177 | .0123 | -.1197* | -.0484 | .0971 | -.1597** | -.0647 | -.1019 | -.0895 | -.0774 | -.0667 | -.1059 |
| COURSE (4) | | | | 1.0000 | -.4681 | -.4379 | -.1553** | .4291*** | .2190*** | -.1405** | -.1181 | .400** | -.1896* | -.0708 | -.2590*** | -.3167*** |
| MIDYRGRD (5) | | | | | 1.0000 | .9461 | .1085* | -.6904*** | -.3978*** | .0205 | .0390 | -.2714*** | .2369** | .0858 | .2859*** | .9461*** |
| FINLGRD (6) | | | | | | 1.0000 | .1070* | .6636*** | -.4181*** | .0163 | .0493 | -.2739*** | .2323** | .0781 | .2796*** | .3868*** |
| FINT (7) | | | | | | | 1.0000 | -.0362 | -.1269* | .2282*** | .1455 | .0417 | -.0727 | .1440** | .2536*** | .2751*** |
| SPMGRD (8) | | | | | | | | 1.0000 | .2780*** | .0100 | .0974 | .2219*** | -.3434*** | -.0905 | -.3138*** | -.3640*** |
| SPMAGRGT (9) | | | | | | | | | 1.0000 | .0099 | -.0881 | .0708 | -.1473* | -.0703 | -.1581** | -.2551*** |
| SCHINTG (10) | | | | | | | | | | 1.0000 | .5818 | .1799** | .1156 | .4696*** | .2859*** | .3384*** |
| SCHCMT (11) | | | | | | | | | | | 1.0000 | .3843*** | .3019*** | .7047*** | .4504*** | .4357*** |
| LCSTRL (12) | | | | | | | | | | | | 1.0000 | .1707* | .4120*** | .1331* | .1335** |
| HBCK (13) | | | | | | | | | | | | | 1.0000 | .4306*** | .4425*** | .4079*** |
| MTV (14) | | | | | | | | | | | | | | 1.0000 | .5370*** | .0781 |
| GMT1 (15) | | | | | | | | | | | | | | | 1.0000 | .6653*** |
| GMT ₂ (16) | | | | | | | | | | | | | | | | 1.0000 |

Number of cases: 353 2-tailed significance: * -.05 ** -.001 ***-.000

School Integration

The factor scores are positive yet the coefficient of regression was negative, because in their variables, the acquisition of friends could relate to their wanting to stay at school. Their friends could influence their decisions. The coefficient of regression was negative because these variables of having their friends to influence them were given a low coded value.

Multiple Correlation Using Pearson-Product Moment¹

Table 4.6 presents the intercorrelation of variables, and identifies the variables which came out as predictors. The variables which had high correlation values were Goal Commitment, Motivation, Home Background, School Integration and SPM Results.

Qualitative Analysis

Altogether, 58 students were interviewed making use of the interview protocol described in Chapter Three (see Table 4.7). Thirty-five students from four of the schools were interviewed after the students had responded to the questionnaires. The students were still in Form Five. A total of 23 students were interviewed early in the following academic year, after the students had received their SPM examination results. Of these 23 students, 17 were studying in Form Six, and 7 of these students

¹ The code for the abbreviations used in Table 4.6 are as follows: Decision (DECSN); Academic Integration (ACDINTG); Intention to go to University (UNVSTY); Course to be Selected (COURSE); Midyear Exam (MIDYR); Final Grade (FINLGRD); Final Intention (FINT); SPM Grade (SPMGRD); SPM Aggregate (SPMAGRT); School Integration (SCHINTG); School Motivation (SCHMT); Locus of Control (LCSTRL); Home Background (HBCK); Motivation (MTV); Goal Commitment 1 (GMT1); Goal Commitment 2 (GMT2).

were interviewed in the schools where they had studied and taken their SPM examinations. Another six students who had not proceeded to Form Six were also interviewed. No student was interviewed in the Sixth Secondary School where the questionnaires were also administered.

Table 4.7

Number of Students Interviewed While in Form Five, Form Six and "Not Proceeding with School," and Their Schools

| School | While in Form Five | School | Studying in Form Six | Not in Form Six | Total |
|----------------------|--------------------|----------------------|----------------------|-----------------|-------|
| 1st Secondary School | 15 | 7th Secondary School | 5 | | |
| 2nd Secondary School | 9 | 8th Secondary School | 5 | | |
| 3rd Secondary School | 9 | 3rd Secondary School | 3 | 6 | |
| 4th Secondary School | 2 | | | | |
| 5th Secondary School | | 5th Secondary School | 4 | | |
| Total | 35 | | 17 | 6 | 58 |

The interviews conducted with the 15 students in the First Secondary School revealed that ten of them did not want to change their minds about anything they had written in the questionnaires.

Four of the students stated that they did not want to go to Form Six; the others said that they were not sure. Some said they would wait for the results before they decided. Five students remarked that Form Six was a waste of time but two said it was not. Five students said that the school had not helped them to make a choice, but another five indicated that the school had advised them to go to Form Six. Six students said that their parents had not influenced them, but three of them said that their parents supported their decision to proceed to Form Six studies.

Students generally wanted to secure professional or business careers,

although some wanted to study overseas.

The second school was a girls' school. The answers given in the interviews showed an even balance of viewpoints. Four students wanted to proceed to Form Six, but three said that they did not. A few students mentioned they had done well in the Form Five Trial Examinations. Three students said that Form Six was difficult, but three said that studying in Form Six was not difficult. Six students said that their parents had influenced them to make the decision to go on to Form Six. The students who wanted to proceed to Form Six wished to proceed to university to study economics, medicine or business.

The third school was a school with quite a large school population. It appeared that the environment played an important role in helping the students to make decisions to study in Form Six. Five students wanted to study in Form Six, but two did not. Five of the students said that Form Six study would be difficult, and five students mentioned that their parents would pay for their Form Six education. Four students said that it would be a waste of time to go on to Form Six. Five of the students said that they had arrived at the decision to study in Form Six on their own. All of the students expressed a wish to go to College or to a University.

The purpose of carrying out the interviews on two occasions was to find out whether students would change their minds after they knew their SPM examination results. The interview sessions carried out in the Form Six classes revealed that:

1. Thirteen students who had expressed a desire to study in Form Six

were subsequently admitted into Form Six classes and were satisfied with their decisions. However, three of them stated that they were having difficulty following Physics classes; one student had difficulty in Mathematics and another in Accountancy classes.

2. Four students who did not express a desire to study in Form Six did, in fact, proceed to Form Six classes. They found that they could follow their lessons satisfactorily.

3. Two students who wanted to proceed to Form Six were not successful in obtaining places because of their poor performance in the SPM examination.

4. Four students who did not want to go to Form Six were quite happy pursuing courses in private colleges.

5. Engineering, medicine, journalism, pharmacy, accountancy and actuarial science were some of the careers listed by those in Form Six.

6. The parents of those students who were studying in Form Six were very happy that their children were able to study in Form Six.

7. Some of the students who had proceeded to Form Six had friends who were also in Form Six at the same school.

8. Several of the students studying in Form Six classes mentioned that they had done well in the SPM examinations.

The interview sessions helped to triangulate data obtained from responses to items in the questionnaires.

Conclusion, Implications and Recommendations

This Chapter presents the summary, conclusions, implications of the study and recommendations for further research.

Summary

This thesis sought answers to the following research questions:

1. Is the decision taken by Form Five students to proceed to Form Six influenced by factors other than a wish to continue at school and sit for the STPM examination?
2. Does the background of the students influence their choice to proceed to Sixth Form?
3. Do the variables Goal Commitment, School Commitment, Social Integration and Academic Integration influence students' decisions to remain in the Sixth Form, as well as their choice of career when they leave school after completing Form Six?
4. Can students' Achievement Motivation act as a mediating variable on Achievement Levels? Is motivation a major factor influencing students' decision to remain in the Sixth Form and their career aspirations when they leave Sixth Form?

The following hypotheses formed the basis of the research study:

1. That specific antecedents, such as Family Background, Goal Commitments, Social Integration and School Commitment, affect the motivation of Form Five students in Penang schools.

2. That Achievement Motivation acts as a mediating variable on the school achievement levels of Form Five students in Penang.

3. That Motivation acts as a mediating variable for Form Five students in schools in Penang, and influences their decisions and/or aspirations to proceed to Form Six.

4. That antecedent variables, such as Family Background, previous achievement (school examinations), Goal Commitments, School Integration, Academic Integration and School Commitment, and Academic Achievement (SPM results) affect students' decisions to proceed to Form 6.

Conclusion

This study has addressed an important, and for the researcher, an annual phenomenon in the Malaysian education system. The data gathered in the study supported the model proposed in Chapter 1 (Figure 1.3). The data and subsequent analyses also confirmed the hypotheses presented in Chapter One. In particular, evidence was presented in Chapter Four that the antecedent variables such as Family Background, Goal Commitments, Social Integration, Academic Integration, and School Commitment, do affect the motivation of Form Five students in Penang schools. It was also confirmed that Achievement

Motivation acts as a mediating variable on the school achievement levels of Form Five students in Penang. The third hypothesis related to motivation and how this might act as a mediating variable for Form Five students in Penang by influencing their decisions and/or aspirations to proceed to Form Six. This hypothesis was also confirmed by the data presented in Chapter Four.

Eight clusters of questions which were found to be highly intercorrelated. This was an important result as the study had set out to find out whether there was correlation among the groups of variables. Four groups of instruments were found to predict students' decisions to continue in Form Six. These comprised the groups of questions for Goal Commitment 2, Home Background Factors, Motivation, and School Integration.

When tested on a sample of 377 students, this model was able to predict accurately whether students would choose to enter Form Six classes.

Many students in Malaysia sit for the SPM examination, the equivalent of the O-level examinations of other countries, at the end of their secondary school career. However, only a relatively small proportion of O-level graduates continue on at school for another two years to complete their Form Six examination, with the hope of gaining entry into tertiary level education in this country or abroad. In fact, as pointed out earlier (in Chapter Three), not many students after completing their secondary school examinations, have the required qualification to join

Form Six classes.

Some students might choose to enter local colleges which have twinning programmes with foreign universities, but which will accept students who do not have the qualifications for entry into Form Six classes or who do not have the full STPM qualification. Some students opt to take the A-levels in private institutions in Malaysia or abroad. Some students apply to enter matriculation classes and on passing the matriculation examinations will be given direct entry into local universities. Matriculation classes are taken over two years. Matriculation examinations, unlike the STPM examinations, are not national public examinations. On the contrary, matriculation examinations are set by each individual university in this country.

It has been mentioned that less than 20% of the cohort of Form Five students in Malaysia proceed to Form Six, and it has also been mentioned that the decision whether to remain at school for Form Six studies or to leave school after Form Five is a difficult one for many students. The earlier literature detailed a number of studies which revealed the importance of Achievement Motivation, Family Background factors, Goal Commitments, School Commitment, Academic Integration and School Integration and Locus of Control, all of which can influence students' decisions to remain for another two years for Form Six study or to leave school once they have taken the Form Five examination.

To investigate the research questions identified in this study, a theoretical model was designed and tested. The model tested comprised

set of instruments, the elements of which were the questions for the different groups of constructs; these made up the questionnaires. The questionnaires were written in English (see Appendix One) and translated into Bahasa Malaysia (see Appendix Two). The Bahasa Malaysia version of the questionnaires was administered to 377 students in six secondary schools in Penang—Sekolah Menengah Pertama, Sekolah Menengah Kedua, Sekolah Menengah Ketiga, Sekolah Menengah Keempat, Sekolah Menengah Kelima, and Sekolah Menengah Keenam. The two other schools, Sekolah Menengah Ketujuh and Sekolah Menengah Kelapan, the Seventh and Eighth Secondary Schools, mentioned in the thesis were the two schools which were not in the list of six schools and from where some of the students were selected to study their Form Six.

The questionnaires were collected from the students, responses coded and the data fed into a computer for statistical analysis via the SPSS/PC statistical package, and the SPSS for Windows factor analysis program. By using factor analysis, a reduction in the number of variables was achieved. By using the conceptual clusters from which all questions asked in the questionnaires were developed, it was possible to reduce the number of variables for analysis. It was this analysis which led to finding the high correlations between the eight clusters of items.

By way of summary, then, this study found that antecedent factors, such as Family Background, Goal Commitments, Social Integration, Academic Integration and School Commitment were correlated and

affected Motivation as observed among the Form Five students in the sample schools in Penang. The study also found that Achievement Motivation acted as a mediating variable on the School Achievement levels of the Form Five students in the sample schools in Penang.

The Interviews

The interview sessions (see Appendix Three for transcripts of the interviews) carried out with the 58 students from five of the six schools revealed that:

1. those students who were not keen to continue their studies in Form Six said that Form Six study was difficult;
2. those students who were not keen to continue their studies in Form Six said that they could take up courses in private colleges locally;
3. those students who expressed the opinion that Form Six was difficult were influenced by friends and/or relatives;
4. some students who had originally not wanted to go to Form Six, but on receiving offers to proceed to Form Six, had been prepared to continue with their Form Six study;
5. some students who had originally wanted to go to Form Six but were not able to proceed to Form Six due to their low SPM results were disappointed, but said they could enter local private colleges. No-one mentioned wanting to resit the SPM examination;
6. some students who did not want to go to Form Six and who were not offered places in Form Six were quite satisfied with the situation, as they

felt that they could find employment, work on their A-levels locally or overseas, or apply to go overseas to continue their education. Those who expressed the wish to go overseas said that they could get financial help from their parents;

7. some students who had originally wanted to proceed to Form Six and who were offered places in either their own schools or in nearby schools, expressed satisfaction. This group of students had done well in their Trial and SPM examinations;

8. some students mentioned that their parents had wanted them to go to Form Six, but others stated that they had made their own decisions about whether to stay on at school or leave.

School Trial Examinations

In many cases the performance of the students in the School Trial Examinations influenced the students' decision on whether to continue at school. Their being able to do well at this examination served to point to their confidence and their ability to pursue a university education. There was a correlation between the students' performance in the School Trial Examinations and their performance in the SPM examinations. As might be expected, most of the students who did well in the SPM examinations were offered places in Form Six.

Academic Achievement

Students who obtained good results on the SPM examination generally wanted to proceed to Form Six studies. From the interviews conducted

with students taken from the sub-sample, it was revealed that parental influence helped students to make decisions to attend Form Six classes. Clearly, it is important for education policy makers to know whether the secondary school one attends affects one's academic achievements or whether these are ultimately linked to the individual's family background (Carpenter & Western, 1989). Featherman (1980), in his reviews of the pertinent American research literature, concluded that student characteristics such as parental socio-economic status, race, sex and intelligence accounted for academic achievement more than school differences as seen in resources, teacher experience or the composition of student cohorts. However, such a view has been challenged by other scholars (see, for example, Coleman et al., 1982) who have reported that students in Catholic and non-Government schools in Australia perform better than comparable students in Government schools. Carpenter and Hayden (1985), and Carpenter and Western (1984) found that the type of school only marginally affected performance in senior-year standardised examinations.

Family Influence

Schiamberg and Chin (1987) carried out a longitudinal study (between 1969 and 1979) on 1202 black and white fifth and sixth graders in the United States. Although their study addressed younger students than those in the present study, it is nevertheless pertinent to note that their study revealed that the total effect of family background on the

occupational attainment process was greater than efforts due to youth characteristics and educational attainment. The total effect of the family was second only to that of achievement motivation in predicting occupational attainment.

Analyses based on a longitudinal survey of Wisconsin seniors in the United States, illuminated the critical role of social psychological variables in mediating the impact of family background on educational attainment (see for example, Hauser, 1972; Sewell, Haller & Ohlendorf, 1970).

Triangulation

Triangulation, which has been defined as the use of two or more methods of data collection in the study of some aspect of human behaviour (Cohen & Manion, 1985), has special use when complex phenomena need elucidation.

The interview sessions served to triangulate data relating to the objectives of the thesis. The interview responses (see Appendix Three) tended to confirm the findings arising from the theoretical model. The triangulation process focused on the reasons that students put forward for wanting to remain at school or to leave school after Form Five.

Implications of the Study

This thesis addressed a problem which almost every Form Five student sitting for the SPM examination in Malaysia has to face—should I proceed to Form Six studies if I pass the examination.

The theoretical model which was used to predict the decisions of Form Five students could be of use to parents, teachers, teacher counsellors, employers and decision makers in the Malaysian Ministry of Education. It would seem to be the case that there is a need to create an awareness in Penang, Malaysia, of the value of continuing from Form Five to Form Six. The impact and implications of continuing or doing away with Form Six education, which has been in existence for more than thirty years in this country, could have great ramifications to the nation, in general, and to its students in particular.

Parents should be encouraged to seek alternative avenues to achieving job opportunities and tertiary level education for their children in the event their children are not able to proceed to Form Six classes in this country.

It should not be difficult for teachers and teacher counsellors in secondary schools to make use of the questionnaires developed in this thesis, to make the predictions suggested, so that students can be properly advised. The theoretical model could also be used by policy makers in the Education Departments to coordinate and consolidate on the number of places for higher education required in the country by working with the schools which have Form Six classes.

Recommendations for Further Research

This thesis has opened new areas for research. In the opinion of the researcher, very little research of the kind described in this thesis has

been carried out in this area in this country or in Southeast Asian countries.

Three of the reasons why this area has been the focus of so little research could be:

1. the time constraints arising from the fact that students need to answer a questionnaire such as the one used in this study at the most opportune time;
2. the difficulty of conducting a follow-up study;
3. the lack of funding to carry out large-scale studies of such a nature.

Future researchers could make use of the theoretical model which has been put forward in order to make predictions about whether Form Five students will return to school to undertake Form Six studies..

One possible approach to further studies may be to consider reducing the number of questions in the instruments. Such a reduction in the number of questions might enable future researchers to focus on particular constructs and would permit less complex analyses to be carried out. The interview sessions could be used successfully once the intending researcher has chosen a workable time-frame.

Much research remains to be done in this area to predict with confidence the future trends in theory, research, and application related to student motivation (Ball, 1984). However, the data, framework and instruments presented in this thesis should provide at least a foundation for researchers in SouthEast Asia.

References

- Adams, J. D., Hayes, J., & Hopson, B. (1976). *Transition understanding and managing personnel change*. London: Martin Robertson.
- Adelson, J. (1969). Personality. *Annual Review of Psychology*, 20, 217-252.
- Ainley, J., Batten, M., & Miller, H. (1984a). *Patterns of retention in Australian government schools*. Hawthorn, Victoria: ACER Research Monograph No. 27.
- Ainley, J., Batten, M., & Miller, H. (1984b). *Staying at high school in Victoria*. Hawthorn, Victoria: ACER Research Monograph No. 23.
- Ainley, J., Foreman, J., & Sheret, M. (1991). High school factors that influence students to remain in school. *Journal of Educational Research*, 85(21), 69-80.
- Ainley, J., Foreman, J., & Sheret, M. (1991, November-December). High school factors that influence students to remain in school. *Journal of Educational Research*. 85(2), 69-80.
- Aldrich, J. H. & Nelson, F. D. (1984) *Linear Probability, logit and probit models*. Beverley Hills, CA: Sage Publications.
- Ames, C., & Ames, R. (1984). Systems of student and teacher motivation: Toward a qualitative definition. *Journal of Educational Psychology*, 76, 535-556.
- Anderson, D. (1983). Who gets ahead? Inequalities in access to post-secondary education. *National Clearinghouse on Transition from School Newsletter*, 2, 87-98.
- Andrisani, P. J., & Nestel, G. (1976). Internal-external control as contributor to and outcome for work experience. *Journal of Applied Psychology*, 61, 156-165.
- Apps, J. M. (1981). *An analysis of factors leading to the decision to discontinued or continue after Year 10*. Unpublished M.A. (Hons.) thesis. Macquarie University.

- Aston, N. M., & McLanahan, S. S. (1991). Family structure, parental practices and high school completion. *American Sociological Review*, 56, 309-320.
- Atkinson, J. (1978). The mainsprings of achievement-oriented activity. In J. Atkinson & J. Raynor (Eds.), *Personality, motivation and achievement* (pp. 11-39). New York: Halsted.
- Atkinson, J. W., & Birch, D. (1979). *Introduction to motivation*. Princeton, NJ: Van Nostrand.
- Atkinson, J. N., & Raynor, J. O. (Eds.), (1974). *Motivation and achievement*. New York: Wiley.
- Ball, S. (Ed.) (1977). *Motivation in Education*. New York: Academic Press.
- Ball, S. (1984). Student motivation: Some reflections and projections. In R.E. and C. Ames. (Eds), *Research on Motivation in Education: Student Motivation, Volume 1*. Orlando: Academic Press.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, NJ: Prentice Hall.
- Bandura, A. (1978). The self-system in reciprocal determinism. *American Psychologist*, 33, 344-358.
- Bandura, A. (1988). Self-regulation and action through goal systems. In V. Hamilton, G. H. Bower, & B. Frijda (Eds.), *Cognitive perspectives on emotion and motivation* (pp. 37-61). Dordrecht, the Netherlands, Kluwer.
- Bandura, A., & Walters, R.H. (1963). *Social learning and personality development*. New York: Holt, Rinehart & Winston.
- Banks, M., Bates, I., Breakwell, G., Bynner, J. Emler, N., Jamieson, L., & Roberts, K. (1992). *Careers and identities*. Milton Keynes: Open University Press.
- Bazalgette, J. (1978). *School life and work life*. London: Hutchinson.
- Bean, J.P. (1980) Dropouts and turnover: The synthesis and test of a causal model of student attrition. *Research in Higher Education*, 12,155-187.

- Beswick, D., Hayden, M., & Schonfield, H. (1983). *Evaluation of the tertiary education assistance scheme: An investigation and review of policy on student financial assistance in Australia*. (Studies in Student Finances Vol. 4). Canberra: AGPA.
- Beutell, N. J., & Brenner, O.C. (1986). Sex differences in work values. *Journal of Vocational Behaviour*, 28, 29-41.
- Bogenschneider, K. (1989, April). *Maternal appointment in two-parent intact families, parenting style and adolescents' academic achievement: A process approach*. Paper presented at the biennial meeting of the Society for Research in Child Development, Kansas City.
- Bordin, E. S. (1985). Psychodynamic model of career choice and satisfaction. In U. Delworth and G.R. Hanson (Eds.), *Career, choice and development*. London: Jossey-Bass.
- Borg, W. R., & Gall, M. D. (1989) *Educational research: An introduction*. New York: Longman.
- Boring, E. G. (1950). *A history of experimental psychology*. (2nd. ed.). New York: Appleton-Century Crofts.
- Borow, H. (1961). Vocational development research: Some problems of logical and experimental form. *Personnel and Guidance Journal*, 40, 21-45.
- Boyd, M. (1982). Sex differences in the Canadian occupational attainment process. *Canadian Review of Sociology and Anthropology*, 19, 1-28.
- Bradley, G. (1994). Identifying students at risk of early withdrawal from secondary schools. *The Australian Educational and Developmental Psychologist*, 11(1), 1-7.
- Brislin, R. W. (1970). Back-translation for cross-cultural research. *Journal of Cross-Cultural Psychology*, 1, 185-216.
- Brislin, R. W. (1986). The wording and translation of research instruments. In W. J. Lonner & J. W. Berry (Eds.), *Field materials in cross-cultural research* (pp. 137-164). Beverley Hills, CA: Sage Publications.

- Brookover, W., Beady, C., Flood, P., Schweitzer, J. & Wisenbaker, J. (1979). *School, several systems and student achievement*. New York: Praeger Publishers.
- Brown, D. (1987). The status of Holland's theory of vocational choice. *Career Development Quarterly*, 36, 13-24.
- Buehler, C. (1933). *Der menschliche Lebenslauf als psychologisches problem [The human life course as a psychological subject]*. Leipzig: Hirzel.
- Buriel, R., & Cardoza, D. (1988). Sociocultural correlates of achievement among three generations of Mexican American high school seniors. *American Educational Research Journal*, 25(2), 177-192.
- Burke, G. (1983). *The Commonwealth Grants Commission and school retention rates*. Clayton, Victoria: Monash University, Faculty of Education and Centre for Policy Studies.
- Burnhill, P. (1984). The ragged edge of compulsory schooling. In D. Raffle (Ed.), *Fourteen to Eighteen: The Changing Pattern of Schooling in Scotland*. Aberdeen: Aberdeen University Press.
- Burnstein, E. (1963). Fear of failure, achievement motivation, and aspiring to prestigious occupations. *Journal of Abnormal and Social Psychology*, 67, 189-193.
- Campbell, D. T., & Stanley, J. C. (1963). Experimental and quasi-experimental designs for research on teaching. In N.L. Gage (Ed.) *Handbook of Research on Teaching*. Chicago: Rand McNally.
- Cannon, W. B., & Washburn, A. L. (1912). An explanation of hunger. *American Journal of Physiology* 29, 441, 454.
- Carlson, A. J. (1916). *The control of hunger in health and disease*. Chicago: University of Chicago Press.
- Carpenter, P. (1983). *Origins, aspirations and attainments*. Unpublished Ph.D. thesis. University of Queensland, Australia.

- Carpenter, P. G., & Fleishman, J. A. (1987). Linking intentions and behaviour: Australian students' college plans and college attendance. *American Educational Research Journal*, 34, 79-105.
- Carpenter, P. G., & Hayden, M. (1985). Academic achievement among Australian youth. *Australian Journal of Education*, 29, 199-220.
- Carpenter, P. G., Fleishman, J. A., & Western, J. S. (1989). Job intentions and job attainments: Young people's career beginnings. *The Australian Journal of Education*, 33(3), 299-319.
- Carpenter, P. G., & Western, J. S. (1982). Aspirations for higher education. *The Australian Journal of Education*, 26, pp. 3.
- Carpenter, P. G., & Western, J. S. (1984). The process of academic achievement. *Education Research and Perspectives*, 11, 63-81.
- Carpenter, P. G., & Western, J. S. (1989). *Starting a career: The early attainment of young people*. Hawthorn, Vic.: ACER Research Monograph No. 36.
- Carpenter, P. G., Western, J. S., & Foster, W. G. (1980). Social background aspiration and educational achievement among Queensland Youth. In I. D. Smith (Ed.), *Australian Association for Research in Education: Papers presented at the 1980 Annual Conference* (pp. 30-41). Sydney. Armidale, NSW: Armidale College of Advanced Education.
- Cass, J. C., & Tiedeman, D.V. (1960). Vocational development and the election of a high school curriculum. *Personnel and Guidance Journal*, 36, 538-545.
- Chu, L., & Culbertson, J. (1982). *Rural Alaskan high school boys' and girls' attitudes towards education*. Paper presented at the Annual Conference of the American Educational Research Association (New York).
- Clarke, A. M., & Clarke, A. D. B. (1976). *Early experience: myth and evidence*. London: Open Books.
- Cofer, C. N. (1972). *Motivation and emotion*. Illinois: Scott, Forman & Co.

- Cohen, L., & Manion, L. (1985) 2nd Ed. *Research methods in education*. London: Croom Helm.
- Coleman, J. S., Campbell, E. Q., Hobson, D. J., McPortland, J., Mood, A. M., Weinfeld, F.D. & York, R.L. (1966). *Equality of educational opportunity*. Washington, DC: U.S. Government Printing Office.
- Coleman, J. S., Hoffer, T., & Kilgore, S. (1982). *Public and private schools*. New York: Basic Books.
- Comrey, A. L. (1973). *A first course in factor analysis*. New York: Academic Press.
- Connelly, D. J. (1988). Increased participation in the post-compulsory years: Some challenges for teacher education. *The South Pacific Journal of Teacher Education*, 16, 1-8.
- Cooley, W. W. (1963). *Career development of scientists: An overlapping longitudinal study*. (Cooperative Research Project No. 436). Harvard University, Graduate School of Education.
- Cooper, H. (1982). Scientific guidelines for conducting integrative research reviews. *Review of Educational Research*, 52, 291-302.
- Covington, M. V., & Omelich, C. L. (1984). Task-oriented versus competitive learning structures: Motivational and performance consequences. *Journal of Educational Psychology*, 6, 1038-1050.
- Covington, M. V. (1991). *Emotion, motivation and cognition in school achievement*. New York: Cambridge University Press.
- Crandall, V.C. (1969). Sex differences in expectancy of intellectual and academic reinforcement. In C.P. Smith (Ed.), *Achievement related motives in children*. New York: Russel Sage Foundation.
- Crites, J. O. (1981). *Career counselling: Models, methods and materials*. New York: McGraw Hill.

- Crites, J. O. (1989). Career differentiation in adolescence. In D. Stern & D. Eichorn (Eds.), *Adolescence and work*. Hillsdale, NJ: Erlbaum.
- Cronbach, L. J. C. (1973). *Psychometrika*, 16, 297-334.
- Cross, C. T. (1990). National goals: Four priorities for educational researches. *Educational Researcher*, 19, 20-24.
- Crouter, A.C., McDermid, S.M., McHale, S.M., & Perry-Jenkins, M. (1990). Parental monitoring and perceptions of children's school performance and conduct in dual- and single-earner families. *Developmental Psychology*, 26, 649-657.
- Cuban, L. (1990). Reforming again, again and again. *Educational Researcher*, 19, 3-13.
- Daoust, H., Vallerand, R.J., & Blais, M.R. (1988). Motivation and education: A look at some important consequences. *Canadian Psychology*, 29(2a), 172 (abstract).
- Davis, D. (1988). *School to work: The EHW factor*. Melbourne: Thomas Nelson.
- Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspectives. *Educational Psychologist*, 26 (3 & 4), 325-346.
- Dertouzos, M. L., Lester, R. K., & Solow, R. M. (1989). *Made in America*. Cambridge, MA: MIT Press.
- Dittman-Kohli, F. (1986). Problem identification and definition as important aspects of adolescent's coping with normative life-tasks. In R.K. Silbereisen, K. Eyferth, & G. Rudinger (Eds.), *Development as action in context. Problem behaviour and normal youth development*. Berlin: Springer-Verlag.
- Dowling, P., & O'Brien, S. (1981). The effects of employment, unemployment & further education upon values of school leavers. *Australian Journal of Psychology*, 33(2), 185-195.

- Douvan, E., & Adelson, J. (1966). *The adolescent experience*. New York: John Wiley.
- Dubin, R. (1956). Industrial workers' worlds: A study of the central life interests of industrial workers. *Social Problems*, 3, 131-142.
- Eckersley, R. (1989). Casualties of change: Social and economic issues affecting youth. *The bulletin of the National Clearinghouse for Youth Studies*, 8, 3-8.
- Elder, G.H. Jr. (1974). *Children of the great depression*. Chicago: University of Chicago Press.
- Elder, G.H. Jr. (1985). Perspectives on the life course. In G.H. Elder, Jr. (Ed.), *Life course dynamics* (pp. 23-49). Ithaca, NY: Cornell University Press.
- Ellsworth, G., Day, N., Hurworth, R., & Andrews, J. (1982). *From school to tertiary study*. Hawthorn, Victoria: ACER Research Monograph No. 14.
- Entwistle, D.R. (1990). Schools and the adolescent. In S.S. Feldman & G.R. Elliot (Eds.), *At the threshold: The developing adolescent* (pp. 197-224). Cambridge, MA: Harvard University Press.
- Erikson, E.H. (1959). *Identity and the life cycle*. New York: International Universities Press.
- Evans, P.D. (1982). Motivation. In R. Holdsworth, *Psychology for Career Counselling*. London: MacMillan Education.
- Fanelli, G.C. (1977) Locus of control. In Samuel Ball (Ed.) *Motivation in Education* (pp. 45-66). New York: Academic Press.
- Featherman, D. L. (1980). Schooling and occupational careers: Constancy and change in worldly success. In O.G. Brim & J. Kagan (Eds.), *Constancy and change in human development* (pp. 675-738). Cambridge, MA: Harvard University Press.
- Fox, J. (1984). *Linear statistical methods and related methods*. New York: John Wiley & Sons.

- Friend, J., & Haggard, E.A. (1948). Work adjustment in relation to family background. *Applied Psychology Monograph*, 16, 1-150.
- Fuqua, D. R., Blum, C. R., & Hartman, B. W. (1988). Empirical support for the differential diagnosis of career indecision. *Career Development Quarterly*, 36(3) 64-73.
- Ginzberg, E. (1972). Toward a theory of occupational choice: A restatement. *Vocational Guideline Quarterly*, 20, 169-176.
- Ginsberg, E., Ginsberg, S. W., Axelrad, S., & Herman, J. C. (1951). *Occupational choice*. New York: Columbia University.
- Greene, A. L. (1990). Great expectations: Constructions on the life course during adolescence. *Journal of Youth and Adolescence*, 15, 99-113.
- Gribbons, W. D. & Lohnes, P. R. (1968). *Emerging careers*. New York: Teachers College Press: Columbia University.
- Grotevant, H. D. (1987). Toward a process model of identity formation. *Journal of Adolescence Research*, 2, 203-222.
- Hair Jr., F. H., Anderson, R. E., Tatham, R. L. & Black, W. C. (1992) *Multivariate data analysis with readings*. New York: Macmillan.
- Haller, A. O. (1982). Reflections on the social psychology status attainment. In R.M. Hauser, D. Mechanic, A.O. Holler & T.S. Hauser (Eds.), *Social structure and behavior* (pp. 3-28). New York: Academic Press.
- Hansell, S. (1982). *Student commitment and purpose in a private school*. Baltimore, MD: Johns Hopkin University.
- Harre, R., & Secord, P. F. (1972). *The explanation of social behaviour*. Oxford: Basil Blackwell.
- Hauser, R. (1972). Disaggregating a social-psychological model of educational attainment. *Social Science Review*, 1, 159-188.
- Havighurst, R. J. (1948/1974). *Developmental tasks and education* (3rd edn.). New York: McKay. (Original work published in 1948).

- Havighurst, R. J. (1953). *Human development and education*. New York: Longren.
- Hawke, R. (1982, August). *The Commonwealth Government's strategy for young people. A statement of the Prime Minister*, Canberra: AGPS.
- Hayden, M. (1982). Factors affecting participation by young people in tertiary education: A review of recent Australian literature and research. In Commonwealth Tertiary Education Commissions (Ed.), *Learning and Earning* (pp.79-165). Canberra: AGPS .
- Hayden, M. (1988). *An investigation of individual and situational influence affecting transition by young people for secondary higher education in two Australian states*. Unpublished Ph.D. thesis. University of Melbourne.
- Heckhausen, H. (1991). *Motivation and action*. Berlin: Springer.
- Heider, F. (1958) *The Psychology of interpersonal relations*. New York: Wiley.
- Hemmings, B., & Hill, D. (1991). Challenge of post-compulsory schooling: Monitoring student perceptions. *Catholic School Studies*, 64, 45-49.
- Hemmings, B., & Hill, D. (1995, November). *Reflection and action: A longitudinal study of education outcomes*. Paper presented at the Education Research Association Annual Conference: Rethinking Education. Reflective Practice, Professionalism and Postmodernisation. Hong Kong.
- Henahan, D. (1982, March 14). The mystery of the dropout composer. *New York Times (Section 2—Music Review)*, pp. 1-23.
- Hess, R. & Holloway, S. (1984). Families and schools as educational institutions. In R.D. Parke (Ed.), *Review of child development research* (Vol. 7 pp. 179-222). Chicago: University of Chicago Press.
- Hill, K.T. (1980). Motivation, evaluation and testing policy. In L.J. Fyans Jr. (Ed.). *Achievement motivation: Recent trends in theory and research*. New York: Plenum.

- Hilton, T.L. (1962). Career decision-making. *Journal of Counselling Psychology*, 9, 291-298.
- Holdsworth, R. (Summer, 1979). The careers adviser and student wastage. *Advice*, 21-27.
- Holland, J. L. (1987). Current status of Holland's theory of careers: Another perspective. *Career Development Quarterly*, 36, 24-30.
- Holland, J. L. (1973). *Making vocational choices: A theory of careers*. Englewood Cliffs, NJ: Prentice Hall.
- Horner, J. T., Buterbaugh, J. G., & Carefoot, J. J. (1967, April). Factors relating to occupational and educational decision making of rural youth. Lincoln: College of Agriculture, University of Nebraska.
- Hosler, D., & Stage, F.K. (1992). Family and high school experience influences on the post secondary educational plans of ninth-grade students. *American Educational Research Journal*, 29, 425-451.
- Howe, M. J. (1984). *A teacher's guide to the psychology of learning*. Oxford: Basil Blackwell.
- Hotchkiss, L., & Borow, H. (1985). Sociological perspectives of career choice and attainment. In U. Delworth and G.R. Hanson (Eds.), *Career, Choice and Development*. London: Jossey-Bass.
- Hughes, E. C. (1958). *Men and their work*. Glencoe, Ill.: Free Press.
- Husen, T. (1987). Young adults in modern society: Changing status and values. *Oxford Review of Education*, 13, 165-176.
- Huston-Stein, J., & Higgins-Trenk, S. (1978). Development of females from childhood through adulthood: Career and feminine role orientations. In P. Baltes (Ed.), *Lifespan development and behaviour* (Vol. 1). New York: Academic Press.
- Idowu, A.I., & Dere, A.O. (1983). Socioeconomic status and occupational aspirations of high school seniors in Nigeria. *Journal of Employment Counselling*, 20(4), 186-192.

- Ihinger-Tallman, M. (1982). Family interaction, gender, and status attainment value. *Sex Roles: Journal of Research*, 8(5), 543-556.
- Inkeles, A. (1980). Continuity and change in American national character. *Tocqueville Review*, 2, 20-51.
- Inkson, J. H. (1971). Achievement motivation and occupational choice. *Australian Journal of Psychology*, 23(3), 225-23.
- Johnson, S.T. (1992). Extra-school factors in achievement, attainment, and aspiration among junior and senior high school-age African American youth. *The Journal of Negro Education*, 61, 91-119.
- Jones, F. L. & Davis, P. (1986). *Models of society: Class stratification and gender in Australia and New Zealand*. Sydney: Croom Helm.
- Kanter, R. M. (1977). *Work and family in the United States: A critical review and agenda for research and policy*. New York: Russe Sage Foundation.
- Karmel, P. (1985). Quality and equality in education. *Australian Journal of Education*, 29, 279-293.
- Katz, I. (1967). The socialization of academic motivation in minority group children. In D. Levine (Ed.), *Nebraska Symposium on Motivation*. Lincoln: University of Nebraska Press.
- Kaufman, D. & Feters, M. L. (1980). Work motivation and job values among professional men and women: A new accounting. *Journal of Vocational Behaviour*, 17, 251-262.
- Keeves, J.P. (1978). Approaches to the goal of educational equality. In J.V. DōCruz & P.J. Sheelman (Eds.), *The renewal of Australian schools: A changing perspective in educational planning*. (2nd and enlarged ed. pp. 92-107). Hawthorn, Victoria: ACER.
- Keeves, J. (1986). Motivation and school learning. *International Journal of Educational Research*, 10, 117-118.

- Kelly, H.H. (1967) Attribution theory in social psychology. In D. Levine (Ed.) *Nebraska symposium on motivation*. New York: Rhinehart & Winston.
- Kerlinger, F. N. (1964). *Foundations of behavioral research*. New York: Holt, Rhinehart & Winston.
- Kfir, D. (1988). Achievements and aspirations among boys and girls in high school: a comparison of two Israeli ethnic groups. *American Educational Journal*, 25(2), 213-236.
- Kirkby, P. (Chairman). (1985). *Report of the committee of inquiry into labour market programs*. Canberra: AGPS.
- Klaczynski, P. A., & Reese, H.W. (1991). Educational trajectory and ôaction orientationö: Grade and track differences. *Journal of Youth and Adolescence*, 20, 441-462.
- Kohn, M. C. (1977). *Class and conformity: A study in values*. Chicago: University of Chicago Press.
- Kotrlik, J. W., & Harrison, B. C. (1989). Career decision patterns of high school seniors in Louisiana. *Journal of Vocational Education*, 14(2), 47-65.
- Kozeki, B., & Entwistle, N. (1988). Interactions between pupil characteristics and school ethos. *A Review of Earlier Collaborative Work and a Proposal for a Further Comparative Study of Hungarian and British Schools*. University of Edinburgh.
- Krumboltz J. D. (1979). A social learning theory of career decision making. In A.M. Mitchell, G.B. Jones and J.D. Krumboltz (Eds.), *Social Learning and Career Decision Making*. Cranston, RI: Caroll Press.
- Krumboltz, J. D., Mitchell, A. M., & Jones, G. B. (1976). A social learning theory of career selection. *The Counselling Psychologist*, 6(1), 71-81.
- Lazarsfeld, P. F. (1959). Reflections on business. *American Journal of Sociology*, 65, 1-31.

- Lazarsfeld, P. F. (1966). Concept formation and measurement in the behavioral sciences. In G. Di Renzo (Ed.), *Concepts, theory and explanations in the behavioral sciences* (pp. 144-200). New York: Random House.
- Lewin, K. (1948). Time perspective and morale. In K. Lewin (Ed.), *Resolving social conflicts*. New York: Harper.
- Levin, H. M. (1970). A new model of school effectiveness. In *Do teachers make a difference? A report on recent research on pupil achievement*. Washington, DC: U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Educational Personnel Development.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice-Hall.
- Maar, E. (1965). Some behaviours and attitudes relating to vocational choice. *Journal of Counselling Psychology*, 12(4), 404-408.
- Maas, F. (1990). The effects of prolonged dependence on young people becoming adult. *Youth Studies*, 9, 24-29.
- Madaus, G. F., & O'Hara, R.P. (1967). Vocational interest patterns of high school boys: A multivariate approach. *Journal of Counselling Psychology*, 14(2)106-112.
- Maehr, M. L. (1984). Meaning and motivation: Towards a theory of personal investment. In R.E. Ames & C. Ames (Eds.), *Research on Motivation in Education, Vol. 1 Student Motivation*. Orlando: Academic Press.
- Maehr, M. L. (1974a). *Sociocultural origins of achievement*. Monterey: Brooks/Cole.
- Maehr, M. L. (1974b). Culture and achievement motivation. *American Psychologist*, 29, 887-896.
- Maehr, M. L., & Nicholls, J. G. (1980). Culture and achievement motivation: A second look. In N. Warren (Ed.), *Studies in cross-cultural psychology* (Vol. 3). New York: Academic Press.

- Maehr, M. L., & Midgley, C. (1991). *Educational Psychologist*, 26, 3 & 4, 399-428.
- Maehr, M. L., & Pintrich, P. R. (Eds.) (1991). *Advances in motivation and achievement: Goals and self-regulatory process*. Vol. 7. Greenwich, CT: JAI.
- Maizels, J. (1970). *Adolescent needs and the transition from school to work*. London: Athlone Press.
- Mansfield, R. (1973). Self-esteem, self-perceived abilities and vocational choice. *Journal of Vocational Behaviour*, 3, 433-441
- Mare, D. M. (1980). Social background and school continuation decisions. *Journal of the American Statistical Society*, 75, 295-305.
- Marini, M. M., & Greenburg, E. (1978). Sex differences in educational aspirations and expectations. *American Educational Research Journal*, 15, 67-79.
- Marjoribanks, K. (1990). Family, school and peer group influences on students' school-rated outcomes. In L. J. and J. P. Keeves (Eds.), *Schooling and society in Australia: Sociological perspectives*. Tokyo: Australia National University Press.
- Marks, G., & Jones, F. L. (1991). Change over time in father-son mobility in Australia. *Australian and New Zealand Journal of Sociology*, 27(3), 315-331.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.
- Maslow, A. H. (1970). *Motivation and personality (Rev. ed.)*. New York: Harper & Row.
- Maurer, R. E. (1982). Dropout prevention: An intervention model for today's high school. *Phi Delta Kappan*, 63, 470-471.
- Mayer, K. U. (1986). Structural constraints on the life course. *Human Development*, 29, 163-170.
- McClelland, C. (1987). *Human motivation*. Cambridge, MA: Cambridge University Press.

- McClelland, D. C. (Ed.). (1955a). *Studies in achievement*. New York: Appleton Century Crofts.
- McClelland, D. C. (1955b). Measuring motivation in phantasy: The achievement motive. In D. C. McClelland (Ed.), *Studies in motivation*. New York: Appleton Century Crofts.
- McClelland, D. C. (1961). *The achieving society*. New York: Free Press.
- McClelland, D. C., Atkinson, J. W., Clark, R. A., & Cowell, E. L. (1953). *The achievement motive*. New York: Appleton Century Crofts.
- McClelland, D. C., Clark, R. A., Ruby, T. B. & Atkinson, J. W. (1958). The effect of the need for achievement on thematic apperception. In J.W. Atkinson (Ed.), *Motives in fantasy, action and society*. Princeton, NJ: Van Nostrand.
- McCracken, J. D., & Fails, E. (December 1989). *A panel study of the aspirations of rural youth in Ohio*. Paper presented at the Annual Meeting of the American Vocational Association (Orlando, FL).
- Mc Dougall, W. (1908). *An introduction to social psychology*. New York: Barnes and Noble.
- Meece, J. L., Blumenfeld, P. C., & Hoyle, R. H. (1988). Students' goal orientation and cognitive engagement in classroom activities. *Journal of Educational Psychology*, 80, 514-523.
- Merrilees, W. J. (1981). The effect of labour market conditions on school enrolment rates. *Australian Economic Review*, 55, 56-60.
- Michelson, S. (1970). The association of teacher resourcefulness with children's characteristics. In *Do teachers make a difference? A report on recent research on pupil achievement*. Washington, DC: U.S. Department of Health, Education and Welfare, Office of Education, Bureau of Educational Personnel Development.
- Miller, P. W. (1983). The determinants of school participation rates: A cross-sectional analysis for New South Wales and Victoria. *Economic Record*, 59, 43-56.

- Miller, J. (1980). Individual and occupational determinants of job satisfaction. *Sociology of Work and Occupations*, 7, 337-366.
- Mitchell, L. K., & Krumboltz, J. D. (1985). Social learning approach to career decision-making: Krumboltz's theory. In U. Delworth & G.R. Hanson (Eds.), *Career, Choice and Development*. San Francisco: Jossey-Bass.
- Miller-Tiedman, A. L., & Tiedman, D. V. (1979). *Personal and common realities in careers: A position exemplified in the young adolescent period*. Los Angeles: National Institute for the Advancement of Career Education, University of Southern California. (Mimeographed)
- Moore, W. E. (1969). Occupational socialization. In D. A. Goshin (Ed.). *Handbook of socialization theory and research*. Chicago: Rand McNally.
- Morgan, M., Dickman, & Broales, A. R. (Ed.). (1979). *Mechanisms of learning and motivation*. Hillsdale: Erlbaum.
- Morris, J. L. (1966). Propensity for risk-taking as a determinant of occupational choice. *Journal of Personality and Social Psychology*, 3, 328-335.
- Mortimer, J. T., & Lorence, J. (1979). Work experiences and occupational value socialization: A longitudinal study. *American Journal of Sociology*, 84, 1361-1385.
- Morton-Williams, R., & Finch, S. (1968). *Enquiry One (Schools Council Report)*. London: HMSO.
- Murray, E. J. (1964). *Motivation and emotion*. Englewood Cliffs, NJ: Prentice Hall.
- Myeong, T., & Crawley, M. (1993). Students' choice of academic track in secondary school. *Journal of Research in Science Teaching*, 3(4), 381-400.
- Myers, D. E., Milne, A. M., Baker, K., & Ginsburg, A. (1985). *Student discipline and high school performance*. (Working paper). Washington, DC: Decision Resources Corporation and U.S. Department of Education.

- Neimeyer, G. J., & Metzler, A. (1987). The development of vocational schemes. *Journal of Vocational Behavior*, 30, 16-32.
- Nicholls, J.G. (1983). Conceptions of ability and achievement motivation: A theory and its implications for education. In S.G. Paris, G.M. Oslon, & H.W. Stevenson (Eds.). *Learning and motivation in the classroom*. Hillsdale, NJ: Erlbaum.
- Nicholls, J. G., Cobb, P., Wood, T., Yackel, E. & Patashnick, M. (1990). Assessing students' theories of success in mathematics: Individual and classroom differences. *Journal for Research in Mathematics Education*, 21, 109-122.
- Nurmi, J.-E. (1987). Age, sex, social class, and quality of family interaction as determinants of adolescents' future orientation: A developmental task interpretation. *Adolescence*, 22, 977-991.
- Nurmi, J.-E. (1989). Adolescents' orientation to the future: Development of interests and plans, and related attributions and affects, in the life-span context. *Commentationes Scientiarum Socialium* 39. Helsinki: The Finnish Society for Sciences and Letters.
- Nurmi, J.-E. (1991). How do adolescents see the future? A review of the development of future orientation and planning. *Development Review*, 11, 1-59.
- Nurmi, J.-E. (1993). Adolescent development in an age-graded context: The role of personal beliefs, goals and strategies in the tackling of developmental tasks and standards. *International Journal of Behavioral Development*, 16, 169-189.
- Nurmi, J.-E., Poole, M. E., & Seginer, R. (1995). Tracks and transitions—A comparison of adolescent future-oriented goals, explorations and commitments in Australia, Israel and Finland. *International Journal of Psychology*, 30(3), 355-375.

- Nuttin, J. R. (1984). *Motivation, planning and action. A relational theory of behaviour dynamics*. Hillsdale, NJ: Lawrence Erlbaum Associates.
- OõHara, R. P. (1963). *Vocational self-concepts of boys choosing science and non science careers*. Boston: College of Education (Mimeo).
- Osipow, S. H. (1983). *Theories of career development*. Englewood Cliffs, NJ: Prentice Hall, Inc.
- Ouchi, W. (1981). *Theory z corporations: How Americans can meet the Japanese challenge*. Reading, MA: Addison-Wesley.
- Owuamanam, D. O. (1983). Relationship between academic motivation and occupational aspiration of Nigerian adolescents. *Adolescence*, 18(70), 441-447.
- Penang Education Department. (1996) Unpublished report. Penang.
- Peres, Y. (1976). *Ethnic relations in Israel*. Tel Aviv: Tel Aviv University and Sifriat Hapoalim. (In Hebrew).
- Pervin, L.A. (Ed.) (1990). *Goals concepts in personality and social psychology*. Hillsdale, NJ: Lawrence Erlbaum Association Inc.
- Pervin, L. A. (Ed.) (1990). *Goals concepts in personality and social psychology*. Hillsdale, NJ: Lawrence Erlbaum Association Inc.
- Picou, J. S., & Carter, T.M. (1976). Significant-other influence and inspirations. *Sociology of Education*, 49, 12-22.
- Pintrich, P. R., & Garcia, T. (1991). Student goal orientation and self-regulation in the college classroom. In M.L. Maehr & P.R. Pintrich (Eds.), *Advances in motivation and achievement (Vol. 7)*. Greenwich, CT: JAI.
- Poole, M. E. (1983). *Youth: Expectations and transitions*. London: Rontledge & Keegan Paul.
- Poole, M. (1985). School and work: Expectations of adolescents in transition. *Education, Research and Perspectives*, 12(2), 10-18.

- Poole, M. E., & Cooney, G. H. (1985). Cultural differences in the exploration of career and leisure possibilities by adolescents in Australia and Singapore. *Australian Journal of Education*, 29, 249-265.
- Poole, M. E., & Cooney, G. H. (1987). Orientations to the future: A comparison of adolescents in Australia and Singapore. *Journal of Youth and Adolescence*, 16, 129-151.
- Poole, M., & Low, B. (1985). Career and marriage: Orientations of adolescent girls. *The Australian Journal of Education*, 29(1), 36-46.
- Power, C. (1984). Factors influencing retentivity and satisfaction. *Australian Journal of Education*, 28, 115-131.
- Powell, B. (1990, April). *Children's perceptions of classroom goal orientation: Relationship to learning strategies and intrinsic motivation*. Paper presented at the annual meeting of the American Educational Research Association, Boston.
- Prom-Jackson, S., & Wallace, M.B. (1987). Home environment, talented minority youth, and school achievement. *The Journal of Negro Education*, 56, 111-126.
- Pryor, R. (1979). In search of a concept: Work values. *The Vocational Guidance Quarterly*, 27, 250-258.
- Psacharopoulos, G. (1982). An analysis of determinants of the demands for upper secondary education in Portugal. *Economics of Education Review*, 2, 233-251.
- Punch, K., & Waugh, R. (1980, November). The formation of educational occupational aspirations in adolescents: An empirical study. In I. D. Smith (Ed.), *Papers presented at the 1980 Annual Conference*. Sydney (pp. 392-404). Armidale, NSW: Armidale College of Advanced Education
- Raffe, D., & Courtney, G. (1988). 16-18 on both sides of the border. In D. Raffe (Ed.), *Education and the Youth Labour Market: Schooling over Scheming*. Lewes: Palmer Press.

- Redpath, B., & Harvey, B. (1987). *Young People's intentions to enter higher education, OPCS Report*. London: HMSO
- Report of the House of Representatives Standing Committee on Employment, Education and Training. (1989). *The restless years: An inquiry into Year 12 retention rates*. Canberra: Australian Government Publishing Office.
- Reubens, B. G. (1977). *Bridges to Work*. Newton Abbot: David & Charles.
- Roberts, K. (1968). The entry into employment: An approach towards a general theory. *Sociological Review*, 16, 165-184.
- Roberts, K. (1975). The developmental theory of occupational choice: A critique and an alternative. In G. Esland et al. (Eds.), *People and Work*. Edingburgh: Holmes McDougall.
- Roe, A. (1972). *Perspectives on vocational development*. In J.M. Whitley and A. Resnikoff (Eds.), *Perspectives on Vocational Development*. Washington, DC: American Personnel and Guidance Association.
- Roe, A., & Lunneborg, P.W. (1985). Personality development and career choice. In U. Delworth and G.R. Hanson (Eds.), *Career, Choice and Development*. London: Jossey-Bass.
- Roe, A., & Siegelman, M. (1964). *The origin of interests*. APGA Inquiry Studies, 1, Washington, DC: American Personnel and Guidance Association.
- Roberts, K. (1971). *From school to work*. Newton Abbot: David & Charles.
- Rosen, B. C. (1956). The achievement syndrome: A psychocultural dimension of social stratification. *American Sociological Review*, 21, 203-211.
- Rosen, B. C. (1959). Race, ethnicity, and the achievement syndrome. *American Sociological Review*, 24, 47-60.
- Rosier, M. (1978). *Early school leavers in Australia*. Stockholm: Almqvist and Wiksell.

- Rotter, J. B. (1954). *Social learning and clinical psychology*. Englewood Cliffs, NJ: Prentice Hall.
- Rotter, J. B. (1966). Generalised expectations for internal versus external control of reinforcements. *Psychology Monographs*, 800 (10), 1-28.
- Ruther, M. (1976). *Helping troubled children*. Harmondsworth: Penguin.
- Rutter, M., Maughan, B., Mortimore, P., Ouston, J., & Smith, A. (1979). Fifteen thousand hours: *Secondary schools and their effects on children*. London: Open Books.
- Ryan, T. A. (1958). Drives, tasks and the initiation of behaviour. *American Journal of Psychology*, 76, pp. 74-93.
- Ryrie, A. C. (1981). *Routes and results: A study of the later years of schooling*. London: Hodder & Stoughton.
- Saha, L. J. (1982). Gender, school attainment and occupational plans. *Australian Journal of Education*, 26(3), 247-265.
- Saha, L. J. (1987). Tertiary education or vocational training? Alternate routes to perceived occupational destinations among male and female urban school leavers. *Education Research and Perspectives*, 14, 49-61.
- Santrock, J. W. (1990). *Adolescence* (4th ed.). Dubuque, IA: Brown.
- Sara, L. J. (1982). Gender, school attainment and occupational plans. *The Australian Journal of Education*, 26(3), 247-265.
- Scott-Jones, D. (1984). Family influences on cognitive development and school achievement. In E.W. Gordon (Ed.), *Review of Research in Education* (Vol. 1, pp. 259-304).
- Schiamberg, L. & Chin, C.H. (1987). *The influence of family on educational and occupational achievement of adolescents in rural low-income areas: An ecological perspective*. Paper presented at the Annual Meeting of the Society for Research on Child Development, Baltimore, Maryland, April, 1987.

- Schulenberg, J. E., Shimizu, K., Vondracek, F. W., & Hostetler, M. (1988). Factorial invariance of career indecision dimensions across junior high and high school males and females. *Journal of Vocational Behaviour*, 33, 63-81.
- Schunk, D. H. (1989). Self-efficacy and achievement behaviours. *Educational Psychology Review*, 1, 173-208.
- Seginer, R. (1988). Adolescents facing the future: Cultural and sociopolitical perspectives. *Youth and Society*, 19, 314-333.
- Sewell, W. H., Haller, A. O., & Straus, M. A. (1957). Social status and educational and occupational aspiration. *American Sociological Review*, 22, 67-73.
- Sewell, W. H., & Hauser, R. H. (1972). Causes and consequences of high education: Models of the status attainment process. *American Journal of Agricultural Economics*, 54, 851-861.
- Sewell, W.H., & Hauser, R.M. (1975). *Education, occupation and earnings: Achievement in the early career*. New York: Academic Press.
- Sewell, W.H., & Hauser, R.M. (1976). Causes and consequences of higher education: Models of the status attainment process. In W.H. Sewell, R.M. Hauser & Featherman (Eds.), *Schooling and achievement in American society* (pp. 9-27). New York: Academic Press.
- Sewell, W.H., & Hauser, R.M. (1980). The Wisconsin longitudinal study of social and psychological factors in aspirations and achievement. *Research in Sociology of Education and Socialization*, 1, 59-99.
- Sewell, W. H., & Shah, V. P. (1967). Socioeconomic status, intelligence and the attainment of higher education. *Sociology of Education*, 40, 1-23.
- Sewell, W. H., & Shah, V. P. (1968). Social class, parental encouragement and educational aspirations. *American Journal of Sociology*, 73, 559-572a.
- Sewell, W. H., & Shah, V. P. (1968a). Parents' education and children's educational aspirations and achievement. *American Sociological Review*, 33, 191-209.

- Sewell, W. H., & Shah, V. P. (1968b). Social class, parental encouragement, and educational aspirations. *American Journal of Sociology*, 73 (5), 559-572.
- Shapira, R., & Etzioni-Halvey, E. (1973). *Who is the Israeli Student?* Tel Aviv: Am Oved. (in Hebrew).
- Sheridan, B. E. (1976). *Reference group influences of the aspirations of adolescents*. Unpublished Master's degree. University Western Australia.
- Slaughter, D. T., & Epps, E. G. (1987). The home environment and academic achievement of Black American children and youth: An overview: *The Journal of Negro Education*, 56, 3-20.
- So, A., & Chan, K. S. (1982). *What matters? The relative impact of language background and socioeconomic status on reading achievement*. (Technical Note TN-5). Los Alamitos, CA: National Center for Bilingual Research.
- Slocum, W. L. (1974). *Occupational careers: A sociological perspective*. (2nd ed.) Chicago: Aldine.
- Smith, D. J., & Tomlinson, S. (1989). *The school effect: A study of multi-racial comprehensives*. London: Policy Studies Institute.
- Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange* 1, 64-85.
- Spenner, D., & Featherman, D. (1978). Achievement ambitions. *Annual Review of Sociology*, 4, 373-420.
- SPSS. (1988). *SPSS Advanced Statistics User's Guide*. Chicago: SPSS Inc.
- Steers, R. M. (1981). *Introduction to organizational behaviour*. Santa Monica, CA: Goodyear.
- Super, D. E. (1951). Vocational adjustment: Implementing a self-concept. *Occupations*, 30, 88-92.
- Super, D. E. (1967). *The psychology of careers*. New York: Harper & Row.

- Super, D. E. (1957). *A framework for research (Horace Maun-Lincoln Institute of School Experimentation, Careers Pattern Study, Monograph 1)*. New York: CEEB Research Monograph 4.
- Super, D. E. (1970). *Manual: Work values inventory*. Boston, MA: Houghton Mifflin.
- Super, D. E. (1978). *Career education and the meaning of work*. Washington, DC: US Office of Education.
- Super, D. E. (1980). A life-span, life-space approach to career development. *Journal of Vocational Behaviour*, 16, 282-298.
- Super, D. E., & Overstreet, P. L. (1960). *The vocational maturity of ninth-grade boys*. New York: Bureau of Publications, Teachers College, Columbia University.
- Super, D. E., Starishevsky, R., Matlin, N., & Jordan, J. P. (1963). *Career development: Self-concept theory*. New York: CEEB Research Monograph 4.
- Tabachnick, B. G., & Fidell, L.S. (1983). *Using multivariate statistics*. New York: Harper & Row Publishers.
- Taft, R. (1975). The aspirations of secondary school children of migrant families in Victoria. *Educational News*, 15(1), 38-41.
- Tan, E. (1988). Job preferences of secondary school pupils in Singapore. *Teaching and Learning*, 9(1), 99-103.
- Tanner, J. M. (1962). *Growth in Adolescence*. Oxford: Blackwell.
- Terenzini, P. T., & Pascarella, E. T. (1977). Voluntary freshman attrition and patterns of social and academic integration in a university: A test of a conceptual model. *Research in Higher Education*, 6, 25-43.
- Terenzini, P. T., & Pascarella, E. T. (1978). The relationship of students' pre college characteristics and freshman year experience to voluntary attrition. *Research in Higher Education*, 9, 337-366.

- Terenzini, P. T., & Pascarella, E. T. (1980). Toward the validation of Tinto's model of college student attrition. a review of recent studies. *Research in Higher Education, 9*, 271-282.
- Thomson, C. H. (1928). The educational achievement of Negro children. *The Annals of the American Academy of Political and Social Science*, 1-15.
- Thurow, L. (1983, May 8). Motivation factor. *New York Times*, business section, p. 1.
- Tiedeman, V. D. & Miller-Tiedman, A. (1976). Adult career education model. *Thresholds in Secondary Education, 2*(1), 20-22.
- Tinto, V. (1975). Dropout from higher education: A theoretical Synthesis at recent research. *Review of Educational Research, 45*, 1, 89-125.
- Tohidi, N. (1984). Sex differences in achievement/career motivation of Iranian boys and girls. *Sex-Roles, 11*(5-6), 467-484.
- Trommsdorf, G., Burger, C., & Fuchsle, T. (1982). Social and psychological aspects of future orientation. In M. Irle (Ed.), *Studies in decision-making*. Berlin: de Gruyter.
- Tukey, J. N. (1977). *Exploratory data analysis*. Reading, MA: Addison Wesley.
- Tyler, L. E. (1951). The relationship of interests to abilities and reputation among first grade children. *Educational Psychology Measurement, 11*, 255-264.
- Tyler, L. E. (1978). *Individuality: Human possibilities and personal choice in the psychological development of men and women*. San Francisco: Jossey-Bass.
- Vallerand, R.J. (1991). *A motivational analysis of high school dropout*. Unpublished manuscript. University of Quebec at Montreal, Montreal, Canada.
- Vallerand, R. J., & Bissonnette, R. (1991). Intrinsic, extrinsic and motivational styles as predictors of behaviour: A prospective study. *Journal of Personality*.

- Voelkl, K. E. (Fall, 1993). Academic achievement and expectations among African-American students. *Journal of Research and Development in Education*, 27(1), 42-55.
- Walker, J. E., Tansky, C. & Olivers, D. (1982). Men and women at work: Similarities and differences in work values within occupational groupings. *Journal of Vocational Behaviour*, 21, 17-36.
- Walker, J. (1988). *Louts and legends: Male youth culture in an inner city school*. Boston: Allen and Unwin.
- Wall, T. (1989). Who influences high school home economics students? Career decisions? *Journal of Vocational Home Economics Education*, 5(2), 130-139.
- Waugh, R. F. (1980, November). The formation of educational and occupational aspirations in adolescents—An empirical study. In J.D. Smith (Ed.), *Papers presented at the 1980 Annual Conference*. Sydney, November 6-9. Compiled and edited by . Armidale, NSW: Australian Association for Research in Education
- Weiner, B. A. (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71, 3-25.
- Weiner, B. (1990). History of motivational research in education. *Journal of Educational Psychology*, 82, 616-622.
- Weinrach, S. G. (1979). Trait-and-factor counselling: Yesterday and today. In S. G. Weinrach (Ed.), *Career counselling: Theoretical and practical perspective*. New York: McGraw Hill.
- Weinrach, S. G. (1984). Determinants of vocational choice: Holland's theory. In U. Delworth and G.R. Hanson (Eds.), *Career Choice and Development*. London: Jossey-Bass.
- Weiner, B. (1984). Principles for a theory of student motivation and their application within an attributional framework. In R. Ames and C. Ames (Eds.), *Research on Motivation in Education Volume 1, Student Motivation* (pp. 15-38). Orlando: Academic Press.

- Weiner, B. (1980). *Human motivation*. New York: Holf, Rhinehart & Winston.
- West, M., & Newton, P. (1983). *The transition from school to work*. London: Croom Helm.
- White, R. W. (1952). *Lives in progress: A study in the natural growth of personality*. New York: Dryden.
- White, K. (1980). Socioeconomic status and academic achievement. *Evaluation in Education: An International Review Series*, 4, 79-81.
- Williams, T. (1975). Educational ambition: teachers and students. *Sociology of Education*, 48(4), 432-456.
- Williams, T. (1987). *Participation in education*. Hawthorn, Vic.: ACER.
- Williams, T., Batten, M., Girling-Butcher, S., & Clancy, J. (1981). *School and work in prospect: 14-year-olds in Australia*. Hawthorn, Victoria: ACER Research Monograph No. 10.
- Williams, T., Clancy, J., Batten, M., & Girling-Butcher, S. (1980). *School, work and career: 17-year-olds in Australia*. Hawthorn, Victoria: ACER.
- Windelband, W. (1957). *History of Ancient Philosophy*. H.E. Cushman, (Trans.). New York: Dover.
- Yaffe, E. (1982). More sacred than motherhood. *Phi Delta Kappan*, 63, 469-472.
- Yankelowich, D. (1979, August 6). We need new motivational tools. *Industry Week.*, pp. 61-65.
- Young, P. T. (1961). *The achieving society*. Princeton, NJ: Van Nostrand.
- Yogev, A. (1986, August). *Modernity and ethnic affiliation in Israeli schools*. Paper presented at the 11th. World Congress of Sociology, New Delhi.
- Zunker, V. G. (1990). *Career counselling: Applied concepts of life planning*. (3rd ed.). Belmont: Brooks & Cole.
- Zytowski, D. G. (1970). *Psychological influences on vocational development*. New York: Houghton Mifflin.

APPENDICES

BACKGROUND FACTORS

Section 1: ABOUT MYSELF

The questions in this section are about you.

Name:.....

Sex: Male [] Female []

Date of Birth:...../...../.....

The following eight items require you to give your opinion on some general statements. Please tick the box which best matches your opinion (*tick only one box for each line*)

- SA Strongly agree
- A Agree
- U Undecided
- D Disagree
- SD Strongly disagree

Locus of Control

| | SA | A | U | D | SD |
|--|-----|-----|-----|-----|-----|
| 1. If somebody studies hard enough he or she can pass any subject. | [] | [] | [] | [] | [] |
| 2. Most problems will solve themselves if you don't do anything about them. | [] | [] | [] | [] | [] |
| 3. Some people are just born lucky. | [] | [] | [] | [] | [] |
| 4. People are often blamed for things that aren't their fault. | [] | [] | [] | [] | [] |
| 5. Most of the time it doesn't pay to try hard because things never turn out right anyway. | [] | [] | [] | [] | [] |
| 6. Most of the time you can change what might happen tomorrow by what you do today. | [] | [] | [] | [] | [] |

7. When bad things are going to happen there's nothing you can do to stop them. [] [] [] [] []
8. Planning ahead makes things turn out better. [] [] [] [] []
9. Do you live in an area which is located within 5km of a population of more than 5000 persons?
YES [] NO []
10. Do you live in an area which is located within 5km of a population of more than 10000 persons?
YES [] NO []
11. A person who fails has not worked hard enough.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree
12. Most of the time I am tolerant of others.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree
13. I feel that moral education is important to me.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree
14. I think I have the intelligence to do well in school.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree

15. I am always calm when faced with difficulties.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree
16. At this stage of my life, I know myself very well.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree
17. When I hand in my homework, I feel satisfied with my work.
- a. strongly agree
 - b. agree
 - c. not sure
 - d. disagree
 - e. strongly disagree

HOME BACKGROUND (SES)

Section 2: ABOUT MY FAMILY

The questions in this section are about you and your family.

Where do you live

1. Do you live with both your parents?

YES []

NO []

If not,, with whom do you live most of the time?

.....

About your father/guardian

2. What is his job?

If he is unemployed or retired what was his last main job?

.....

Where does/did he work?

What does/did he do?

3. He left school at *(please tick only one box)*

Form 2 or before []

Form 3 []

Form 4 []

Form 5 []

Form 6 []

4. Since leaving school he has completed:

S.P.M. []

S.T.P.M. []

College Diploma []

Undergraduate Degree []

Graduate Degree []

About your mother/guardian:

5. What is her job?

.....

If she is unemployed or retired what was her last main job?

.....

Where does/did she work?

.....

What does/did she do?

.....

6. She left school at *(please tick only one box)*

Form 2 or before Year 8 or before []

Form 3 []

Form 4 []

Form 5 []

Form 6 []

7. Since leaving school he has completed:

S.P.M. []

S.T.P.M. []

College Diploma []

Undergraduate Degree []

Graduate Degree []

About you and your family members:

8. How far would your father/guardian like you to go at school?

To leave school before Form 5 []

To the end of Form 5 []

To the end of Form 6 []

Beyond Form 6 []

Don't know []

9. How far would your mother/guardian like you to go at school?

- To leave school before Form 5 []
- To the end of Form 5 []
- To the end of Form 6 []
- Beyond Form 6 []
- Don't know []

10. How important does your father/guardian think it is for you to continue at school next year?

- Very important []
- Important []
- Not sure []
- Not important []
- Not very important at all []

11. How important does your mother/guardian think it is for you to continue at school next year?

- Very important []
- Important []
- Not sure []
- Not important []
- Not very important at all []

12. How sure are you that you parents will be able to afford to keep you at school until the end of Form 6?

- Very sure []
- Fairly sure []
- Undecided []
- Probably not []
- Almost certainly not []

(Why? :.....)

13. Do you receive any financial support from a scholarship?

- YES [] NO []

14. Compared with others in your year, how much spending money do you have?

- Much more []
A bit more []
About the same []
Less []
Much less []

15a. Please tick the state where you were born. Also tick the state where your Mother and Father were born. (Only answer this part of Question 15 if you were born in Malaysia).

| | Self | Mother | Father |
|-----------------|------|--------|--------|
| Johore | [] | [] | [] |
| Kedah | [] | [] | [] |
| Kelantan | [] | [] | [] |
| Malacca | [] | [] | [] |
| Negeri Sembilan | [] | [] | [] |
| Penang | [] | [] | [] |
| Perak | [] | [] | [] |
| Perlis | [] | [] | [] |
| Pahang | [] | [] | [] |
| Sabah | [] | [] | [] |
| Sarawak | [] | [] | [] |
| Trengganu | [] | [] | [] |
| Wilayah | [] | [] | [] |

15b. Please tick the country where you were born if outside Malaysia. Also tick the country where your mother and father were born if outside Malaysia.

| | | | |
|------------------------|-----|-----|-----|
| Indonesia | [] | [] | [] |
| Philippines | [] | [] | [] |
| Singapore | [] | [] | [] |
| Thailand | [] | [] | [] |
| Outside Southeast Asia | [] | [] | [] |

16. What language is most frequently spoken at home?

17. How many brothers do you have?

18. How many brothers are older than you?
19. How many sisters do you have?
20. How many sisters are older than you?
21. How many of your brothers and sisters have sat for the HSC or another exam like the HSC?
22. How many of your brothers and sisters have gone to further study after the HSC?

23. Approximately how much time do you spend travelling most mornings from home to school?

- 0 - 20 minutes []
- 21 - 30 minutes []
- 31 - 40 minutes []
- 41 - 60 minutes []
- 61 - 90 minutes []

24. How do you usually travel to school. *(Tick more than one if needed).*

- walk []
- ride a bicycle []
- ride a motor-bike []
- ride in a car []
- drive a car []
- catch a train []
- catch a bus []
- catch a ferry []
- catch a taxi []

25. How many hours per week, on average, do you spend doing family/household jobs (during school term only)?

- 0 []
- 1 - 5 minutes []
- 6 - 10 minutes []
- 11 - 15 minutes []
- 16 - 20 minutes []

26. How many hours per week, on average do you spend reading newspapers/magazines in your home?

- 0 []
- 1 - 5 minutes []
- 6 - 10 minutes []
- 11 - 15 minutes []
- 16 - 20 minutes []

27. How many hours per week, on average do you spend going to the library either in school or in the city library?

- 0 []
- 1 - 5 minutes []
- 6 - 10 minutes []
- 11 - 15 minutes []
- 16 - 20 minutes []

28. How many hours per week, on average do you spend watching television?

- 0 []
- 1 - 5 minutes []
- 6 - 10 minutes []
- 11 - 15 minutes []
- 16 - 20 minutes []

MOTIVATION

ITEMS

1. The strength of my determination to achieve in school examinations is
 - (a) very strong []
 - (b) strong []
 - (c) moderate []
 - (d) fair []
 - (e) weak []

2. Compared with others in my school my motivation to achieve is
 - (a) well above average []
 - (b) above average []
 - (c) average []
 - (d) below average []
 - (e) well below average []

3. In terms of my ability, my school achievement is
 - (a) much higher than expected []
 - (b) higher than expected []
 - (c) as expected []
 - (d) below expected []
 - (e) well below expected []

4. Compared with others in my year, the amount of effort I put into my school studies is:
 - (a) well above average []
 - (b) above average []
 - (c) average []
 - (d) below average []
 - (e) well below average []

5. Compared with my friend at school, my will to succeed is
 - (a) very strong []
 - (b) strong []
 - (c) about the same []
 - (d) a bit less []
 - (e) much less []

6. In terms of my current school work, I could
- (a) not work harder than I do at present []
 - (b) not work just a bit harder []
 - (c) work quite a lot harder []
 - (d) work much harder []
 - (e) work very much harder []
7. At this time of the school year, working hard is
- (a) extremely important []
 - (b) very important []
 - (c) important []
 - (d) of some importance []
 - (e) not important at all []
8. For me, academic achievement is
- (a) extremely important []
 - (b) very important []
 - (c) sometimes important []
 - (d) seldom important []
 - (e) not important at all []
9. I think that high attainment for me in the SPM is
- (a) very likely []
 - (b) likely []
 - (c) possible []
 - (d) unlikely []
 - (e) not likely at all []
10. For my parents, it is
- (a) very important that I do well at school []
 - (b) important that I do well []
 - (c) important that I try to do well []
 - (d) less important that I do well []
 - (e) not important that I do well at school []

11. For me, it is
- (a) very important that I do well at school []
 - (b) important that I do well []
 - (c) important that I try to do well []
 - (d) less important that I do well []
 - (e) not important that I do well at school []
12. In terms of the career I wish to follow, doing well in the SPM is
- (a) absolutely essential []
 - (b) essential []
 - (c) important []
 - (d) possibly important []
 - (e) not important at all []
13. How motivated, on average, are you to study despite other things going on in your life?
- (a) highly motivated []
 - (b) motivated []
 - (c) slightly motivated []
 - (d) poorly motivated []
 - (e) not motivated at all []
14. Compared with other students in your year, how good are your study skills?
- (a) very good []
 - (b) good []
 - (c) about the same/average []
 - (d) below average []
 - (e) very poor []
15. Compared with other students in your year, how often are you absent from school?
- (a) much more []
 - (b) more []
 - (c) about the same []
 - (d) less []
 - (e) much less []

16. What is the average number of hours you spend studying per week during term (not including the time spent on assignments and set homework)?
- (a) 0 []
- (b) 1 - 3 []
- (c) 4 - 6 []
- (d) 7 - 9 []
- (e) 10 - 12 []
17. How many books/magazines other than school-set texts do you read for pleasure (per month)?
- (a) 0 []
- (b) 1 - 5 []
- (c) 6 - 10 []
- (d) 11 - 15 []
- (e) 16 - 20 []
18. To what extent have your experiences at school helped you to become a better learner?
- (a) very large extent []
- (b) large extent []
- (c) quite a bit []
- (d) small extent []
- (e) very small extent []
19. How useful are your compulsory school subjects in terms of your future plans?
- (a) very useful []
- (b) useful []
- (c) quite useful []
- (d) only partly useful []
- (e) useless []
20. How useful are your elective school subjects in terms of your future plans?
- (a) very useful []
- (b) useful []
- (c) quite useful []
- (d) only partly useful []
- (e) useless []

21. Are you confident that you will do well in your compulsory subjects?
- (a) certain to do well []
 - (b) very confident []
 - (c) confident []
 - (d) not very confident []
 - (e) certain to do poorly []
22. How confident are you that you will do well in your elective subjects?
- (a) certain to do well []
 - (b) very confident []
 - (c) confident []
 - (d) not very confident []
 - (e) certain to do poorly []
23. How much do you like the compulsory subjects you are taking?
- (a) very much []
 - (b) quite a lot []
 - (c) sometimes they're alright []
 - (d) dislike slightly []
 - (e) dislike very much []
24. How much do you like the elective subjects you are taking?
- (a) very much []
 - (b) quite a lot []
 - (c) sometimes they're alright []
 - (d) dislike slightly []
 - (e) dislike very much []
25. What do you think of the amount of homework you get in school?
- (a) much more than I expected []
 - (b) more than I expected []
 - (c) as I expected []
 - (d) less than I expected []
 - (e) much less than I expected []

26. I look forward to the time when I can leave school.
- (a) strongly agree []
 - (b) agree []
 - (c) not sure []
 - (d) disagree []
 - (e) strongly disagree []
27. Going to school is a waste of time for me.
- (a) strongly agree []
 - (b) agree []
 - (c) not sure []
 - (d) disagree []
 - (e) strongly disagree []
28. I am usually able to do most things well.
- (a) strongly agree []
 - (b) agree []
 - (c) not sure []
 - (d) disagree []
 - (e) strongly disagree []
29. I am confident when attempting to solve problems.
- (a) always []
 - (b) usually []
 - (c) sometimes []
 - (d) occasionally []
 - (e) never []
30. When I have jobs to do, I go about doing them enthusiastically.
- (a) always []
 - (b) usually []
 - (c) sometimes []
 - (d) occasionally []
 - (e) never []

31. I think it is important for my future that I try to be a leader.

- (a) strongly agree []
- (b) agree []
- (c) not sure []
- (d) disagree []
- (e) strongly disagree []

GOAL COMMITMENT

SECTION 1

The questions in this section are about your past and future plans.

1. How important is it to you to complete Form Five?

- (a) essential []
- (b) very important []
- (c) important []
- (d) not very important []
- (e) not important at all []

Why?.....

2. How important is it to you to complete Form Six?

- (a) essential []
- (b) very important []
- (c) important []
- (d) not very important []
- (e) not important at all []

Why?.....

3. What is the highest academic qualification that you think you will receive?

- (a) School Certificate (SPM) []
- (b) Higher School Cert. (STPM) []
- (c) Cert. in Edn. (Sijil Pend.) []
- (d) Diploma (Diploma Maktab) []
- (e) University Diploma/Degree []

4. How confident are you that you have made the right choice to continue your schooling at this school?

- (a) certain []
- (b) very confident []
- (c) confident []
- (d) not very confident []
- (e) I'm sure I made the wrong decision []

5. How important is it to you to finish your schooling at this school?
- (a) essential []
 - (b) very important []
 - (c) important []
 - (d) not important []
 - (e) not important at all []
6. How confident are you that you will reach your goals through doing your schooling at this school?
- (a) certain []
 - (b) very confident []
 - (c) confident []
 - (d) not confident []
 - (e) I'm sure I will not reach my goals at this school []
7. How confident are you that you will be able to pursue the career of your choice?
- (a) certain []
 - (b) almost certain []
 - (c) confident []
 - (d) uncertain []
 - (e) very worried []
8. Would you rather work or would you rather continue studying after completing your Form 5?
- (a) definitely work []
 - (b) prefer work more than study []
 - (c) do not feel strongly either way []
 - (d) prefer study more than work []
 - (e) definitely study []
9. Your friend has done well in his SPM and is eligible to continue to Form 6. Meanwhile, he has also been offered a job as a technician at Intel. Do you think he should leave school and take the job?
- (a) strongly encourage him to leave school []
 - (b) think that he probably should leave school []
 - (c) can't decide whether or not he should leave school []
 - (d) think that he probably should continue to Form 6 []
 - (e) strongly encourage him to stay at school []

GOAL COMMITMENT

SECTION 2: MY PAST AND FUTURE PLANS

The questions in this section are about your past and future plans.

1. What is the highest academic qualification that you think you will receive?
 - (a) School Certificate (SPM) []
 - (b) Higher School Certificate (STPM) []
 - (c) College Diploma []
 - (d) University Degree/Diploma []
 - (e) Post-graduate Studies at a University []

2. Which year of school would you like to complete and then leave?
 - (a) Form Five []
 - (b) Form Six Lower []
 - (c) Form Six Upper []

3. Which year of school do you expect to complete before you leave?
 - (a) Form Five []
 - (b) Form Six Lower []
 - (c) Form Six Upper []

4. How good an education do you think you get at this school?
 - (a) excellent []
 - (b) very good []
 - (c) good []
 - (d) fair []
 - (e) poor []

5. How important do you think time spent at this school will be for getting future work?
 - (a) extremely important []
 - (b) important []
 - (c) could be important []
 - (d) not important []
 - (e) irrelevant - not important at all []

6. What jobs would you like to do after you leave school?

.....
.....

7. Realistically, what jobs do you expect to do after you leave school?

.....
.....

8. How pleased is your father/guardian with your future job choice?

- (a) very pleased []
- (b) pleased []
- (c) uncertain []
- (d) not pleased []
- (e) most unimpressed []

9. How pleased is your mother/guardian with your future job choice?

- (a) very pleased []
- (b) pleased []
- (c) uncertain []
- (d) not pleased []
- (e) most unimpressed []

10. How many secondary schools have you attended?.....

If you have attended more than one, please write down how long you spent in each.

First Secondary School attended.....years andmonths

Second Secondary School attended.....years andmonths

Third Secondary School attended.....years andmonths

Others.....

.....

11. How likely is it that you will transfer to another school this year or next year?

- (a) no chance []
- (b) little chance []
- (c) some chance []
- (d) good chance []
- (e) very good chance []

Give reason.....

.....

12. Would you recommend your school to others?

- (a) definitely []
- (b) probably []
- (c) possibly []
- (d) probably not []
- (e) definitely not []

13. Do you have (or do you expect to have) any special responsibilities at school this year e.g. prefect, school council, library duties, society duties, games/athletics duties?

YES [] NO []

If yes, which one(s)?

14. Next year, do you expect to be chosen as a school prefect and/or school council member, library prefect, society committee member, games/athletics committee member?

YES [] NO []

15. Are you in a sporting team that competes in interschool sports?

YES [] NO []

If YES, which team(s)?

16. Next year, do you expect to be a school representative in sport?

YES [] NO []

17. How satisfied are you with the schooling you received in Forms 3 to 4?

- (a) very satisfied []
- (b) satisfied []
- (c) there were good and bad points []
- (d) dissatisfied []
- (e) very dissatisfied []

18. Tick the one which completes the following sentence:

I expect that next year I will.....

- (a) be very satisfied with school []
- (b) be satisfied with school []
- (c) be partly satisfied with school []
- (d) be dissatisfied with school []
- (e) be very dissatisfied with school []

SCHOOL COMMITMENT

SECTION 1: ABOUT MY SCHOOL STUDIES

The questions in this next section are about you and your studies.

1. How good are you at school work compared with other students in your year?
 - (a) a lot above average []
 - (b) a little above average []
 - (c) about average []
 - (d) a little below average []
 - (e) a lot below average []

2. How motivated, on average, are you to study despite other things going on in your life?
 - (a) highly motivated []
 - (b) slightly motivated []
 - (c) neutral []
 - (d) poorly motivated []
 - (e) not motivated at all []

3. Compared with other students in Year 10, how good are your study skills?
 - (a) excellent []
 - (b) good []
 - (c) fair []
 - (d) poor []
 - (e) very poor []

4. Compared with other students in Year 10, how often do you ask for help (from your friends or your teachers) concerning your studies?
 - (a) much more []
 - (b) more []
 - (c) about the same []
 - (d) less []
 - (e) much less []

5. My teachers are really interested in helping me get good results?
- (a) strongly agree []
 - (b) agree []
 - (c) some are, some are not []
 - (d) disagree []
 - (e) strongly disagree []
6. How many of your teachers are really interested in helping you gain better school results?
- (a) all of them []
 - (b) most of them []
 - (c) about half of them []
 - (d) a few of them []
 - (e) none of them []
7. How many of your teachers are easy to approach about the problems you have with your school work?
- (a) all of them []
 - (b) most of them []
 - (c) about half of them []
 - (d) a few of them []
 - (e) none of them []
8. How often do you contact a teacher out of class about your school work?
- (a) very often []
 - (b) often (about once a week) []
 - (c) sometimes []
 - (d) rarely (about once a term) []
 - (e) never []
9. Since you started high school, how often have you talked to the school counsellor about your school work?
- (a) very often []
 - (b) often (about once a week) []
 - (c) sometimes (about once a year) []
 - (d) rarely (about once every two years) []
 - (e) never []

10. What is the average number of hours you spend studying per week during term (not including assignments and set-homework)?
- (a) 0 []
 - (b) 1 - 3 []
 - (c) 4 - 6 []
 - (d) 7 - 9 []
 - (e) 10+ []
11. How many books/magazines other than school-set texts do you read for pleasure (per month)?
- (a) 0 []
 - (b) 1 - 5 []
 - (c) 6 - 10 []
 - (d) 11 - 15 []
 - (e) 16+ []
12. Have your experiences at school helped you to become a better learner?
- (a) yes, definitely []
 - (b) yes, mostly []
 - (c) perhaps []
 - (d) not very much []
 - (e) definitely not []
13. How useful are your compulsory school subjects in terms of your future plans?
- (a) very useful []
 - (b) useful []
 - (c) unsure []
 - (d) only partly useful []
 - (e) useless []
14. How useful are your elective school subjects in terms of your future plans?
- (a) very useful []
 - (b) useful []
 - (c) unsure []
 - (d) only partly useful []
 - (e) useless []

15. Are you confident that you will do well in your compulsory subjects?
- (a) very confident []
 - (b) confident []
 - (c) unsure []
 - (d) not very confident []
 - (e) not confident at all []

16. How confident are you that you will do well in your elective subjects?
- (a) very confident []
 - (b) confident []
 - (c) unsure []
 - (d) not very confident []
 - (e) not confident at all []

17. At this school there are lots of interesting things to do.
- (a) strongly agree []
 - (b) agree []
 - (c) undecided []
 - (d) disagree []
 - (e) strongly disagree []

18. Most of the time I feel like going to school.
- (a) strongly agree []
 - (b) agree []
 - (c) undecided []
 - (d) disagree []
 - (e) strongly disagree []

SCHOOL INTEGRATION

SECTION 1: ABOUT MY SOCIAL LIFE AT SCHOOL

The questions in this next section are about you, your friends and social life at school.

1. How many very good friends do you have at this school?

- (a) none []
- (b) one []
- (c) two []
- (d) three []
- (e) four or more []

2. When I came to this school I found that making friends was.....

- (a) very difficult []
- (b) difficult []
- (c) not easy []
- (d) easy []
- (e) very easy []

3. Have your friends' decisions to leave school influenced your decision?

- (a) very much []
- (b) probably []
- (c) possibly []
- (d) possibly not []
- (e) not at all []

Please explain.....
.....

4. Have your friends' decisions to stay at school influenced your decision?

- (a) very much []
- (b) probably []
- (c) possibly []
- (d) possibly not []
- (e) not at all []

5. (Answer this if you are a boy) Do you have a girl friend?
 YES [] NO []

(Answer this if you are a girl) Do you have a boy friend?
 YES [] NO []

If YES

Does he/she go to this school? YES [] NO []

Does he/she go to another school? YES [] NO []

If he/she is still at school, in what year
 is your boy friend/girl friend?

6. How often do you take part in any of the following organised school social activities?
 (Please tick only one box on each line)

VO Very Often
 O Often
 S Sometimes
 R Rarely
 N Never

| | VO | O | S | R | N |
|----------------------|-----|-----|-----|-----|-----|
| Clubs (non-sporting) | [] | [] | [] | [] | [] |
| Dances | [] | [] | [] | [] | [] |
| Musicals | [] | [] | [] | [] | [] |
| Plays | [] | [] | [] | [] | [] |

7. How would you rate your social life at this school?

- (a) excellent []
- (b) good []
- (c) average []
- (d) poor []
- (e) very poor []

8. How many of your teachers are really interested in your outside-of-school activities?

- (a) all []
- (b) most []
- (c) some []
- (d) few []
- (e) none []

9. How many of your teachers do you think are easy to approach about the problems you may have outside of school?
- (a) all []
 - (b) most []
 - (c) some []
 - (d) few []
 - (e) none []
10. How often do you talk to your teachers out of class time about your outside-of-school activities?
- (a) very often (at least once a week) []
 - (b) often []
 - (c) sometimes (once a term) []
 - (d) rarely []
 - (e) never []
11. How helpful has your Form 5 teacher adviser been?
- (a) very helpful []
 - (b) helpful []
 - (c) occasionally helpful []
 - (d) unhelpful []
 - (e) very helpful []
12. Since you started secondary school, how often have you talked to the school counsellor about your personal problems (non-school work)?
- (a) very often []
 - (b) often (about once a term) []
 - (c) sometimes (about once a year) []
 - (d) rarely (about once a year) []
 - (e) never []
13. My contacts with the school staff outside of class time have influenced my wanting to stay on at school.
- (a) strongly agree []
 - (b) agree []
 - (c) might have been of some influence []
 - (d) disagree []
 - (e) strongly disagree []

14. Do you think that rules and regulations control your school life?

- (a) definitely yes []
- (b) yes, to a large extent []
- (c) perhaps - they do have some control []
- (d) no, not to a large extent []
- (e) definitely not []

15. Have you felt frustrated by rules and regulations at this school?

- (a) definitely yes []
- (b) yes, to a large extent []
- (c) perhaps - they do have some control []
- (d) no, not to a large extent []
- (e) definitely not []

16. Do you have a part-time paid job or part-time paid jobs?

YES [] NO []

If yes, how many?.....

How many hours per week, on average, do you spend doing part-time paid work (during school term only)?

- (a) 1 - 5 []
- (b) 6 - 10 []
- (c) 11 - 15 []
- (d) 16 - 20 []
- (e) 20+ []

17. How many hours per week, on average, do you spend doing family/household tasks (during school term only)?

- (a) 0 []
- (b) 1 - 5 []
- (c) 6 - 10 []
- (d) 11 - 15 []
- (e) 16+ []

18. Most of my classmates believe that working hard at school is more important than having a good time in school.
- (a) strongly agree []
 - (b) agree []
 - (c) possibly []
 - (d) disagree []
 - (e) strongly disagree []
19. Most of my classmates take their work seriously.
- (a) strongly agree []
 - (b) agree []
 - (c) possibly []
 - (d) disagree []
 - (e) strongly disagree []
20. I think it is important for me to help others with their homework.
- (a) strongly agree []
 - (b) agree []
 - (c) possibly []
 - (d) disagree []
 - (e) strongly disagree []
21. I think that most of my teachers are understanding.
- (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []
22. I am eager to cooperate with most of my teachers.
- (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []

MY DECISIONS

The last two questions are concerned with whether you will be leaving school or staying at school.

1. I often think of leaving school before finishing Form 6.

- (a) strongly agree []
- (b) agree []
- (c) unsure []
- (d) disagree []
- (e) strongly disagree []

2. Do you expect to return to school next year?

- (a) definitely yes []
- (b) yes, I think so []
- (c) possibly yes, possibly no []
- (d) no, I don't think so []
- (e) definitely no []

ACADEMIC INTEGRATION

The questions in this section are about your Form Five experiences so far this year.

1. I am able to find suitable school library materials for all my subjects.
 - (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []

2. The computers at this school are suitable for my senior school needs.
 - (a) strongly agree []
 - (b) agree []
 - (c) sometimes []
 - (d) disagree []
 - (e) strongly disagree []

3. I have been able to study the subjects this year that I wanted.
 - (a) strongly agree []
 - (b) agree []
 - (c) partly yes, partly no []
 - (d) disagree []
 - (e) strongly disagree []

4. My overall school needs will be met at this school this year.
 - (a) strongly agree []
 - (b) agree []
 - (c) partly yes, partly no []
 - (d) disagree []
 - (e) strongly disagree []

5. I am glad that I decided to study Form Five at this school
- (a) definitely yes []
- (b) probably yes []
- (c) undecided []
- (d) probably no []
- (e) definitely no []
6. The change from Form Three to Form Five has been easy.
- (a) strongly agree []
- (b) agree []
- (c) easy sometimes, hard at other times []
- (d) disagree []
- (e) strongly disagree []
7. I decided not to study some of the subjects that I would have liked to have studied in Form Five because in those subjects I would not have received much teacher support/supervision.
- (a) strongly agree []
- (b) agree []
- (c) possibly []
- (d) disagree []
- (e) strongly disagree []

For each of the following sentences please tick the statement which best completes the sentence.

8. I am coping with the amount of school work in Form Five.....
- (a) much better than I expected []
- (b) better than I expected []
- (c) as I expected []
- (d) worse than I expected []
- (e) much worse than I expected []
9. I am coping with the difficulty level of the school work.....
- (a) much better than I expected []
- (b) better than I expected []
- (c) as I expected []
- (d) worse than I expected []
- (e) much worse than I expected []

10. I am getting on with other students in Form Five.....
- (a) much better than I did in Form Four []
 - (b) better than I did in Form Four []
 - (c) about the same as I did in Form Four []
 - (d) less well than I did in Form Four []
 - (e) much less than I did in Form Four []
11. I am getting on with my teachers.....
- (a) much better than I did in Form Four []
 - (b) better than I did in Form Four []
 - (c) about the same as I did in Form Four []
 - (d) less well than I did in Form Four []
 - (e) much less well than I did in Form Four []
12. I interact with my teachers in Form Five.....
- (a) much more formally than I expected []
 - (b) more formally than I expected []
 - (c) as I expected []
 - (d) less formally than I expected []
 - (e) much less formally than I expected []
13. I am proud of the work I am doing in class this year.
- (a) definitely yes []
 - (b) often yes []
 - (c) sometimes yes, sometimes no []
 - (d) often no []
 - (e) definitely no []
14. When I want to, I can learn most things that I am taught.
- (a) definitely yes []
 - (b) often yes []
 - (c) sometimes yes, sometimes no []
 - (d) often no []
 - (e) definitely no []

15. What has been the most satisfying thing about Form Five so far?

.....
.....
.....

Explain briefly.....

.....
.....

16. What has been the least satisfying thing about Form Five so far?

.....
.....
.....

Explain briefly.....

.....
.....

17. I think that my life at school could be improved in the following ways:

.....
.....
.....

18. Has it been possible for you to do work experience in your chosen area?

YES [] NO []

19. Area you in receipt of any scholarship?

YES [] NO []

20. Have you tried to get full-time work this year?

YES [] NO []

Were you successful?

YES [] NO []

If YES, please explain why you did not take it.

.....
.....
.....

21. How important does your father/guardian think it is for you to continue at school this year?
- (a) definitely important []
 - (b) important []
 - (c) not sure []
 - (d) not important []
 - (e) definitely not important at all []
22. How important does your mother/guardian think it is for you to continue at school this year?
- (a) definitely important []
 - (b) important []
 - (c) not sure []
 - (d) not important []
 - (e) definitely not important at all []
23. How much encouragement is your father/guardian giving you to stay at school this year?
- (a) very strong []
 - (b) strong []
 - (c) moderate []
 - (d) some []
 - (e) little or no encouragement at all []
24. How much encouragement is your mother/guardian giving you to stay at school this year?
- (a) very strong []
 - (b) strong []
 - (c) moderate []
 - (d) some []
 - (e) little or no encouragement at all []

MY DECISIONS

The last two questions are asking whether you will be leaving school before Form 6 or staying at school for Form 6.

1. I often think of leaving school before I finish Form 6.

- (a) strongly agree []
- (b) agree []
- (c) unsure []
- (d) disagree []
- (e) strongly disagree []

2. Do you expect to return to school next year?

- (a) yes []
- (b) maybe []
- (c) not sure []
- (d) unlikely []
- (e) no []

DECISIONS (Q2/Q3)

1. Do you intend to go on to Form 6?

- (a) definitely yes []
- (b) very probably []
- (c) possibly []
- (d) unlikely []
- (e) definitely no []

2. List possible careers that you have considered, in order of preference (starting with the one you would like most).

- (a)
- (b)
- (c)
- (d)
- (e)

3. Does the career you listed as your first preference require you to undertake tertiary studies?

YES [] NO []

4. What subjects will you need to study at Form 6 to get into this tertiary course (at a university)?

- (a)
- (b)
- (c)
- (d)
- (e)

APPENDIX TWO
SOALAN SOALAN

A.

FAKTA-FAKTA LATARBELAKANG

MENGENAI DIRI SAYA

Soalan-soalan dalam bahagian ini adalah mengenai diri anda.

Nama: _____

Jantina: Lelaki [] Perempuan []

Tarikh lahir: ____/____/19____

Sila berikan pendapat anda berdasarkan kepada pemilihan satu satu daripada 8 item-item yang diberikan. Tandakan [√] pada petak yang sesuai dengan pendapat anda (Tandakan satu [√] sahaja pada setiap baris)

| | | | | | |
|----|---|---------------|-----|---|---------------------|
| SS | - | Sangat Sejuju | TS | - | Tidak Setuju |
| S | - | Setuju | STS | - | Sangat Tidak Setuju |
| TP | - | Tidak Pasti | | | |

LOKUS KAWALAN

SS S TP TS STS

- | | | | | | | |
|----|---|-----|-----|-----|-----|-----|
| 1. | Jika seseorang belajar dengan bersungguh-sungguh dia akan lulus apa-apa mata pelajaran. | [] | [] | [] | [] | [] |
| 2. | Kebanyakan masalah-masalah yang susah akan diselesaikan dengan sendiri jika kita tidak membuat sesuatu terhadapnya. | [] | [] | [] | [] | [] |
| 3. | Ada setengah-setengah orang dilahirkan sebagai insan yang bemasib baik. | [] | [] | [] | [] | [] |
| 4. | Kadang-kadang manusia dipersalahkan atas perkara-perkara yang bukan disebabkan oleh kesalahan mereka. | [] | [] | [] | [] | [] |
| 5. | Kebiasaannya, bekerja keras pun tidak membuahkan apa-apa hasil kerana ada sahaja perkara yang tidak betul yang berlaku. | [] | [] | [] | [] | [] |
| 6. | Kebiasaannya kita boleh mengubah apa yang akan berlaku pada hari esoknya dengan apa yang kita lakukan pada hari ini. | [] | [] | [] | [] | [] |

7. Apabila ada perkara-perkara buruk yang akan berlaku, tidak ada apa-apa yang boleh menahannya daripada berlaku. [] [] [] [] []
8. Perancangan awal dapat membuahkan hasil yang lebih baik. [] [] [] [] []
9. Adakah anda tinggal dalam satu kawasan yang terletak dalam lokasi 5 km dengan populasi penduduk lebih daripada 5 000 orang? Ya [] Tidak []
10. Adakah anda tinggal dalam satu kawasan yang terletak dalam lokasi 5 km dengan populasi penduduk lebih daripada 10 000 orang? Ya [] Tidak []

B.

LATARBELAKANG RUMAH

MENGENAI KELUARGA SAYA

Soalan-soalan dalam bahagian ini adalah mengenai diri anda dan keluarga anda.

Di mana anda tinggal

1. Adakah anda tinggal dengan kedua-dua ibubapa anda?
Ya [] Tidak []

Jika tidak, dengan siapakah anda tinggal kebanyakan masa?

Mengenai ayah anda/penjaga

2. Apakah pekerjaannya? _____

Jika dia tidak bekerja atau bersara, apakah pekerjaan terakhirnya?

Di manakah ia bekerja? _____

Apakah jenis pekerjaannya? _____

3. Dia mengakhiri persekolahannya pada: (Tandakan satu petak sahaja)

| | | | |
|--------------------------|-----|-------------|-----|
| Tingkatan 2 atau sebelum | [] | Tingkatan 5 | [] |
| Tingkatan 3 | [] | Tingkatan 6 | [] |
| Tingkatan 4 | [] | | |

Sejak meninggalkan sekolah, dia telah memperolehi: (Tandakan satu, atau lebih)

| | | | |
|------|-----|------------|-----|
| STPM | [] | Ijazah | [] |
| SPM | [] | Tidak tahu | [] |

Kelulusan lain (terangkan): _____

Mengenai ibu anda/penjaga

4. Apakah pekerjaannya? _____

Jika dia tidak bekerja atau bersara, apakah pekerjaan terakhir nya?

Di manakah ia bekerja? _____

Apakah jenis pekerjaannya? _____

5. Dia mengakhiri persekolahannya pada (Tandakan satu petak sahaja)

| | | | |
|--------------------------|-----|-------------|-----|
| Tingkatan 2 atau sebelum | [] | Tingkatan 5 | [] |
| Tingkatan 3 | [] | Tingkatan 6 | [] |
| Tingkatan 4 | [] | | |

Sejak meninggalkan sekolah, dia telah memperolehi: (Tandakan satu, atau lebih)

| | | | |
|------|-----|------------|-----|
| STPM | [] | Ijazah | [] |
| SPM | [] | Tidak tahu | [] |

Kelulusan lain (terangkan): _____

Mengenai anda dan ahli-ahli keluarga

6. Berapa jauhkah ayah/penjaga anda berharap anda dapat meneruskan persekolahan anda?

| | | | |
|----------------------------|-----|---------------------|-----|
| Sehingga tamat Tingkatan 5 | [] | Selepas Tingkatan 6 | [] |
| Sehingga tamat Tingkatan 6 | [] | Tidak tahu | [] |

7. Berapa jauhkah ibu/penjaga anda berharap anda dapat meneruskan persekolahan anda?

| | | | |
|----------------------------|-----|---------------------|-----|
| Sehingga tamat Tingkatan 5 | [] | Selepas Tingkatan 6 | [] |
| Sehingga tamat Tingkatan 6 | [] | Tidak tahu | [] |

8. Bagaimanakah pendapat ayah/penjaga anda mengenai kepentingan anda meneruskan pelajaran anda pada tahun hadapan?

| | | | |
|----------------|-----|------------------------|-----|
| Sangat penting | [] | Tidak penting | [] |
| Penting | [] | Tidak penting langsung | [] |
| Tidak pasti | [] | | |

9. Bagaimanakah pendapat ibu/penjaga anda mengenai kepentingan anda meneruskan pelajaran anda pada tahun hadapan?

| | | | |
|----------------|-----|------------------------|-----|
| Sangat penting | [] | Tidak penting | [] |
| Penting | [] | Tidak penting langsung | [] |
| Tidak pasti | [] | | |

10. Adakah anda pasti bahawa ibubapa anda boleh membiayai persekolahan anda sehingga tamat Tingkatan 6?

| | | | |
|--------------|-----|---------------|-----|
| Sangat pasti | [] | Mungkin tidak | [] |
| Pasti | [] | Tidak mungkin | [] |
| Tidak pasti | [] | | |

(Kenapa?: _____)

11. Adakah anda menerima sebarang biasiswa?

Ya [] Tidak []

12. Jika dibandingkan dengan rakan-rakan sebaya, berapa banyak wang sakukah yang kamu ada ?

| | | | |
|----------------------|-----|---------------|-----|
| Lebih banyak | [] | Kurang | [] |
| Sedikit lebih banyak | [] | Sangat kurang | [] |
| Lebih kurang sama | [] | | |

13a. Sila tandakan negeri di mana anda dilahirkan. Tandakan juga negeri-negeri di mana ayah dan ibu anda dilahirkan.

| | Anda | Ibu | Ayah |
|---------------------|------|-----|------|
| Johor | [] | [] | [] |
| Kedah | [] | [] | [] |
| Kelantan | [] | [] | [] |
| Melaka | [] | [] | [] |
| Negeri Sembilan | [] | [] | [] |
| Pulau Pinang | [] | [] | [] |
| Perak | [] | [] | [] |
| Pertis | [] | [] | [] |
| Pahang | [] | [] | [] |
| Sabah | [] | [] | [] |
| Sarawak | [] | [] | [] |
| Trengganu | [] | [] | [] |
| Wilayah Persekutuan | [] | [] | [] |

13b. Sila tandakan negara manakah anda dilahirkan sekiranya di luar Malaysia. Tandakan juga negara di mana ibu dan ayah anda dilahirkan, sekiranya mereka juga dilahirkan di luar Malaysia.

| | Anda | Ibu | Ayah |
|-----------|------|-----|------|
| Indonesia | [] | [] | [] |
| Filipina | [] | [] | [] |
| Singapura | [] | [] | [] |
| Thailand | [] | [] | [] |

14. Apakah bahasa yang biasa dituturkan di rumah? _____

15. Berapa ramaikah adik-beradik lelaki kamu? _____

16. Berapa orang abang yang kamu ada? _____

17. Berapa ramaikah adik-beradik perempuan kamu? _____

18. Berapa orang kakak yang kamu ada? _____

19. Berapa ramaikah daripada abang atau kakak kamu yang telah mengambil Peperiksaan STPM, atau yang setara dengannya? _____

20. Berapa ramaikah daripada abang atau kakak kamu telah melanjutkan pelajaran mereka selepas STPM? _____

21. Apakah anggaran masa yang kamu gunakan untuk pergi ke sekolah dari rumah setiap pagi?

| | | | |
|----------------|-----|----------|-----|
| 0 - 10 (minit) | [] | 41 - 60 | [] |
| 11 - 20 | [] | 61 - 90 | [] |
| 21 - 30 | [] | 91 - 120 | [] |
| 31 - 40 | [] | | |

22. Bagaimana anda pergi ke sekolah?
(Anda boleh menandakan lebih daripada satu petak, jika perlu)

| | | | |
|----------------|-----|---------------|-----|
| berjalan kaki | [] | naik keretapi | [] |
| naik basikal | [] | naik bas | [] |
| naik motosikal | [] | naik feri | [] |
| naik kereta | [] | naik teksi | [] |
| membawa kereta | [] | | |

23. Berapa jam seminggu, secara purata, yang kamu gunakan untuk membantu membuat kerja-kerja di rumah (semasa penggal persekolahan sahaja)?

| | | | |
|--------|-----|---------|-----|
| 0 | [] | 11 - 15 | [] |
| 1 - 5 | [] | 16 - 20 | [] |
| 6 - 10 | [] | | |

24. Berapa jam seminggu, secara purata, yang kamu gunakan untuk membaca suratkhobar/majalah di rumah?

- | | | | |
|--------|-----|---------|-----|
| 0 | [] | 11 - 15 | [] |
| 1 - 5 | [] | 16 - 20 | [] |
| 6 - 10 | [] | | |

25. Berapa jam seminggu, secara purata, yang kamu gunakan untuk pergi ke perpustakaan, samada di sekolah atau di perpustakaan awam?

- | | | | |
|--------|-----|---------|-----|
| 0 | [] | 11 - 15 | [] |
| 1 - 5 | [] | 16 - 20 | [] |
| 6 - 10 | [] | | |

26. Berapa jam seminggu, secara purata, yang kamu gunakan untuk menonton talivisyen?

- | | | | |
|--------|-----|---------|-----|
| 0 | [] | 11 - 15 | [] |
| 1 - 5 | [] | 16 - 20 | [] |
| 6 - 10 | [] | | |

C.

MOTIVASI

Item-item

1. Kekuatan kesungguhan saya untuk mencapai prestasi yang tinggi dalam peperiksaan adalah

- a) sangat kuat []
- b) kuat []
- c) sederhana []
- d) lemah []
- e) sangat lemah []

2. Jika dibandingkan dengan rakan-rakan saya di sekolah, motivasi saya mencapai kejayaan adalah

- a) amat tinggi []
- b) tinggi []
- c) sederhana []
- d) lemah []
- e) amat lemah []

3. Berdasarkan kebolehan saya, pencapaian saya di sekolah adalah

- a) lebih tinggi daripada dijangkakan []
- b) lebih daripada dijangkakan []
- c) seperti dijangkakan []
- d) kurang daripada dijangkakan []
- e) amat kurang daripada dijangkakan []

4. Jika dibandingkan dengan rakan-rakan sebaya saya, usaha-usaha saya untuk mencapai kejayaan adalah
- a) amat tinggi []
 - b) tinggi []
 - c) sederhana []
 - d) lemah []
 - e) amat lemah []
5. Jika dibandingkan dengan rakan-rakan sebaya saya, keinginan saya untuk berjaya adalah
- a) amat kuat []
 - b) kuat []
 - c) lebih kurang sama []
 - d) kurang []
 - e) sangat kurang []
6. Berpandukan pelajaran saya di sekolah sekarang, saya
- a) tidak boleh bekerja lebih kuat lagi []
 - b) boleh bekerja kuat sedikit []
 - c) boleh bekerja lebih kuat lagi []
 - d) boleh bekerja dengan amat bersungguh-sungguh lagi []
7. Pada masa ini dalam penggal persekolahan , belajar bersungguh-sungguh adalah
- a) teramat penting []
 - b) amat penting []
 - c) penting []
 - d) sedikit penting []
8. Bagi saya pencapaian akademik adalah
- a) amat penting []
 - b) selalu penting []
 - c) kadang-kadang penting []
 - d) jarang penting []
9. Saya berpendapat bahawa pencapaian prestasi yang tinggi dalam SPM adalah
- a) kemungkinan besar []
 - b) mungkin []
 - c) boleh jadi []
 - d) tidak mungkin []

10. Bagi ibubapa saya, adalah
- a) amat penting untuk saya mendapat pencapaian yang tinggi di sekolah []
 - b) penting untuk saya mendapat pencapaian yang tinggi di sekolah []
 - c) penting untuk saya mencuba mendapat pencapaian yang tinggi []
 - d) tidak penting untuk saya mendapat pencapaian yang tinggi []
11. Bagi saya, adalah
- a) amat penting untuk saya mendapat pencapaian yang tinggi di sekolah []
 - b) penting untuk saya mendapat pencapaian yang tinggi di sekolah []
 - c) penting untuk saya mencuba mendapat pencapaian yang tinggi []
 - d) tidak penting untuk saya mendapat pencapaian yang tinggi []
12. Berdasarkan kerjaya yang telah saya pilih, pencapaian yang tinggi dalam SPM adalah
- a) amat perlu []
 - b) perlu []
 - c) mungkin perlu []
 - d) tidak perlu []
13. Pada keseluruhannya, berapa tinggikah motivasi anda dalam pelajaran, walaupun terdapat beberapa perkara yang berlaku dalam kehidupan anda ?
- a) amat bermotivasi []
 - b) ada motivasi []
 - c) sedikit bermotivasi []
 - d) kurang bermotivasi []
 - e) tidak bermotivasi langsung []
14. Jika dibandingkan dengan penuntut-penuntut sebaya di sekolah, bagaimanakah taraf kemahiran belajar kamu?
- a) amat baik []
 - b) baik []
 - c) lebih kurang sama []
 - d) amat lemah []

15. Jika dibandingkan dengan penuntut-penuntut sebaya di sekolah, berapa selalukah anda tidak hadir ke sekolah?
- a) lebih selalu []
 - b) selalu []
 - c) lebih kurang sama []
 - d) kurang []
 - e) lebih kurang []
16. Purata bilangan jam yang kamu gunakan dalam seminggu semasa penggal persekolahan, untuk belajar (tidak termasuk masa yang digunakan untuk menghabiskan tugas dan kerjarumah) adalah
- a) 0 []
 - b) 1 - 3 []
 - c) 4 - 6 []
 - d) 7 - 9 []
 - e) 10 - 12 []
17. Bilangan buku/majalah selain daripada buku teks sekolah, yang kamu baca untuk rekreasi (sebulan) adalah
- a) 0 []
 - b) 1 - 5 []
 - c) 6 - 10 []
 - d) 11 - 15 []
 - e) 16 - 20 []
18. Sejauh manakah pengalaman anda di sekolah dapat membantu anda menjadi seorang pelajar yang lebih baik?
- a) amat berguna []
 - b) berguna []
 - c) tidak pasti []
 - d) sedikit berguna []
 - e) amat sedikit gunanya []
19. Bagaimana bergunakah mata-mata pelajaran wajib di sekolah dalam memainkan peranan dalam masa hadapan anda?
- a) amat berguna []
 - b) berguna []
 - c) tidak pasti []
 - d) sebahagian sahaja berguna []
 - e) tidak berguna []

20. Bagaimana bergunakah mata-mata pelajaran pilihan di sekolah dalam memainkan peranan dalam masa hadapan anda?
- a) amat berguna []
 - b) berguna []
 - c) tidak pasti []
 - d) sebahagian sahaja berguna []
 - e) tidak berguna []
21. Adakah anda yakin bahawa anda akan menunjukkan prestasi yang baik dalam mata-mata pelajaran wajib?
- a) amat yakin []
 - b) yakin []
 - c) tidak pasti []
 - d) tidak berapa yakin []
 - e) langsung tidak yakin []
22. Adakah anda yakin bahawa anda akan menunjukkan prestasi yang baik dalam mata-mata pelajaran pilihan?
- a) amat yakin []
 - b) yakin []
 - c) tidak pasti []
 - d) tidak berapa yakin []
 - e) langsung tidak yakin []

D

KOMITMEN HASRAT DIRI

Soalan-soalan dalam bahagian ini adalah mengenai diri anda pada masa dahulu dan akan datang.

1. Bagaimana pentingkah kepada kamu untuk menghabiskan pelajaran sehingga ke Tingkatan Lima?
- a) sangat penting []
 - b) penting []
 - c) tidak pasti []
 - d) tidak penting []
 - e) tidak penting langsung []
- (Kenapa?: _____)
2. Bagaimana pentingkah kepada kamu untuk menghabiskan pelajaran sehingga ke Tingkatan Enam?
- a) sangat penting []
 - b) penting []
 - c) tidak pasti []
 - d) tidak penting []
 - e) tidak penting langsung []
- (Kenapa?: _____)

3. Apakah pencapaian akademik yang paling tinggi yang anda fikir anda boleh mencapai?
- a) Sijil Pelajaran Malaysia []
 - b) Sijil Tinggi Persekolahan Malaysia []
 - c) Sijil Pendidikan []
 - d) Diploma Maktab Perguruan []
 - e) Diploma/Ijazah Universiti []
4. Berapa yakinkah kamu bahawa kamu telah membuat pilihan yang tepat untuk melanjutkan pelajaran di sekolah ini?
- a) amat yakin []
 - b) yakin []
 - c) tidak pasti []
 - d) tidak berapa yakin []
 - e) tidak yakin langsung []
5. Bagaimanakah pentingnya anda menamatkan persekolahan anda di sekolah ini?
- a) amat penting []
 - b) penting []
 - c) tidak pasti []
 - d) tidak penting []
 - e) tidak penting langsung []
6. Bagaimana yakinkah kamu bahawa kamu akan mencapai hasrat diri kamu melalui persekolahan di sekolah ini?
- a) amat yakin []
 - b) yakin []
 - c) tidak pasti []
 - d) tidak berapa yakin []
 - e) tidak yakin langsung []

E

KOMITMEN HASRAT DIRI

Rancangan Dahulu dan Akan Datang

Soalan-soalan dalam bahagian ini adalah mengenai rancangan diri anda pada masa dahulu dan pada masa akan datang.

1. Apakah pencapaian akademik yang paling tinggi yang anda fikir anda boleh mencapai?
- a) Sijil Pelajaran Malaysia []
 - b) Sijil Tinggi Persekolahan Malaysia []
 - c) Diploma Maktab Perguruan []
 - d) Ijazah/Diploma Universiti []

2. Pada peringkat persekolahan manakah yang anda ingin menamatkan persekolahan?
- a) Tingkatan Lima []
 - b) Tingkatan Enam Rendah []
 - c) Tingkatan Enam Atas []
3. Pada peringkat persekolahan yang manakah anda jangka anda akan menamatkan persekolahan?
- a) Tingkatan Lima []
 - b) Tingkatan Enam Rendah []
 - c) Tingkatan Enam Atas []
4. Bagaimanakah tahap pencapaian pendidikan yang anda fikir anda boleh perolehi di sekolah ini?
- a) Cemerlang []
 - b) Amat baik []
 - c) Baik []
 - d) Sederhana []
5. Pada fikiran anda, berapa pentingkah masa yang anda gunakan di sekolah ini akan membantu kamu mendapat pekerjaan?
- a) amat penting []
 - b) penting []
 - c) tidak pasti []
 - d) tidak penting []
 - e) tidak penting langsung []
6. Apakah jenis pekerjaan yang anda suka?
-
-
7. Secara jujur, apakah pekerjaan yang anda jangka akan buat ?
-
-
8. Bagaimana pendapat ayah/penjaga anda tentang pilihan kerjaya anda?
- a) amat suka []
 - b) suka []
 - c) tidak pasti []
 - d) tidak tertarik []
 - e) tidak tertarik langsung []

9. Bagaimana pendapat ibu/penjaga anda tentang pilihan kerjaya anda?

- a) amat suka []
- b) suka []
- c) tidak pasti []
- d) tidak tertarik []
- e) tidak tertarik langsung []

10. Berapa sekolah menengah telah anda hadiri? _____

Jika anda telah belajar di lebih daripada satu sekolah, sila nyatakan berapa lama kamu belajar dalam setiap buah sekolah.

Sekolah menengah no. 1: _____ tahun _____ bulan

Sekolah menengah no. 2: _____ tahun _____ bulan

Sekolah menengah no. 3: _____ tahun _____ bulan

Lain-lain: _____

11. Apakah kemungkinannya anda akan bertukar ke sekolah lain pada tahun ini, atau pada tahun hadapan?

- a) tiada kemungkinan []
- b) mungkin []
- c) kemungkinan yang baik []
- d) kemungkinan yang amat baik []

Berikan sebabnya: _____

12. Adakah anda akan menyarankan sekolah ini kepada rakan-rakan lain?

- a) sudah tentu []
- b) mungkin []
- c) tidak pasti []
- d) mungkin tidak []
- e) tentu sekali tidak []

13. Adakah anda, (atau dijangka akan ada) mempunyai khas di sekolah pada tahun ini; contoh: pengawas, majlis penuntut, perpustakaan, persatuan, permainan/olahraga?

Ya [] Tidak []

Jika ya, nyatakan? _____

2. Secara keseluruhan, bagaimanakah motivasi kamu untuk belajar walaupun terdapat banyak hal yang berlaku dalam kehidupan kamu?
- a) amat bermotivasi []
 - b) sedikit bermotivasi []
 - c) tidak terpengaruh []
 - d) tidak bermotivasi []
 - e) tidak bermotivasi langsung []
3. Jika dibandingkan dengan penuntut-penuntut lain dalam Tingkatan 4, berapa baikkah kemahiran belajar kamu?
- a) amat baik []
 - b) baik []
 - c) lebih kurang sama []
 - d) lemah []
 - e) amat lemah []
4. Jika dibandingkan dengan rakan sedarjah, adakah anda meminta bantuan dari rakan-rakan lain atau guru-guru mengenai pelajaran kamu?
- a) amat lebih []
 - b) lebih []
 - c) lebih kurang sama []
 - d) kurang []
 - e) amat kurang []
5. Berapa ramai daripada guru-guru anda yang benar-benar ingin menolong anda mencapai keputusan yang lebih baik di sekolah?
- a) amat lebih []
 - b) lebih []
 - c) lebih kurang sama []
 - d) kurang []
 - e) amat kurang []
6. Berapa ramai daripada guru-guru anda yang benar-benar ingin menolong anda mencapai keputusan yang lebih baik di sekolah?
- a) semua []
 - b) kebanyakan []
 - c) sebahagian daripada mereka []
 - d) tidak ramai []
 - e) tiada langsung []

7. Berapa ramai daripada guru-guru anda senang ditemui jika anda ada masalah mengenai kerja sekolah?
- a) semua []
 - b) kebanyakan []
 - c) sebahagian daripada mereka []
 - d) tidak ramai []
 - e) tiada langsung []
8. Adakah kamu selalu berjumpa dengan guru di luar kelas untuk bertanya tentang kerja sekolah?
- a) amat selalu []
 - b) selalu (sekali seminggu) []
 - c) kadang-kadang []
 - d) jarang (sekali sepeggal) []
 - e) tidak pernah []
9. Sejak kamu masuk ke sekolah menengah, berapa kalikah sudah kamu berjumpa dengan guru kaunseling mengenai kerja sekolah?
- a) amat selalu []
 - b) selalu (sekali seminggu) []
 - c) kadang-kadang []
 - d) jarang (sekali dalam tiga tahun) []
 - e) tidak pernah []
10. Purata bilangan jam dalam seminggu yang di gunakan untuk belajar semasa peggal persekolahan (tidak termasuk kerja kursus)
- a) 0 []
 - b) 1 - 3 []
 - c) 4 - 6 []
 - d) 7 - 9 []
 - e) 10 - 12 []
 - f) 13+ []
11. Bilangan buku/majalah selain daripada buku teks sekolah yang dibaca untuk hiburan (dalam sebulan)
- a) 0 []
 - b) 1 - 5 []
 - c) 6 - 10 []
 - d) 11 - 15 []
 - e) 16 - 20 []
 - f) 21+ []

12. Sejauh manakah pengalaman-pengalaman anda di sekolah membantu anda menjadi seorang pelajar yang lebih baik?

- a) amat berguna []
- b) berguna []
- c) tidak pasti []
- d) kurang berguna []
- e) tidak berguna []

13. Bagaimana bergunakah mata-mata pelajaran wajib di sekolah terhadap rancangan masa hadapan kamu?

- a) amat berguna []
- b) berguna []
- c) tidak pasti []
- d) kurang berguna []
- e) tidak berguna []

14. Bagaimana bergunakah mata-mata pelajaran pilihan di sekolah terhadap rancangan masa hadapan kamu?

- a) amat berguna []
- b) berguna []
- c) tidak pasti []
- d) kurang berguna []
- e) tidak berguna []

15. Adakah anda yakin bahawa anda akan mencapai prestasi yang baik dalam mata-mata pelajaran wajib?

- a) amat yakin []
- b) yakin []
- c) tidak pasti []
- d) tidak berapa yakin []
- e) tidak yakin langsung []

16. Adakah anda yakin bahawa anda akan mencapai prestasi yang baik dalam mata-mata pelajaran pilihan?

- a) amat yakin []
- b) yakin []
- c) tidak pasti []
- d) tidak berapa yakin []
- e) tidak yakin langsung []

G

INTEGRASI SEKOLAH

MENGENAI KEHIDUPAN SOSIAL SAYA DI SEKOLAH

Soalan-soalan dalam bahagian ini adalah mengenai diri anda, rakan-rakan anda dan kehidupan sosial anda di sekolah.

1. Berapa ramai rakan-rakan yang amat baik yang anda punyai di sekolah ini?

- a) tidak seorang pun []
- b) seorang []
- c) dua orang []
- d) tiga orang []
- e) empat atau lebih []

Berapa ramai adalah di Tingkatan 5? _____

2. Apabila saya memasuki sekolah ini, saya dapati bahawa untuk mendapat seorang kawan adalah....

- a) amat susah []
- b) susah []
- c) tidak pasti []
- d) senang []
- e) amat senang []

3. Adakah keputusan rakan anda untuk berhenti sekolah mempengaruhi keputusan kamu?

- a) Ya []
- b) Mungkin []
- c) Tidak []

Sila terangkan _____

4. Adakah keputusan rakan anda untuk menetap di sekolah mempengaruhi keputusan kamu?

- a) Ya []
- b) Mungkin []
- c) Tidak []
- d) Sila terangkan _____

5. Adakah anda mempunyai teman lelaki/perempuan?

Ya [] Tidak []

Jika YA

a) Adakah dia bersekolah di sekolah ini Ya [] Tidak []

b) Adakah dia bersekolah di sekolah lain Ya [] Tidak []

Dalam tingkatan berapakah teman anda ini? _____

6. Adakah kamu selalu mengambil bahagian dalam aktiviti-aktiviti sosial yang dianjurkan oleh sekolah?

AS - Amat Selalu

S - Selalu

K - Kadang-kadang

J - jarang sekali

TP - Tidak Pernah

AS S K J TP

a) Kelab (bukan bersukan) [] [] [] [] []

b) Tarian [] [] [] [] []

c) Muzik [] [] [] [] []

d) Drama [] [] [] [] []

7. Bagaimanakah anda memeringkatkan kehidupan sosial anda di sekolah ini?

a) amat baik []

b) baik []

c) tidak pasti []

d) lemah []

e) amat lemah []

8. Berapa ramai daripada guru-guru anda benar-benar berminat tentang aktiviti luar sekolah anda?

a) semua []

b) kebanyakan []

c) sebahagian daripada mereka []

d) sebilangan kecil []

e) tidak seorang []

9. Berapa ramai daripada guru-guru yang anda fikir senang ditemui tentang masalah-masalah yang berlaku di luar sekolah?

a) semua []

b) kebanyakan []

c) sebahagian daripada mereka []

d) sebilangan kecil []

e) tidak seorang []

10. Saya selalu menghubungi guru-guru saya di luar bilik darjah mengenai aktiviti-aktiviti luar sekolah.
- a) amat selalu (sekali seminggu) []
 - b) selalu []
 - c) kadang-kadang (sekali sepekan) []
 - d) jarang []
 - e) tidak pernah []
11. Adakah guru kelas Tingkatan 5 anda sentiasa membantu anda?
- a) amat selalu membantu []
 - b) selalu membantu []
 - c) berkecuali []
 - d) tidak membantu []
 - e) tidak membantu langsung []
12. Sejak kamu memasuki sekolah menengah, berapa kalikah anda berjumpa dengan guru kaunseling mengenai masalah-masalah peribadi anda (bukan kerja sekolah)?
- a) amat selalu []
 - b) selalu (sekali sepekan) []
 - c) kadang-kadang []
 - d) jarang (sekali dalam 3 bulan) []
 - e) tidak pernah []
13. Perhubungan saya dengan guru-guru di luar bilik darjah telah mempengaruhi saya supaya menetap di sekolah ini.
- a) sangat setuju []
 - b) setuju []
 - c) berkecuali []
 - d) tidak setuju []
 - e) sangat tidak setuju []
14. Setakat manakah anda fikir bahawa undang-undang dan peraturan di sekolah membendung kehidupan anda di sekolah?
- a) sangat tinggi []
 - b) tinggi []
 - c) tidak pasti []
 - d) rendah []
 - e) sangat rendah []

15. Setakat manakah anda rasa bahawa undang-undang dan peraturan di sekolah telah mengecewakan anda?

- a) sangat tinggi []
- b) tinggi []
- c) tidak pasti []
- d) rendah []
- e) sangat rendah []

16. Adakah anda mempunyai apa-apa kerja sambilan?

Ya [] Tidak []

Jika ada, berapa? _____

Berapa jam seminggukah, secara purata, anda gunakan untuk membuat kerja-kerja sambilan ini (semasa penggal persekolahan saja)?

- a) 1 - 5 []
- b) 6 - 10 []
- c) 11 - 15 []
- d) 15 - 20 []
- e) 20+ []

17. Berapa jam seminggukah, secara purata, anda gunakan untuk membuat kerja-kerja di rumah (semasa penggal persekolahan saja)?

- a) 1 - 5 []
- b) 6 - 10 []
- c) 11 - 15 []
- d) 15 - 20 []
- e) 20+ []

H

KEPUTUSAN SAYA

Kedua-dua soalan ini bertanyakan samada anda akan meninggalkan bangku sekolah atau meneruskan pelajaran di sekolah.

1. Saya selalu memikirkan untuk meninggalkan sekolah sebelum tamat Tingkatan 6.

- a) sangat setuju []
- b) setuju []
- c) tidak pasti []
- d) tidak setuju []
- e) sangat tidak setuju []

2. Adakah anda jangkakan bahawa anda akan kembali ke sekolah pada tahun depan?
- a) Ya []
 - b) Tidak pasti []
 - c) Tidak []

INTEGRASI AKADEMIK

Soalan-soalan dalam bahagian ini adalah mengenai pengalaman anda dalam Tingkatan Lima pada tahun ini.

1. Saya boleh mendapat bahan-bahan rujukan perpustakaan yang sesuai untuk semua mata pelajaran di sekolah ini.
- a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []
2. Komputer-komputer di sekolah ini adalah sesuai untuk keperluan saya di peringkat menengah atas.
- a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []
3. Saya telah dapat mempelajari mata-mata pelajaran yang saya hendakkan pada tahun ini.
- a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []
4. Harapan-harapan persekolahan saya akan dapat dicapai pada tahun ini.
- a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []
5. Saya berasa gembira kerana telah belajar dalam Tingkatan Lima di sekolah ini.
- a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []

6. Perubahan dari Tingkatan Tiga hingga ke Tingkatan Lima adalah mudah.
- a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []
7. Terdapat beberapa mata pelajaran yang saya minati dalam Tingkatan Lima yang akan memerlukan saya belajar tanpa bantuan/penyeliaan guru.
- Ya [] Tidak []

Bagi soalan-soalan yang berikut, sila tandakan [√] pada pelengkap ayat-ayatnya

8. Saya dapat menguasai beban kerja sekolah dalam Tingkatan 5..
- a) jauh lebih baik daripada dijangkakan []
 - b) lebih baik daripada dijangkakan []
 - c) seperti dijangkakan []
 - d) lebih buruk daripada dijangkakan []
 - e) jauh lebih buruk daripada dijangkakan []
9. Saya dapat menguasai tahap kesukaran kerja sekolah.....
- a) jauh lebih baik daripada dijangkakan []
 - b) lebih baik daripada dijangkakan []
 - c) seperti dijangkakan []
 - d) lebih buruk daripada dijangkakan []
 - e) jauh lebih buruk daripada dijangkakan []
10. Perhubungan saya dengan pelajar-pelajar Tingkatan Lima yang lain adalah
- a) lebih baik daripada di Tingkatan Empat []
 - b) lebih kurang sama di Tingkatan Empat []
 - c) kurang baik daripada di Tingkatan Empat []
11. Perhubungan saya dengan guru-guru saya adalah
- a) lebih baik daripada di Tingkatan Empat []
 - b) lebih kurang sama di Tingkatan Empat []
 - c) kurang baik daripada di Tingkatan Empat []
12. Interaksi saya dengan guru-guru saya di Tingkatan Lima adalah
- a) lebih formal daripada yang dijangkakan []
 - b) seperti dijangkakan []
 - c) kurang formal daripada yang dijangkakan []

13. Nyatakan perkara yang paling memuaskan mengenai Tingkatan Lima setakat ini.

Terangkan dengan ringkas: _____

14. Nyatakan perkara yang paling tidak memuaskan mengenai Tingkatan Lima setakat ini.

Terangkan dengan ringkas: _____

15. Adakah anda berpeluang untuk mendapat pengalaman kerja dalam bidang pilihan anda?

Ya [] Tidak []

Jika TIDAK, kenapa? _____

16. Adakah kamu menerima apa-apa biasiswa?

Ya [] Tidak []

17. Adakah kamu mencuba mendapatkan kerja penuh masa pada tahun ini?

Ya [] Tidak []

Adakah kamu berjaya?

Ya [] Tidak []

Jika YA, sila terangkan mengapa kamu tidak mengambilnya?

18. Adakah anda mempunyai kerja sambilan yang bergaji?

Ya [] Tidak []

Jika YA, berapa bilangannya? _____

Lebih kurang berapa jam seminggukah anda menggunakan untuk membuat kerja sambilan ini (semasa penggal persekolahan saja)?

- a) 1 - 5 []
- b) 6 - 10 []
- c) 11 - 15 []
- d) 16 - 20 []
- e) 21+ []

19. Pada pendapat ayah/penjaga anda, bagaimana pentingkah anda meneruskan persekolahan pada tahun ini?

- a) amat penting []
- b) penting []
- c) tidak pasti []
- d) tidak penting []
- e) tidak penting langsung []

20. Pada pendapat ibu/penjaga anda, bagaimana pentingkah anda meneruskan persekolahan pada tahun ini?

- a) amat penting []
- b) penting []
- c) tidak pasti []
- d) tidak penting []
- e) tidak penting langsung []

21. Berapa banyak galakankah yang diberi oleh ayah/penjaga anda supaya anda meneruskan persekolahan pada tahun ini?

- a) amat kuat []
- b) kuat []
- c) sederhana []
- d) sedikit []
- e) sangat sedikit/tiada langsung []

22. Berapa banyak galakankah yang diberi oleh ibu/penjaga anda supaya anda meneruskan persekolahan pada tahun ini?

- a) amat kuat []
- b) kuat []
- c) sederhana []
- d) sedikit []
- e) sangat sedikit/tiada langsung []

J

KEPUTUSAN SAYA

Kedua-dua soalan yang berikut ini bertanyakan samada anda akan berhenti sekolah atau meneruskan persekolahan.

1. Saya selalu memikirkan tentang meninggalkan sekolah sebelum tamat Tingkatan Enam.
 - a) sangat setuju []
 - b) setuju []
 - c) tidak pasti []
 - d) tidak setuju []
 - e) sangat tidak setuju []

2. Adakah anda jangka akan kembali ke sekolah pada tahun depan?
 - a) Ya []
 - b) Tidak Pasti []
 - c) Tidak []

K

KEPUTUSAN

1. Adakah anda bercita-cita untuk memasuki ke Tingkatan Enam?
 - a) sudah tentu []
 - b) kemungkinan besar []
 - c) mungkin []
 - d) tidak pasti []
 - e) tidak []

2. Apakah kerjaya yang telah anda fikirkan?
 - a) _____
 - b) _____
 - c) _____
 - d) _____
 - e) _____

3. Adakah kerjaya ini memerlukan pelajaran peringkat tinggi?
Ya [] Tidak []

4. Apakah mata pelajaran yang anda perlu belajar di Tingkatan Enam untuk memasuki kursus ini (di Universiti)?

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

L

KEPUTUSAN

1. Saya telah mengambil keputusan

- a) untuk meneruskan pelajaran di sekolah ini dalam Tingkatan Enam pada 1993 []
- b) untuk memasuki Tingkatan Enam di sekolah lain pada 1993 []
- c) untuk belajar dalam Tingkatan Enam secara separuh masa pada 1993 []
- d) untuk mengambil peperiksaan G.C E. A' Level di sekolah lain pada 1993 []
- e) supaya tidak memasuki Tingkatan Enam []

2. Jika anda telah membuat keputusan untuk meneruskan pelajaran ke Tingkatan 6 di sekolah ini pada 1993, nyatakan dengan ringkas, kerjaya apakah yang anda ingin mencapai selepas peperiksaan Tingkatan 6 nanti.

Kerjaya yang saya ingin mencapai adalah

3. Adakah kerjaya yang anda cita-citakan itu memerlukan anda melanjutkan pelajaran di Universiti?

Ya [] Tidak []

4. Apakah mata pelajaran yang anda mesti belajar di Tingkatan 6 supaya membantu anda mencapai kerjaya anda?

- a) _____
- b) _____
- c) _____
- d) _____
- e) _____

5. Apakah mata-mata pelajaran yang sedang anda pelajari di Tingkatan 6?

a) _____

b) _____

c) _____

d) _____

e) _____

Terima kasih kerana sudi meluangkan masa untuk melengkapkan soal selidik ini.

APPENDIX THREE

INTERVIEWS

SEKOLAH MENENGAH PERTAMA (FIRST SECONDARY SCHOOL)

1. C. H. C.

| Questions | Answers |
|---|---|
| 1. Do you want to change what you wrote? | No. I don't |
| 2. What do you want to do after the SPM? | See my results first |
| 3. You do not want to go to Form Six? | No. |
| 4. Why don't you want to go? | It is difficult to enter the local Universities. It's hard. |
| 5. How well did you do in the SPM? | Only average. I got a Grade I in the forecast exam. |
| Is this result good? | Maybe. I'm not sure. |
| 6. Did the school help you to choose your career? | No. |
| 7. Has your family helped you to choose? | No. It depends on me, I can choose. |
| 8. What do you want to be? | An engineer. |
| 9. Where do you want to study to be an engineer? | Now I am not sure. |

2. Y. C. W.

| Questions | Answers |
|--|--|
| 1. Do you want to change what you wrote? | No I have decided. |
| 2. What do you want to be after the SPM? | I want to go to a College. |
| 3. You do not want to go to Form Six? | Not yet. |
| Why? | I have to find out about my Form Five results first. |

- | | | |
|----|---|---------------|
| 4. | How do you think you will do in your SPM results? | O.K. I guess. |
| 5. | Do you think your SPM results will be good enough for Form Six? | O.K. |
| 6. | Has the school helped you to choose the job you want? | No. |
| 7. | Has your family helped you? | No. |

3. Y. C. H.

Questions

Answers

- | | | |
|----|---|--|
| 1. | Do you remember filling out that form for me? | Yes. |
| | Do you think you want to change your answer about what you told me about going to Form Six? | I don't want to change. |
| 2. | You would like to take the A-levels and you do not want to go to Form Six? | Yes. I think I wrote that. |
| 3. | Why do you not want to take Form Six? | I am not sure whether I can enter. |
| | Why do you say you are not sure? | Because of the result I will get. |
| 4. | What are your school results in Form Five? | For the forecast exam I got Grade I. |
| 5. | Still you are not sure? | Yes, still not sure. |
| 6. | Why do you want to go to the University? | It's good to go to a local University. |
| 7. | Does the school help you to choose the work you want to do? | No. |
| 8. | Does your family tell you that you have to go to Form Six? | No. I want to. It depends on my results. |

4. **B. D. N.**

Questions

Answers

- | | | |
|----|---|--|
| 1. | You remember filling the forms for me? | Yes. |
| | Do you like to change your answer? | No. |
| | You wrote that you want to take the A-levels? | I said that. |
| 2. | Do you want to go to Form Six? | No. I said I want to take the A-levels. |
| 3. | Have you any other ambition? | Yes. I want to go to Melbourne University. |
| 4. | What do you want to do in Australia? | To take up an Engineering course in Australia. |
| 5. | Do you feel the school has helped you to think about your future job? | Yes. |
| 6. | Have you done well in your school exam? | Yes, all right. I think. |

5. **C. K. H.**

Questions

Answers

- | | | |
|----|--|--------------------------|
| 1. | Do you remember filling out the forms? | Yes. |
| | Do you like to change your views from what you wrote? | No. I don't think so. |
| 2. | Why don't you want to go to Form Six? | It is difficult. |
| 3. | Have you any ambition? | Yes. To do business. |
| 4. | Do you feel the school has helped you to choose your future job? | Not really. |
| | What do you want to do? | Some business. Get help. |
| 5. | If you had the chance would you then want to go to Form Six? | No. I don't want to go. |
| 6. | Do you think you are going to do well without going to Form Six? | I am not sure. |

6. E. O.

Questions

Answers

- | | | |
|----|--|--|
| 1. | Do you remember filling the form for me? | Yes. |
| | Would you like to change your choice? | No. |
| 2. | If you did better in your Form Five exam would you want to go to Form Six? | No. I don't think so. |
| 3. | Why do you not want to go to Form Six? | It is a waste of time. If I do badly in Form Six, it will be a real waste of time. |
| 4. | Where do you want to take your A-levels? | Locally. Here maybe in Penang. |
| 5. | Who will support you? | My family. |
| 6. | Someone told me that it is a waste of time to go to Form Six and that it is better to go to a College locally, do you agree? | Yes. |
| 7. | Did your school help to advise you to choose a career? | Yes. |
| 8. | Did your parents influence you? | Just agree to what I'm doing |

7. A. L.

Questions

Answers

- | | | |
|----|---|---|
| 1. | Have you seen the form I have given you to fill in? | Yes I did. |
| | So you do not want to go to Form six? | No. |
| 2. | Why do you not want to go? | I think that Form Six is a waste of time. I have met a few friends and my mother's friends who work in factories who say From Six is a waste of time. |
| 3. | In what sense will you waste your time? | I may be better off if I entered a College or go for some courses. Short courses. |
| 4. | What will you do after your Form Five? | I am taking the L.C.C.I course. |
| 5. | Is this an accountancy course? | Yes it is. |
| 6. | Is this going to be expensive for you? | Average only. |

- | | | |
|----|---|---|
| 7. | If you do well in your SPM exam will you then go to Form Six? | No. I don't want to. |
| 8. | Did your friends influence you in this? | No. Before I met them I had made my choice already. |

8. D.

Questions

Answers

- | | | |
|----|---|--|
| 1. | Have you filled in the forms? You do not want to go to Form Six? | Yes. No. I don't. |
| 2. | Why do you not want to go? | It is a waste of time for two years. At a private College I can take a similar type of course. |
| 3. | Why do you say it is a waste of time? | By the time the Form Six students come out, I might have found a job. |
| 4. | What College do you want to go to? | One maybe in Kuala Lumpur. |
| 5. | You want to be an Engineer, how are you going to do this? | It is a long way. |
| 6. | Do you mean to say you would want to work first? | Yes. |
| 7. | Did your school advise you on what to do after you finish your Form Five? | Yes. |
| 8. | Will you have money to go for such a course? | My family can support me. |
| 9. | Did your friends influence you? Your parents told you to do this? | No. It's my own decision. No. |

9. L. C. W.

Questions

Answers

- | | | |
|----|---------------------------------------|--|
| 1. | Do you want to change what you wrote? | No, I don't think so I'll change. Because I plan to go to UTM (a local University). So this does not need Form Six. I do not want to go to Form Six. |
| 2. | So you do not want to go? Why? | Because I want to go to UTM if I can. |

- | | | |
|----|---|---|
| 3. | Do you think Form Six is difficult? | Yes, I think the STPM is difficult. |
| | Did your friends say that Form Six is difficult? | They have talked a bit. They said difficult. |
| | How will you know? | Even my tutors said it is difficult. My cousin said Form Six is difficult. |
| 4. | Is Form Six then a waste of time? | It is not a waste of time. Because you can learn a lot—and it is a means to do higher education. |
| 5. | What are your plans after Form Five? | I want to go to UTM. My parents have asked me to get a job in the factory temporarily so as not to waste time and to save money for University fees. |
| 6. | How were your results? | Good, but not as good as I had wanted it to be. My trial exam results were not satisfactory but compared to others I did well. However my friends' results were better than mine. |
| 7. | Will there be someone to support you in the University? | Yes, my parents can support me and I can ask for a scholarship. |
| 8. | What would you like to study in the University? | I would like to study either Engineering or Chemistry depending on my Form Five results. My priority is to study Engineering. My friends have said Form Six is difficult. |
| 9. | Did you make this decision yourself? | Yes. Actually my mother wants me to be a doctor but I want to be an Engineer. |

10. V. M. K.

Questions

1. Will you change your mind about going to Form Six?

Why?
2. Are you certain of your decision?
3. In which school would you like to study Form Six?

Answers

- No, I will not.

I am eager to go to Form Six.
- I am. I absolutely will not change my mind because I would like to further my studies.
- At S.M. Munshi Abdullah.

- | | | |
|-----|--|--|
| 4. | Is Form Six difficult? | No, I don't think it is difficult. I think nothing is impossible. |
| 5. | Has anyone talked to you about going to Form Six? | Yes, my parents, relatives and teachers have talked to me about it. |
| 6. | Is Form Six a waste of time? | No, it is not. |
| 7. | What are your plans after Form Five? | I plan to work for a few months. In fact I just applied for a job at Ban Hin Lee Bank. |
| 8. | How well have you done in your Form Five so far? | So far, my results have been just good, not excellent—just good. |
| 9. | Will there be someone to support you in Form Six? | Yes, my father will. |
| 10. | What do you intend to do when you enter University? | I want to take up a Medicine course. |
| 11. | Did you speak to your friends about going to Form Six? | Yes, I did. |
| 12. | Did you make this decision yourself? | Yes, I did. |
| 13. | Did your parents speak to you about the kind of job you should do? | My parents want me to become a Doctor. |
| 14. | What are your parents' views on your decision? | They said that if I wanted to further my studies, I have to go to Form Six. |
| 15. | Would you like to study medicine in a University? | Yes, I would like to study in University Malaya. |
| 11. | C. C. B. | |

Questions

Answers

- | | | |
|----|--|---|
| 1. | Are you sure of going to Form Six? | I am not sure. It depends on my parents. |
| 2. | Would you like to change the answers you have given? | No. |
| 3. | Why do you want to go to Form Six? | So that I can get a chance to study in the University. I will try to get in but I feel the competition is high. |
| 4. | Is Form Six difficult? | I feel that whether it is difficult or not depends on the person. |

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|-----|--|---|
| 5. | Is Form Six a waste of time? | I don't know. If a person does not get into a University or a College, then he would have wasted two years. |
| 6. | What are your plans after Form Five? | I would like to go to the Outward Bound School. I have paid for the course. |
| 7. | Are you going to work? | No. |
| 8. | How well have you done in your Form Five? | No idea but for my forecast results, I obtained 3As. That is fine with me. |
| 9. | Who will support you when you go to Form 6? | My parents. |
| 10. | What do you intend to study in the University. | I will make up my mind when I enter the University? |
| 11. | Has anyone spoken to you about going to Form Six? | No. |
| 12. | Did you make this decision yourself? | Yes. |
| 13. | Did your parents speak to you about the kind of job you should do? | No. |
| 14. | Did your parents encourage you to go to Form Six? | Yes. Sometimes maybe. |
| 15. | Have you thought about going to a University? | Yes. It has been in my mind. |

12. K. C. J.

Questions

1. Will you change your mind about going to Form Six?
2. Why do you want to study Form Six?
3. Where do you intend to study Form Six?
4. Is Form Six difficult?
5. Has anyone spoken to you about going to Form Six?

Answers

- Maybe I'll change my mind if I have good results.
- I feel it is the only way to get into a University.
- For us, the only choice is S.M. Abdullah Munshi.
- I don't know. I've not heard anything.
- Yes, my cousins have.

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|-----|--|--|
| 6. | What are your plans after Form Five? | If I get good results, I will enter Form Six. If not, I will study Form Six part-time. I'll be working with my uncle as a clerk in Perunding Ihsan. If my results are good I'll go into a government school. |
| 7. | How well have you done in Form Five so far? | For my mid-year exams, I had a Grade I. For my trial exam I got a Grade II. |
| 8. | What do you intend to take up in the University? | I don't know. I'll think about this later when I get into the University. |
| 9. | Have your friends spoken to you about going to Form Six? | No. |
| | Is this your decision? | Yes. |
| 10. | Who will finance your studies? | I will pay for my studies. |
| 11. | Did your parents speak to you about the kind of job you should do? | Yes. They feel I should take up professional jobs like becoming an accountant or an Engineer. |
| 12. | Did your parents ask you to go to Form Six? | No. |
| 13. | Do you want to go to a University? | Yes, if I do well in my Form Six. |

13. L. C. P.

Questions

1. Are you sure of going to Form Six?
2. Will you change your mind?
3. Why do you intend to take A-levels with a College?
4. Is Form Six difficult?
5. Have any of your friends talked to you about going to Form Six?
6. Are you certain of your decision?
7. Which College do you intend to attend?

Answers

- I am not sure about going to Form Six. Because I have many choices. I would probably go to a College.
- Perhaps.
- If I do that, I can save half a year. For the STPM, I need to study for 2 years.
- I am not sure—I have not seen any Form Six textbooks.
- Some of them have.
- Well, it is a 50-50 thing whether to go to a College or to go to Form Six.
- I am not sure. Probably one in Penang.

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|-----|--|--|
| 8. | What are your plans after Form Five? Are you happy with you Form Five results so far? | I intend to take a computer course. I'm quite happy but I can still do better. I did not do very well in my trial exam. |
| 9. | Who will finance your College/ Form Six studies? | My parents. Maybe I'll ask for a scholarship. |
| 10. | What do you intend to do after College? | After College I intend to go to a University. After I graduate, I would like to do my masters and then work. |
| 11. | Have your friends spoken to you about going to Form Six? Is this your decision? | Some of them have. I'm not sure but it is not other people's decision. |
| 12. | Did your parents speak to you about the kind of job you should do? | Yes, they advised me to take up suitable jobs. They advised me to do Engineering. |
| 13. | Did your parents ask you to go to Form Six? | They gave me choices. I would if I have the chance or if I get a scholarship. |
| 14. | Have you thought about going to a University? | Yes, I would if I could get a scholarship to go to a University. |

14. C. L. H.

Questions

1. Is Form Six difficult?
2. Has anyone talked to you about going to Form Six?
3. What are your plans after Form Five?
4. How well have you done in your Form Five so far?
5. Who will finance your studies?
6. What are your plans after the STPM examinations?

Answers

- I think so. My friends studying Form Six told me so.
- Other than my friends, I do not think so. My friends advised me not to go to Form Six because it is difficult.
- I'll work temporarily.
- I got a Grade One for both my mid-year and trial exams—which is better than I expected.
- My parents.
- I would like to study Veterinary Science.

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|-----|--|---|
| 7. | Have your friends spoken to you about going to Form Six? | Yes. Most of them do not want to go to Form Six. Some of them would prefer to have some twinning programme. |
| 8. | Is this your decision? | Mostly my parents'. I agreed with this decision. |
| 9. | Did your parents speak to you about the kind of job you should do? | No. They want me to do something that will make me happy. |
| 10. | Did your parents ask you to go to Form Six? | Yes. |
| 11. | Have you thought about going to a University? | Yes, I have. Probably to the UTM because I think my parents cannot afford to send me abroad. |
| 12. | Do you want to go to Form Six? | Actually, I don't want to but both my parents want me to. |
| 13. | Where would you like to study Form Six? | Hopefully at St. Xaviers Institution in Penang. |

15. Y. K. Y.

Questions

1. Are you sure of going to Form Six or to a College?
2. Will you change your mind about this?
3. Why do you want to go to a College?
4. Is Form Six difficult?
5. Has anyone talked to you about going to Form Six?
6. Where would you like to further your studies?
7. How well have you done in your Form Five so far?

Answers

- This depends. Maybe it will be "50-50". I have to see which is more suitable. This depends on my results and on my parents.
- I will stick to my choice.
- I want to go to a College because if I go to Form Six I'm not sure of passing. I have a friend who did not pass Form Six and she could not enter a University.
- I don't know—have not tried it.
- Yes, my parents, my uncle and my relatives know about this.
- In a College. My parents are thinking of sending me to America or I would like to do the local matriculation course, maybe in Penang.
- In the trial exam, I was 7th. Generally I did well. I improved in my Chemistry and Physics.

8. Who will finance your studies? My parents.
9. What are your plans after College? After College, I want to go to a University to study either Chemistry or Biology.
10. Have your friends spoken to you about Form Six? Yes, some of them have. Some do not want to go to Form Six.
11. Is this your own decision? Yes.
12. Did your parents talk to you about going to Form Six? They said it was up to me. Initially my mother said it would be better for me to go but later she said it was up to me.
13. Have you thought about going to a University? Yes, I have.

INTERVIEWS

SEKOLAH MENENGAH KEDUA (SECOND SECONDARY SCHOOL)

1. L. M.

| Questions | Answers |
|--|---|
| 1. Would you like to change what you wrote? | No |
| 2. You do want to go to Form Six? | Yes |
| 3. Why do you want to go to Form Six? | Because there is no alternative. |
| 4. How did you do in Form Five? | Quite well. Forecast examination 5 A1s and 2 A2s. |
| 5. If you go to Form Six, what stream will you want to take? | Arts. |
| 6. A friend told me that Form Six is not the answer, do you agree? | No. I don't. |
| 7. What do you want to be? | Not sure. |
| 8. Does this school help in your choice? | Yes. I think so. |
| 9. How about your parents? | No. My own choice. |

2. J. Z.

| Questions | Answers |
|--|--|
| 1. Would you like to change what you wrote? | No. |
| 2. You would like to go to Form Six? | Forced to. |
| 3. Why 'forced to'? | Because of financial problems. Not as expensive as going overseas. |
| 4. What stream would you want to take? | Arts—economics. |
| 5. Will someone support you? | Dad and mum. |
| 6. Has this school helped you to choose your career? | No. |
| 7. Why would you want to be an Economist? | There is a demand. I heard this. |
| 8. Where are you going to study your Form Six? | In Penang Free School—the nearest. |

3. L. M. S.

Questions

Answers

- | | |
|---|---|
| 1. Would you like to change what you wrote? | No. |
| 2. You do not want to go to Form Six? Why? | No. Difficult. |
| 3. Is Form Six difficult? | Yes. |
| 4. You want to take your A-levels? | Yes. |
| 5. What stream are you thinking of taking? | Arts. |
| 6. How well have you done in your Form Five so far? | O.K. |
| 7. Will there be someone to support you? | Father. |
| 8. Has the school helped you? | No. |
| 9. Do you want to change your ambition? Why? | No. Computer studies. Challenging and you learn many things. |

5. E. E. J.

Questions

Answers

- | | |
|--|---|
| 1. Would you like to change what you wrote? | No. |
| 2. Why don't you want to go to Form Six? | Waste of time. |
| 3. Why is it a waste of time? | Spend two years, it is a waste of time. Better to go to College. |
| 4. What stream are you thinking of? | Arts. |
| 5. Is Form Six difficult? | Yes. |
| 6. How well have you done in Form Five? | Average. In the forecast exam I had 4 As and 4 credits. |
| 7. Will there be someone to support you? | Yes, my father. |
| 8. Someone told me that Form Six is good for students, do you agree? | No. |

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|-----|---|---|
| 9. | Has this school helped you to choose your career? | Not really. |
| 10. | Do your parents tell you about what you should study? | Yes some suggestions. |
| 11. | What do they suggest? | Follow a course which has a twinning programme with another University. |
| 12. | What do you want to study? | Business and Marketing. |

4. O. B. C.

Questions

Answers

- | | | |
|----|---|---|
| 1. | Would you like to change what you wrote? Would you like to change your mind? | No. Hopefully not. |
| 2. | Would you like to go to Form Six? | Not really, but I have to. |
| 3. | You do not like to take A-levels? | No money for overseas study. |
| 4. | Is Form Six difficult? | Yes. |
| 5. | Do your parents tell you what you have to study? | No. |
| 6. | Is this your own choice then? | Yes. |
| 7. | What do you want to take up in the University? | Computer studies. Science if I have to change suddenly. |

6. H. D.

Questions

Answers

- | | | |
|----|---|---|
| 1. | Would you like to change what you have written? | No. |
| 2. | Would you like to go to Form Six? | Yes. |
| 3. | Is Form Six difficult? | Maybe. |
| 4. | What stream would you want to take up? | Arts. |
| 5. | How well have you done in your Form Five this year? | Average. I did not take the forecast exam. |

- | | | |
|----|--|---|
| 6. | Someone said that studying Form Six is a waste of time, do you agree with this person? | No. Even studying in a College will be the same. |
| 7. | Why do you want to go to Form Six? | To go to a University. |
| 8. | Which school would you like to go to for the Form Six? | Penang Free School. |
| 9. | Did your parents tell you what you must do? | My own choice. |

7. **Y. K.**

Questions

1. Would you like to change what you wrote?
2. Why do you want to go to Form Six?
3. Someone said that Form Six is a waste of time.
4. What stream would you be interested in?
5. How well did you do in your Form Five this year?
6. Will someone support you?
7. Have your friends influenced you to choose?
8. Did your family influence you?
9. How did they influence you?

Answers

- If possible I would like to go to a matriculation class.
- Chance for local University.
- Not if I get what I want to achieve which is to go to a local University.
- Science probably.
- Among the top students.
I had 9 As in the forecast exam.
- My parents.
- No. I want to do Medicine.
- Yes.
- My parents discussed with me.
My sister is in the University.

8. **L. L. P.**

Questions

1. Would you like to change what you wrote in the form?
2. Why don't you want to go to Form Six?
3. Someone said that Form Six is a waste of time. Do you agree?
4. What do you want to do after your SPM?

Answers

- No.
- It is tough in Form Six.
- Depends. If you want to go to a local University then I don't think so.
- Matriculation class.

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| 5. | At which school? | No. In the University. I'm not sure. |
| 6. | Does this school help you in your career? | Yes. |
| 7. | Do your parents tell you what career to choose? | Yes. |
| 8. | What do you want? | That I be an Economist. |
| 9. | Do you agree with them? | Yes. |
| 10. | Do you listen to your friends about what career to choose? | No. |

9. T. B. C.

Questions

Answers

- | | | |
|-----|---|---|
| 1. | Would you like to change your mind? | No. |
| 2. | Why do you want to go to Form Six? | It is because I cannot afford to go overseas. |
| 3. | Someone said that Form Six is difficult and a waste of time, do you agree? Why? | Not really. Form Six is specific. You can go to a College at any age, unlike Form Six which is for your age. |
| 4. | What stream are you thinking of following in Form Six? | Science. |
| 5. | How well have you done in Form Five? | Average only. I did not sit for the forecast exam. |
| 6. | Will there be someone to support you? | Yes, parents. |
| 7. | Do you think that Form Six is useful? | Yes, for those who want to go to the local Universities. |
| 8. | You want to be a doctor? | Yes, I have the thought. |
| 9. | Did your school influence you? | Yes. We had someone talking to us. |
| 10. | Did your friends influence you? | No. |
| 11. | Your parents influenced you? | It is my own decision. |

INTERVIEWS

SEKOLAH MENENGAH KETIGA (THIRD SECONDARY SCHOOL)

1. K. S. K.

| Questions | Answers |
|--|---|
| 1. Would you like to go to Form Six? | It depends on my results. |
| Would you change your mind about this? | No, I've decided. |
| 2. Why do you want to go to Form Six? | For further studies and to gain an opportunity to enter the University. |
| 3. Where do you intend to do your Form Six? | In this school. |
| What do you think of Form Six? | Some of my Lower Six friends told me that it is not difficult—and it is not the same as the Form Five subjects. |
| 4. Did anyone talk to you about this? | No one spoke about this. |
| 5. What are you going to do after Form Five? | Find a College or polytechnic and I'll try to get a job there. If my results are good then I'll come to this school. |
| 6. How well have you done so far in your Form Five? | Not very well. In the trial I only had 1 or 2 distinctions. |
| 7. Who will support you in Form Six? | My parents. |
| 8. What would you like to study in the University? | In the University I would like to study Engineering. |
| 9. Have your friends spoken to you about this? | Some only talked about going to Form Six. |
| 10. Did your parents speak to you the kind of job you should have? | No, they did not. They told me to study hard so that I can have a bright future. They feel that if I can enter the University I should. |
| 11. Which University would you like to attend? | I would like to attend the local University. I do not have enough to go abroad. It is expensive. |

2. O. H. F.

| Questions | Answers |
|--|--|
| 1. Do you want to go to Form Six? | If it is possible. |
| 2. Will you change your mind? Why do you want to go to Form Six? | No. I want to take a course in Pharmacy so I must study in Form Six. |
| 3. Where will you study your Form Six? | In Jit Sin. |
| 4. Is Form Six difficult? Has anyone talked to you about going to Form Six? | Yes. My mother and some of my friends have mentioned this in our talks. |
| 5. Is Form Six a waste of time? | No, I do not agree. Studying Form Six will take two years where I can learn new things to prepare me for a University education. |
| 6. What are your plans after Form Five? | I plan to improve my English and to help around the house. |
| 7. What do you want to do when you enter the University? | I want to take up a course in Pharmacy. |
| 8. Who will pay for your Form Six education? | My parents. |
| 9. Is going to Form Six your own decision? | Yes. |
| 10. Did your parents speak to you about the kind of job you should do? | They told me to be a Doctor or a Pharmacist. |
| 11. Is going to the University your own decision? Where will you study for your University education? | Yes—and my parents support my decision. Most probably University Sains Malaysia because it is in Penang. |

3. C. C. C.

| Questions | Answers |
|--|---|
| 1. Do you want to change what you wrote? | No. |
| 2. Will you go to Form Six? | Perhaps, I'll go to Form Six. |
| 3. Will you change your mind? | No, I don't want to change my mind because I want to get a place in the University. Besides, I think Form Six is exciting. |
| 4. Where will you study Form Six? | In this school because my ex-teachers will be here. |
| 5. Do you think Form Six is difficult? | I don't know. |
| Has anyone talked to you about going to Form Six? | I don't think so. |
| 6. Is Form Six a waste of time? | I don't think so. Moreover, there are many subjects to study and these subjects can prepare us for the University. I want to go to a local University because my parents cannot afford to send me overseas. |
| 7. What are your plans after Form Five? | After Form Five, I want to go to Form Six if I can get a place in the UTM, I will go there. |
| 8. Did you fare well in your exams so far? | I fared only averagely. In the final exam. I obtained what I expected and I'm happy with the results. However, I feel I can do better. |
| 9. Who will pay for your Form Six education? | My parents. |
| 10. What will you study in the University? | Electronic Engineering. |
| 11. Have your friends spoken about going to Form Six? | Yes. |
| 12. Is this your own decision? About going to Form Six? | Yes it is. |
| 13. Did your parents ask you to work after your Form Five? | No. |

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|-----|--|---|
| 14. | Did your parents know about your plans for the future? | I told them I wanted to become an Engineer and they agreed to that. |
| 15. | Did your parents speak to you about the kind of job you should do? | No. |
| 16. | Will you study in Malaysia? | Definitely. Not so expensive. |

4. T. L. Y.

Questions

Answers

- | | | |
|-----|--|---|
| 1. | Do you remember filling this form? Do you want to go to Form Six? | Yes. Actually, I've not made up my mind. If I can enter the UTM, then I'll do so. |
| 2. | Do you think Form Six is difficult? | Yes. One has to pass the STPM in order to enter the University. My friends have told me it is extremely difficult. |
| 3. | Have your friends spoken to you about Form Six? | A few of them have and they said they have made up their minds to go to Form Six. Some of my friends plan to go overseas. |
| 4. | Is Form Six a waste of time? | No—it is definitely not. It is not rational to say it is a waste of time because if it is a waste of time the Government would have stopped it. |
| 5. | What are your plans after Form Five? | I'll look for a job somewhere. |
| 6. | Did you fare well in your exams? | Pretty well. I'm happy with the result because I did better than I expected. My trial exam results were good. |
| 7. | Who will pay for your Form Six education? | My parents. |
| 8. | When you enter the University, what will you do? | I want to study Science. |
| 9. | Is going to the University your own decision? | Yes. |
| 10. | Did your parents speak to you about the kind of job you should have? | No. They give me freedom to make my own decisions. |
| 11. | Did your parents ask you to go to Form Six? Have you thought about going to the University? If so, where? | No. Yes, I have. Most probably I'll study in Malaysia and not to another country. |

5. N. S. H.

Questions

Answers

- | | | |
|-----|---|---|
| 1. | Did you fill in the form earlier? Do you want to go to Form Six? | Yes. I do not want to because I can go to a University without doing my Form Six. I can go to UTM. |
| 2. | Will you change your mind? Is Form Six difficult? | No. Yes. The subjects are very specific and more difficult than those in Form Five. I think it is one of the most difficult exams in the world. |
| 3. | Has anyone talked to you about going to Form Six? | Yes, my brother and some of my friends have spoken about going to Form Six. |
| 4. | Is Form Six a waste of time? | I think it is a waste of time for me. I want to go to UTM and not to the other Universities in Malaysia. My main objective is to go to a Malaysian University and not one abroad. |
| 5. | What are your plans after Form Five? | I'll help my father in his business. |
| 6. | Did you fare well in your exams? | I think so. My results were better than I expected but my trial exam results were worse than I thought. |
| 7. | Who will support your University education? | My brother. |
| 8. | What will you do when you enter the University? | I would like to study Aerospace Engineering. |
| 9. | Have your friends spoken to you about Form Six? | Yes. Some of them want to study Form Six but some want to attend College. |
| 10. | Is going to the University your own decision? | Partly. |
| 11. | Did your parents speak to you about the kind of job you should have? | No. I'm very free to choose what I want to do. |
| 12. | Have you thought about going to the University? If so, where? | Yes. In the UTM, Malaysia. |

6. O. Y. J.

| Questions | Answers |
|--|---|
| 1. Do you remember filling this form? Do you want to go to Form Six? | Yes. I feel that if I were to go to Form Six, I'll find it difficult—like I found Form Five difficult. I am afraid because those in Form Six have said that it is difficult. |
| 2. Will you change your mind? | No. |
| 3. Is Form Six difficult? | Yes. |
| 4. Has anyone spoken to you about Form Six? | Yes, my friends and my mother have talked about it. |
| 5. Is Form Six a waste of time? | Yes. Form Six takes up two years. If we go to a College we can save time./ If we do not pass the STPM, we would have wasted two years. |
| 6. Where will you further your studies after Form Five? | I want to study in a College—The Institute of Art of Malaysia. |
| 7. What are your plans after Form Five? | I want to work—either in Malacca or Singapore. I have not decided on the type of job. |
| 8. Did you fare well in your exams? | No. |
| 9. Who will support your further studies? | Perhaps, my mother will pay half of my fees and I'll take care of the other half. |
| 10. What are your plans after College? | I will work as a designer or study further. |
| 11. Have your friends spoken about going to Form Six? | Yes. |
| 12. Is not going to Form Six your own decision? | Yes. |
| 13. Did your parents speak to you about the kind of job you should have? | My mother said my job is my choice. |
| 14. Did your parents ask you to go to Form Six? | No. |
| 15. Have you thought about going to a University? | Yes, maybe to the UPM. (Agriculture University of Malaysia). |

7. N. C. H.

| Questions | Answers |
|---|---|
| 1. Do you remember filling this form? Do you want to go to Form Six? | Yes. If there is no other choice. I want to go to the UTM. If I can't go then I'll do Form Six. A lot depends on my Form Five results. |
| 2. Will you change your mind? | No. I want to go to Form Six, if there is no other choice for me. |
| 3. Where will you study Form Six? | In this school. |
| 4. Is Form Six difficult? | Yes, I've seen my friends studying very hard—they must struggle all the time. |
| 5. Has anyone talked to you about Form Six? | Yes, my brother has spoken to me and he has gone to the UTM. |
| 6. Is Form Six a waste of time? | No—because we can learn many things. |
| 7. What are your plans after Form Five? | I'll stay at home and wait for the results. |
| 8. Did you do well in the exams? | I had average results—in my trial exam. |
| 9. Who will pay for your Form Six education? | My father. |
| 10. When you enter a University what do you want to do? | I want to study Engineering. |
| 11. Have your friends spoken about Form Six? | Very few have but there are some who want to go to Form Six. |
| 12. Is going to Form Six your own decision? | Yes. |
| 13. Did your parents ask you to go to Form Six? | No. |
| 14. Have you thought about going to a University? If so, where? | Yes, either to the UTM or to the USM but not overseas. Costs less. |

8. T. L. Y.

Questions

Answers

- | | |
|--|--|
| 1. Have you filled in this form? | Yes. |
| Do you want to go to Form Six? | No. It could be a waste of time if I don't pass my STPM. |
| 2. Will you change your mind? | No—but I would like to see my SPM results. |
| 3. Is Form Six difficult? | Yes. |
| 4. Has anyone talked to you about Form Six? | Yes, my brother and my friends have mentioned going to Form Six. |
| 5. Is Form Six a waste of time? | No—it depends on the person. If the person has the ambition to go to Form Six then it will not be a waste of time. |
| 6. What are your plans after Form Five? | I want to go to a College, but I've not decided on what to study. |
| 7. Did you do well in your exams? | Okay. I did well in my trial exam. |
| 8. Who will pay for your College education? | My father. |
| 9. Have your friends spoken about going to Form Six? | Yes. |
| 10. Is not going to Form Six your own decision? | Yes. |
| 11. Did your parents speak to you about the kind of job you should have? | No. |
| 12. Did your parents ask you to go to Form Six? | No. |
| 13. Have you thought about going to a University? | Yes, I have. |

9. T. Y. P.

Questions

Answers

- | | |
|--|---|
| 1. Do you want to go to Form Six? | I think that Form Six is a waste of time. If I cannot pass the SPM exam, then it will be a waste of time and I cannot go to the University. I am not so sure about my achievement in class. |
| 2. Would you like to change your mind? | No. |
| 3. Is Form Six difficult? | Depends on the subject. The General Paper should be easy. But the Science subjects are quite tough. I'm in the Science stream, the Science class now. |
| 4. Has anyone talked to you about going to Form Six? | My friends have talked about going to Form Six. |
| 5. Someone told me that Form Six is a waste of time. Do you agree with this? | I agree it is a waste of time. |
| 6. Why do you not want to go to Form Six? | It's better not to. I'll wait for my results after the exam before thinking about the future. |
| 7. So you intend to go to a College? | Probably take a course for computers in Penang. |
| 8. Who will support you? | My parents. |
| 9. How well have you done in your exams? | Quite O.K. Second in the form. Forecast exam I had 9 As. |
| 10. What do you intend to do after College? | I intend to study business. MBA, possibly. |
| 11. Have your friends spoken to you about going to Form Six? | Yes, my friends have. |
| 12. Did you make this decision yourself? | I made the decision myself, and my parents will support me. I should be a Lawyer or in Business. |
| 13. Did your parents ask you to go to Form Six? | No, they did not. |
| 14. Have you given some thought about going to the University? | Yes. I've thought about it and probably in the U.S. |

INTERVIEWS

SEKOLAH MENENGAH KEEMPAT (FOURTH SECONDARY SCHOOL)

1. O. W. L.

| Questions | Answers |
|---|--|
| 1. Did you fill in this form? How do you feel about going to Form Six? | Yes It is a waste of time. |
| 2. Would you like to change your mind? | No. Do not want to go. |
| 3. Why don't you want to go? | It is difficult. If you do will then it is worth (going). |
| 4. Has anyone talked to you? | There are some Form Five friends who talked to me. |
| 5. Someone told me that Form Six is difficult, do you agree with this? | It depends. If you cannot follow (the lessons) it is a waste of time. If you can follow the class then it is not. |
| 6. Do you want to go to a College? | I want to find a course to help me. |
| 7. What are going to do? Will there be someone to support you? | After Form Five I am going to work part-time and take a course. A computer course in Georgetown. No support, that's why I'll work. |
| 8. Have you spoken to friends about Form Six? | Some friends have spoken to me. |
| 9. Did you make this decision yourself? | It is my own decision not to go to Form Six. |
| 10. Did your parents tell you? | My sister studied in Form Six. My parents asked me to go. My sister said it is difficult. |
| 11. Have you given some thought about going to a University? | I have thought about going to a University, maybe outside Malaysia. |

2. C. C.

Questions

Answers

- | | |
|--|---|
| 1. How do you feel now about going to Form Six? | I have to work hard. But actually I do not want to go. I want to get a good result and then I can apply to go to a University in U.T.M. or U.P.M. |
| 2. Will going to Form Six help you? | It can help me to go to a University if I take Form Six. |
| 3. In what school? | In any school with a science stream. |
| 4. Is Form Six difficult? | As far as I know I think it is. |
| 5. Someone told me that Form Six is a waste of time. Do you agree? | Maybe. It is a waste of time if they cannot pass the STPM. I cannot say it is a waste of time. If I cannot do it well then it is a waste of time. Maybe I can learn more. |
| 6. What will you do after Form Five? | I will get a job as a teacher. |
| 7. How well have you done in your Form Five? so far? | I am not satisfied with what I have done in Form Five. I cannot achieve my ambition. I wanted to score more A's. I am taking 10 subjects. |
| 8. What do you intend to study? | I want to study engineering. |
| 9. Did your parents speak to you about this job? | It is my own decision. |
| 10. Where do you want to study? | In Malaysia. I like to study here. |

INTERVIEWS

STUDIED FORM FIVE IN SEKOLAH MENENGAH PERTAMA (FIRST SCHOOL) SELECTED FOR FORM SIX IN SEKOLAH MENENGAH KETUJUH (SEVENTH SECONDARY SCHOOL)

1. Y. K. Y.

| Questions | Answers |
|---|---|
| 1. Do you remember filling in the forms last year? | Yes I filled the forms. |
| 2. Can you remember saying you did not want to go to Form Six? | Yes. |
| 3. Are you happy you have been selected? You have done well to study in Form Six? | I got a chance to go to a University in Malaysia. |
| 4. After your exams did you feel that you would have a chance? | After the exams I felt I had a chance. I did fairly well. |
| 5. Now that you are here how do you feel? | There is no pressure now, but later maybe. |
| 6. How are you following your lessons? | For all the subjects O.K. Except for Physics. |
| 7. After Form Six, what do you intend to do? | To go to the University to take up an Engineering course. |
| 8. Are you in the Arts or Science stream? | Science. |
| 9. Do you have any particular career in mind? | Mechanical Engineer |
| Did you change your mind since taking the exam? | Did not change. Still stick to it. |
| 10. How do your parents feel about your being in Form Six? | Happy also. |

2. C. C. B.

| Questions | Answers |
|--|---|
| 1. Do you remember filling in this form last year? | Yes, I did fill it. |
| 2. Can you remember saying to me you wanted to go to Form Six last year? | Yes, I want to go to Form Six. |
| 3. Do you want to attend our local Universities? | Yes. Cheap. |
| 4. Are you happy that you have been selected? | Yes. The government pays for the fees. I pay a little. |
| 5. Now that you are here, how do you feel? | Good. But I am going to Tunku Abdul Rahman College. |
| 6. After your exam did you feel that you would have a chance? | Not too good. |
| How well did you do? | Not satisfied, maybe could have been better. |
| 7. Are you following your class well? | Difficult. Especially Physics. |
| 8. After Form Six, what do you intend to do? | I don't want to complete Form Six. My father wants to send me to Tunku Abdul Rahman College. |
| 9. Are you in the Arts or Science stream? | Science stream. |
| 10. Do you have any particular career in mind you would like to take up? | In Tunku Abdul Rahman College I will take up Building Engineering. |
| 11. How do your parents feel about your being here now? | Don't know. My father says it is better to go to Tunku Abdul Rahman College. I don't know the reason. |
| 12. Do you know of any friends who said they did not want to go to Form Six, but are here? | Yes. |

3. T. C. F.

| Questions | Answers |
|--|---|
| 1. Do you remember filling the form last year? | Yes, I did. |
| 2. In the form, can you remember what you wrote? | A little. |
| You did not want to go to Form Six? | No, I did not want to. |
| 3. Are you happy that you have been selected? | Little bit. Because it is tough. |
| 4. Now that you are here, how do you feel? | Worried. Too much to learn in a short time. |
| Are you going to change your mind? | No. Complete the course. |
| 5. After the exam, did you feel that you had a chance? | O.K. not very well. |
| Were you confident? | Quite confident. |
| 6. How are you following your lessons? | So far so good. Except for Physics. |
| 7. Are you in the Arts or Science stream? | Science. |
| 8. After Form Six, what do you intend to do? | Depends on my results. |
| 9. Do you have any particular career you want to pursue? | Not sure, depends on my results. Medical, maybe. |
| 10. How do your parents feel about your being here now? | They say it's good. It's cheap. In the College, more money. |
| 11. Do you have any friends who said they did not want to go to Form Six but are here studying in this school in Form Six? | I don't know. Maybe I can find out. |

4. L. H. H.

| Questions | Answers |
|--|------------------------|
| 1. Do you remember filling in the form last year? | Yes, I have done that. |
| 2. Can you remember saying you did not want to go to Form Six? | I cannot recall. |

- | | | |
|-----|--|--|
| 3. | Are you happy now that you have been selected? | Yes. More chance to go to a University. For me it's easier and don't have to spend more. Taking A-levels more expensive. |
| 4. | Now that you are here how do you feel? Will you change your mind? | I feel very happy. I am applying for U.P.U. If I get a matriculation course I'll go. |
| 5. | After your exam, did you feel that you would have a chance? | Yes. I did well in Accounts and in General Science. |
| 6. | Are you able to follow your class lessons? Is it difficult? | No problem, except for Maths. Difficult because I do not have strong base. I did not do Add. Maths. I will have tuition in three subjects. I just dropped Maths three days ago. |
| 7. | After Form Six, what do you want to do? Was this the choice you made in Form Five? | I intend to take up Accounts. In Form Five also. I did Principles of Accounts. |
| 8. | Are you in the Arts or Science stream? | Arts. |
| 9. | Do you want to pursue any particular career? | Accountancy. I'll do the course in Malaysia. |
| 10. | How do your parents feel, now that you are in Form Six? | They feel very happy. I have two sisters who have taken Form Six. Both took Science. If I take the matriculation course, I can go in much more easily. |
| 11. | Do you have any friends who said they did not want to go to Form Six, but are with you in this school? | One friend. |

5. J. C. (f)

Questions

Answers

- | | | |
|----|--|---|
| 1. | Do you remember filling this form? | Yes. |
| 2. | Do you remember saying you did not want to go to Form Six? | Yes, I did not want to come. |
| 3. | Are you happy you have been selected? | Yup (yes). After that I changed my mind. It is a good chance. |
| 4. | Now you are here you happy? | Happy. |

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|-----|--|--|
| 5. | After the exam, did you feel that you would have a chance? | I did not think about it. I made my decision after I received the (official) letter. It came to me as a shock. |
| 6. | Are you following your lessons? | So far so good. Only difficulty in Maths. |
| 7. | After completing Form Six, what do you intend to do? | To go to the University. |
| 8. | Are you in the Arts or Science stream? | Arts. |
| 9. | Do you have any particular career you want to pursue? | In Business studies. |
| 10. | How do your parents feel? | They support me. Happy, They want me to study in Malaysia. |
| 11. | Do you have any friends who said they did not want to go to Form Six but are here in Form Six with you in this school? | I don't know. |
| 12. | What is your ambition? | Accountant. Doing the course in Malaysia. |

INTERVIEWS

STUDIED IN SEKOLAH MENENGAH KEDUA (SECOND SCHOOL) AND SELECTED FOR FORM SIX IN SEKOLAH MENENGAH KELAPAN (EIGHTH SECONDARY SCHOOL)

1. K. N.

| Questions | Answers |
|--|--|
| 1. Did you say that you wanted to come back to Form Six? | Yes, I did. |
| 2. Now you are in Form Six, how do you feel? | I feel happy. |
| 3. How well did you do in your exam? | Average. I got a Grade I. |
| 4. Last year you told me you wanted to come back to Form Six? | Yes. |
| 5. How are you following your classes? | O.K. |
| 6. After Form Six, what do you intend to do? | Enter a University. |
| 7. What course do you intend to do? | Business Ed. I will see which University will accept me. |
| 8. Any particular subject you are studying now? | Economics and Accounts. |
| 9. How do your parents feel about you taking Form Six? | They feel happy with my achievement. |
| 10. Are there any friends of yours who said they want to go to Form Six and they are here? | A number of them. |

2. T. B. C.

| Questions | Answers |
|---|-------------------------------------|
| 1. Do you remember I spoke to you before? | Yes. |
| 2. Do you remember you said you wanted to come to Form Six? | Yes. |
| 3. Now you are in Form Six, how do you feel? | Quite O.K. Sort of happy. |
| 4. How did you do in your exam? | I had 4 As and 5 credits. |
| 5. After Form Six, what will you do? | I will apply to a local University. |

- | | | |
|-----|---|------------------|
| 6. | What course are you thinking of? | Pharmacy. |
| 7. | Is there a particular subject you are studying now? | Yes, Chemistry. |
| 8. | How do your parents feel about your being here now? | Quite satisfied. |
| 9. | Were you motivated to come to this particular school? | Yes. |
| 10. | Have you any friends from your previous school here? | I'm not sure. |

3. O. B. C.

Questions

Answers

- | | | |
|-----|--|---|
| 1. | Do you remember I spoke to you before? | Yes, at the end of our recess. |
| 2. | Did you tell me you wanted to do your Form Six? | Not really. But I said if I had the chance. |
| 3. | Now you are in Form Six, how do you feel? | Like a student again. O.K. I think. |
| 4. | After your Form Six, what will you do? | With good results I'll go to a University, if not I'll take courses with Colleges, hopefully Mass Communication or in Hotel Management. |
| 5. | What career would you like? | Journalist. Or Public Relations. |
| 6. | What class are you in now? | Arts. |
| 7. | How do your parents feel? | They have no objections. They hope I'll further my studies. |
| 8. | Do you have friends who said they wanted to be in Form Six who are here with you in this school? | About four or five of them. |
| 9. | Were you motivated to come? | No. |
| 10. | What do you mean? | To go to gain exposure and to have experience as a foreign student. |

4. J. P. A. A.

| Questions | Answers |
|---|---|
| 1. How do you feel about coming to Form Six? | I don't intend to stay. I will be going somewhere else. |
| 2. Can you go without Form Six? | I'll apply for matric. |
| 3. Last year did you say you wanted to go to Form Six? | No. I did not. |
| 4. You will not change your mind? | I still want to go to matric. |
| 5. Can you follow what is taught? You do not find the lessons difficult? | Yes. Only in Maths. |
| 6. What stream are you in? | Arts. |
| 7. What do you intend to study? | Accounts. |
| 8. Any particular subjects you are doing now? | Accounts and English. |
| 9. How do your parents feel? | They are quite happy. Because I'm not doing nothing. |
| 10. You have friends who said they want to take Form Six with you in this school? | A few. |
| 11. Did your friends encourage you to take Form Six? | No. Most of them do not want to do Form Six, here or in any other school. |

5. C. E. I.

| Questions | Answers |
|---|---|
| 1. Would you like to change your mind, about your being in Form Six? | No. |
| 2. How do you feel about coming to Form Six? | O.K. Not bad, just need a little time to adapt myself to the new environment. |
| 3. Last year when I spoke to you, you mentioned you wanted to come to Form Six? | Yes, I did. |
| 4. You will not change your mind? You are happy? | I don't think so. |
| 5. Can you follow the lessons in your class? | Yes. |

6. What stream are you in? Arts stream, temporarily.
I want to switch for Science stream.
7. What do you intend to study? Accountancy.
8. Any particular subjects you do now? Malay, Economics, Accounts,
Mathematics and General Paper.
9. How do your parents feel? They support me.
10. Do you have friends who said they wanted
to come to Form Six studying here with you? Yes.
11. Did your friends influence you to come? No, they did not.

STUDIED IN SEKOLAH MENENGAH KETIGA (THIRD SECONDARY SCHOOL) AND SELECTED FOR FORM SIX IN SEKOLAH MENENGAH KETIGA (THIRD SCHOOL)

1. T. L. Y.

| Questions | Answers |
|--|-------------------------------------|
| 1. Do you remember filling the form last year? | Yes. |
| 2. How do you feel now that you are back in the school doing Form Six? | Happy. |
| 3. How well did you do in the exam? | Quite well. |
| 4. Last year you wrote in the form, you wanted to come back? | Yes. |
| 5. Did you say you wanted to come back? To this school? | Yes, I think so. Yes. |
| 6. After Form Six what do you intend to do? | I want to go to a local University. |
| 7. Any particular area you are interested in? | Medicine or maybe BioScience. |
| 8. How do your parents feel now that you are back in your own school for Form Six this year? | Quite happy also. |
| 9. Do you have friends who wanted to be in Form Six and are in Form Six in this school? | Quite a number. Many I think. |

2. N. P. C.

| Questions | Answers |
|--|--------------------------------|
| 1. You filled a form like this last year? | I did. |
| 2. How do you feel about coming back for Form Six in this school? | Satisfied and happy. |
| 3. How well did you do in your exam? | I did very well. |
| 4. Last year you mentioned you wanted to come back to Form Six? This school? | Yes. Yes, its good. |
| 5. You will not change your mind? | No. |
| 6. Can you follow the lessons in your class? | Yes. I'm in the Science stream |

- | | | |
|-----|--|---|
| 7. | After the Form Six exam, what do you intend to study? | To go to a University. May be locally. |
| 8. | Any particular subject you are interested in? | I have not decided. |
| 9. | How do your parents feel about your doing Form Six in this school? Can they pay the expenses here? | Quite a lot. |
| 10. | Do you have any friends who said they wanted to study Form Six here and are back in this school? | Quite a lot. |

3. N. S. H.

Questions

Answers

- | | | |
|-----|--|---|
| 1. | You filled a form like this last year? | Yes. |
| 2. | How do you feel that you are back for Form Six? | I feel that Form Six is more important than going to U.T.M. (for the matriculation) because in the school we can experience more. |
| 3. | How well did you do in the Form Five exam? | For me, I think I did well. |
| 4. | Last year did you want to come to Form Six? Back to this school? | Yes, I wanted. I did not want to go to a College. |
| 5. | You are not going to change your mind? | I think so. |
| 6. | Can you follow the lessons in class? | I am only in Form Six for three days. But I have confidence I can do it. |
| 7. | Did you tell me last year you wanted to come back? | Yes. I did well in the trial exam. |
| 8. | After completing your Form Six what do you intend to study? | Engineering. |
| 9. | How do your parents feel now? | They feel happy. |
| 10. | Do you have any friends who said they wanted to be here and are back studying Form Six here? | I do not know. But most of my friends did well and are back maybe. |

INTERVIEWS

STUDIED IN SEKOLAH MENENGAH KETIGA (THIRD SECONDARY SCHOOL) AND WHO DID NOT GO BACK TO FORM SIX

1. T. Y. P.

| Questions | Answers |
|--|--|
| 1. Do you remember filling out the form for me last year before the Form Five S.P.M. examination? | Yes. I did that. |
| 2. You said you did not want to go back to Form Six. Is that right? How did you feel after the exams? | Yes. I felt alright. |
| 3. You felt that you did well? | Yes. |
| 4. Are you happy studying in this College? How do you feel now that you aren't coming back? | I feel happy now that I am in the International College. I feel that I've made the right choice. |
| 5. Do you think that following that course is more useful than being in Form Six? | Yes. Because it will give me more options. |
| 6. You have done well in your Form Five exams, do you think you can do just as well in your coming exam? | Yes. I think I can do well in the Australian matric. I will do well in Form Six, if I take double Maths. |
| 7. Did your friends advise you not to stay in Form Six? | Yes. |
| 8. Have you any friends studying with you? Are your parents satisfied with the International College? | Yes. About six of them. Yes. They can pay for the tuition. |
| 9. Will you change your mind about completing the course here in the International College? | Yes, if there are options. |
| 10. What are you going to study? | Actuarial Science. |

2. **K. M. S. (f)**

| Questions | Answers |
|---|--|
| 1. Do you remember filling the forms last year? | I remember the forms I filled in. |
| 2. You are now not coming back to Form Six? Why? | No. I have no confidence. |
| 3. Last year, in the form you said you were not coming back, is that right? | Yes. I am not coming back because of my Bahasa Melayu. I got a P7. |
| 4. How do you feel, now that you are not coming back? | I feel disappointed. |
| 5. Before the exams, how did you feel about your chances? | Good. Yes, because in class, I was the second girl in the exam. |
| 6. What do you feel about your SPM result? Your results are good. | I feel unhappy. I have a credit in English. I am not offered a place. |
| 7. Did your parents advise you to go to Form Six? | Yes. They hoped I'll attend, get a place. |
| 8. What do you want to study? | Accountancy. |
| 9. What are you doing now? | I am in a College-Perkim Goon. |
| 10. Will Form Six be better? Will Form Six have been a help to you? | I don't know. I heard the government is going to stop Form Six, may cancel the Form Six classes. |
| 11. Would you like to take A-levels? | No. |
| 12. Had you been given a place, if you had a credit in Bahasa Melayu, would you be happy? | Yes, very happy. |

3. **C. K. S.**

| Questions | Answers |
|--|--|
| 1. Do you remember filling in the form? | Yes. |
| 2. Are you coming back to do your Form Six? | No. I am now studying in INTI College. |
| 3. Last year when you were in Form Five, did you want to go to Form Six? | No. I did not want to. |
| 4. Did your parents advise you to go to Form Six? | My parents want me to go. |

- | | | |
|----|--|--|
| 5. | How do you feel, not studying Form Six? When did you actually decide not to study Form Six? | Nothing. Before the SPM exam. |
| 6. | Did your friends advise you not to go to Form Six? | No. But friends used to talk about it. Friends said Form Six was difficult. |
| 7. | What do you actually feel about studying in a College? | My parents will pay for me to go overseas. |
| 8. | You really feel that Form Six is of no help to you? | I feel that it is true. |

4. N. A. N.

Questions

Answers

- | | | |
|----|---|---|
| 1. | Do you remember filling in the form? | Yes, I did. |
| 2. | Now you are not going to do your Form Six? | No. |
| 3. | Last year, in your form you did say you wanted to? And I asked you? | Yes. |
| 4. | You wanted to go, but the results are not sufficient. Is this so? | I have a Grade 2 and an aggregate of 27. |
| 5. | Do you intend to go to another school? | Now I'm in a College. I am in Kolej Kommuniti Bukit Mertajam. |
| 6. | What do you intend to take up? | I am taking the L.C.C.I. course. It is an accountancy course. |
| 7. | You would still want to have a professional qualification? | Not sure for now. I am interested in the Accounts side. |
| 8. | What do you really want to be in the future? | A Manager. |

5. O. P. T. (f)

Questions

Answers

- | | | |
|----|--|--|
| 1. | Do you remember filling in the form? | Yes. |
| 2. | Are you going to study in Form Six? | No. I am studying in Informatics. It is a College. I have not started yet. |
| 3. | Last year in Form Five, you mentioned that you did not want to do your Form Six? | No. |

- | | | |
|----|---|---|
| 4. | Even in Form Five you did not want to? | Because I felt I cannot pass the SPM exam. |
| 5. | How do you feel now you are in Form Six class? | No pressure. |
| 6. | Did your friends advise you not to go to Form Six? | No, they did not. |
| 7. | Did you say that Form Six is difficult? | Yes. Worried I cannot pass. |
| 8. | Can your parents pay for your course? What do you want to take up? | Yes. Work related to computers. |
| 9. | You feel that Form Six is no use to you? Why do you say "no"? | No. It is hard. It has own advantage. Can broaden a student's knowledge. |

6. Y. L. P.

Questions

Answers

- | | | |
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| 1. | Do you remember filling in the form? | Yes. |
| 2. | You are not coming back for your Form Six? Why? | No. I am studying in Informatics. It is a centre for Computer Science. |
| 3. | Last year did you say you did not want to do your Form Six? | I cannot remember. Yes, I did not want to. |
| 4. | How do you feel now you are not in Form Six? When did you decide? | I feel nothing. Just the same. Before the SPM exam. |
| 5. | Did your friends advise you not to go to Form Six? | No. |
| 6. | Did your parents advise you, how about them? | No, they did not. |
| 7. | You feel that Form Six will not be able to help you? | Yes. |
| 8. | What career would you like to take up later? | Not sure. I'll find out after my course. Something to do with computers. |