

**THE UNIVERSITY OF ALBERTA  
SELECTED INDICATORS OF HIGH SCHOOL  
STUDENTS' POST-SECONDARY PLANS**

by



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## ABSTRACT

The purpose of this study was to examine the relationship between the post-secondary plans of some grade twelve high school students and certain selected predictor variables, namely socioeconomic status, community of residence, religion, ethnicity, family size, high school program, average grades, age, sex, and value orientation.

The conceptual framework upon which this study was based viewed the students' decision-making process as being influenced by their parents, their peer groups, the school attended, and individual characteristics. Hypotheses were developed, based on review of related literature, to investigate the relationships between the various influential factors and the students' choice of post-secondary options, which included university, junior college, technical institute, other, and none.

The sample consisted of 526 urban and rural grade twelve students from both the public and private school systems in Alberta. The data were collected by means of a three-part questionnaire. Part one solicited demographic and socioeconomic information from the students. Part two required the students to indicate their plans for their post-high school future, and part three consisted of a Differential Values Inventory to which the students were asked to respond.

The majority of students indicated an intention to continue their education beyond high school by attending one of the institutions listed.

An investigation of possible parental influence showed that a significant relationship existed between the predictor variables, socioeconomic status and location of the home, and the post-secondary plans of high school students. No significant relationships were found between students' plans and religion, ethnicity, and family size.

Two predictor variables were posited as indicators of school influence, program of study and average grades. Both of these variables were significantly related to the students' choice of post-high school plans.

The age of the students was significantly related to their post-secondary plans, while sex was found not to be related to students' post-high school options.

The students' value orientation on the traditional-emergent continuum was not significantly related to their choice of post-secondary options. Significant differences were found in the traditional subscale, future-time orientation when students were classified by their choice of post-secondary plans. Similar results were obtained when the emergent subscales, hedonistic tone and group conformity, were examined.

There were no significant differences in the traditional subscales; work-success ethic, rigid discipline, and personal independence when students were grouped by their choice of post-secondary options. Nor were significant differences found in choices between the groups based on the emergent value orientation or the subscales, other directed and sociability.

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## Chapter 1

### THE DEVELOPMENT OF THE STUDY

#### INTRODUCTION

Society has always placed a great emphasis on the development of its youth. A major aspect of this development is the education of the young to fit the roles on which society's survival depends. "Educating its young is probably a society's second most fundamental task - second only to the problem of organizing itself to carry out actions as a society". (Coleman, 1963:1) In recent years this same society has been shocked by its inability to predict which direction youth will take when determining their future in society in general, and post-secondary education in particular.

Conditions in society have changed dramatically in recent years and these changes have had their effect on the plans and aspirations of high school students. This can be demonstrated by the drop in enrolment at the university level in the past two years.

Many studies have been completed which attempt, not only to determine what a student will do after high school, but also to discover why a student makes a particular choice. Knill (1963) attempted to explain the behavior of high school students by demonstrating that there was a different value orientation between high school students and society in general, which he referred to

as the 'teenage sub-culture'. He found that although students differed among themselves depending upon such factors as their community of residence, sex, grades in school, and the school attended, there appeared to be one adolescent sub-culture with agreement on certain shared values common to the students.

Parents, teachers, and friends have been considered as highly influential in the decision-making process of a high school student. Friesen (1969) found that the two most influential groups were peer groups and parents and that the teacher could not be considered a major factor in the students' decision-making in Western Canada. This study confirms a survey conducted by Coleman (1963) in the United States, which examined high school students in relation to the characteristics leading to satisfaction in high school.

The level of socioeconomic status to which the parents of the high school student belongs has been widely used in studies as an indicator of student's post-secondary plans, particularly in relation to college attendance. Friesen (1967) illustrated the high degree of relationship that existed between students academic aspirations and socioeconomic status by showing that proportionately many more high socioeconomic status students planned to continue their education than did students from medium and low socioeconomic backgrounds. Cathcart (1967) found that more high socioeconomic status students enrolled in the high school matriculation program and planned for university than any other status group.

Keoyote (1971) found a positive correlation between socioeconomic status and aspirations and for university education. He

also found a positive correlation between students who did not intend to continue their education and low socioeconomic status. Other influential factors could include the religious and ethnic background of the student, program studied in high school, grades attained in high school, and the size of the student's family.

The extent to which any or all of these factors influence a high school student's choice of post-secondary options was the main concern of this study. The selected characteristics and a student's value orientation were posited as some possible indicators of the student's post high school plans.

#### STATEMENT OF THE PROBLEM

##### The Problem

The main purpose of this study was to investigate the relationship of the post-secondary plans of some senior high school students in Alberta and certain selected variables. The intent was to investigate the extent to which the selected variables can be considered indicators of a choice of post-secondary options by grade twelve students. The major quest of this study was the following: What relationship exists between the choice of post-secondary options and age, sex, socioeconomic status, high school program studied, average grades in high school, religion, ethnic background, family size, and value orientation.

##### Sub-Problems

1. What were the post-secondary plans of the grade twelve

students for the year (1971) following graduation from high school?

2. Are the plans of these students related to their traditional or emergent value orientation when compared on the basis of Friesen's (1970) Differential Values Inventory?

2.1 Are the students who chose university, junior college, technical institute, other, or none significantly different when compared on the basis of the traditional value orientation and the four subscales; work-success ethic, future-time orientation, personal independence, rigid discipline.

2.2 Are the students who chose university, junior college, technical institute, other, or none significantly different when compared on the basis of the emergent value orientation and the four subscales; other directed, hedonistic tone, sociability, and group conformity.

3. Are the students' post-secondary educational plans related to their age?

4. Are the students' post-secondary plans related to their sex?

5. Are the students' post-secondary plans related to their socioeconomic status?

6. Are the students' post-secondary plans related to their grades?

7. Are the students' post-secondary plans related to their program of study?

8. Are the students' post-secondary plans related to religious preferences?



9. Are the students' post-secondary plans related to their ethnic background?
10. Are the students' post-secondary plans related to their family size?
11. Are the students' post-secondary plans related to their community of residence?

#### SIGNIFICANCE OF THE STUDY

The process of educational and occupational choice among secondary school students is a complex one, influenced by a wide range of factors. A number of valuable research studies have been conducted in this area in recent years but knowledge about the articulation between the educational and occupational plans of young people still remains fragmentary. The importance of further study in this area was emphasized by Brenton (1967:4):

What remains obscure, however is the whole problem of how young people come to make educational and occupational choices; to what extent the process is one of rational planning and decision-making or one of drift and haphazard allocation among available jobs; whether the way in which young people make their choices is fairly standardized or varies systematically among different age and sex groups, various regions, types of schools and educational programmes, and among contrasting family and community backgrounds.

The conceptual framework of this study is based on the belief that students are influenced by the social systems to which they belong and that each social system has certain factors or indicators which can predict the students' choice of post-secondary options.

The theory that values are changing and that various social systems will have differing values which tend to create conflict is

proposed by Riesman (1950). This theory indicates that there is a need for educators to become aware and to understand the emerging values of their students in order to capitalize upon the strengths of these social systems for a more realistic education at both the high school and post-high school levels.

The results of this study can assist educators at the secondary level in providing an improved system of education for high school students by being more aware of the individual student needs and aspirations. It can aid the teacher in his relationship with the student on both an individual and a group basis, allowing him to evaluate better the behavior of his class and open channels of communications which will be of benefit to himself and his pupils. Guidance counselors may be better informed and therefore better prepared in helping students to understand themselves and their problems. High school administrators can be aided in the overall administration of the school and in the planning of high school programs by being better informed of the plans of their students.

At the post-secondary level, knowledge of prospective student needs and aspirations can aid in the planning of educational facilities. The information obtained might be valuable to: the universities, the Alberta Colleges Commission, the institutes of technology and agricultural colleges in planning for the future.

Campbell (1971:76) in a discussion of the trends of post-secondary education in Canada, emphasizes the need for studies such as this one, by stating:

A fourth trend is the increased effort to clarify the basis

of articulation between community colleges, universities, and high schools. Much more information is needed than presently exists regarding the flow of students from secondary schools through colleges and universities.

Another significant aspect of this study is that it should contribute to the growing body of knowledge on the adolescent group and it might give some indication of the reasons for the recent decrease in projected student enrolment at some post-secondary institutions in Alberta. Previous research has not been faced with this aspect of student plans and aspirations, since the decrease in projected student enrolment has occurred only in the past two years.

#### DEFINITION OF TERMS

##### Values

A basic definition of values, which has been proposed by C. Kluckhohn (1959:395) and accepted by many other researchers can be applied here:

A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable, which influences the selection from available modes, means and ends of action.

This concept emphasizes the desirable - what is felt to be the correct course for the individual to undertake - it also implies that individuals or groups may select differently from the available modes, means, and ends of action. This is further suggested by Thompson (1962:514) who refers to values or attitudes as:

Mediational states within the individual that predispose him towards certain courses of action and towards certain beliefs and evaluation.

The value orientations in this study are those derived from the raw scores on the revised and adapted Differential Values Inventory, which was developed by Prince (1959) and revised by Friesen (1970). They are based on the classification of traditional and emergent values by Getzels (1958).

Traditional value orientation. A traditional value orientation is characteristic of an individual who emphasizes the work-success ethic, a future-time orientation, personal independence and rigid discipline, as indicated on the adapted Differential Values Inventory.

Emergent value orientation. An emergent value orientation is characteristic of an individual who emphasizes sociability, hedonistic tone, group conformity and other directed, as indicated on the adapted Differential Values Inventory.

#### Post-Secondary Plans

Post-secondary plans refer to the choices available to a student on completion of the grade twelve high school program. For the purpose of this study, post-secondary plans refer to those options offered on the student questionnaire and have been categorized as: university, junior or agricultural colleges, institutes of technology, other, and none.

#### Socioeconomic Status

Socioeconomic status refers to the position a person occupies in society as a result of his occupation, his income, and his education.

For the purpose of this study, four indicators of the socioeconomic status of a student's family have been examined.

Father's education. Father's education has been categorized as: grade nine or less, some high school, high school graduate, and post-high school education.

Mother's education. Mother's education has been categorized as: grade nine or less, some high school, high school graduate, and post-high school education.

Combined parental income. Parents combined income has been categorized as: less than \$5,999, \$6,000 to \$7,999, \$8,000 to \$9,999, \$10,000 to \$11,999, and over \$12,000.

Father's present occupation. Father's present occupation has been categorized as: unskilled laborer, semi-skilled worker, skilled worker, clerical, professional (1), and professional (2).

#### Family Size

Family size refers to the number of children in the immediate family. For the purpose of this study, family size has been categorized as: small (two children or less), average (three or four children), or large (five children or more).

#### Ethnicity

Ethnicity refers to the ethnic origin of the student on the male side of the family. For the purpose of this study, ethnicity has been

categorized as: English, French, German, Netherlands, Norwegian, Polish, Ukrainian, Native Indian, and Other.

### Religion

Religion refers to a system of faith or worship. For the purpose of this study, religion has been categorized as Catholic, Protestant, or "Other".

### Community of Residence

Community of residence refers to the area of residence. For the purpose of this study, community has been categorized as being urban or rural. Urban students are those living in a city, while rural students are those living in a town or on a farm.

### High School Program

High school program refers to the total of all courses offered in a high school to regular full time day students, with the approval of the school board in compliance with the Alberta Department of Education regulations. For the purpose of this study, high school programs have been categorized as: matriculation, general, technical-vocational, and business.

## ASSUMPTIONS

One of the major assumptions underlying this study was that an individual's values can be measured by means of a paper and pencil test.

It is assumed that the information given by the respondents in the instrument was accurate.

The assumption is also made that the students who participated in this study had the necessary knowledge to complete the instruments and that the instruments provided a valid and reliable measure of the variables used in the study.

#### LIMITATIONS

The study was limited by the recognition that the instruments used did not measure all aspects of a student's values.

Students' post-secondary options were limited to university, junior or agricultural colleges, institutes of technology, other, and no plans for the future.

An inability to generalize beyond the groups studied is another limitation. This is due to the fact that the schools were not chosen randomly and the fact that only a small number of schools were selected. These schools were not representative of the geographical area of Alberta, the only province studied.

Some of these limitations may be discounted if the results of this study confirm the results of similar studies in other geographical areas.

A further limitation is the impossibility of eliminating all extraneous variables, a problem which faces researchers in any social situation, especially since value orientations are highly subjective.

#### DELIMITATIONS

The sample includes only students in selected schools in the Province of Alberta, who were in grade twelve in March, 1971, and who

were present at the time the questionnaire was administered.

This study was delimited to a study of only a few of the personal and social variables that may be related to post-secondary plans of the students.

A further delimitation is inherent in the Differential Values Inventory used to measure values. This instrument measures values as being 'traditional or emergent'. Other instruments apparently measure somewhat different values. For example, the Allport-Vernon-Lindzey Study of Values claims to measure religious, political, theoretical, economic, social, and aesthetic values. This study was delimited to a study of only one type of value classification, as developed by Prince (1959) and adapted by Friesen (1970).

#### ORGANIZATION OF THE THESIS

This chapter has introduced the research problem, explained the significance of the study, presented the definition of important terms, and stated the assumptions, delimitations and limitations of the study.

Chapter 2 outlines the conceptual framework of the study, reviews the literature related to the research problem, and states the hypotheses formulated to guide the investigation.

Chapter 3 presents the methodology of the study. The methodology includes a description of the instrumentation, Differential Values Inventory, the sample, data collection and treatment, statistical procedure, levels of significance, and computer analysis.

Chapter 4 contains a description of the sample by sex, age, program, grades, family size, socioeconomic status, religion, ethnicity,



location of the home, and post-secondary plans.

Chapters 5 and 6 present the analysis of the data.

Chapter 7 contains a summary of the study, a statement of the conclusions and implications, and some suggestions for further research.

## Chapter 2

### THEORETICAL FRAMEWORK AND RELATED LITERATURE

#### INTRODUCTION

The purpose of this chapter is to present the theoretical framework upon which this study is based. In so doing, some of the indicators of high school students' plans are discussed. The examination of related studies in the area of influential factors, which are brought to bear on students, leads to a statement of the general hypothesis.

#### CONCEPTUAL FRAMEWORK

In his model, Slocum (1968:66) views the student as:

...a decision-maker who is a member of a number of social systems, some of which are so important that their values and norms influence his performance and behavior. These reference groups include his family, his friends, and his school.

This indicates that the student makes his choice for the future in accordance with his perceptions of the reference groups whose influence is exerted through their relationship with him and their attitude towards him. Korner (1946:329) emphasizes this viewpoint:

It is a well established fact that a vocational choice is often made in answer to a basic personal need within the individual or is imposed by others and incorporated by the individual.

Nekolaichuk (1970) concluded that a high school student's plans were the end result of influential factors. These factors in order of

importance were: a) parents, b) peer groups, and c) teachers, principals, and counselors.

The extent to which these factors affect the present and future lives of high school students has been the topic of many research projects. Knill (1963:34) established that "students belong to one large adolescent sub-culture with agreement on certain shared values," and he extended participation in a sub-culture to conclude that: "It appears that the most influential people, and those who dominate the students' frame of reference are their friends and peers."

Friesen (1967) confirmed an earlier study by Coleman (1963) when he found that the two major influences on high school students were parents and friends. Epperson (1964:94) reported: "Over eighty percent of the students indicated that it would make them unhappy if their parents did not like what they did." One of the results of Slocum's (1968) study of rural Washington high schools was that: "teachers and counselors have considerable influence on the educational aspirations and expectations of a minority of students".

The conceptual framework within which this study was developed focuses on the high school student as a decision-maker. The decision-making process is concerned with the student's choice of post-secondary options, and is visualized as being influenced by the student's parents, peer group, and school, as well as the individual characteristics of the student. Certain selected indicators of each

of these factors were investigated to determine the extent to which they influence the decision of the students.

The indicators of possible parental influence, for this study, included: socioeconomic status, size of family, location of home, the religious and ethnic background of the family. The influence of the peer group was examined by a study of the value orientations of the student, using Friesen's Differential values Inventory. The indicators of school influence were confined to a study of programs and grades. The individual characteristics of the students, sex and age, were also examined in relation to students' plans.

These variables are seen as being influential in the decision-making process of the student and are posited as some of the indicators of the students' choice of post-secondary plans.

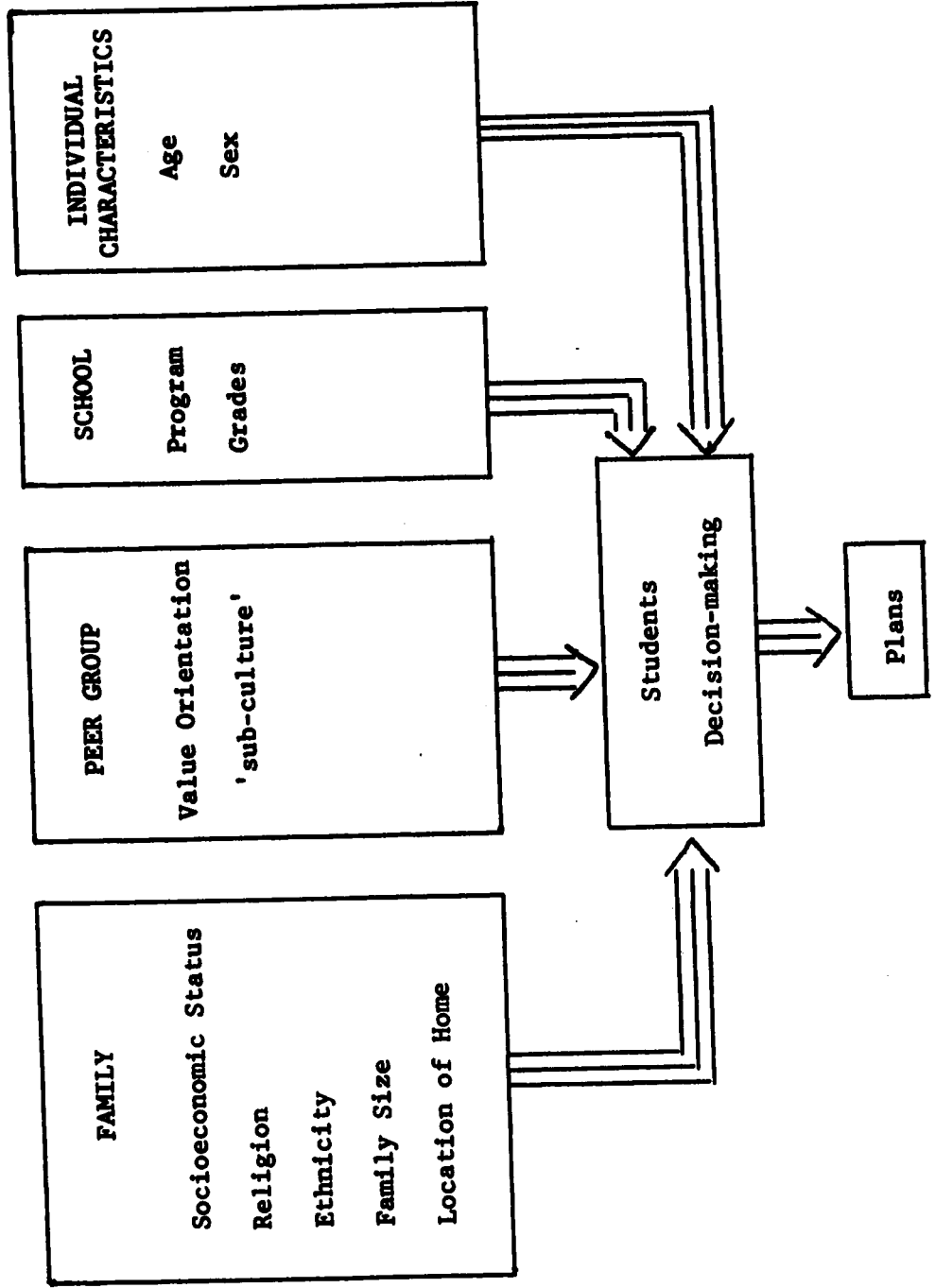


Figure I

## PARENTAL INFLUENCE

### Socioeconomic Status

Variations in the socioeconomic background of students have perhaps more relevancy to education than any other single factor under investigation. Coleman (1963) suggested that the socioeconomic factor was the major cause of the differences that existed among students. Schoenfeldt (1968) reported that both socioeconomic status and ability had direct effects on the post-high school educational decisions of students. Sewell and Shah (1967) found that when intelligence was controlled, socioeconomic status was positively, monotonically, and significantly related to planning for college. Friesen (1969:52) indicated the importance of socioeconomic status by stating:

The most significant difference in this area occurred between the socioeconomic groups. Almost three times as many students in the high socioeconomic group than in the low one had plans for university or college, while over four times as many in the low group than in the high group excluded higher education from their plans.

Four indicators of socioeconomic status were investigated in this study; educational levels of the parents, occupation of the father, and combined parental income.

Educational levels of parents. The educational level of the mother and the father have been studied in relation to post-secondary plans by Friesen (1967), Narine (1971), and Keoyote (1971). Friesen reported that the high school student expected to attain a higher level of education than his parents. Narine found a significant

relationship between perceived parental influence and educational level of the parents. Keoyote concluded:

Students aspiring to university had fathers who were better educated than fathers of students who chose 'other' plans. The mothers of students who planned to attend university and junior college had higher educational levels than mothers of students who intended to enter technical and agricultural colleges. Similarly mothers of students intending to enter technical and agricultural colleges had higher education than mothers of students who chose 'other' or 'no educational plans'.

Father's occupation. Mulligan (1951:189) states, "fathers occupation would probably be selected as the most significant index of socioeconomic status by social scientists." A report of a study of Minnesota college entrants, classified by father's occupations, (Darley, 1959) shows that the majority of students entering university are from the professional and semi-professional occupational level, whereas less than one third of the students enrolled in junior colleges came from the high occupational level. A similar study (Burton, 1960) of San Jose Community found that university students were drawn primarily from the upper white-collar occupational group, and more than three quarters of the junior college students came from white- and blue-collar homes. A study of high school seniors in the State of Washington by Empey (1956) revealed that the absolute occupational status aspirations of male high school seniors from the middle and upper classes are significantly higher than those of seniors from lower classes. Research conducted in Canada corresponded to United States studies.

The sample of students tested responded in a consistent pattern of high achievement orientation and high levels of aspirations by students with fathers from high status positions, graduating downwards in the possession of values necessary for achieving behavior with each lower strata of social standing. (Strong, 1963:iv)

Parental income. Combined parental income was another indicator of socioeconomic status used to investigate parental influence on the decision-making process of the student. After a survey of 35,000 graduating seniors of Wisconsin high schools, Little (1967:149) reported that, "among other factors, the family in the upper third of the income bracket was associated with students' attainment of high prestige occupations." McPhee (1959:8) showed that family income and parental interest in the student's education were related: "Income was related to school approval, with those parents in the higher income bracket being higher in school approval." Keoyote (1971:90) stated:

Fathers' and mothers' education, and parental income were factors closely related to students' educational aspirations. High socioeconomic status students tend to continue their education especially at university. Low socioeconomic status students tend to chose 'Other' and 'None'.

The effects of socioeconomic status on the plans of high school students were summarized by Friesen (1969:30):

The higher the socioeconomic classification of students, the higher was their aspiration level, their achievement, and their participation in extra-curricular and in community activities. The higher the socioeconomic level of students the greater was the proportion planning to go to university.

Schoenfeldt (1968:360) agrees that socioeconomic status has a direct effect on post-high school education, but he also suggests the importance of ability: "A high socioeconomic status does not compensate for low ability."

### Family Size

The size of a family has been shown to be related to both socioeconomic status of the parents and the students' choice of



post-secondary options. A relationship between socioeconomic status, size of family, and plans for the future was reported by Banks (1968:98):

The lower-class family may well have fewer expectations for the future and so lower aspirations for themselves and their children. They may have less self-esteem and be less self-confident. They tend to have larger families and to be less well educated. Within the middle classes those in the lower-middle-class occupations will be differentiated from the upper-middle classes by their earnings, their status, and their educational level. This may well reflect upon the horizons they set for their children. The environment of a large family has also been shown to constitute a handicap which is explained as a limitation to the amount of verbal communication with adults.

Cathcart (1967:iv) investigated the values held by high school students and teachers in Alberta and concluded: "most traditional value patterns belong to students from large families." These findings were supported by Narine (1971), who found that there was a significant relationship between the size of the family and the perceived parental attitude for post-secondary education.

### Ethnicity

The relationship of ethnic background to achievement orientations and occupational aspirations was the focus of a study conducted by Rosen (1959:60). As a result of this study, it was proposed that ethnic groups differed in their achievement orientation and in their levels of educational and occupational aspirations.

Achievement motivation is more characteristic of Greeks, Jews, and White Protestants than of Italians, French-Canadians, and Negroes. Ethnic differences persist when social class is controlled.

Walter (1971) used different ethnic backgrounds for his study but had similar results; he found that there was a difference in value orientation between the Indian and the Non-Indian in Alberta. In a

study of the underdeveloped area of Northern Saskatchewan, Knill (1963:8) found that:

The apparent differences in occupational and educational choices made by white girls and Metis-Indian girls was partly due to an influence by ethnicity.

Narine (1971) found no relationship between differences in ethnicity when the criterion was perceived parental educational aspirations.

### Religion

The religious affiliation of the parents may be another indicator of their influence on the students' choice of post-secondary educational options. The Protestant Ethic has usually been associated with high achievement and the Catholic doctrine of the Church's absolution of each single act of sin had no part in the Calvinist ideology of predestined salvation. Capitalistic enterprise is compatible with the Calvinist view but not with Catholicism. However, based on a national sample in the United States, Veroff, Feld, and Gurin (1962:205), concluded that:

On a national level using a thematic apperceptive measure of achievement motivation, we find Catholic men generally tend to have stronger achievement orientation than Protestants. And more Jewish men in contrast to all other groups have high achievement scores.

Getzels and others (1968) found a significant difference in the educational values and expectations held by Catholic and Protestant parents. Strong (1963), in a study of levels of aspirations among Alberta high school students, found that Protestants aspired higher than Catholics.

A different conclusion was reached by Narine (1971), in his study of perceived parental aspirations, Narine found no relationship between differences in religion.

### Place of Residence

The family's place of residence has long been considered an influencing factor on the adolescent's decision-making process. In relation to the urban centers, educational opportunities in the rural areas have been considered inadequate. Benson (1965) claims that there are two key problems in American schooling: 1) geographical inequality of educational provision, 2) uneconomical expenditures of funds between urban and rural. Support for this viewpoint was offered by Rousseau (1970) when he found that the incidence of misassignment among secondary teachers in Alberta was higher among non-city schools than among city schools.

Keoyote (1971:13) reported on a study conducted by Siemens (1965) which indicates the diversity of educational aspirations between urban and rural youths.

...higher educational aspirations among urban as compared with rural youth has been reported from statewide studies in Minnesota, Florida, Wisconsin, and Washington. Although these researchers varied somewhat in their definitions of aspirations, their residential categories, and the nature of their sample, all of them reported that the farm group tended to lag well behind the more urban segments of the population in educational aspirations.

Recent studies completed in Canada by Narine (1971), Peach (1970), and Strohschein (1971), confirm that a significant relationship existed between community of residence and post-secondary educational aspirations. Peach found that student achievement expectations differed when related to school size and location. Strohschein proposed that the proximity of a post-secondary educational institution was favorably related to students continuing their education after high school. Narine

found a significant relationship between perceived parental attitude towards post-secondary education and their place of residence.

An opposing view was offered by Slocum (1968), who concluded that farm boys had higher aspirations than non-farm boys, while aspirations of farm and non-farm girls did not differ significantly. Both findings contradicted prior research findings.

In summary, post-secondary educational aspirations of high school students have been shown to be greatly influenced by their parents. Some indicators of parental influence which have been found to be related with the students' post-secondary plans are: the socioeconomic status of the parents, the size of the family, religious and ethnic background, and the family's place of residence. The implication here is that certain characteristics are transmitted to the young child within the home and that parental influence to a large extent is a determinate of the educational and occupational future of the child.

#### Hypotheses Related to Post-Secondary Plans and Parental Influence

Based on a review of related literature, some of which appears contradictory, the following working null hypotheses were proposed:

1. There is no significant relationship between the students' post-secondary plans and the educational level attained by the father.
2. There is no significant relationship between the students' post-secondary plans and the educational level attained by the mother.
3. There is no significant relationship between the students' post-secondary plans and the occupation of the father.

4. There is no significant relationship between the students' post-secondary plans and the combined income of the parents.

5. There is no significant relationship between the students' post-secondary plans and their ethnic background.

6. There is no significant relationship between the students' post-secondary plans and their religious preferences.

7. There is no significant relationship between the students' post-secondary plans and their family size.

8. There is no significant relationship between the students' post-secondary plans and their community of residence.

#### PEER GROUP INFLUENCE

Being accepted and liked by other students is one of the most, if not the most, important goals of the high school students' life.

The peer group runs a close second to parents as a significant reference group. Belonging to the leading crowd is perceived as the principle means for ensuring popularity with the opposite sex, and friendliness is judged as the main requirement for admission to this group. (Friesen, 1969:31)

Studies in the area of peer group influence are numerous and the findings of these investigations vary considerably in the extent to which an adolescent's plans are affected by his peers. Riesman (1950:16) views the peer group as being the measure of all things, and feels that the adolescent has no defenses the group cannot batter down:

In this situation the competitive drives for achievement sponsored in children by the remnants of inner-direction in their parents come into conflict with the cooperative demands

sponsored by the peer group. The child therefore is forced to rechannel the competitive drive for achievement as demanded by the parents, into his drive for approval from the peers.

Coleman (1961:2) differs very little with the above statement:

"The youth culture constitutes a separate society with but little contact with the outside adult society."

Epperson (1964:95) took exception with Coleman and other writers and expressed the following position:

...but evidence from the present study indicates that the teenage group is in some respects no more estranged from adults than the pre-teenage group and that standards set in the family may not have been replaced by peer group standards in the high school context to the degree that Coleman implied.

A more diverse view was expressed by Koos (1970:89):

It is clear that the social goals of adolescents are basically oriented towards the adult world, and that the chief function of the adolescent peer group is to provide a substitutive status, from the fact that it dissolves as soon as adolescents achieve anchorage and status roles in the wider community. In fact, one of the chief functions that both adolescents and their culture attribute to the peer group is the apprenticeship it provides for adult living.

Korner (1946:329) offered the suggestion that: "some individuals accept the vocational choice of a friend, with whom they closely indentify, as a 'coat rack' for their ambitions." Knill (1963) summarized his findings by stating: "It appears that the most influential people, and those who dominate the students frame of reference are their friends and peers." Friesen (1967:60) found that 46.9 percent of the students under investigation considered, "breaking with a friend harder to take than parent or teacher disapproval."

Based on a four part study conducted in Saskatchewan, Knill (1963:35) stated:

Teenagers belong to a separate sub-culture within the overall social culture of their parents and teachers. These differences are more than obvious dress and overt behavioral aspects of the members, they include levels of attitude, values, and beliefs.

Inherent in these studies is the importance of the peer group as an influential factor in the decision-making process of the student and that value orientations may be considered as an indicator of the peer group influence on the students' post-secondary plans.

The theory presented by Spindler (1955) and elaborated on by Getzels (1958) suggested that values in our society are undergoing change. This change is away from a traditional value system in which the work-success ethic, future-time orientations, personal independence, and rigid discipline were dominant, to an emergent value system in which sociability, hedonistic tone, group conformity, and other directed are dominant. Assuming this to be true, then older people should hold more traditional values and younger people more emergent values. Thus, parents should be more traditional than some teachers, older teachers more traditional than younger teachers and all three groups more traditional than some high school students.

The peer group has been shown to be an influential factor on the decision-making process of the high school student. It has been suggested that the student belongs to a 'sub-culture', which has evolving values that are different from the traditional values of society, but yet affected by them. The extent of peer group influence on an adolescent's choice of post-secondary plans may be evaluated by

the degree to which he conforms to the traditional or emergent value orientations.

Hypotheses Related to Students' Post-Secondary  
Plans and Their Value Orientation

Based on a review of related literature, some of which appears to be contradictory, the following working null hypotheses were proposed:

9. There is no significant difference among the mean scores on the traditional value orientation for those students who chose university, junior college, technical institute, other, or none.

10. There is no significant difference among the mean scores on the work-success ethic value orientation for those students who chose university, junior college, technical institute, other, or none.

11. There is no significant difference among the mean scores on the future-time value orientation for those students who chose university, junior college, technical institute, other, or none.

12. There is no significant difference among the mean scores on the rigid discipline value orientation for those students who chose university, junior college, technical institute, other, or none.

13. There is no significant difference among the mean scores on the personal independence value orientation for those students who chose university, junior college, technical institute, other, or none.

14. There is no significant difference among the mean scores on the emergent value orientation for those students who chose university, junior college, technical institute, other, or none.

15. There is no significant difference among the mean scores on



the other directed value orientation for those students who chose university, junior college, technical institute, other, or none.

16. There is no significant difference among the mean scores on the hedonistic tone value orientation for those students who chose university, junior college, technical institute, other, or none.

17. There is no significant difference among the mean scores on the sociability value orientation for those students who chose university, junior college, technical institute, other, or none.

18. There is no significant difference among the mean scores on the group conformity value orientation for those students who chose university, junior college, technical institute, other, or none.

#### INFLUENCE OF THE SCHOOL

Some evidence exists that the particular secondary school a pupil attends will have some influence on this future plans. Knill (1963:9) reported that, "the values held by students are related to the particular school attended." Peach (1970) concluded that student achievement expectations differed when related to school size, school location, grade, and social class. Bryans (1969:iv) stated:

Students from low socioeconomic categories who attended a school which was predominantly middle and upper class in composition aspired more highly than those lower class students who attended a school which was more heterogeneous in socioeconomic composition.

Prince (1959:305) found that, "the value patterns of students who attended a particular type of school are similar to the value patterns of the teachers of that school".

The influence of the teacher was not seen by Knill (1963) or Friesen (1967) as being important. Knill concluded that the teachers seem to be the least influential factor in a students' life and plans. Friesen indicated that the teacher does not appear to be a significant factor.

#### Program and Grades

These studies indicate that the school is an influential factor in the post-secondary plans of high school students. The high school program and grades attained by the students were studied by Little (1967), Cathcart (1967), Friesen (1969), and Keoyote (1971) as indicators of the influence the school had on students' post-high school plans.

Little's study of the occupations of non-college youths, revealed that differences in high school performance had very little effect on the level of occupations attained. Cathcart found a relationship between socioeconomic status, program, and plans. Whereas high socioeconomic status students enrolled in the matriculation program and planned to go to university, low socioeconomic status students enrolled mainly in general, commercial, and technical/vocational programs and planned to terminate their education after high school. Friesen found that about 60 percent of the students were enrolled in the matriculation program and the remainder were almost evenly distributed between the general, commercial and technical/vocational programs. He also found that more boys than girls were enrolled in the vocational program and that the combined failure rate was close to 50 percent with the boys

exceeding the girls. More girls than boys were enrolled in the commercial program.

Keoyote concluded that students who planned to attend university, junior college, or nurses training attained significantly higher levels of achievement than those who planned to attend technical institutes or agricultural college. There was a significant difference between those students who planned to attend an educational institution and those who chose "other" and post-secondary educational plans were significantly related to program of study.

#### Hypotheses Related to Post-Secondary plans of Students and the Influence of the School

Based on a review of related literature, some of which could be considered contradictory, the following working null hypotheses were proposed:

19. There is no significant relationship between the students' post-secondary plans and the program of study taken in school.

20. There is no significant relationship between the students' post-secondary plans and the average grades attained while in high school.

### INDIVIDUAL CHARACTERISTICS

#### Age

Friesen (1969:5) reports that, "...in grade twelve close to half of the boys and slightly more than a third of the girls were in the eighteen year or over category." This appears to indicate that

boys encounter greater obstacles in high school, delaying their completion significantly beyond that of girls. A significant relationship between age and values was shown by Knill (1963:8): "The values held by students tend to change throughout their high school careers - students tend to become less idealistic as they approach adulthood." Epperson (1964:95) found:

...secondary school pupils appear to be more rather than less concerned about parental reactions, and that the elementary school pupil appeared to be more concerned (but not much) with teacher disapproval.

Keoyote (1971) found no significant difference between the post-secondary plans of Alberta high school students and their age.

### Sex

Sex has been another variable widely used by researchers in their study of the adolescent. Narine (1971) reported that a significant relationship existed between perceived parental attitude and the sex of the student. Slocum (1968) indicated a difference between sexes in the levels of educational aspirations of rural youths - while the girls seemed to have plans similar to their city counterparts, the plans of males did not correspond to the plans of urban males. Bryans (1969) found significant relationships existed between the level of aspiration and the sex of the student. The differences between sexes apparently goes beyond the students' educational plans and is also related to the completion of post-secondary education. Trent (1965:69) stated:

Data suggests - sex differences, with proportionately more women receiving baccalaureate degrees, but more men continuing in college without obtaining their degree.

A different view was reported by Friesen (1969) and Keoyote (1971). Friesen states that there is no difference in boys' and girls' plans for university. Keoyote found no relationship between sex and the post-secondary plans of high school students.

#### Hypotheses Related to Post-Secondary Plans of Students and Their Age and Sex

Based on the review of the literature, some of which was contradictory, the following working null hypotheses were proposed:

21. There is no significant relationship between the students' post-secondary plans and their age.

22. There is no significant relationship between the students' post-secondary plans and their sex.

#### SUMMARY

The conceptual framework of this study proposed that the decision a high school student makes in relation to his post-secondary plans is influenced by the individual characteristics of the student, the high school he attends, his peer group, and his family. Based on the research literature reviewed, the basic hypotheses are:

- 1) there is a significant relationship between the high school students' choice of post-secondary options and the variables, age, sex, program, grades, family size, home location, religion, ethnic background, parental income, father's occupation, mothers' and fathers' education;
- 2) there is a significant relationship between the high school students' choice of post-secondary options and the students' value orientations.

## Chapter 3

### METHODOLOGY

This chapter presents descriptions of the instrument used for data collection, procedure of collecting data and an outline of the methodology applied in the study.

### INSTRUMENTATION

The instrument used in the collection of the data for this study was designed by Friesen, and administered by Narine (1971) as part of a larger study which also included students' perceived parental influence on their choice of post-secondary options. The data for this investigation were collected by means of a three-part questionnaire.

Part 1. The first part of the questionnaire solicited certain demographic and socioeconomic data. Among these were sex, age, ethnicity, religion, academic program, academic achievement, area of residence, and size of family. Additional information included the occupational status, the education and income of the parents.

Part 2. The second part of the questionnaire required the respondents to indicate their planned post-secondary options from among the following: a) university, including nurses' training, b) junior or agricultural college, c) technical/vocational institute, d) other, and e) none.

Part 3. The third part of the questionnaire consisted of a Differential Values Inventory. This Values Inventory was developed by Friesen of the University of Alberta in 1970. It is comprised of thirty-seven Likert-type items designed to determine the values held by high school students.

#### Differential Values Inventory

The Differential Values Inventory was originally developed by Prince in 1957 at the University of Chicago and contained sixty-four forced-choice items representing eight categories related to the traditional and emergent conceptualization of Getzels and Spindler. The eight values categories were:

<u>Traditional</u>	<u>Emergent</u>
1. Work-success ethic	1. Sociability
2. Future-time orientation	2. Hedonistic tone
3. Personal independence	3. Group conformity
4. Rigid discipline	4. Other directed

Since the students' responses were in terms of degrees of agreement or disagreement with the statement, scores of from one to five were given to each student for each item to which he responded. Items which produced Varimax loadings of less than .400 were discarded. The twenty-nine items which produced above .400 loadings on the Varimax Rotated Factors on the eight subscales are represented in Table 1. The factor analysis of all thirty-seven items on an eight factor loading is represented in Appendix B. Negative loadings were reflected so that

Table 1

**SIGNIFICANT VARIMAX FACTOR ANALYSIS LOADINGS  
ON THE EIGHT VALUE SUBSCALES**

Traditional

Subscales	Items	Communalities	Loadings
Work-success ethic	6	0.407	0.535
	13	0.534	0.673
	27	0.555	0.446
	34	0.531	0.616
	37	0.568	0.501
Future-time orientation	1	0.568	0.513
	8	0.741	0.811
	15	0.692	0.756
	29	0.640	0.690
Personal independence	9	0.578	0.692
	26	0.532	0.464
	31	0.408	0.515
	33	0.575	0.611
Rigid discipline	15	-0.692	-0.514
	22	0.559	0.643
	25	0.603	0.690
	32	0.575	0.682



Table 1 (continued)

Emergent

<u>Subscales</u>	<u>Items</u>	<u>Communalities</u>	<u>Loadings</u>
Sociability	24	0.599	0.607
	35	0.573	0.639
Hedonistic tone	2	0.653	0.799
	23	0.537	0.531
	30	0.665	0.792
	36	0.648	0.697
Group conformity	18	0.528	0.687
	21	0.602	0.701
Other directed	3	0.658	0.771
	7	0.683	0.761
	11	0.514	0.619
	14	0.540	0.459

mean scores could be interpreted on the basis that the higher the score the more characteristic of the factor. The individuals' scores for each of the eight subscales were summed and thus, value orientation scores were obtained for each student on each of the eight subscales. These subscales were examined in relation to the students' plans for their post-high school future.

The four traditional and four emergent subscales were then added so that a orientation score for each student could be found on both the traditional and emergent scales and these were also examined in relation to the students' post-secondary plans.

#### The Sample

The sample was drawn from two urban and three rural high schools in Alberta. These schools were part of the public and separate school systems. The sample selected met the following criteria:

- (a) Grade twelve students who were leaving high school at the end of the academic year, 1970-71, and had given some consideration to their post-secondary plans.
- (b) Grade twelve students who were living in an area served by, or within proximity of a university, a junior and/or agricultural college, and a technical institute. These students were therefore exposed for some time to the type of post-secondary institutions that were available to them.
- (c) Students of different ethnic origin, religious and socio-economic background.

- (d) Students who attended schools that offered a multiplicity of high school programs in preparation for any post-secondary institution of their choice.

The usable responses from the returned questionnaires totalled 526 for student data, representing approximately 82.5 percent of the registered grade twelve enrolment in the schools surveyed.

#### Data Collection and Treatment

The instrument was distributed to the high school principals in one urban and three rural communities in Alberta upon receipt of permission from the respective superintendents. The instrument was completed by the grade twelve students in five high schools and data collection was completed in March 1971.

Students were required to record their responses on the questionnaire itself. They were not required to identify themselves, consequently anonymity was maintained. Students were required to indicate their school of attendance so that the sample could be identified by rural and urban communities, and treated independently for descriptive purposes.

Where the response for three or fewer items were omitted from the questionnaire, the mean response was entered. This approach is recognized as the prevailing practice in social science research.

Those aspects of the original questionnaire which pertain to this study are represented in the three-part questionnaire included in Appendix A.

### Statistical Procedure

This study employed both parametric and nonparametric statistics in the analysis of data.

For the description of the sample, nonparametric statistics were used to determine the frequency and percentage frequency distribution of responses to all items on the questionnaire. The respondents were divided into rural and urban sub-samples and treated separately for descriptive purposes. Subsequently these dichotomous groups were combined as a part of the total description of the sample.

Chi Square. In dealing with problems of association between variables, the Chi square test was applied. This procedure was followed as a means of testing for any significant difference between (1) the variation among post-secondary plans, and (2) each of the independent variables, age, sex, program, grades, socioeconomic status, religion, ethnicity, family size, and location of the home. The test was deemed necessary because the variables were in nominal measurement.

One-way analysis of variance. One-way analysis of variance was used when comparison of mean scores for the traditional and emergent value orientations and for the eight subscales of the Differential Values Inventory were made among sub-samples partitioned on the basis of non-dichotomous variables. The one-way analysis of variance was used to test for a comparison of mean scores among five groups, those planning to attend: (a) university, (b) junior or agricultural college, (c) technical institute, (d) those who had other plans for the future, and (e) those who had no plans.

The assumptions underlying the analysis of variance are (Ferguson, 1966:294):

1. The distribution of the variables in the population from which the sample is drawn, are normal.
2. The variances in the population from which the sample is drawn, are equal.
3. The effects of the various factors on the total variation are additive.

Scheffe multiple comparison of means. The Scheffe test was applied when the probability of the F ratio for the one-way analysis of variance was less than .05.

#### Levels of Significance

The .05 level of significance was established for rejection of the null hypothesis, since a five percent level of Type 1 error (rejection of true hypothesis) is often accepted as a standard for rejection in educational research. "In psychological and educational circles the five percent level of significance (.05) is often accepted as a standard for rejection." (Best, 1970:270). The .10 level of significance was established to identify significant differences among mean scores when the Scheffe test was applied as suggested by Ferguson. (1966:297)

#### Computer Analysis

Student responses to the items on each questionnaire were punched directly on IBM cards. Information relating to sex, age, high school program, average grade, family size, mothers' and fathers' educational

levels, combined parental income, father's occupation, home locations, religious affiliation, ethnicity and the post-secondary plans of the respondent, as well as the value scores on the Likert-type scale as perceived by the student were entered on each card.

Prepared computer programs were used for the analysis of the data. They included the following types of analysis:

1. A Varimax Rotated Factors Analysis of the students' responses to those items (items fourteen to fifty-one on the questionnaire) which contributed to the eight factor value orientation.
2. A transformation of the raw data into usable data for one-way analysis of variance to test the significance of mean differences among the groups.
3. Nonparametric statistics were used for the description of the sample in terms of frequency and percentage frequency distribution.

#### SUMMARY

This chapter dealt with the methodology of the study, including the instrumentation, data collection and treatment, statistical procedures, computer analysis, levels of significance and the Differential Values Inventory.

Three statistical tests, (1) the Chi Square, (2) one-way analysis of variance, and (3) Scheffe multiple comparison of means, were used to test for significant relationships between the students' post-secondary plans and selected predictor variables: socioeconomic status, family size, religion, ethnicity, location of the home, program, grades, age, sex, and the value orientations of the students.

## Chapter 4

### DESCRIPTION OF SAMPLE

The purpose of this chapter is to provide a more complete description of the sample based on the data obtained.

#### Distribution of the Sample by Participating Schools

The two urban and three rural schools used in this study had a total registered grade twelve enrolment of 637 students. The final sample consisted of 526 students or 82.5 percent of the total grade twelve enrolment in these schools.

The two urban schools are represented by A and B and are shown on Table 2. Usable responses totalled 113 out of a possible 163 from School A, which represented 69.3 percent returns. School B returned 280 out of a possible 330 or 84.9 percent returns. The final urban school sample was 393 students which represented 80 percent of the registered enrolment.

The three rural schools are represented by C, D, and E on Table 2. The usable responses obtained from these schools were: 80 out of a possible 85 for School C, 20 out of 26 for School D, and 33 out of 33 for School E, which represented 94.1, 76.9, and 100 percent returns respectively. The final rural school sample consisted of 133 students, which represented 90.3 percent of the registered enrolment.

**Table 2**  
**Frequency Distribution of Urban and Rural**  
**Respondents by Schools**  
**(n=526)**

	Urban		Rural			Total
	A	B	C	D	E	
<b>Respondents*</b>	113	280	80	20	33	526
<b>Registered Enrolment in Grade 12</b>	163	330	85	26	33	637
<b>Percentage</b>	69.3	84.9	94.1	76.9	100	82.5

\* Completing usable questionnaires



Distribution of the Sample by Father's  
and Mother's Education

Father's education. Almost two-thirds (63.27) of the respondents had fathers who had not completed high school, and only 99 (18.7%) of the fathers had any post-high school education. The fathers of the urban students appeared to be considerably more educated than their counterparts in the rural areas, 44.6 percent of the urban fathers were high school graduates whereas only 14.2 percent of the rural fathers attained a similar educational level.

Mother's education. The educational level attained by the students' mothers was generally higher than that of the fathers. Approximately one-quarter (25.9%) of the mothers were high school graduates and 20.5 percent had some post-high school education. The urban mothers had attained a higher educational level than the rural mothers, 52.4 percent of the urban mothers as compared to 28.6 percent of the rural mothers had attained high school graduation or higher.

Approximately one-fifth of the sample had parents who had continued their education beyond high school.

Distribution of the sample by father's and mother's education is shown in Table 3.

Distribution of the Sample by Father's  
Occupation and Combined Parental  
Income

Father's occupation. The two middle categories accounted for 43.4 percent of the sample, 33.9 per cent were in the top two

Table 3  
 Distribution of Urban and Rural Students by  
 Father's Education and Mother's Education  
 (n=526)

Classification	Urban		Rural		Total	
	f	%	f	%	f	%
<b>Father's Education</b>						
Grade 9 or less	120	30.5	86	64.7	206	39.2
Some high school	98	24.9	28	21.1	126	24.0
High School grad	83	21.1	12	9.0	95	18.1
Post high school	92	23.5	7	5.2	99	18.7
<b>Mother's Education</b>						
Grade 9 or less	93	23.7	48	36.1	141	26.8
Some high school	94	23.9	47	35.3	141	26.8
High School grad	115	29.3	21	15.8	136	25.9
Post high school	91	23.1	17	12.8	108	20.5

categories, and 22.7 percent made up the bottom two categories. The rural subsample had a larger number of fathers in the lower categories (27.8%) and middle categories (48.9%) than did the urban subsample (20.9% and 41.4%). The number of urban fathers (37.7%) in the top categories was approximately one and a half times the number of rural fathers (23.3%) in the same categories.

Parental income. More than one-quarter of the respondents' families had combined parental incomes of over \$12,000 per annum. At the other extreme, 15.2 percent of the parents had incomes of less than \$6,000 per annum. The majority of students (56.8%) came from homes where the combined parental income was more than \$6,000 and less than \$12,000 per annum.

Distribution of the sample by father's occupation and combined parental income is shown on Table 4.

#### Distribution of the Sample by Ethnicity and Religion

Ethnicity. The most identifiable ethnic groups in urban subsample were English (30.3%) and German (14.2%). In the rural subsample, the predominant ethnic groups were German (30.8%), English (24.8%), and Norwegian (12.8%). Slightly over one-third of the urban (33.4%) and nearly one-quarter of the rural (24.0%) students were in the category of 'Other'. In relation to the total sample, three identifiable groups emerge: 'Other' (31.0%), English (28.9%), and German (18.4%).

Table 4

Distribution of Urban and Rural Students by Father's Occupation and Combined Parental Income (n=526)

Classification	Urban		Rural		Total	
	f	%	f	%	f	%
<b>Father's Occupation*</b>						
Category 1	29	7.4	25	18.8	54	10.3
Category 2	53	13.5	12	9.0	65	12.4
Category 3	74	18.8	28	21.1	102	19.4
Category 4	89	22.6	37	27.8	126	24.0
Category 5	75	19.1	24	18.0	99	18.8
Category 6	73	18.6	7	5.3	80	15.1
<b>Parental Income*</b>						
Category 1	52	13.2	28	21.0	80	15.2
Category 2	66	16.8	33	24.8	99	18.8
Category 3	83	21.1	26	19.5	109	20.7
Category 4	71	18.1	20	15.0	91	17.3
Category 5	121	30.8	26	19.5	147	28.0

\* See Appendix C

Religion. The predominant religious group in both the urban (49.9%) and rural (63.9%) subsamples was Protestant. This religious group accounted for 53.4 percent of the total sample, while 32.5 percent were Catholic and 14.1 percent were 'Others'. The percentage of Catholics in all three groups tended to be consistent, amounting to approximately one-third of each group. There were almost four times as many 'Others' in the urban as compared to the rural subsample. Distribution of the sample by ethnicity and religion is given in Table 5.

Distribution of the Sample by Family  
Size and Place of Residence

Family size. More than three-quarters (77.9%) of the students in the sample came from average or small families (four children or less). The large family, five children or more, was more prevalent in the rural group (31.7%) than in the urban subsample (18.7%). The small family, with two children or less, made up 43.3 percent of the urban and almost one-third (32.3%) of the rural group. Family size was approximately evenly distributed among the rural respondents.

Place of residence. The sample was predominantly urban. Sixty-six percent lived in a city, while the remainder of the students resided in a town or on a farm.

Distribution of the sample by family size and place of residence is shown on Table 6.

Table 5  
 Distribution of Urban and Rural Students  
 by Ethnicity and Religion  
 (n=526)

Classification	Urban		Rural		Total	
	f	%	f	%	f	%
<u>Ethnicity</u>						
English	119	30.3	33	24.8	152	28.9
French	14	3.6	-	-	14	2.7
German	56	14.2	41	30.8	97	18.4
Netherlands	17	4.3	1	0.8	18	3.4
Norwegian	17	4.3	17	12.8	34	6.5
Polish	21	5.4	1	0.8	22	4.2
Ukrainian	14	3.6	8	6.0	22	4.2
Native Indian	4	0.9	-	-	4	0.8
Others	131	33.4	32	24.0	163	31.0
<u>Religion</u>						
Catholic	129	32.8	42	31.6	171	32.5
Protestant	196	49.9	85	63.9	281	53.4
Others	68	17.3	6	4.5	74	14.1

Table 6  
 Distribution of Urban and Rural Students by  
 Family Size and Place of Residence  
 (n=526)

Classification	Urban		Rural		Total	
	f	%	f	%	f	%
<b>Family Size*</b>						
Small	170	43.3	43	32.3	213	40.5
Average	149	38.0	48	36.0	197	37.4
Large	74	18.7	42	31.7	116	22.1
<b>Place of Residence</b>						
Urban	347	66.0	-	-	347	66.0
Rural	-	-	179	34.0	179	34.0

\*Small: two children or less  
 Average: three to four children  
 Large: five children or more

Distribution of the Sample by High  
School Program and Average  
Grades

Program. More than two-thirds (68.6%) of the sample were in the matriculation program. There were 88 (16.7%) respondents in the general program and the technical/vocational and business program had approximately equal numbers, 36 and 41 respectively.

Almost three-quarters (72.3%) of the urban and over one-half (57.9%) of the rural students were in the university entrance or matriculation program. There was a greater emphasis on the general program among the rural subsample (37.6%) than among the urban group (9.7%). The two subsamples also differed in their participation in categories three and four, with the greater emphasis being placed on these programs by the urban students.

Grades. The majority of students (52.7%) had average grades of between 50 to 64 percent. The categories B and C (50 to 64, and 65 to 79%) accounted for 481 (91.5%) of the sample. There were a small number (35) with average grades of 80 percent or over and only 10 students (1.8%) reported having below a 50 percent grade average. There were more rural students (66.2%) in category C than urban students (48.1%) and more urban respondents (42.0%) in category B than rural students (29.3%).

Distribution of the sample by high school program and average grade is shown in Table 7.



Table 7  
 Distribution of Urban and Rural Students by  
 High School Program and Average Grade  
 (n=526)

Classification	Urban		Rural		Total	
	f	%	f	%	f	%
<u>High School Program</u>						
<u>Matriculation</u>						
General	284	72.3	77	57.9	361	68.6
Voc/Technical	38	9.7	50	37.6	88	16.7
Business	34	8.7	2	1.5	36	6.8
	37	9.4	4	3.0	41	7.8
<u>Average Grade</u>						
A (80-100%)	31	7.9	4	3.0	35	6.7
B (65-79%)	165	42.0	39	29.3	204	38.8
C (50-64%)	189	48.1	88	66.2	277	52.7
D ( 0-49%)	8	2.0	2	1.5	10	1.8

Distribution of the Sample by  
Sex and Age

Sex. The division of the sample on the basis of sex resulted in unequal subsamples, with the majority (54.6%) being male and females accounting for 45.4 percent. The males were predominant among the urban subsample (57.5%) while there were more females (54.1%) than males among the rural group.

Age. More than one-half (58.4%) of the students were in the 17 year old age category and approximately 30 percent were 18 years of age. These two categories accounted for 88.1 percent of the total sample. The tendency for students to be in the two middle categories was similar for both urban and rural subsamples with the urban group having a higher percentage in the 18 year old category than the rural subsample. The total number of students in the two extreme categories (16 or under and 19 or over) were approximately equal, 5.9 and 6.0 percent respectively.

The distribution of the sample by sex and age is shown in Table 8.

Distribution of the Sample by  
Post-Secondary Plans

Of the total sample, 213 (40.5%) chose to attend university, 98 (18.6%) chose a technical institute, and 69 (13.1%) chose junior or agricultural college. There were 88 (16.7%) students who had other plans for the future and 58 (11.0%) respondents had no plans for their future. Approximately three-quarters (75.5%) of the urban and 65.9 percent of the rural students indicated an intention to

**Table 8**  
**Distribution of Urban and Rural Students**  
**by Sex and Age**  
**(n=526)**

Classification	Urban		Rural		Total	
	f	%	f	%	f	%
<b>Sex</b>						
<b>Male</b>	226	57.5	61	45.9	287	54.6
<b>Female</b>	167	42.5	72	54.1	239	45.4
<b>Age</b>						
<b>16 or under</b>	25	6.4	6	4.5	31	5.9
<b>17</b>	222	56.5	85	63.9	307	58.4
<b>18</b>	123	31.3	33	24.8	156	29.7
<b>19 or over</b>	23	5.8	9	6.8	32	6.0

continue their education at one of the post-secondary institutions listed.

The distribution of the sample by post-secondary plans is shown on Table 9.

#### SUMMARY

The sample consisted of 526 high school students out of a possible 637, representing 82.5 percent of the registered grade twelve students in the five schools that were studied. In this chapter, the students were described according to the following variables: educational levels of the father and mother, father's occupation, combined parental income, religion, ethnicity, family size, location of the home, high school program, average grade, age, sex, and post-secondary plans.

Table 9  
 Distribution of Urban and Rural Students by  
 Post-Secondary Plans  
 (n=526)

Post-secondary plans	Urban		Rural		Total	
	f	%	f	%	f	%
University	166	47.8	47	26.3	213	40.5
Junior/Agricultural	43	12.4	26	14.5	69	13.1
Technical Institute	53	15.3	45	25.1	98	18.6
Other	47	13.5	41	22.9	88	16.7
None	38	11.0	20	11.2	58	11.0

## Chapter 5

### ANALYSIS OF THE DATA

#### INTRODUCTION

The purpose of this chapter is to present an analysis of data with respect to the relationship between selected predictor variables and the post-secondary plans of high school students. There are essentially three groups of hypotheses to guide the analysis.

The first group, hypotheses one to eight, deals with the relationship between students' post-secondary plans and family-related variables. The variables include the education of the father and mother, father's occupation, combined parental income, religion, ethnicity, family size, and location of the home.

The second group, hypotheses fourteen and fifteen, is directly related to school variables which include high school program and average grades.

The third group, hypotheses sixteen and seventeen, deals with the students' individual characteristics which include age and sex.

#### HYPOTHESES RELATED TO PARENTAL INFLUENCE

Hypothesis one. There is no significant relationship between the students' post-secondary plans and the educational level attained by the father.

Four categories of fathers' education were used to test the hypothesis; grade nine or less, some high school, high school

graduate, and post-high school. Details of the percentage distribution of responses by groups and by response categories are shown in Table 10. A Chi square of 55.822 with 12 degrees of freedom was found to be significant at the .05 level, and the null hypothesis was rejected.

There appeared to be a tendency for the percentage of respondents who chose university to increase as the level of the father's education increased. In category one 29 percent chose university, in category two 34 percent, category three 47 percent, and in the fourth category 66 percent indicated a desire to attend university.

A close inspection of the data revealed that the greatest variation from expected frequencies occurred among respondents with fathers who had attained post-high school education. Approximately two-thirds (65.7%) of these students planned to attend university, 7 percent chose junior college and a similar number (7.1%) chose technical institute, 10 percent had other plans and 10 percent did not have any plans for the future. Wide variations were also found among those students with fathers who were high school graduates, 47 percent of these students planned to attend university, 14 percent aspired to junior college, 26 percent to technical institute, 7 percent had other plans and 5 percent had no plans.

Hypothesis two. There is no significant relationship between the students' post-secondary plans and the education level attained by the mother.

Categories similar to those used for father were used for

Table 10

Percentage Distribution of Responses According to Post-Secondary Plans and Father's Education (percentage by rows)

Father's Education	Post-Secondary Plans					Total
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
Grade 9 or less (206)	29.1	16.0	18.9	21.8	14.1	39.2
Some High School (126)	34.1	12.7	21.4	20.6	11.1	24.0
High School Graduate (95)	47.4	13.7	26.3	7.4	5.3	18.1
Post-High School (99)	65.7	7.1	7.1	10.1	10.1	18.8
Percentage of Total Responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 55.822      df = 12      Probability = 0.000



mother's education. Table 11 shows the percentage distribution by groups and response categories. A Chi square of 22.069 with a  $df = 12$  and a probability of less than .05 indicates that a significant difference existed in the way these groups of responses were distributed in the various response categories.

Inspection of the data revealed a trend similar to the tendency which existed in the relationship between the father's education and the students' post-secondary plans. The higher the level of mother's education, the larger the percentage of students who planned to attend university. When mother's education was grade nine or less, 31 percent of the students aspired to university. When mother's education level was some high school, 40 percent aspired, where the education level was high school graduate 40 percent aspired, and when mothers had post-high school education 54 percent of the students planned to attend university. Although the variation of responses was not as diverse as under father's education, the greatest variation also occurred among students with mothers who had post-high school education; 54 percent aspired to university, 14 percent to junior college, 13 percent to technical institute, 15 percent chose other and less than 5 percent had no plans. Respondents in the other categories distributed their replies only slightly different from expected frequencies.

Hypothesis three. There is no significant relationship between the students' post-secondary plans and the occupation of the father.

Responses were grouped according to six occupational

Table 11

Percentage Distribution of Responses According to  
Post-Secondary Plans and Mother's Education  
(percentage by rows)

Mother's Education	University (213)	Post-Secondary Plans			Total (526)	
		Junior College (69)	Technical Institute (98)	Other (88)		
Grade 9 or less	(141) 31.2	16.3	21.3	16.3	14.9	26.8
Some High School	(141) 40.4	9.2	21.3	19.9	9.2	26.8
High School Graduate	(136) 39.7	13.2	17.6	15.4	14.0	25.9
Post-High School	(108) 53.7	13.9	13.0	14.8	4.6	20.5
Percentage of total responses	(526) 40.5	13.1	18.6	16.7	11.0	100.0
Chi Square = 22.069		df = 12		Probability = 0.037		

categories; unskilled, semi-skilled, skilled, clerical, professional (1) and professional (2). Table 12 shows the percentage distribution and a Chi square of 53.901 with  $df = 20$  which was significant at the .05 level.

Examination of the data reveals a tendency for the percentage of students who aspired to university to increase in relation to their father's occupation. In the unskilled category 22 percent planned to attend university, in the semi-skilled 28 percent, professional (1) 51 percent and among the professional (2) category 65 percent. The greatest variation among the responses occurred where the student's fathers were classified as professional (2); 65 percent of these students expressed a desire to attend university, 6 percent planned to attend junior college, 10 percent aspired to technical institute, 13 percent had other plans and 6 percent had no plans for the future. There was also a wide variation among students with fathers in the professional (1) category: 51 percent of these students planned to attend university, 18 percent aspired to junior college, 14 percent chose technical institute, 7 percent had other plans and 10 percent had no plans.

Hypothesis four. There is no significant relationship between the students' post-secondary plans and combined parental income.

Table 13 shows percentage distribution of responses for five categories of parental income and a Chi square of 40.933 with 16 degrees of freedom and a probability level less than .05, indicating a rejection of the null hypothesis.

An inspection of the data indicates that a direct relationship

Table 12  
 Percentage Distribution of Responses According to  
 Post-Secondary Plans and Father's Occupation  
 (percentage by rows)

Occupational* Category	Post-Secondary Plans					Total (526)
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
Unskilled	(54) 22.2	18.5	22.2	20.4	16.7	10.3
Semi-skilled	(65) 27.7	12.3	30.8	15.4	13.8	12.4
Skilled	(102) 35.3	11.8	21.6	21.6	9.8	19.4
Clerical	(126) 35.7	12.7	17.5	22.2	11.9	24.0
Professional(1)	(99) 50.5	18.2	14.1	7.1	10.1	18.8
Professional(2)	(80) 65.0	6.2	10.0	12.5	6.2	15.2
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 53.901      df = 20      Probability = 0.000

\* A more detailed description of the Occupational Categories is given in Appendix C

Table 13

Percentage Distribution of Responses According to Post-Secondary Plans and Combined Parental Income (percentage by rows)

Combined Parental Income (per annum)	Post-Secondary Plans				Total (526)
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	
Less than \$5,999 (80)	27.5	11.2	27.5	18.8	15.2
\$6,000 - \$7,999 (99)	33.3	14.1	22.2	23.2	18.8
\$8,000 - \$9,999 (109)	40.4	13.8	22.9	16.5	20.7
\$10,000 - \$11,999 (91)	36.3	15.4	20.9	12.1	17.3
Over \$12,000 (147)	55.1	11.6	6.8	14.3	27.9
Percentage of total responses (526)	40.5	13.1	18.6	16.7	100.0

Chi Square = 40.933      df = 16      Probability = 0.001

exists between parental income and students' aspirations for university. The greater the income of the parents the larger was the percentage of students who aspired to university. This trend was not followed by the 91 students in category four (\$10,000 - \$11,999), 36 percent of these students aspired to university as compared to 40 percent of category three (\$8,000 - \$9,999). More students in category four aspired to junior college or had no plans than any other category.

The greatest variation of responses was found among students with a parental income of over \$12,000; 55 percent of these students aspired to university, 12 percent chose junior college, 7 percent planned to attend technical institute, 14 percent had other plans and 12 percent stated they had no plans.

Hypothesis five. There is no significant relationship between the students' post-secondary plans and their ethnic background.

The Chi square test for significant relationship as shown in Table 14 gives a value of 36.597 with 32 degrees of freedom. The probability level is greater than .05 and the null hypothesis was accepted. The relationship between the students' post-secondary plans and their ethnic background was not significant.

Hypothesis six. There is no significant relationship between the students' post-secondary plans and their religious preference.

The Chi square test for significant relationship as shown in Table 15 gives a value of 7.565 with 8 degrees of freedom. The probability level is greater than .05 and the null hypothesis was accepted. The relationship between the students' post-secondary plans and their religious preference was not significant.

Table 14  
 Percentage Distribution of Responses According to  
 Post-Secondary Plans and Ethnic Background  
 (percentage by rows)

Ethnic Origin	Post-Secondary Plans					Total (526)
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
English	(152) 44.7	14.5	14.5	16.4	9.9	28.9
French	(14) 21.4	7.1	21.4	28.6	21.4	2.7
German	(97) 33.0	14.4	26.8	15.5	10.3	18.4
Netherlands	(18) 38.9	16.7	22.2	5.6	16.7	3.4
Norwegian	(34) 32.4	14.7	20.6	17.6	14.7	6.5
Polish	(22) 36.4	18.2	22.7	13.6	9.1	4.2
Ukrainian	(22) 31.8	0.0	31.8	18.2	18.2	4.2
Native Indian	(4) 0.0	50.0	50.0	0.0	0.0	0.8
Other	(163) 47.2	11.0	13.5	18.4	9.8	31.0
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 36.597

df = 32

Probability = 0.264

Table 15

Percentage Distribution of Responses According to  
Post-Secondary Plans and Religion  
(percentage by rows)

Religion	Post-Secondary Plans				Total
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	
Catholic	(171) 36.8	14.6	22.2	14.6	9.9 32.5
Protestant	(281) 42.7	12.1	16.7	18.5	10.0 53.4
Other	(74) 36.5	13.5	17.6	14.9	17.6 14.1
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0 100.0

Chi Square = 7.565      df = 8      Probability = 0.477



Hypothesis seven. There is no significant relationship between the students' post-secondary plans and their family size.

The Chi square test for significant relationship as shown in Table 16 gives a value of 7.695 with 8 degrees of freedom. The probability level is greater than .05 and the null hypothesis was accepted. The relationship between the students' post-secondary plans and their family size was not significant.

Hypothesis eight. There is no significant relationship between the students' post-secondary plans and their community of residence.

Two categories of community of residence were examined; urban, those students living in a city, and rural, those living in a town or on a farm. Table 17 shows the percentage distribution and a Chi square value of 26.351 with  $df = 4$  and a probability level of less than .05, indicating a rejection of the null hypothesis.

Inspection of the data revealed that more urban students (48%) aspired to university than rural students (27%). Among all other groups the rural students were predominant. Fifteen percent of the rural students as compared to 12 percent of the urban students chose junior college, 25 percent of the rural planned to attend technical institute as compared to 15 percent of the urban, 23 percent of the rural students as compared to 14 percent of the urban had other plans. There was very little difference among those students who did not have any plans for the future, 11 percent for both rural and urban.

#### HYPOTHESES RELATED TO SCHOOL INFLUENCE

Hypothesis nineteen. There is no significant relationship

Table 16

Percentage Distribution of Responses According to Post-Secondary Plans and Size of the Family (percentage by rows)

Family Size	Post-Secondary Plans					Total (526)
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
Small (96)	43.8	14.6	17.7	14.6	9.4	18.3
Average (246)	44.7	12.6	17.5	15.4	9.8	46.8
Large (184)	33.2	13.0	20.7	19.6	13.6	35.0
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 7.695      df = 8      Probability = 0.464

Table 17

Percentage Distribution of Responses According to  
Post-Secondary Plans and Location of Home  
(percentage by rows)

Location of Home	Post-Secondary Plans				Total	
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)		None (58)
Rural (179)	26.3	14.5	25.1	22.9	11.2	34.0
Urban (347)	47.8	12.4	15.3	13.5	11.0	66.0
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 26.351

df = 4

Probability = 0.000

between the students' post-secondary plans and the program of study taken in school.

Table 18 shows the percentage distribution of responses according to post-secondary plans and programs. A Chi square of 147.260 with 12 degrees of freedom and a probability level of less than .05 indicates a rejection of the null hypothesis.

Inspection of the data reveals that the greatest variation of responses occurred among those students who chose university. Of the 361 students on the matriculation program, 57 percent chose university, as compared to 7 percent of the general program students, none of the technical/vocational students and 5 percent of the students on the business program. The general program students indicated that junior college (23%), technical institute (26%), and Other (27%) were their most predominant choices of post-secondary plans. Almost one-half (47%) of the technical/vocational students aspired to technical institute and 25 percent of them had other plans, 20 percent of these students had no plans for the future.

Hypothesis twenty. There is no significant relationship between the students' post-secondary plans and the average grades attained while in high school.

When the responses were categorized according to average grades, considerable variation became apparent among the groups. Table 19 shows the percentage distribution and a Chi square of 51.650 with  $df = 12$ . The probability of less than .05 indicates that there was a significant difference between the students' post-secondary plans and the average grades.

**Table 18**  
**Percentage Distribution of Responses According to**  
**Post-Secondary Plans and High School Program**  
**(percentage by rows)**

High School Program	Post-Secondary Plans					Total
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
Matriculation (361)	56.8	8.0	14.4	12.2	8.6	68.6
General (88)	6.8	22.7	26.1	27.3	17.0	16.7
Tec/Vocational (36)	0.0	16.7	47.2	25.0	11.1	6.8
Business (41)	4.9	34.1	14.6	26.8	19.5	7.8
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 147.260      df = 12      Probability = 0.000

Table 19  
 Percentage Distribution of Responses According to  
 Post-Secondary Plans and Average Grades  
 (percentage by rows)

Average Grades	Post-Secondary Plans					Total
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
80 - 100%	(35) 65.7	5.7	8.6	5.7	14.3	6.7
65 - 79%	(204) 53.9	9.3	16.2	13.7	6.9	38.8
50 - 64%	(277) 27.8	16.2	21.7	20.9	13.4	52.7
0 - 49%	(10) 30.0	30.0	20.0	0.0	20.0	1.9
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0

Chi Square = 51.650      df = 12      Probability = 0.000

Examination of the data reveals that the percentage of respondents who planned to attend university decreased as their average grades decreased and for those who planned to attend junior college, the percentage increased as their average grades decreased.

The greatest variation occurred among those respondents who had the highest average grades (80 - 100%). Approximately 66 percent of these students aspired to attend university, 6 percent chose junior college, 9 percent planned to attend technical institute, 6 percent had other plans for the future and 14 percent stated they had no plans. Considerable variation occurred among those students with 65 - 79 percent average grades; 54 percent chose university, 9 percent picked junior college, 16 percent aspired to technical institute, 14 percent had other plans and 7 percent had no plans. None of the students in the lowest category (0 - 49%) indicated that they had 'Other' plans for the future.

#### HYPOTHESES RELATED TO INDIVIDUAL CHARACTERISTICS

Hypothesis twenty-one. There is no significant relationship between the students' post-secondary plans and their age.

Age was categorized into four groups; 16 and under, 17, 18, and 19 and over. Table 20 shows a Chi square of 36.14 with 12 degrees of freedom and a probability level of less than .05 for the percentage distribution by post-secondary plans and age. This indicates a significant relationship and the null hypothesis was rejected.

Examination of the data indicates two diverse trends between

Table 20  
 Percentage Distribution of Responses According to  
 Post-Secondary Plans and Age  
 (percentage by rows)

Age	Post-Secondary Plans				Total	
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)		None (58)
16 and under	(31) 67.7	6.5	16.1	9.7	0.0	5.9
17	(307) 45.3	9.4	17.3	17.9	10.1	58.4
18	(156) 29.5	18.6	21.2	16.0	14.7	29.7
19 and over	(32) 21.9	28.1	21.9	15.6	12.5	6.1
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0
Chi Square = 36.135	df = 12				Probability = 0.000	



those who chose university and those who planned to attend junior college. The younger the students, the larger the percentage who planned to attend university, and the older the student the larger the percentage who planned to attend junior college.

The greatest variation from expected frequencies occurred among the youngest students (16 and under), 68 percent of these students aspired to university, 7 percent indicated an interest in attending junior college, 16 percent chose technical institute and 10 percent had other plans, none of these students stated that they did not have any plans. There was also considerable variation in the largest category (the 17 year olds); 45 percent wanted to attend university, 9 percent wanted to attend junior college, 17 percent aspired to technical institute, 18 percent stated they had other plans, and 10 percent indicated they did not have any plans.

Hypothesis twenty-two. There is no significant relationship between the students' post-secondary plans and their sex.

The Chi square test for significant relationship as shown on Table 21, gives a value of 6.485 with 4 degrees of freedom. The probability level is greater than .05 and the null hypothesis could not be rejected. The relationship between students' post-secondary plans and their sex was not significant.

#### SUMMARY

The purpose of this chapter was to determine if there were any significant relationships between high school students' post-secondary plans and certain selected variables. The chapter was

Table 21  
 Percentage Distribution of Responses According to  
 Post-Secondary Plans and Sex  
 (percentage by rows)

Sex	Post-Secondary Plans					Total
	University (213)	Junior College (69)	Technical Institute (98)	Other (88)	None (58)	
Male	(287) 36.2	13.2	21.3	16.7	12.5	54.6
Female	(239) 45.6	13.0	15.5	16.7	9.2	45.4
Percentage of total responses (526)	40.5	13.1	18.6	16.7	11.0	100.0
Chi Square = 6.485	df = 4				Probability = 0.166	

divided into three sections based on an examination of the null hypotheses related to: (1) parental influence, (2) school influence, (3) individual characteristics. The Chi square analysis was used to test for significant relationships.

An examination of the hypotheses related to family influence on students' decision making showed that not all of the variables were significant. The four indicators of socioeconomic status, the education levels of the father and mother, father's occupation, and combined parental income, were found to be significantly related to the post-secondary plans of high school students. The community of residence was also found to be significant. No significant relationships were found between post-secondary plans of high school students and their ethnic background, religious preference, or their family size.

Two variables were examined as indicators of school influence on the students' decision-making process. A significant relationship was found to exist between both the high school program and the average grades attained, and the post-secondary plans of the students.

The hypotheses related to individual characteristics were concerned with two variables, age and sex. An examination of these variables revealed that there was a significant relationship between the age of the students and their post-secondary plans. No significant relationship was found between sex and the students' plans.

## Chapter 6

### ANALYSIS OF VALUE ORIENTATION SCORES

#### INTRODUCTION

The purpose of this chapter is to present an analysis of the data with respect to relationships among the students grouped according to their post-secondary plans and their value orientations. For this study the scores of the individual students on each value subscale were assumed to indicate their degree of acceptance of the traditional - emergent value orientation.

The mean scores on the traditional and emergent value orientations and on the eight value subscales for the five sub-groups were compared by means of a one-way analysis of variance to determine if differences did exist. The Scheffe test was used to make an a posteriori comparison of the means following a significant F ratio. Probabilities which satisfied the 0.10 criterion level required for Scheffe's test were used as the test for significance.

The various sub-groups were determined on the basis of the students' choice of post-secondary options and categorized as: university, junior college, technical institute, other and none. This chapter concludes with a summary of the findings.

#### TRADITIONAL VALUE ORIENTATION

This value orientation is characteristic of an individual

who emphasizes the following: (1) work-success ethic, (2) future-time orientation, (3) personal independence, and (4) rigid discipline. The seventeen items that made up the traditional value orientation are listed under the analysis of the four subscales. (numbered as they appeared on the questionnaire - see Appendix A)

Hypothesis nine. There is no significant difference among the mean scores on the traditional value orientation for those students who chose university, junior college technical institute, other, or none.

Table 22 shows the data for the one-way analysis of variance of the traditional value orientation scores. The null hypothesis was rejected on the basis of an F ratio of 2.67 with a probability level of less than .05. There was a significant difference in the students' traditional value orientation when classified by their post-secondary plans.

The Scheffe multiple comparison of means is presented in Table 23. This analysis of the data indicates that there was a significant difference between the mean scores for those students who planned to attend junior college and those who had no plans.

Further examination of the traditional value orientation was conducted by an analysis of the four subscales and the students classified by their post-secondary plans.

#### Work-Success Ethic

Individuals who accept this value view success as being a constant goal in their lives and are concerned with improving their status. The questionnaire attempted to measure the students' acceptance

**Table 22**  
**Summary of Analysis of Variance of the Traditional**  
**Value Orientation of the Total Sample**

Sub-Groups	N	Means*	Standard Deviation	F Ratio	Prob.
University	213	43.64	8.86	2.67	0.03
Junior College	69	40.97	8.40		
Technical Institute	98	44.42	8.98		
Other	88	43.63	9.95		
None	58	43.71	11.06		
<b>Totals</b>	<b>526</b>	<b>43.71</b>	<b>9.33</b>		

\* The lower the mean score, the greater was the acceptance of the  
 Traditional Value Orientation.

**Table 23**  
**Probability Matrix for Scheffe Multiple Comparison of**  
**Means for the Traditional Value Orientation**  
**and Post-Secondary Plans**

	University	Junior College	Technical Institute	Other	None
University	1.000	0.365	0.976	1.000	0.496
Junior College		1.000	0.234	0.531	0.043*
Technical Institute			1.000	0.987	0.861
Other				1.000	0.621
None					1.000

\* Significant at the .10 level of probability

of this value with the following items:

I ought to:

19. attain a higher position than my father attained
26. try to do things better than others
40. get a job which has status
47. strive to be an expert at something
50. feel that it is right to be very ambitious

Hypothesis ten. There is no significant difference among the mean scores on the work-success ethic value orientation for those students who chose university, junior college, technical institute, other or none.

Table 24 presents the data for the one-way analysis of variance of the work-success value orientation scores. The F ratio of 2.14 with a probability level greater than .05 indicates an acceptance of the null hypothesis. There was no significant difference in the work-success value orientation between students grouped according to their post-secondary plans.

#### Future-Time Orientation

The four items that determined this subscale were concerned with the belief that the future is most important.

I ought to:

14. plan carefully for future opportunities
21. save money carefully
28. spend less and save more
42. plan and save for the future



Table 24

Summary of Analysis of Variance of the Work-  
Success Ethic Value Orientation Scores  
of the Total Sample

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	14.22	4.22	2.14	0.07
Junior College	69	12.60	3.33		
Technical Institute	98	14.02	3.93		
Other	88	13.84	4.22		
None	58	14.12	4.12		
Totals	526	13.89	4.06		

\* The lower the mean score, the greater was the acceptance of the  
Work-Success Ethic as a Value Orientation.

Hypothesis eleven. There is no significant difference among the mean scores on the future-time value orientation for those students who chose university, junior college, technical institute, other or none.

Table 25 shows that when compared on the basis of future-time value orientation, a significant difference existed among the mean scores of the sub-groups. The F ratio of 3.70 and a probability level of less than .05 was sufficient for a rejection of the null hypothesis. The Scheffe multiple comparison of means test to probe the nature of the differences between means is represented on Table 26. The mean score of the future-time orientation for the university sub-group was significantly different from the mean score of the 'none' sub-group. A significant difference also existed between the mean scores of those students who planned to attend junior college and those who had 'no plans for the future'.

### Rigid Discipline

Persons who accept this value orientation feel that characteristics such as: strict discipline and obedience, will result in the development of self-control. (scores on item 29 were reflected when recorded on IBM cards)

I ought to:

- 29. resist strict discipline in school
- 35. feel children should obey their parents
- 38. accept strict discipline in the home
- 45. feel that old fashioned discipline is needed today

Table 25

Summary of Analysis of Variance of the Future-  
Time Value Orientation Scores of  
the Total Sample

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	8.99	3.31	3.70	0.01
Junior College	69	8.36	3.19		
Technical Institute	98	9.25	3.45		
Other	88	9.18	3.54		
None	58	10.64	4.13		
Totals	526	9.17	3.49		

\* The lower the mean score, the greater was the acceptance of the  
Future-Time Orientation as a Value Orientation.

Table 26

Probability Matrix for Scheffe Multiple Comparison of Means for Future-Time Value Orientation and Post-Secondary Plans

	University	Junior College	Technical Institute	Other	None
University	1.000	0.783	0.984	0.996	0.037*
Junior College		1.000	0.611	0.705	0.009*
Technical Institute			1.000	0.999	0.215
Other				1.000	0.187
None					1.000

\* Significant at the .10 level of probability

Hypothesis twelve. There is no significant difference among the mean scores on the rigid discipline value orientation for those students who chose university, junior college, technical institute, other, or none.

The F ratio of 1.10 with a probability level greater than .05, as shown in Table 27, resulted in an acceptance of the null hypothesis. There was no significant difference among the mean scores of the various sub-groups when compared on the basis of the rigid discipline value orientation.

### Personal Independence

Certain items on the questionnaire were designed to measure the student's acceptance of the personal independence value. This value orientation is characteristic of persons who feel that the individual is sacred and always more important than the group.

I ought to:

- 22. make my own decisions in most matters
- 39. try to avoid making the same mistake twice
- 44. spend as much time as I can working independently
- 46. stand by my convictions

Hypothesis thirteen. There is no significant difference among the mean scores on the personal independence value orientation for those students who chose university, junior college, technical institute, other, or none.

Table 28 presents the data for the analysis of variance of the personal independence value orientation scores. The F ratio is given as 2.21 with a probability level greater than .05, resulting in an acceptance of the null hypothesis. There was no significant difference

**Table 27**  
**Summary of Analysis of Variance of the Rigid**  
**Discipline Value Orientation Scores**  
**of the Total Sample**

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	12.51	3.21	1.10	0.36
Junior College	69	11.75	2.83		
Technical Institute	98	12.44	2.85		
Other	88	12.26	3.11		
None	58	12.81	3.59		
<b>Totals</b>	<b>526</b>	<b>12.39</b>	<b>3.12</b>		

\* The lower the mean score, the greater was the acceptance of Rigid Discipline as a Value Orientation.

**Table 28**  
**Summary of Analysis of Variance of the Personal**  
**Independence Value Orientation Scores**  
**of the Total Sample**

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	7.92	2.26	2.21	0.07
Junior College	69	8.25	2.40		
Technical Institute	98	8.70	2.55		
Other	88	8.34	2.32		
None	58	8.60	2.69		
Totals	526	8.26	2.40		

\* The lower the mean score, the greater was the acceptance of  
 Personal Independence as a Value Orientation.

in the students' acceptance of the personal independence value orientation when classified on the basis of their post-high school plans.

#### EMERGENT VALUE ORIENTATION

The emergent value orientation is characteristic of an individual who emphasizes the following: (1) other directed, (2) hedonistic tone, (3) sociability, (4) group conformity. The twelve items that made up the emergent value orientation are listed under the analysis on the four subscales.

Hypothesis fourteen. There is no significant difference among the mean scores on the emergent value orientation for those students who chose university, junior college, technical institute, other, or none.

Table 29 presents the data for a one-way analysis of variance of the emergent value orientation scores. The null hypothesis was accepted based on an F ratio of 1.52 with a probability level greater than .05. There was no significant difference in the mean scores of the emergent value orientation when the students were grouped according to their choice of post-secondary options.

Further examination of the data was conducted by applying a one-way analysis of variance for significant differences among each of the emergent value subscales and the students grouped according to their post-secondary plans.

#### Other Directed

The four items which attempted to determine the students'



**Table 29**  
**Summary of Analysis of Variance of the**  
**Emergent Value Orientation of the**  
**Total Sample**

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	31.10	6.27	1.52	0.19
Junior College	69	29.30	7.15		
Technical Institute	98	31.64	7.17		
Other	88	30.55	6.89		
None	58	30.14			
<b>Totals</b>	<b>526</b>	<b>30.77</b>	<b>6.71</b>		

\* The lower the mean score, the greater was the acceptance of the Emergent Value Orientation.

acceptance of this subscale were concerned with the belief that morality is what the group thinks is right.

I ought to:

16. be careful not to offend others
20. consider carefully the feelings of others
24. strive for peace with everyone
27. make as many friends as possible

Hypothesis fifteen. There is no significant difference among the mean scores on the other directed value orientation for those students who chose university, junior college, technical institute, other, or none.

The data for the analysis of variance of the other directed value orientation scores is given in Table 30. An F ratio of 1.61 with a probability level greater than .05 indicates an acceptance of the null hypothesis. There was no significant difference in the mean scores of the value subscale, other directed, when the students were classified according to their post-secondary plans.

#### Hedonistic Tone

Persons who accept this value orientation feel that they should live to enjoy the present, rather than sacrificing through self-denial. The four items which attempted to measure this value were:

I ought to:

15. feel that present happiness is most important
16. do things which permit me to have fun and be happy

Table 30  
 Summary of Analysis of Variance of the Other  
 Directed Value Orientation Scores  
 of the Total Sample

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	8.86	3.11	1.61	0.17
Junior College	69	8.57	3.10		
Technical Institute	98	9.28	3.38		
Other	88	9.26	3.02		
None	58	9.81	3.55		
Totals	526	9.07	3.20		

\* The lower the mean score, the greater was the acceptance of Other Directed as a Value Orientation.

- 43. feel present happiness is most important thing in life
- 49. get as much pleasure out of life now as possible

Hypothesis sixteen. There is no significant difference among the mean scores on the hedonistic tone value orientation for those students who chose university, junior college, technical institute, other, or none.

Table 31 shows that when compared on the basis of the hedonistic tone value orientation, a significant difference existed among the five sub-groups classified by their choice of post-secondary plans. The F ratio of 3.52 with a probability level less than .05 was sufficient for a rejection of the null hypothesis. The Scheffe multiple comparison of means test was used to probe for significant differences among the sub-groups. Table 32 presents the data for this test and indicates that a significant difference existed between the mean scores of those students who planned to attend a technical institute and those students who had 'no plans for the future'.

### Sociability

This value orientation refers to a disposition towards friendliness, a liking for other people and a desire to get along well with them. The two items which attempted to measure the students' acceptance of this value orientation were:

I ought to:

- 37. be very sociable
- 48. have fun attending parties and being with people

Hypothesis seventeen. There is no significant difference among the mean scores on the sociability value orientation for those

Table 31

**Summary of Analysis of Variance of the Hedonistic  
Tone Value Orientation Scores  
of the Total Sample**

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	10.04	3.08	3.52	0.01
Junior College	69	9.75	3.00		
Technical Institute	98	10.55	3.34		
Other	88	9.42	3.27		
None	58	8.74	3.48		
<b>Totals</b>	<b>526</b>	<b>9.85</b>	<b>3.23</b>		

\* The lower the mean score, the greater was the acceptance of Hedonistic Tone as a Value Orientation.

Table 32  
 Probability Matrix for Scheffe Multiple Comparison of  
 Means for Hedonistic Tone Value Orientation  
 and Post-Secondary Plans

	University	Junior College	Technical Institute	Other	None
University	1.000	0.982	0.785	0.678	0.114
Junior College		1.000	0.642	0.981	0.533
Technical Institute			1.000	0.217	0.021*
Other				1.000	0.813
None					1.000

\* Significant at the .10 level of probability

students who chose university, junior college, technical institute, other, or none.

The data for the one-way analysis of variance on the sociability value orientation is given in Table 33. The F ratio of 1.05 with a probability level greater than .05 resulted in an acceptance of the null hypothesis. There was no significant difference in the mean scores of the sociability value orientation among the five groups of students classified by their post-secondary plans.

#### Group Conformity

Persons who accept this value orientation feel that the group is most important and that everything is relative to the group. There were two items on the questionnaire which attempted to measure the students' acceptance of group conformity.

I ought to:

31. feel that the group should decide what kind of behavior it will approve
34. wear clothes similar to those of my friends

Hypothesis eighteen. There is no significant difference among the mean scores on the group conformity value orientation for those students who chose university, junior college, technical institute, other, or none.

Table 34 gives the data for the one-way analysis of variance of the group conformity value orientation. The F ratio of 2.55 with a probability level less than .05 indicates a rejection of the null hypothesis. There was a significant difference in the group conformity value orientation between students classified by their

Table 33

**Summary of Analysis of Variance of the Sociability  
Value Orientation Scores of  
the Total Sample**

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	4.55	1.69	1.05	0.38
Junior College	69	4.06	1.70		
Technical Institute	98	4.36	1.64		
Other	88	4.47	1.82		
None	58	4.14	1.61		
<b>Totals</b>	<b>526</b>	<b>4.35</b>	<b>1.70</b>		

\* The lower the mean score, the greater was the acceptance of Sociability as a Value Orientation.



Table 34

**Summary of Analysis of Variance of the Group  
Conformity Value Orientation Scores  
of the Total Sample**

Sub-Groups	N	Mean*	Standard Deviation	F Ratio	Prob.
University	213	7.75	1.91	2.55	0.04
Junior College	69	6.93	2.13		
Technical Institute	98	7.46	1.90		
Other	88	7.40	1.82		
None	58	7.45	1.70		
<b>Totals</b>	<b>526</b>	<b>7.50</b>	<b>1.90</b>		

\* The lower the mean score, the greater was the acceptance of Group Conformity as a Value Orientation.

post-secondary plans. The Scheffe multiple comparison of means test to probe the nature of the difference between the means is presented in Table 35. The mean score of those students who aspired to university was significantly different from that of the students who planned to attend junior college.

#### SUMMARY

Chapter 6 presented an analysis of data with respect to the relationships between students' plans and value orientations. The one-way analysis of variance test was used to determine if significant differences existed in the mean scores of the students' value orientations. When significant differences were found to exist, the Scheffe test was applied to probe the nature of the differences. The analysis of the traditional and emergent value orientations and their various subscales are summarized below.

##### Traditional Value Orientation

A significant difference was found in the traditional value orientation scores, further analysis indicated that there was a difference in the mean score of those students who chose junior college and those students who chose 'none'. An analysis of the value subscale, future-time orientation, showed that there were significant differences between those who had no plans for the future and (1) those who chose junior college, (2) those who planned to attend university.

Table 35  
 Probability Matrix for Scheffe Multiple Comparison of  
 Means for Group Conformity Value Orientation  
 and Post-Secondary Plans

	University	Junior College	Technical Institute	Other	None
University	1.000	0.047*	0.820	0.717	0.890
Junior College		1.000	0.529	0.668	0.669
Technical Institute			1.000	0.999	1.000
Other				1.000	0.999
None					1.000

\* Significant at the .10 level of probability

No significant differences in the mean scores of the five sub-groups, classified by students' choice of post-secondary options, were found when the value subscales; work-success ethic, rigid discipline, and personal independence, were examined.

#### Emergent Value Orientation

No significant difference was found to exist in the students' emergent value orientation scores. An analysis of the value subscales indicated that significant differences did exist in the mean scores of the value subscales; hedonistic tone and group conformity between students classified by their post-secondary options.

The Scheffe multiple comparison of means showed that for the hedonistic tone value orientation, there was a significant difference in the mean scores between the two sub-groups, technical institute and none. A similar examination of the group conformity value orientation showed a significant difference existed in the mean scores between the sub-groups, university and junior college.

There was no significant difference in the mean scores of the value subscales, other directed, and sociability between students classified by their choices of post-secondary options.

## Chapter 7

### SUMMARY, CONCLUSIONS, AND IMPLICATIONS

#### SUMMARY

##### The Problem

The primary purpose of this study was to investigate the relationship of the post-secondary plans of some high school students in Alberta and certain selected variables. The selected variables included: (1) the demographic variables; age, sex, socioeconomic status, program, grades, religion, ethnicity, family size, and location of the home, and (2) value orientations based on the traditional-emergent conceptualization.

A review of related literature indicated that a high school students' decision in regard to his post-secondary plans may be influenced by: his parents, his peer groups, the high school he attended, and individual characteristics. Based on the literature cited, the following problem areas were investigated:

1. Is there a significant relationship between the students' post-secondary plans and such indicators of parental influence as: socioeconomic status, religion, ethnic background, family size and location of the home.
2. Is there a significant relationship between the students' post-secondary plans and such indicators of school influence as: program and average grades.

3. Is there a significant relationship between the students' post-secondary plans and the individual characteristics such as: age and sex.

4. Is there a significant relationship between the student's choice of post secondary plans and the individual's acceptance of the traditional or emergent value orientation.

### Procedure

The sample consisted of 526 grade twelve students from five high schools, selected from the public and separate school systems. These schools represented one urban and three rural communities in Alberta.

Data were collected from the students by means of a three-part questionnaire. Part 1 of the questionnaire solicited certain demographic and socioeconomic data. Part 2 required the students to indicate their post-secondary plans after graduation from high school. Part 3 of the questionnaire consisted of a Differential Values Inventory, with thirty-seven Likert-type items to which the students were asked to respond.

The questionnaires were administered by the principals of the cooperating high schools, and the usable responses were coded on IBM cards for computer analysis at the Department of Educational Research, University of Alberta.

Twenty-two research hypotheses were formulated to guide the study, and three statistical tests were applied to test these null hypotheses. Hypotheses one to eight and nineteen to twenty-two were tested using the Chi Square for a comparison of data expressed as a

percent of frequencies in discrete categories. Hypotheses nine to eighteen were tested using the one-way analysis of variance as an overall test and the Scheffe multiple comparison of means to identify significant differences.

The findings of this research were classified into four categories in compliance with the four problems areas. The first category pertained to the relationship between students' post-secondary plans and the hypotheses (1 to 8) related to parental influence. The second category, hypotheses nine to eighteen, examined the students' value orientation in relation to their post-secondary plans. School influence was investigated by testing hypotheses nineteen and twenty, while hypotheses twenty-one and twenty-two tested the relationship between individual characteristics and post-secondary plans.

### Findings

Parental influence. The findings provided support for the theory that the students' choice of post-secondary options is influenced by their parents. Significant relationships were found between the students' post-secondary plans and the four indicators of socioeconomic status: fathers' and mothers' education, father's occupation, and combined parental income. The higher the level of education, occupation, and income that the parents attained, the larger was the percentage of students who planned to attend university. The location of the home also proved to be significantly related to the students' post-secondary plans, with more urban than rural students aspiring to continue their education.

No significant relationships were found between the post-secondary plans of the high school students and their ethnic background, religious preference, or the size of their family.

School influence. The two indicators of school influence that were examined proved to be significantly related to the students' post-secondary plans. Both the high school program and the average grades attained by the students were found to be related to the students' decision for post-high school plans. University was the predominant choice for those students who were taking the matriculation program and also for those who had high average grades (65% and above).

Individual characteristics. An examination of the data showed that there was a significant relationship between the age of the students and their post-secondary plans. The younger students tended to choose university as a post-high school goal, while the older students seemed to favor junior college. There was no significant relationship between the students' sex and their post-secondary plans.

Value orientations. When the four traditional subscales were combined, a significant difference was found in the traditional value orientation scores between the five groups classified by the students' choice of post-secondary options. Only one traditional subscale, future-time orientation, proved to be significantly related.



No significant differences were found among the mean scores of the value subscales; work-success ethic, rigid discipline, and personal independence, when compared on the basis of the student sub-groups; university, junior college, technical institute, other and none.

No significant difference was revealed when the emergent value orientations were compared using five groups classified by their post-secondary plans. An examination of the subscales indicated significant differences in the mean scores of the emergent subscales; hedonistic tone and group conformity, between the students classified by their choice of post-secondary options. No significant differences were found in mean scores of the subscales, other directed and sociability.

#### CONCLUSIONS

As part of a 'career decisions project' conducted for the Department of Manpower and Immigration in 1967, Brenton and McDonald found that 75 percent of the high school students in Alberta planned to continue their education at some post-secondary institution. This finding compares favorably with the 72 percent who indicated similar aspirations in this study. Brenton and McDonald also found that 52 percent of the secondary students aspired to attend university, this is considerably higher than the 40.5 percent who chose university in this research study. A considerable increase in the percentage of students intending to continue their education at a technical institute is evident as well, when the results of the 1957 study (10.7%)

are compared to the 1971 study (18.6%). Substantial differences also occurred among those students who had 'other' plans for the future, whereas 7 percent of the students in the 1967 study chose 'other', the findings in this study indicate that this sub-group had more than doubled, 16.7 percent chose 'other' in 1971.

One of the purposes of this study was to determine the relationship between students classified by post-secondary plans and certain indicators of parental influence, namely mother's education, father's education, father's occupation, parental income, community of residence, family size, religion, and ethnicity. Parental influence tended to be significantly related to the students' choice of post-secondary plans. The educational levels of both parents, father's occupation, combined parental income, and the location of the home, all proved to be significantly related to the students' post-secondary plans. The findings showed that students who had parents with post-high school education, a father in one of the professional occupational categories, earning over \$12,000 per annum, and living in an urban community were most likely to continue their education, probably by attending a university.

Three other factors were posited as possible indicators of parental influence; religion, ethnicity, and family size. None of these factors were found to be significantly related to the students' choice of post-secondary options. This disputes somewhat the findings reported by Narine, since he found a significant relationship between family size and the students' post-secondary plans.

A second problem area was concerned with the influence of the school on the students' decisions for their post-high school future. Two indicators of school influence were examined in this study; high school program and average grades. Significant relationships were found between both the program and the average grades, and the post-secondary plans of the high school students. Results indicated that the majority of students were enrolled in the matriculation program and had attained average grades of between fifty and eighty percent, and that the majority of these students intended to continue their education after graduation from high school.

Keoyote reported a significant relationship between sex but no significant relationship between age when compared to the students' post-secondary plans. The results of this study somewhat contradict these findings. An analysis of the individual characteristics showed that a significant relationship existed between age and no significant relationship was found between sex and the students' post-secondary plans. The younger students tended to aspire to an educational institution to a greater degree than the older students and none of the younger students indicated that they had no plans for the future.

The significant relationships established between the selected variables and the students' choice of post-secondary options suggested the following conclusions:

1. The students who chose university as their post-secondary option tended to come from high socioeconomic families, live in urban areas, take a matriculation program and maintain a 65 percent or

higher average in high school and tended to be seventeen or younger.

2. The high school students who aspired to attend junior or agricultural college were representative of all levels of socioeconomic status from both urban and rural areas, were less likely to have taken the matriculation program, were more likely to have an average of below 65 percent and to be eighteen or over.

3. The characteristics of respondents who indicated plans to attend a technical institute were very similar to those students who aspired to junior college, except that more rural students than urban chose to attend technical institutes.

4. An examination of the 'other' sub-group showed that these students were less likely to be from high socioeconomic status families or from urban areas, they were more likely to have taken a non-matriculation program, have average grades below 65 percent and be seventeen or over.

5. Those students who stated they had no plans for the future were representative of a cross-section of all variables except age. None of the youngest age group (16 and under) stated that they had no plans for the future.

An examination of the value orientation scores showed that the mean scores of the students grouped according to their choice of post-secondary options were significantly different when compared on the basis of the traditional value orientation. A closer examination of the traditional orientation revealed a significant difference in the value subscale, future-time orientation, but there were no significant differences in the traditional subscales; work-

success ethic, rigid discipline, and personal independence between the five groups classified by their post-secondary plans.

No significant relationship was found when the emergent value orientation was examined in relation to the five sub-groups classified by the students' plans. An examination of the emergent value subscales revealed significant differences in the hedonistic tone and group conformity subscales between the students grouped according to their choice of post-secondary options. The subscales; other directed and sociability were shown not to be significantly different.

The acceptance of certain hypotheses related to the traditional and emergent value orientations and the rejection of other hypotheses related to this same value conceptualization indicated support for Friesen's research into the values of the urban teenager. It appears that while the high school student regards the present time or emergent values to be important, they also maintain values that are indicative of the more traditional value orientation. This is in contradiction with Coleman, who views the youth culture as a separate society with very little contact with the adult world. Neither do the findings of this study support the studies conducted by Knill. An investigation of the data pertaining to value orientations did not reveal the existence of a distinctive separate 'sub-culture' to which the teenagers were reported to have had belonged.

Evidence from this study did indicate that while the students are not estranged from their adolescent peer groups they are orientated towards the adult world.

The lower mean scores recorded by the various sub-groups on the traditional - emergent value orientation scales indicated a greater acceptance of the various value orientations by the different sub-groups.

A summary of the mean scores of each sub-group on each of the traditional - emergent values subscales is given in Appendix B.

### IMPLICATIONS

The conceptual framework with in which this study was conducted was limited by the small number of demographic and personal variables studied, and by the use of only one value scale. Thus the possible implications of this report are dependent upon future research in any one or all of the areas of influence on a students' decision-making process.

This investigation showed that the decision-making process of the high school student is influenced by his parents, the school he attends, and his individual characteristics. The indecisiveness of the relationship between the value orientations and the students' post-secondary plans may be indicative of the fact that the value orientations studied are not adequate indicators of peer group influence.

The results of this study have implications for parents, teachers, and pupils. More particularly, they have implications for educational administrators at both the secondary and post-secondary levels.

The first problem area to be examined focused on the role of the parents as an influential factor in the student's life. The positive findings indicated the necessity of a close relationship between the home and the school for the benefit of the student. It implied that close communication between the counseling services of the school and the home may benefit the student in his choice of post-secondary options. The need for both the home and the school to be aware of their influential capabilities and to work together for the benefit of the student has not decreased in recent years, if anything it has increased.

There is also implied the need for better articulation between the secondary schools and the post-secondary institutions. Although there appears to be a decrease in the percentage of students planning to attend university, there is very little change in the overall percentage of those students who intend to continue their education at a post-secondary educational institution. Thus the responsibilities of educational administrators in the various educational institutions, both secondary and post-secondary, are increasing. The diversity of student plans adds importance to the need for cooperative articulation among the various institutions.

The high school administrator should also be made aware of the influence the school appears to exert on the students' decision to continue his education. Improvements in the areas of program development and evaluation may elevate the students' satisfaction and achievement, thus encouraging him to greater post-high school

aspirations. Administrators may aid parents, teachers, and counsellors in combining their efforts, in the hope of assisting the students to a realistic choice of post-secondary options.

The influential aspect of the school on student's plans has encouraging implications for educators since it is another indication of the vital role schools play in the lives and plans of their students. The responsibilities this places on educators, need not be overwhelming, but they do demand the undivided attention of all those involved in the formal education of the student.

The decline in the percentage of students planning to attend university (a decline of 12% between the 1967 study and this 1971 study) implies the need for a reappraisal of the aims, objectives and present structure of this particular post-secondary institution. Speculation as to the reasons for this decline is enhanced by the apparent increase in the percentage of those students planning to attend technical institutes (an increase of 8%) and an increase in the 'no plans for the future' sub-group (an increase of over 9% between 1967 and 1971). Future studies in this area may be able to discover some of the major reasons why high school graduates are choosing other post-secondary educational institutions in preference to attending university.

The values held by individuals are highly subjective and difficult to determine accurately as was shown by the diverse results of the studies recorded under Related Literature. The values which an individual holds are a result of his contact with a variety of



social systems; the individual himself, his home environment, his association with different peer groups, the schools he attends, and society in general. It was evident from the data examined that the high school graduate irrespective of his post-secondary plans is a product of all the social systems to which he has or does belong.

The complexity of the students' value orientations, as indicated by the findings of this study, implies that a need exists for further research in this area, and for an understanding commitment to the youth of today by all aspects of society. Educators, especially administrators involved in the formulation of educational policy, are in a particularly opportune position to assist students in becoming committed to a value orientation that is both relevant and beneficial to themselves and society.

#### SUGGESTIONS FOR FURTHER RESEARCH

Some possible suggestions for further research developed out of this study.

1. The study should be replicated, hopefully by means of a random sample of a number of urban and rural communities.
2. A more comprehensive study could be conducted in an attempt to identify as many variables as possible that may be related to parental, peer group, and school influence on the post-secondary plans of high school students.
3. Comparative studies based on random samples from a number of provinces could be undertaken in an attempt to determine possible

relationships between the educational aspirations of high school students in different areas of Canada.

4. An investigation of the plans of high school students as related to a number of value scales in addition to the instrument used in this study could prove to be valuable research study. Such instruments as Friesen's High School Student Values Inventory and the instrument developed by Allport, Vernon, and Lindzey would provide a good means of studying different values.

5. A follow-up study could be conducted to determine the extent to which the students examined in this study fulfilled their aspirations.

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**A P P E N D I X A**

**QUESTIONNAIRE**

CODE

**Individual replies  
are held in strict  
confidence**

On the following pages are a few questions requesting some personal information as well as your plans for the future.

**GENERAL INSTRUCTIONS**

1. Please do not write your name on the questionnaire
2. Please answer each question as accurately as you are able
3. Please return the completed questionnaire to your principal or his representative. The questionnaire will be mailed to the University.

Thank you for your cooperation

H.C. Narine



6. What is the highest level of your father's education?
  1. Grade 9 or less
  2. Some high school
  3. High school graduate or equivalent
  4. Post-High school education
  
7. What is the highest level of your mother's education?
  1. Grade 9 or less
  2. Some high school
  3. High school graduate or equivalent
  4. Post-high school education
  
8. Estimate your parents' combined income for last year?
  1. less than \$5,999
  2. \$6,000 to \$7,999
  3. \$8,000 to \$9,999
  4. \$10,000 to \$11,999
  5. over \$12,000
  
9. What is your father's present occupation?
  1. Unskilled laborer
  2. Semi-skilled worker
  3. Skilled worker
  4. Secretary, clerk, foreman, salesman, etc.
  5. School teacher, other profession
  6. Banker, college teacher, physician, lawyer, etc.
  
10. Where is your home situated?
  1. on a farm
  2. in a town
  3. in a city

11. What are your parents' religious affiliation?

1. Catholic
2. Protestant
3. Other (please specify) \_\_\_\_\_

12. To what ethnic or cultural group do your ancestors (on the male side) belong on coming to this continent?

1. English
2. French
3. German
4. Netherlands
5. Norwegian
6. Polish
7. Ukrainian
8. Native Indian
9. Other

13. Which one of the following post-secondary options are you most likely to take when you leave high school at the end of the current academic year?

Please circle one only. THINK CAREFULLY:

1. University - including Nurses Training
2. Junior or Agricultural College
3. An Institute of Technology
4. Other
5. None

**Directions:**

1. **Read** each item carefully, beginning each with "I ought to."
2. **Think** about how well the statement agrees with your feeling.
3. **Circle** the number of the best answer.

I ought to:	I AGREE:				
	Very Strongly	Strongly	Moder- ately	Some what	Not much
14. plan carefully for future opportunities	1	2	3	4	5
15. feel that present happiness is most important	1	2	3	4	5
16. be careful not to offend others	1	2	3	4	5
17. put in long hours of work each day	1	2	3	4	5
18. have firm convictions about educational matters	1	2	3	4	5
19. attain a higher position than my father attained	1	2	3	4	5
20. consider carefully the feelings of others	1	2	3	4	5
21. save money carefully	1	2	3	4	5
22. make my own decisions in most matters	1	2	3	4	5
23. choose a job where I can work with many interesting people	1	2	3	4	5
24. strive for peace with everyone	1	2	3	4	5
25. have firm ideas about politics	1	2	3	4	5
26. try to do things better than others	1	2	3	4	5
27. make as many friends as possible	1	2	3	4	5
28. spend less and save more	1	2	3	4	5
29. resist strict discipline in school	1	2	3	4	5

Please turn to next page.....

I ought to:	I AGREE:				
	Very Strongly	Strongly	Moderately	Some what	Not much
30. be very ambitious	1	2	3	4	5
31. feel that the group should decide what kind of behavior it will approve	1	2	3	4	5
32. feel that present sacrifice may be important for future gains	1	2	3	4	5
33. get a well paying job	1	2	3	4	5
34. wear clothes similar to those of my friends	1	2	3	4	5
35. feel children should obey their parents	1	2	3	4	5
36. do things which permit me to have fun and be happy	1	2	3	4	5
37. be very sociable	1	2	3	4	5
38. accept strict discipline in the home	1	2	3	4	5
39. try to avoid making same mistake twice	1	2	3	4	5
40. get a job which has status	1	2	3	4	5
41. feel that work comes before pleasure	1	2	3	4	5
42. plan and save for the future	1	2	3	4	5
43. feel present happiness is most important thing in life	1	2	3	4	5
44. spend as much time as I can working independently	1	2	3	4	5
45. feel that old-fashioned discipline is needed today	1	2	3	4	5
46. stand by my convictions	1	2	3	4	5
47. strive to be an expert at something	1	2	3	4	5
48. have fun attending parties and being with people	1	2	3	4	5
49. get as much pleasure out of life as possible	1	2	3	4	5
50. feel that it is right to be very ambitious	1	2	3	4	5

**A P P E N D I X B**



## Varimax Rotated Factors

Communalities	1	2	3	4	5	6	7	8
14	0.568	0.422	0.513	-0.100	0.145	0.035	0.022	-0.144
15	0.653	0.024	0.107	0.799	-0.042	0.015	0.006	0.002
16	0.658	-0.043	0.129	0.038	0.123	0.061	0.052	-0.148
17	0.565	0.404	0.273	0.036	0.176	-0.245	-0.112	0.173
18	0.501	0.480	0.168	-0.015	0.193	-0.155	0.183	-0.129
19	0.407	0.535	0.169	0.022	-0.033	0.083	-0.157	0.240
20	0.683	-0.063	0.162	0.043	0.104	0.128	0.099	-0.184
21	0.741	0.061	0.185	-0.007	0.108	-0.048	0.109	0.141
22	0.578	-0.046	0.159	0.124	-0.165	0.033	0.692	0.030
23	0.410	0.145	0.116	-0.096	-0.108	0.217	0.375	0.099
24	0.514	0.093	0.619	0.155	-0.006	0.101	0.265	0.111
25	0.479	0.427	0.356	0.051	0.116	-0.118	0.263	0.211
26	0.534	0.673	-0.034	0.109	0.019	0.072	0.127	0.199
27	0.540	0.173	0.459	0.025	0.109	0.419	0.051	0.248
28	0.692	0.129	0.165	-0.040	0.116	0.130	0.141	0.161
29	0.502	0.139	-0.001	0.377	-0.514	-0.077	0.093	0.245
30	0.554	0.512	0.099	0.053	0.130	0.207	0.159	-0.100
31	0.528	0.154	0.001	0.096	0.063	0.045	-0.047	0.687

## Varimax Rotated Factors (continued)

Communalities	1	2	3	4	5	6	7	8	
32	0.502	0.398	0.437	0.063	-0.149	0.274	0.103	0.200	-0.030
33	0.581	0.334	0.431	-0.183	0.122	-0.078	0.406	0.058	0.247
34	0.602	0.100	0.043	-0.065	0.084	0.228	0.187	-0.020	0.701
35	0.559	0.040	0.307	0.096	-0.042	0.643	0.133	0.136	0.040
36	0.537	0.082	0.073	-0.030	0.531	-0.057	0.463	0.138	0.076
37	0.599	0.145	0.078	0.350	0.245	0.090	0.607	0.005	0.109
38	0.603	0.152	0.152	0.173	-0.021	0.690	-0.042	0.029	0.217
39	0.532	0.181	0.149	0.109	-0.212	0.214	0.382	0.464	-0.112
40	0.555	0.446	0.193	-0.038	-0.049	0.173	0.383	-0.111	0.355
41	0.561	0.361	0.302	0.200	-0.161	0.470	0.160	-0.108	0.128
42	0.640	0.230	0.690	0.094	-0.032	0.305	0.067	0.043	0.041
43	0.665	-0.033	-0.075	0.049	0.792	0.012	0.047	0.120	0.109
44	0.408	0.160	0.132	0.077	0.211	0.198	-0.089	0.515	0.048
45	0.564	0.165	0.096	-0.025	0.061	0.682	-0.145	0.105	0.162
46	0.575	0.109	-0.025	0.143	0.103	0.201	0.121	0.611	-0.322
47	0.531	0.616	0.097	-0.095	-0.003	0.082	0.221	0.275	0.038
48	0.573	0.101	0.023	0.328	0.328	-0.093	0.639	0.109	0.099
49	0.648	0.047	-0.054	0.037	0.697	-0.076	0.386	0.034	-0.010
50	0.568	0.501	0.308	0.154	0.121	0.273	0.328	-0.011	-0.041
	20.910	3.342	3.265	2.909	2.630	2.559	2.331	2.005	1.871
Percent of Common Variance									
100.000	15.982	15.613	13.910	12.576	12.237	11.147	9.589	8.947	
Percent of Total Variance									
56.513	9.032	8.823	7.861	7.107	6.915	6.299	5.419	5.056	

Summary of the Mean Scores for the Traditional-Emergent  
Subscales and Students' Post-Secondary Plans

Subscales	Number of Items	University	Junior College	Technical Institute	Other	None	Total
Work-Success Ethic	5	14.22	12.60	14.02	13.84	14.12	13.89
Future-Time Orientation	4	8.99	8.36	9.25	9.18	10.64	9.17
Personal Independence	4	7.92	8.25	8.70	8.34	8.60	8.26
Rigid Discipline	4	12.51	11.75	12.44	12.26	12.81	12.39
Other Directed	4	8.86	8.57	9.28	9.26	9.81	9.07
Hedonistic Tone	4	10.04	9.75	10.55	9.42	8.74	9.85
Sociability	2	4.55	4.06	4.36	4.47	4.14	4.35
Group Conformity	2	7.75	6.93	7.46	7.40	7.45	7.50

The lower the mean score, the greater was the acceptance of the value orientation.

**A P P E N D I X C**

**Father's Occupation**

- Category 1: Unskilled laborer, farm laborer, domestic worker, etc.
- Category 2: Semi-skilled worker, truck driver, miner, factory worker, etc.
- Category 3: Skilled worker, policeman, mailman, small farm owner, foreman, etc.
- Category 4: Secretary, clerk, owner of medium sized farm, foreman, salesman, etc.
- Category 5: School teacher, other profession, public official, owner of a large farm, retail merchant, etc.
- Category 6: Banker, college teacher, proprietor, engineer, physician, lawyer, architect, etc.

**Combined Parental Income**

- Category 1: less than \$6,000.
- Category 2: \$6,000. to \$7,999.
- Category 3: \$8,000. to \$9,999.
- Category 4: \$10,000. to \$11,999.
- Category 5: over \$12,000.