THE UNIVERSITY OF MANITOBA

EDUCATIONAL AND OCCUPATIONAL VALUES, OPPORTUNITY ORIENTATIONS, ASPIRATIONS AND EXPECTATIONS OF TWELFTH GRADE STUDENTS AND THEIR MOTHERS IN SELECTED SINGLE ENTERPRISE COMMUNITIES

by

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A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE

OF MASTER OF ARTS

DEPARTMENT OF SOCIOLOGY

WINNIPEG, MANITOBA

May, 1972

ABSTRACT

Educational and Occupational Values, Opportunity Orientations, Aspirations and Expectations of Twelfth Grade Students and their Mothers in Selected Single Enterprise Communities

To gain insight into the phenomena under study and to focus the phases of the tripartite problem, three general hypotheses were derived from stratification and socialization theory: (1) selected social factors are related to the educational and occupational values, opportunity orientations, aspirations and expectations of twelfth grade students; (2) selected social factors are related to the educational and occupational values, opportunity orientations, aspirations and expectations of their mothers; (3) the educational and occupational values, opportunity orientations, aspirations and expectations of the students are related to those their mothers have for them.

A review of existing literature and research revealed that further directional specification of the general hypotheses was possible. The resultant research hypotheses were tested. In essence, it was hypothesized that the higher the familial socio-economic status; and the higher the level of parents' education; and the larger and less isolated the

community of residence; and the stronger the parental encouragement for post-high school education and occupational achievement:

a) the more expressive and less instrumental the educational and occupational values of the respondents.
b) the more positive the educational and occupational opportunity orientations of the respondents.
c) the higher the level of educational and occupational aspirations of the respondents.
d) the higher the level of educational and occupational expectations of the respondents.

The data were gathered by means of questionnaires distributed to twelfth grade students residing in Flin Flon, Lynn Lake, Pine Falls and Thompson, Manitoba and Red Lake, Ontario. Questionnaires were completed by 319 students and 203 of their mothers.

The correlational analysis revealed findings partially supportive of the general hypotheses. The support given to the research hypotheses was found to be somewhat sex and generation specific. Parental encouragement, parental educational levels and socio-economic status were found to be the most discriminating variables; community size and isolation the least. The generational similarities in the patterns of relationships and the congruencies in the mothers' and students' orientations attest to the importance of objective and subjective family factors in adolescents' educational and occupational decisions.

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ACKNOWLEDGMENTS

Sincere appreciation is expressed to the following people. To Dr. G. Albert Kristjanson, my thesis adviser, for the guidance and encouragement he has given me throughout my program of studies. To Dr. A. Hunter, for his methodological assistance. To Dr. J.W. Peach, for his constructive suggestions. To Dr. E.D. Boldt, for his comments on the theory chapter and his help in focusing the research problem.

I would also like to express my gratitude to the Center for Settlement Studies, University of Manitoba under whose auspices the research was conducted. The cooperation of the superintendents, principals and teachers of the high schools involved was greatly appreciated. A special thank you is extended to the students and mothers who were kind enough to respond to the questionnaires.

Last, but certainly not least, a very special mention goes to my parents, who have helped in every possible way. To Mom and Dad, many thanks for your patience, understanding and encouragement.

Doreen L. Smith

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CHAPTER I

INTRODUCTION

The "search for self" and the "generation gap" are two popular themes currently being explored in articles on, and conversations about, today's adolescents. The period of adolescence itself has been defined as "a physical... and social process, whose fundamental task is clear and stable self-identification" (Friedenberg, 1959: 17). Perhaps the words of T.S. Eliot most cogently convey what it is that constitutes one of the major concerns of contemporary youth during their transition from childhood to adulthood, namely:

> finding out
> What you really are. What you really feel.
> What you really are among other people.
> (Eliot, 1950: 30-31).

Inasmuch as society stresses the intricate interrelationship between what one is and what one does; and, inasmuch as work continues to be one of the major mediums for self-expression, it follows that knowing what one can do facilitates knowing who one is. From this perspective, an adolescent's career decision (specifically the crystallization of values, assessment of opportunities and sorting of aspirations and expectations involved) may be regarded as a

significant step in the direction of self-definition.

As youth approach graduation from high school, they are confronted with a number of questions for which they are forced to formulate answers in a relatively short period of time.

> What kinds of occupations would be the most interesting and rewarding? What kinds of occupations are available? Which occupations are reasonable career alternatives, given personal circumstances and capabilities? Would more education be necessary to enable the achievement of the desired career alternative? Is it possible to obtain additional education? (Yoesting et al., 1969: 1)

In view of the ramifications their answers to these and similar pertinent questions have for their future lives, a study of the social factors associated with students' educational and occupational values, opportunity orientations, aspirations and expectations would provide insight into segments of the self-identification, as well as occupational choice, process occurring during adolescence.

According to Margaret Mead, the central problem agitating today's youth is "commitment" rather than "identity" (Mead, 1970: Preface). Although various authors have asserted that adolescents are reluctant to commit themselves to the values, goals, aspirations and roles of their parents, very little research has endeavored to delineate specific areas of intergenerational conflict or, for that matter,

congruency (Perrone, 1965; Kandel and Lesser, 1969; Harvey and Harvey, 1970; Meier, 1970). Hence, there appeared to be a need for research designed to provide some empirical indication of the extent to which students agreed with their parents on specific matters such as educational and occupational values, opportunity orientations, aspirations and expectations. Of equal interest was the extent to which students' educational and occupational achievement orientations, as compared with those of their parents, are influenced by selected social factors.

Thus, when the "search for self" and the "generation gap" were considered with reference to the educational and occupational spheres, these contemporary clichés became catalysts for the present sociological research.

Statement of the Problem

In essence, the purpose of this study was threefold. Initially, it endeavored to determine whether relationships existed between selected social factors (socio-economic status, size and isolation of community of residence, parental educational attainment and parental encouragement) and the educational and occupational values, opportunity orientations, aspirations and expectations of twelfth grade students registered in high schools in the five single enterprise communities of Flin Flon, Lynn Lake, Pine Falls

and Thompson, Manitoba and Red Lake, Ontario. Secondly, it attempted to ascertain whether the same selected social factors were related to the educational and occupational values, opportunity orientations, aspirations and expectations of the mothers of these students. Finally, an attempt was made to determine whether relationships existed between the students' educational and occupational values, opportunity orientations, aspirations and expectations and the educational and occupational values, opportunity orientations, aspirations and expectations of their mothers.

More specifically, this study endeavored

1) to determine whether twelfth grade students from different social strata, places of residence etc. are dissimilar with respect to educational and occupational values, opportunity orientations, aspirations and expectations.

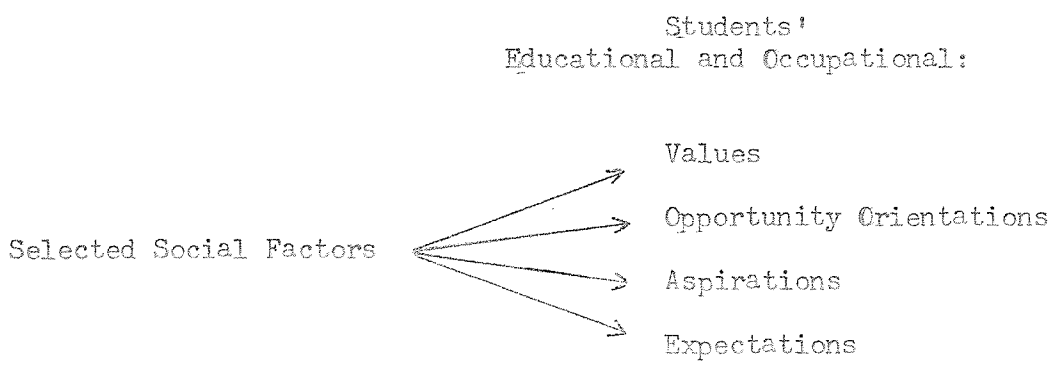
2) to determine whether mothers from different social strata, educational levels, places of residence, etc. are dissimilar with respect to educational and occupational values, opportunity orientations, aspirations and expectations for their children.

3) to indicate the significance of maternal educational and occupational values, opportunity orientations, aspirations and expectations for analyses of their children's educational and occupational values, opportunity orientations, aspirations and expectations (See Figure 1).

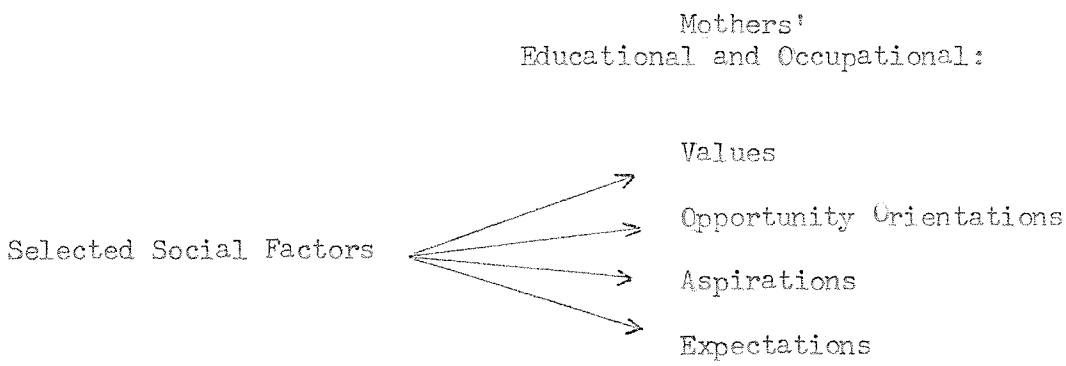
FIGURE 1

Diagrammatic Representation of the Problem

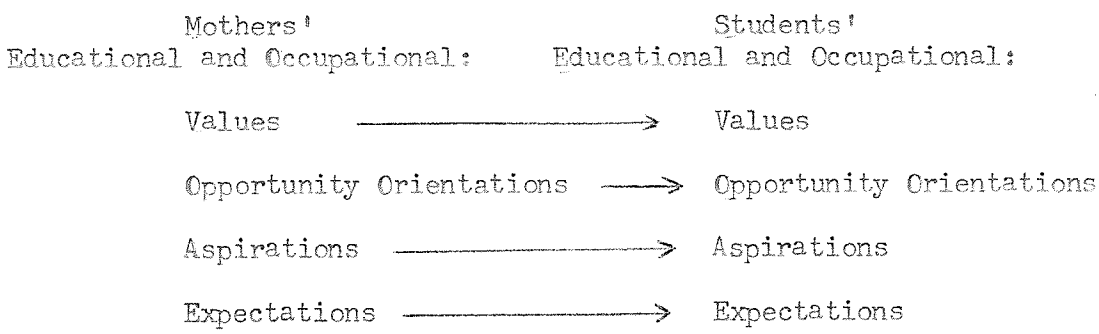
PART I:



PART II:



PART III:



Background of the Study

This specific study was part of a larger project initiated by Dr. G. Albert Kristjanson and Dr. Lawrence F. Douglas of the Department of Sociology, University of Manitoba for the purpose of examining the role of the educational system and the aspirations of high school students in five selected communities.[1] The initial phase of the project (May 1, 1969 to April 30, 1970) was conducted in close co-operation with Dr. John W. Peach of the Faculty of Education, University of Manitoba. The present research endeavor constituted the final phase of the overall study, which focused on finding the objective and subjective family factors associated with the educational and occupational values, opportunity orientations, aspirations and expectations of twelfth grade students in five single enterprise communities.

The Scope of the Study

The scope of the present study was more extensive than several previous research endeavors and, at the same time, more restricted than others. Prior studies tended to focus exclusively on antecedents of educational achievement orientations (Downey, 1960; Herriott, 1963; Krauss, 1964; Boyle, 1966;

1. The project proposal is contained in the Second Annual Report - 1969 of the Center for Settlement Studies, The University of Manitoba: 66 and a progress report is contained in the Third Annual Report - 1970 of the Center for Settlement Studies, The University of Manitoba: 85.

Pavalko and Bishop, 1966; Sewell and Shah, 1968a and 1968b; Meier, 1970) or on concomitants of the occupational choice process (Singer and Stefflre, 1954; Stephenson, 1955; Lipset et al., 1955; Empey, 1956; Dipboye and Anderson, 1959; Wagman, 1965; Thompson, 1966; Kuvlesky and Bealer, 1967; Breton and McDonald, 1968; Werts, 1968). Primarily because educational achievement is generally viewed as one of the most important factors determining eventual occupational attainment, data on both the educational and occupational dimensions were included for consideration in this investigation.

In addition, the scope of this study was more extensive in that an attempt was made to determine whether selected social factors were associated with educational and occupational values, opportunity orientations, aspirations and expectations. The majority of existing studies concentrate on determining the correlates of only one of the above mentioned variables. Occasionally two (for example, educational values and beliefs in opportunity or occupational values and occupational choices) are analyzed in the same study (Hyman, 1953; Miller, 1956; Rosen, 1956; Rosenberg, 1957; Schwarzweller, 1959 and 1960; Simpson and Simpson, 1960 and 1962a).

Although few would challenge Hyman's contention that "the goals of all individual's are governed to some extent

by the appraisal of reality," research designed to discern subjects' subjective perceptions of their positions in the opportunity structure is scarce (Hyman, 1953: 434). The studies reported by Hyman (1953), Landis, Dinitz and Reckless (1963) and Mizruchi (1964) are notable exceptions.

> In Canada today there is a continuing debate concerning the nature and extent of opportunity in our increasingly industrialized society, and the social, psychological, and economic factors associated with its availability (Blishen, 1970: 110).

As well as examining values, aspirations and expectations, this study endeavored to elicit the respondents' appraisals of their educational and occupational opportunities.

Previous research with respect to familial influences on students' educational and occupational achievement orientations tended to focus on objective background factors (for example, socio-economic status, parental educational levels, and size of community of residence) <u>or</u> subjective factors (for example, parental influence in the form of values, standards of excellence and expectations). The initial sections of the present study considered the influence of objective family factors, whereas the third part considered the impact of subjective family factors, namely: maternal educational and occupational values, opportunity orientations, aspirations and expectations for their children.

In summary, this study was more extensive in scope than a number of previous endeavors in that it included both the educational and occupational dimensions; it attempted to delineate selected social correlates of values, opportunity orientations, aspirations and expectations; and it examined subjective as well as objective familial influences. On the other hand, this study restricted its scope to the educational and occupational spheres, as opposed to a general level of analysis exemplified by attempts to index the global concepts of "ambition" and "achievement" (Turner, 1956; 1964a and 1964b; Rosen, 1956 and 1959; Rosenberg, 1957; Strodtbeck, 1958; Mizruchi, 1964; Kahl, 1965; Scanzoni, 1967; Lawlor, 1970).

Significance of the Study

Theoretical:

It was anticipated that findings pertinent to the first two parts of the study would attest to the feasibility of utilizing a culture-variation interpretation to synthesize Merton's various statements on the uniformity of the cultural mandate of success and his subsequent assertion regarding differentials in the assimilation of culturally induced goals and values (Merton, 1968: 185-214). It was hoped that the formulation of the conceptual framework itself, specifically aimed at clarifying Merton's position

with respect to two competing perspectives on societal stratification, would be of heuristic value.

In addition, it was anticipated that the results revealed in the third section of the study would provide insights into a fundamental premise of socialization theory, namely: that parental values are learned by children and in large measure stay with them through life.

Methodological:

Existing studies have frequently employed a socialization framework but, by limiting their samples to parents alone, have failed to demonstrate intergenerational transmission of values and attitudes or, by limiting their samples to adolescents alone, have failed to take into account parental perspectives. Several researchers have relied solely on students' reported perceptions of parental attitudes, values and goal emphases (Brunkan, 1966: 396; Scanzoni, 1967: 451; Slocum, 1967: 274; Harvey and Harvey, 1970: 139; Meier, 1970: 74-75). They are operating on the assumption that students' perceptions or estimates of parental orientations reasonably approximate actual parental orientations. Conceivably, the students' responses could differ from what parents would themselves report. Inkeles has contended that the impact of socialization cannot be assessed effectively unless it is shown that a child's values replicate the value configurations held by his parents (Inkeles, 1955: 12-23).

By utilizing both the values, opportunity orientations, aspirations and expectations of the mothers for their children (as stated by the mothers themselves) and the children's values, opportunity orientations, aspirations and expectations (as stated by the students themselves), it was hoped that this study would be able to present a more accurate representation of the generational viewpoints involved.

Practical:

Despite the considerable amount of research effort already expended in attempts to identify factors associated with adolescents' educational and occupational preferences, Schwarzweller has observed that

> ... we have very little substantive knowledge about the social and cultural origins of occupational value orientations (Schwarzweller, 1960: 126).

Statements conveying similar contentions have been made with respect to beliefs in opportunity (Hyman, 1966: 489) and also with respect to vocational interests and aspirations (Gribbons and Lohnes, 1965: 249).

Furthermore, Jackson and Fleming have noted a need for Canadian research into the relationship between the "family situation" and the educational opportunities of youth

(Jackson and Fleming, 1956: 98-99). Likewise, Elkin has pointed out that "some important topics such as the family and occupational choice ... are hardly touched on, if at all, in Canada" (Elkin, 1964: 112). The present study satisfies the above mentioned needs to a certain extent.

It is to be noted that the communities which served as data sources differed decidedly, with respect to economic base (single enterprise) and geographical location (relatively isolated), from the contexts in which the majority of past studies were conducted. Thus, the empirical data this study provides on the social correlates of educational and occupational values, opportunity orientations, aspirations and expectations may prove useful for educators and other professionals engaged in formulating educational policies or planning vocational guidance programs especially for students residing in single enterprise communities. In addition, it was anticipated that individuals faced with the task of designing future resource frontier communities could glean background information (for example, on perceptions of educational opportunities or occupational preferences) pertinent to their purposes.

Organization of the Thesis

This thesis is divided into nine chapters, references, and four appendices.

Chapter I has presented the problem studied, described the essence of its tripartite nature, placed it into perspective with respect to the aims of the larger project of which it was a phase, delineated its scope and suggested that its study has significance not only from a practical point of view, but theoretically and methodologically as well.

Chapter II outlines the theoretical frameworks used to gain insight into the phenomena under study and states the general hypotheses guiding the three sections of the study. It is to be noted that the term "theory" is not being used in the sense of a logically interrelated body of propositions; rather it refers to a particular type of conceptual orientation, one which leads us to look in certain directions.

Chapter III contains a review of relevant literature. An attempt has been made to point out the consistencies and inconsistencies among the results of past studies.

In Chapter IV the population is defined and the single enterprise communities, which served as data sources, are described.

Chapter V presents information on the construction and administration of the research instruments and the opera-

tionalization and measurement of the independent and dependent variables examined. In addition, the method of analysis is outlined.

Chapter VI presents findings on the relationships between the nine selected social factors (independent variables) and the eleven dependent variables for the 319 twelfth grade boys and girls in the study. A discussion section follows the presentation of findings.

Chapter VII presents findings on the relationships between the nine selected social factors (independent variables) and the eleven dependent variables for the 203 mothers of twelfth grade students. A discussion section is also included in this chapter.

Chapter VIII presents findings on the relationships between students' educational and occupational values, opportunity orientations, aspirations and expectations and those of their mothers. The discussion sections contain additional information derived for the express purpose of elucidating the results.

In Chapter IX the main findings of the study are summarized and concluding comments are presented. Suggestions for further research are advanced.

CHAPTER II

THEORETICAL FRAMEWORKS AND STATEMENT OF THE GENERAL HYPOTHESES

Theoretical Framework for Parts I and II

Several theoretical models could have been used to gain insight into the phenomena under study. The theory of occupational choice posited by Ginzberg and his associates (1951: 185-198; 1952: 491-494), the theory of vocational development advanced by Super (1953: 185-190) and the conceptualization of occupational choice provided by Blau and his associates (1956: 531-543) appeared to be potentially useful for this purpose. However, a review of the specific propositions comprising these theories coupled with a cognizance of a number of cogent criticisms recently levelled at these particular perspectives (Taylor, 1968: 190-193) led the writer to look for an alternate approach. Although these theories recognize the delimiting effects that social and occupational structures have on the choice process, they tend to be individual oriented and, as such, constitute somewhat inadequate bases from which to formulate hypotheses pertaining to the distribution of educational and occupational values, opportunity orientations, aspirations and expectations among different segments of society.

The following section outlines two viewpoints on the distribution of values and aspirations in society; discusses categorizations of Robert K. Merton's (1957) and Herbert H. Hyman's (1953) theoretical contentions with respect to these perspectives; advances a culture-variation interpretation intended to clarify Merton's position; and shows how the essential similarities between the culture-variation approach (as exemplified by Merton's assertions) and the class-differentiated approach (as represented in Hyman's statements) are conducive to the construction of a composite theoretical orientation from which hypotheses pertinent to the problem at hand may be drawn.

A fundamental issue, predominating past and present theories and empirical studies of social stratification, centers around the choice between two contending perspectives vying for precedence in explanations of class-value linkages. Rodman has delineated the "two contradictory positions," namely: whether society is based upon a common value system or if it is based upon a class-differentiated value system.

> There are sharp disagreements about the nature of values held by members of the lower class, and correspondingly, about whether a society is based on a common value system, or a class-differentiated value system. Some writers assert that the basic values of society are common to all social classes within that society, while others assert that the values differ from class to class (Rodman, 1963: 205).

Earlier Empey had identified two important schools of thought on the occupational aspirations of lower class youth:

> (1) that lower-class youth have limited their occupational aspirations to the class horizon; or
> (2) that lower-class yputh have the same lofty occupational aspirations as those from upper strata (Empey, 1956: 709).

Similarly, two alternative interpretations of mobility orientation in society have been noted by Stephenson.

> One assumes that mobility orientation roughly follows class lines, so that the middle and upper classes are the strivers while the lower classes set a level of aspiration that is largely satisfied within the limits of their own stratum. This view implies that the very orientation of the lower strata prevents them from upward mobility, irrespective of the class distribution of mobility resources or skills. The other assumes that there is a somewhat similar mobility orientation throughout the stratification system, and that regardless of one's position in it, the orientation is toward commonly perceived and desired goals. This hypothesis places the emphasis upon unequal distribution of resources and skills in explaining class differences in upward mobility (Stephenson, 1957: 204).

All three of the above mentioned authors cite the works of Merton (1957) and Hyman (1953) when they wish to exemplify the contrasting positions taken on the question of class-value linkages. Rodman has identified Merton as a proponent of the "common" values school of thought and Hyman as a

supporter of the position suggesting that a "class-differentiated" value system underlies a stratified society (Rodman, 1963: 205-207). Similar classifications of Merton's and Hyman's assertions on aspirations have been made by Empey (1956: 703) and Stephenson (1957: 204). Before one can condone or condemn these categorizations, a brief examination of the writings of Merton and Hyman is mandatory.

In what is considered to be a classic article, Hyman reanalyzed data collected in a number of nationwide surveys and noted class differences in educational aspirations (that is, a differential preference among the classes for college education increasing with higher class position); in the desiderata the classes considered in choosing an occupation (the upper classes emphasized congeniality of career pattern to personal interests and qualifications whereas the lower classes stressed economic benefits and security); in occupational aspirations (the upper classes preferred professional careers whereas the lower groups chose skilled manual occupations); and in perceptions of opportunity (the lower classes were more aware of their lack of opportunity)(Hyman, 1953: 426-42). Hyman interpreted this data as empirical evidence supporting the major assumption of his theoretical coda, namely that

> ... an intervening variable mediating the relationship between low position and lack

> of upward mobility is a system of beliefs and values within the lower classes which in turn reduces the very voluntary actions which would ameliorate their low position (Hyman, 1953: 427).

Thus, on the basis of his findings, Hyman concluded that society is based on a class-differentiated value system. The significance of Hyman's interpretations has been attested to by Perrucci who points out that "his efforts in the area of class values and mobility can be taken as a crucial point in the development of a large body of systematic theoretical and empirical work" (Perrucci, 1967: 119).

Merton's paper "Social Structure and Anomie," written in 1938, revised in 1949 and further extended in 1957, is regarded by some as "his greatest single contribution to contemporary sociological theory" (Mizruchi, 1964: 10). In it Merton has suggested that the salient environment of individuals can be dichotomized into two essential components: the cultural structure (comprised of "that organized set of normative values governing behavior which is common to members of a designated society or group") and the analytically separable social structure (comprised of "that organized set of social relationships in which members of the society or group are variously implicated") (Merton, 1968: 216). The malintegration of the cultural and social structures, one preventing what the other encourages, can

lead to an anomic state of society, that is

> a breakdown in the cultural structure, occurring particularly when there is an acute disjunction between the cultural norms and goals and the socially structured capacities of members of the group to act in accord with them (Merton, 1968: 216).

Merton's major contention is that differential access to legitimate means for attaining success goals, combined with a generally uniform expectation for success, will result in a greater propensity for anomie among those persons with the least opportunity to achieve such success (for example, members of the lower class). Several studies have attempted to test this hypothesis.[2]

Moreover, Merton contended that a disjunction between culturally prescribed goals and socially institutionalized means for achieving these goals generates pressure toward deviant behavior. Deviance is regarded as an effort to reduce discrepancy and establish an equilibrium between goals and means. Merton delineated five modes of adaptation to the "culture-bearing society" made by individuals occupying

2. For an inventory of empirical studies on anomie and an annotated bibliography of theoretical studies, the reader is referred to Clinard, 1964: 246-311.

different positions in the social structure (Loomis, 1965: 273). Merton identified four types of deviant behavior: innovation, ritualism, retreatism, and rebellion. Non-deviant behavior was labelled as conformity in his scheme. These classifications were based on differential evaluations of, and adherence to, aspects of the goal-means complex. A variety of extensions and reformulations of Merton's original theory and behavioral typology have been made (Parsons, 1951: 256-267; Parsons and Shils, 1951: 412; Dubin, 1959: 147-164; Cloward, 1959: 164-176; Cloward and Ohlin, 1960; Cohen, 1965: 5-13; Loomis, 1965: 391-392; Harary, 1966: 693-697). In addition, two attempts have been made to adapt Merton's model to an educational context. Stinchcombe (1964) used Merton's paradigm as a theoretical framework for his research on the determinants of rebellious behaviour of pupils in school. Pedersen and Etheridge (1970) employed Merton's typology to study conformist and deviant behaviour in high school.

On the basis of the main tenets of his theory of social structure and anomie, a number of authors have suggested that Merton assumes that success values and aspirations are held in "common" by all classes and equally appreciated in all segments of society. Hyman, for example, concluded that "it is clear that Merton's analysis assumes that the cultural goal of success is actually internalized by lower

class individuals" (Hyman, 1953: 426). Likewise, Empey identified Merton as a member of the group of investigators that suggest, either explicitly or implicitly, that the lower classes have internalized the American tradition of wanting to get ahead (Empey, 1956: 703). Similarly, Lemert emphasized that Merton's theory tends to consider the social structure as consisting of more uniform values than empirical examinations of the diverse nature of most societies manifests. He has insisted that the idea that contemporary technologically based societies, such as the United States, "have a common value hierarchy, either culturally transmitted or structurally induced, strains credulity" (Lemert, 1964: 64). Moreover, with respect to Merton's views on aspirations, Mizruchi maintained that

> The assumption of uniform aspirations as a factor has yet to be established... (Mizruchi, 1964: 50).

One must approach the above mentioned interpretations with caution.

It is this writer's contention that those authors confining their criticism to Merton's so-called "common" values assumption have neglected to note Merton's shift in perspective from "the plane of patterns of cultural values" to "the plane of types of adaptation to these values among those occupying different positions in the social structure"

(Merton, 1968: 193) (see Figure 2). In commenting on Merton's theory of anomie, Cohen has contended that its major contribution "is not a definition of deviant behavior, but the specification of two dimensions along which behavior may vary" (Cohen, 1959: 464).

It is true that in Merton's scheme success is purported to be a proper aspiration for everyone "irrespective of his initial lot or station in life" (Merton, 1957: 167). However, this exhortation merely constitutes a cultural mandate - a "cultural manifesto" (Merton, 1968: 193). Specifically, Merton postulated that there are culturally defined goals which comprise "a frame of aspirational reference" (Merton, 1968: 186). Merton did assume that culturally defined success goals are legitimate objectives for all to strive for, but he has also asserted that the acceptance of these culturally acclaimed ends involves "various degrees of sentiment and significance" (Merton, 1968: 186).

In essence, culturally defined goals constitute idealized goals: the same proportion of persons in all social classes does not internalize them. Despite the inferences that may be drawn, Merton did not state that members of the lower class actually internalize the general values of the society. In fact, Merton has presented the cultural values

FIGURE 2

The Two Dimensions Utilized in Merton's Discussion

		Cultural Structure	Social Structure
Plane 1	CULTURE	Culturally prescribed success-goals.	Socially structured means of access to and opportunities for achieving success-goals.
		↓	↓
Plane 2	VARIATION	Differentials in the assimilation of success-goals.	Subjective perception of place in opportunity structure.

as external to the (lower-class) individuals (Rodman, 1963: 208). Thus, one should not infer that Merton maintained that the culture supplies individuals with a standardized order of values (Lemert suggested this), or that universally inculcated success goals (occupational or otherwise) permeate all segments of society (Hyman, Empey, and Stephenson suggested this).

Merton has acknowledged that all persons do not assimilate the central values of a culture to the same degree. He has recognized that the assimilation of the cultural emphasis and its transmutation into personal goals does not occur in the same proportion for different social strata. Turner's value-relevancy hypothesis (that is, social classes differ not so much in the values which they endorse in general as in the extent to which they regard these values as applicable to themselves as goals for their own striving - Turner, 1964: 80) concurs with Merton's contentions. Similarly Haller and Miller have differentiated between "a cultural value" which may be considered to be "a societally defined maxim holding that a certain behavior object is inherently good" and "the value orientation of the person" which may be considered to be "his attitude toward a widely accepted cultural value" (Haller and Miller, 1967: 10).

Merton's position is categorized best in terms of a "culture-variation approach (Turner, 1964: 9). Proponents

of this point of view regard class differences in success striving as variations on a society-wide theme. However, if two or more strata adopt the same values but assign different degrees of significance to them their value systems are, in effect, differentiated. If one assumes that decisions with respect to important courses of action (for example, occupational choice) usually require some choice among contending values, the relative importance assigned to different values is all-important.

Merton has taken direct cognizance of the issue as to whether or not all members of society share the same system of values.

> But if the communications addressed to generations of Americans continue to reiterate the gospel of success, it does not follow that all Americans in all groups, regions, and class strata have uniformly assimilated this set of values (Merton, 1968: 224).

Among the problems Merton placed in the category "calling for further research" is "the extent to which ... different social strata have in fact assimilated the same culturally induced goals and values" (Merton, 1968: 177). In order to provide a framework for probing this problem two viewpoints on the distribution of values and aspirations in society and categorizations of Merton's and Hyman's theoretical contentions with respect to these orientations were discussed. It has

been suggested that a "culture-variation," as opposed to "common values," approach constitutes a more accurate representation of Merton's position.

In summary, both the "culture-variation" approach (as exemplified by Merton's assertions) and the class-differentiated approach (as represented in Hyman's statements) may be used to predict differentials in the distribution of educational and occupational values, opportunity orientations, aspirations and expectations among selected segments of society.

Theoretical Framework for Part III

Whereas the theoretical orientation for Parts I and II of the problem concentrated on stratification theory, the theoretical framework for Part III is comprised of socialization theory.

In general the term "socialization" refers to "the process by which the individual is originally inducted into the social organization" (Gottlieb and Ramsey, 1964: 155). Through this process a child is disciplined and trained, taught the physical and social skills necessary for participation in society, familiarized with roles and role relationships, and imbued with ideals, aspirations and values of various kinds. According to Merton, the term socialization designates

> the processes by which people selectively acquire the values and attitudes, the interests, skills, and knowledge - in short, the culture - current in the groups of which they are, or seek to become, a member. It refers to the learning of social roles (Merton, 1957b: 287).

The main premise of the social role theory of socialization emphasizes that a child is born into an ongoing society that has common symbols, recognized positions (statuses) and established patterns of behavior (roles) and that it is through others that a child learns what is necessary to become a functioning member of society (Elkin, 1960: 19). Thus, the concepts of status and role, the behavior of "significant others" and the process of learning are central to this general perspective. Restated in terms of role theory the problem of socialization requires an explanation of how a child comes to function within a system of statuses. In short,

> How does he learn to recognize status positions, to know and internalize their expectations and accompanying values, and to act those roles that are appropriate for him? (Elkin, 1960: 20).

A child learns what is expected of him in interaction with other people. It is necessary to note that all other people do not have an equal influence on the child. There are those who exert greater influence because of their frequency and primacy of contact and their control over rewards and punishments. These are his "significant others."

Initially, socialization is possible because the infant is dependent upon adults to satisfy its basic needs. As a consequence of the infant's initial dependency, adults (nearly always the parents and usually the mother - Danziger, 1970: 12) become significant sources of satisfaction and dissatisfaction. Parental expectations and goals for their children reflect, to a considerable extent, what society regards as desirable or necessary role performance. Societal norms influence the kinds of behavior parents will elicit and reward and what will be punished and suppressed. Whether a parent will reward achievement, independence and assertiveness or prefer dependence, docility and conformity in children depends in part on how society defines the roles of parent and child, what roles the child is being trained to play and the location of these roles in the social structure (Rosen, 1969: 48).

The dispensing of rewards and punishments by significant others is conditional. If a child performs an acceptable act he gains approval and accrues rewards. Thus, the act is reinforced and tends to remain in his behavioral repertoire. If, on the other hand, the child's act is unacceptable according to cultural standards disapproval and punishment results and the behavior is usually extinguished. Because a child seeks approval and love from significant others, he is motivated to behave as they wish. For example,

he may seek to do well in school if he thereby gains the good will of his parents and teachers (Elkin, 1960: 31).

During the initial stages of socialization interaction takes place through gestures. Differential reactions on the part of significant others indicate to the child whether his behavior is appropriate or not. When the child acquires the ability to use language the socialization process proceeds with greater rapidity and in greater depth. Value orientations, because they tend to be on a conceptual level, are probably acquired in that stage of the child's cultural training when verbal communication of a fairly complex nature is possible (Rosen, 1956: 210).

It is readily acknowledged that the family forms the matrix of social experience in which the basic socialization of the child takes place and in which the most persistent personality patterns are formed (Cottrell, 1948: 127). Ginsberg has summarized the role of the family with reference to occupational choice.

> The family continues to exercise an important influence on the occupational choices of the younger generation. For it is as a member of a family that the child first learns about the jobs that exist in the adult world; it may be through the family that he acquires his first experience at work; and it is through the family that he is encouraged to follow one path and discouraged from following another, even if only indirectly through his absorption of familial attitudes and values (Ginzberg, 1951: 234).

Thus, the more or less irregular conversations that occur in any home regarding desirable or undesirable occupations and the chances to attain them coupled with the offhand comments by parents about status and mobility as well as their own occupational behavior and attitudes constitute a form of communication more subtle yet just as effective as direct statements (Scanzoni, 1967: 455).

In summary, the operational theory from which the third general hypothesis has been developed is comprised of the following propositions. Socialization is considered to be the process whereby culture is transmitted. More specifically, it is the process whereby a child learns values, attitudes, aspirations, and appropriate role behavior in interaction with significant others (usually parents acting as representatives of the culture). The significant others and the expectations they have for the child are of salience to him for a considerable length of time. And finally, the durability of early childhood learning is assumed on the basis of the frequency of learning situations, their primacy in the life cycle of the individual and the intensity of rewards and punishments administered.

Statement of Hypotheses

The general hypotheses guiding the three phases of the study are as follows:

Part I: Selected social factors (independent variables) are related to the educational and occupational values, opportunity orientations, aspirations and expectations (dependent variables) of twelfth grade students in five single enterprise communities.

Part II: Selected social factors (independent variables) are related to the educational and occupational values, opportunity orientations aspirations and expectations (dependent variables) of their mothers.

Part III: The educational and occupational values, opportunity orientations, aspirations and expectations of the students (dependent variables) are related to the educational and occupational values, opportunity orientations, aspirations and expectations of their mothers (independent variables).

CHAPTER III

REVIEW OF THE LITERATURE

Introduction

The process by which adolescents decide on the education and occupation suitable for themselves has been the focus of discussion in numerous studies prior to and during the last decade (see Kuvlesky and Reynolds, 1970). The detection of factors related to the educational and occupational achievement orientations of adolescents constitutes an important problem area in educational research. As a result of the research effort already expended many generalizations, at various levels of practical or theoretical relevance, are contained in the literature. Previous investigations, focusing on the socio-cultural correlates of aspirations, present a fairly consistent pattern of findings indicating the existence of relationships between level of educational and occupational aspiration and three general groups of variables: indices of students' general ability, school-related variables and family-related variables (Kristjanson, 1967: 11). Particularly pertinent for the purposes of the present research endeavor are studies specifically concentrating on the influence of family factors.

The greatest concentration of research pertaining to parental influence is in studies dealing with child social-

ization. Perhaps in recognition of the fact that the family is simultaneously the matrix of personality formation and a basic determinant of social class position, students of stratification have been particularly interested in the relationships between class level and child-rearing practices. Research studies in this area have run the gamut from descriptions of specific feeding and training practices and their relation to achievement motivation (Benedict, 1938; Davis and Havighurst, 1946; Sears, Maccoby and Levine, 1957; Bronfenbrenner, 1958 and 1963; Rosen and D'Andrade, 1959; Swinehart, 1963) to discussions of more general categories of parental influence, such as emotional support (Miller and Swanson, 1959), parental values (Aberle and Naegele, 1952; Kohn, 1959a and 1959b), and the motivational elements in family experience (Dynes, Clarke and Dinitz, 1956; Strodtbeck, 1958). Whereas Michelson (1968) studied the physical environment of the home as a mediating factor in school achievement, Rosen (1961), Turner (1962), and Parsons and Bales (1955) concentrated on structural correlates of ambition (for example, family size and birth order).

The above mentioned types of studies, along with other past endeavors to examine the influence of family factors on adolescents' educational and occupational achievement orientations, can be classified into two categories.

> (1) Those examining the structural characteristics of the family unit as indicators of its social and economic properties; for example, levels of educational and occupational achievements of the parents, income, size of the family, and number and order of siblings.
>
> (2) Those purporting to examine the influence of the social-psychological properties of the family milieu; for example, value orientations, parental expectations, parental encouragement, and other variables related to the motivational aspects of aspiration and achievement (Sewell and Shah, 1968b: 191).

Inasmuch as these categorizations are compatible with the major division of the study at hand (that is, Parts I and II examine objective familial influences, whereas Part III focuses on subjective familial influences), they serve as the dominant coalescing themes underlying the following presentation of relevant literature and research. Because the students' and mothers' values, opportunity orientations, aspirations and expectations are examined with respect to the same selected social factors some of the studies included will be of a general, rather than an age-specific, nature.

(1) Objective Familial Influence - The Selected Social Factors

Socio-economic Status

Various authors have documented class value differentials. Upon examining the nature of educational value systems, Mizruchi found that education itself is evaluated differently

among the social classes. He noted a marked tendency for instrumental perception of education to increase inversely with social class. A chi-square analysis indicated that lower class and perception of education as instrumental were associated at the .01 level of probability. Mizruchi concluded that, although his lower class respondents were aware of the utility of education as a means for getting ahead, they did not tend to view it as a high end-value. Moreover, on the basis of his findings, Mizruchi suggested that education is more highly valued by the middle class as an end-value than it is by the lower class (Mizruchi, 1964: 78-81).

Whereas Mizruchi's sample was comprised of non-student adults, it has also been shown that students are more inclined to emphasize the instrumental or "means oriented" value of education the lower their status level (Goldsen et al., 1960: 14-16).

Similarly, Anderson and Safar found that lower class members tend to be reluctant to attend trade school or college when one's ability to find a job is questionable. Members of the middle class, on the other hand, valued post-high school preparation and were not overly concerned about difficulties in finding a job after completing their education (Anderson and Safar, 1967: 226).

Meier's findings only partially supported his hypothesis that "the higher the social status of the parental

family, the less likely are students (of both sexes) to see themselves and their parents (of both sexes) as emphasizing instrumentally oriented college aims" (Meier, 1970: 72). The anticipated inverse variation occurred unambiguously only in the case of attributions of instrumental orientations to fathers. Meier found the comparable variation in the propensity of students to see mothers as instrumentally oriented to be weaker and to occur mainly between the middle and lower status levels. In addition, the author observed that although students themselves appeared more inclined toward instrumental orientations at the lower status level than at the middle level, the overall status effects on student orientations were weaker and less consistent than was the case with their perceptions of parental orientations. Social status variation appeared for liberal education-oriented parents but not for students (Meier, 1970: 77-85).

Sociologists have devoted considerable attention to the empirical examination of relationships between values and educational and occupational choices. Rosen, for example, reports that achievement motivation, but not value orientations, were related to high grades and that value orientations, but not achievement motivation, were related to educational aspirations (Rosen, 1956: 209). After analyzing data from unstructured interviews with young people at

various stages of career planning, Ginzberg and his associates (1951) suggest that the foundation for effective occupational choice lies in the values and goals of the individual, because it is these which enable him to order current activities with reference to the future. Rosenberg (1957) found patterned consistency between values and the occupational preferences of college students. Schwarzweller also examined the affect of value orientations on the educational and occupational choice-making process (Schwarzweller, 1959: 246-256). In a more specific study, he focused on the value orientations associated with the status and situs dimensions of occupations chosen by high school seniors (Schwarzweller, 1960: 126-135). Simpson and Simpson endeavored to go beyond the simple dependent-vs-independent variable analysis and explored the three-way interaction between values, personal influence and occupational choice, in an attempt to show that values and personal influence are systematically related to each other, to aspiration levels and to the nature of the occupations chosen (Simpson and Simpson, 1960: 116-125 and 1962: 264-271).

The studies cited in the preceding paragraph focused on values as they relate to the type or status levels of occupations chosen. More relevant for the present research are studies concerned with the socio-cultural correlates of occupational values. Centers (1949) did preliminary work on

this problem when he examined the relationships of job values and desires to socio-economic differences. His major finding was that middle-class men preferred the job value of self-expression, while working-class men preferred the job value of security.

Stephenson's findings also tend to demonstrate that, in contrast to the middle strata, lower strata respondents seek job security and avoid risk (Stephenson, 1957: 205).

Stefflre (1959) found differences in values existing for senior boys who aspired to different occupational and educational levels, those from different socio-economic levels, and those with differential school achievement.

Similarly, Dipboye and Anderson suggest that intelligence, socio-economic status conditions and personality structure have a formative influence on occupational values (Dipboye and Anderson, 1959: 124).

Rosenberg (1957) reported that the higher the background of a student the more likely he was to stress extrinsic rewards as occupational values. In contrast, Simpson and Simpson noted a slight tendency for low social background to go with extrinsic-reward orientation for students planning to enter business occupations (Simpson and Simpson, 1960: 119).

On the basis of documented variations in the patterns of socialization experiences of young people from different status categories, Schwarzweller expected to discover a

difference in occupational value orientations between strata. Schwarzweller's findings, from a study of the structural antecedents of the value orientations of 240 rural high school youths in New York State, offer evidence to support his general hypothesis that the status positions of an adolescent in society and school and his I.Q. level influence his value orientations. Although father's occupational status varied in the hypothesized directions with specific value orientations, hard work was the only value found significantly associated (negative at the 5 per cent level) (Schwarzweller, 1959: 255).

Similarly, in his study of the occupational values of seniors in eight Kentucky rural high schools, Schwarzweller found socio-economic status related to what a youth considers as the desirable criteria in choosing a job. For boys, values on hard work and external conformity were found to be negatively related to three indices of socio-economic status (father's education, the Sewell Short Form S.E.S. Scale, and the Cornell Nine Item Level of Living Scale). On the other hand, value on achievement was positively related to two of the S.E.S. indices, father's schooling and the Sewell Score, and the values on creative work and service to society were positively related to the Cornell Level of Living Score. In the case of girls, value on material comfort was negatively associated with the three S.E.S. indices. In addition, the

data also revealed that the Sewell Score was positively related to a creative work orientation; and the Cornell Score was negatively related to achievement (Schwarzweller, 1960: 132). Having examined the correlates of the occupational choice criteria separately, Schwarzweller proceeds to delineate three distinct clusters of occupational values and to determine their socio-economic backgrounds. Cluster # 1 included values on material comfort, security, hard work and external conformity, which were values found to be related to low parental socio-economic status. Cluster # 2 included values on mental work and creative work, which were values found in association with high parental socio-economic status. Cluster # 3 included values on friendship, work with people, and service to society, which also tended to be associated with high parental socio-economic status (Schwarzweller, 1960: 133).

In his study of the occupational values and preferences of junior high school girls, Perrone found negative correlations between daughters' ratings and fathers' occupational level for two values: using special talents and having time to pursue one's interests and hobbies. Perrone concluded that girls with fathers in higher-level occupations tend to have low regard for these values while the opposite is true for girls with fathers in lower-level occupations. In addition, Perrone noted negative correlations between

parents' ratings and fathers' occupational level for two values: using special talents and working with things, and a positive correlation with good income. According to the author, these findings suggest that parent-pairs with a male in a higher-level occupation value a good income more for their daughters and place less importance on use of special talents and working with things than parent-pairs with a male in a lower-level occupation (Perrone, 1965: 255).

In his longitudinal study of the occupational values of high school students, Thompson found that the importance students placed upon leadership in an occupation was related to the socio-economic level of the student's family as measured by the father's occupation. Students whose fathers had high-prestige vocations placed significantly more importance on a job where one could be leader than did students whose fathers were in the manual or skilled trades. Thompson also found that job security and high pay were much more important to students whose fathers were in low-prestige occupations than those whose fathers were in the professions (Thompson, 1966: 851).

Data analyzed by Rytina and her associates point to the importance of money to lower-strata and their feelings of economic deprivation. In a series of questions designed to tap interest in making money, Negroes and poor whites showed the highest interest, and larger proportions of them

reported having fewer economic opportunities than "other people" (Rytina et al., 1970: 707).

Some authors have described differential achievement as being a function of the opportunities available to individuals in the social structure. Proponents of the "life chances" point of view argue that money, specialized training, and prestigeful contacts - factors which affect access to high position - are relatively inaccessible to persons in the lower social strata (Rosen, 1956: 203). Lower levels of educational and occupational achievement are considered to occur as the result of realistic responses to a restrictive opportunity structure.

Natalie Rogoff delineated three patterns of opportunity: radical, representing a society where people of equal capacity are treated alike regardless of social origins; conservative, corresponding to a society where opportunity shows no sensitivity to ability but rather decreases successively for less favorable social class positions; and moderate, which lies mid-way between the two previously mentioned patterns and depicts a society where both ability and class background have an influence (Rogoff, 1961; 140-147). According to Halsey, the pattern of opportunity most prevalent in modern industrial societies is moderate but tends toward the conservative rather than the radical (Halsey, 1967: 431). Caro's contention, that the acceptance by

working class people of a lesser degree of success constitutes a process of adjustment to their circumstances, concurs with Halsey's assumption (Caro, 1966: 492-498).

Pavalko and Bishop have characterized the Canadian educational system as being less "egalitarian" and more "elitist" than that of the United States (Pavalko and Bishop, 1966: 289). Similarly, Porter's assessment of disparities in Canada provides data indicating that

> ... in almost any aspect of education, the offspring of the advantaged enjoy superiority over those of the disadvantaged even when intellectual capacity is equal: they stay in school longer, achieve higher academic standing, attain higher levels of education, participate more in extracurricular activities, and occupy the prestige positions in such activities (Blishen et al., 1960: 212).

Porter's discussions convey the impression that stratification of educational opportunity is still a dominant feature of the Canadian system and that the effects of social origins on academic achievement remain exceedingly difficult to eradicate (cf. Porter, 1961: 103-129 and 1965: 165-198).

A family's position in the class structure is capable of exerting considerable direct and indirect influence on a child's chances of completing high school (Fleming, 1957; Hall and McFarlane, 1962; Bertrand, 1962) and continuing on to higher levels of education (Brookover and Gottlieb, 1963; Porter, 1965). Directly, family socio-economic status

dictates the availability of financial support; and indirectly, it determines whether the child's contribution to the family's welfare is needed immediately or could be postponed indefinitely. Thus sheer necessity could account for disavowal of "the deferred gratification pattern" (Schneider and Lysgaard, 1953: 142-149) and cause lower income families to take their children out of school prior to graduation and put them to work. Besides influencing the amount of education attained, class position also influences the quality of the education available. Higher status families can afford to send their children to private schools or live in residential areas which insure that the public schools have superior staff and facilities. Particularly in smaller communities the economic resources of the families sending children to school place some limit on the wealth of the school as evidenced in the educational facilities available and the salaries paid to teachers (Elder, 1963: 36). In addition, familial socio-economic status tends to determine whether the children will have access to the educational and occupational information deemed mandatory for mobility opportunities. Lipset and his associates suggest that one of the advantages possessed by boys in the higher social classes is the access to superior advice about the labor market. Their analysis showed that children of families in the higher status occupations were

more likely to have received realistic advice from many sources (Lipset et al., 1955: 224-232). It has been suggested that upper status adolescents come into contact with more prominent persons from whom they can obtain direct knowledge about high-status positions. A youth in immediate contact with individuals occupying high-status positions, or receiving a more or less continuous flow of information concerning their daily activities, will tend to view these individuals as occupational role models and to regard their occupational positions as reasonable personal goals (Sewell and Orenstein, 1965: 562). In essence, both economic (unfavorable financial circumstances) and social (little educational or vocational advice and absence of personal contacts) deprivation could impede lower status youths in their explorations of potential job opportunities.

In addition to the family's role in the allotment of formal opportunity, the family also provides its members with a particular outlook on, or perception of, the opportunity structure. As Perrucci points out,

> The main factor in the development of ascribed advantage is the institution of the family, which transmits greater or lesser opportunity to attain access to the highly rewarded positions... The family also shapes the orientation of its members toward an existing opportunity structure (Perrucci, 1967: 108).

It is possible that the pre-conceived attitudes and stereotyped responses of some people prevent them from taking advantage of opportunities that are available. Thus, it is pertinent for the purposes of the present study to establish the distinction between an objective characteristic of society (i.e. its opportunity structure) and an individual's subjective perception of his place in the opportunity structure (i.e. his assessment of his own opportunities).

Several authors have suggested that socio-economic status conditions perceptions of opportunity (Hyman, 1953; Mizruchi, 1964; Scanzoni, 1967; Zavalloni, 1968; Rosen, 1969; Rytina et al., 1970). According to Rosen,

> An individual's position in the social structure also affects his perception of the character of the larger social system in which he lives. Whether society is perceived as hostile or friendly, open or closed, expanding, static or constricting will depend to some degree on one's access to society's resources (Rosen, 1969: 47).

In interpreting data from national surveys conducted by Roper, Hyman indicates that the lower classes believe that economic opportunities are limited for them in comparison to opportunities for higher classes (Hyman, 1953: 437). Mizruchi endeavored to examine the extent to which members of the various classes believe that opportunities for getting ahead are available to them. His data revealed a class differential in the respondents' perceptions of their

own chances of getting ahead. As class declined, Mizruchi noted an increase in responses that reflect awareness and expectations of limited success (Mizruchi, 1964: 121).

Similarly, Scanzoni found lower class respondents were much more apt than middle class respondents to perceive the opportunity structure as being closed to them. Scanzoni concludes that a limited purview of opportunity is inherent within the lower classes, whereas youth in the middle classes obtain a wider and more optimistic view of their chances in the opportunity structure (Scanzoni, 1967: 456).

More specifically, Zavalloni suggests that students' subjective impressions of their life situations vary with their socio-economic status. He found anxieties stemming from perceived obstacles to social mobility to be more prevalent among members of the lower class. Zavalloni also suggests that among girls, an underprivileged situation affects the social perception even more dysphorically, insofar as anxieties and fears are not balanced by expectations of a better future or of great potential accomplishments (Zavalloni, 1968: 16).

Rytina and her associates found that perceptions of political, legal, economic and educational opportunity varied directly with socio-economic status. Basic tenets of the egalitarian ideology received greater support from the higher income strata. These researchers concluded that the

rich consistently see greater equality of opportunity than the poor, except with respect to the occupational structure where a majority of respondents regard the general tendency to be occupational inheritance (Rytina et al., 1970: 710).

Studies of the effects of socio-economic status on perceptions of opportunity have been supplemented to a considerable extent by research into the influence of class on educational and occupational aspirations and expectations. Brookover and Gottlieb succinctly summarize some of the key conclusions contained in three community studies considered to be sociological classics among works dealing specifically with the relationship between social stratification and education. From their study of Middletown, the Lynds concluded that lower class parents are less likely than middle class parents to instill in their children a desire for formal education. In his study of Elmtown's youth, Hollingshead found significant relationships between class level and patterns of school attendance and career expectations. Similarly, Warner, Havighurst and Loeb, in their book entitled Who Shall Be Educated?, present evidence showing that, when intelligence is held constant, the proportion of high school graduates that go on to college decreases with corresponding decreases in parental socio-economic status (Brookover and Gottlieb, 1963: 3-11).

The above mentioned studies, reviewed by Brookover and

Gottlieb, were consistent in reporting direct relationships between socio-economic status and levels of educational aspiration and attainment. However, in view of the substantial amount of criticism leveled at these early studies (notable among these are the following accusations: that the relatively small communities analyzed are inadequate samples from which to make generalizations; that the researchers have failed to consider and control for the effect of factors other than social class; and that, in general, there is a lack of systematic evidence for acceptance of the hypothesis that variations in school attendance and attainment are determined by socio-economic status positions) an examination of more recent research is warranted to see whether these results have been replicated.

A number of relatively recent empirical investigations have discovered class differentials in levels of educational aspiration and expectation. Rosen, for example, noted that the social strata differed decidedly with respect to educational aspiration level, which was found to be considerably higher for adolescents in the upper and middle strata than for those in the lower strata. The author attributes the observed variation to the propensity of middle class parents to focus their demands and expectations, as well as rewards and punishment, on their child's academic performance. Rosen contends that "from the beginning of his school career the

middle-class child is more likely than his lower-class counterpart to have standards of excellence in scholastic behavior set for him by his parents" (Rosen, 1956: 211). Various studies cited by Bronfenbrenner (1958 and 1963) also show that middle class parents make greater demands for school achievement and length of attendance. Similarly, Ausubel (1958) supports the thesis that middle class parents desire that their children achieve higher academic success and Swinehart's results reveal a close association between socio-economic status and levels of maternal educational and occupational aspiration for their children (Swinehart, 1963: 396). Conversely, other studies have suggested that lower status parents are equally, or even more, concerned about their children's scholastic achievements (Sears, 1952; Kahl, 1953; Weiner and Murray, 1963).

In a study conducted in rural Wisconsin, Sewell and his associates found a positive association between socio-economic status and attitude toward high school education; each of the successively higher socio-economic status groups was significantly more favorable to high school education than the ones below them in status (Sewell et al., 1953: 362).

Information obtained by Youmans (1959), from a sample of 480 Kentucky families with sons and daughters aged sixteen and seventeen, also revealed more favorable attitudes to

education among students from the comparatively higher socio-economic levels. This relationship between the valuation of education and socio-economic level was found to be even more pronounced among the students' mothers.

Krauss' data on 387 working-class and 267 middle-class high school seniors in four San Francisco Bay Area high schools indicate that students having a father in a high status occupation and having family members or friends of the family with college experience are more likely to have college aspirations (Krauss, 1964: 867-879). Studies conducted by Bordua (1960: 265) and Sewell (1964: 24) and evidence summarized by Elder (1963: 33) and Jones (1965: 23) show that students from higher socio-economic backgrounds are more likely to plan on attending college than those from lower socio-economic levels. In addition, Bordua found that parents in the middle class place more emphasis on their children entering college than do lower class parents (Bordua, 1960: 266). Similarly, Slocum's analysis of data obtained from a random sample of Washington public high schools revealed that educational aspirations and expectations of students were positively related to the economic and social status of their parents (Slocum, 1967: 273). Moreover, the sons of blue-collar workers and farmers were more likely to plan for vocational training than the sons of white-collar workers. The daughters of blue-collar

and clerical workers were more likely than the daughters of men in other occupations to plan vocational or business training. On the whole, vocational and business oriented students were less likely than those planning on college to perceive their family as having an above average income (Bowles and Slocum, 1968: 1).

In their study of 10,318 Wisconsin high school seniors, Sewell and Shaw found that socio-economic status, intelligence and parental encouragement all have substantial independent relationships to the students' college plans. In addition, their various analyses showed that social class differences in the college plans were not completely accounted for either by level of students' intelligence, or by perceived parental encouragement, or both (Sewell and Shaw, 1968a: 559).

As pointed out by Pavalko and Bishop, there appears to be little systematic research published on the relationship of socio-economic status to the college plans of Canadians (Pavalko and Bishop, 1966: 291). A few investigators have endeavored to remedy this situation. Porter, for example, summarized Canadian census data and concluded that there is a considerable amount of evidence indicating that the desire to stay in school and continue to university is related principally to the position which the family occupies in the social structure (Porter, 1965: 168). Porter's

conclusion concurs with Fleming's findings from a study of the post high school plans of 9,404 Ontario Grade 13 students, which suggest that education at the university level "is to a considerable extent the privilege of a numerically small occupational class" (Fleming, 1957: 8). Another study conducted in the province of Ontario, specifically in the adjacent cities of Fort William and Port Arthur, examined the effect of socio-economic status on the college plans of 889 twelfth grade students. The researchers reported that the direct relationship between the students' college plans and the socio-economic status of their families persisted even when sex and intelligence were controlled simultaneously (Pavalko and Bishop, 1966: 296).

Considerable evidence also indicates that parental socio-economic status, however measured, is closely related to their children's occupational aspirations and plans, to the nature of their children's first jobs, and to the pattern of their later careers. Hollingshead (1949), for example, found a pattern of vocational choices among high-school-aged adolescents that roughly corresponded with the occupational patterns of each class in the adult work world. Although Ginzberg (1951) found that boys from low income families progressed through essentially the same stages of vocational development as did high income boys, differences were detected in their occupational choices and the reasons

accompanying them. In the high income group the boys, even at an early age, tended to assume that they would go to college, and as they entered the realistic stage their choices tended to be confined to the professions. Boys from low income families, on the other hand, restricted their selection to the skilled work category and preferred a job in which the salary exceeded that of their father's employment. On the basis of case material, Ginzberg advances the contention that one of the major limitations facing the lower income group is their modest level of aspiration.

Sewell, Haller and Straus suggest that values specific to the status milieu in which a student is reared constitute important influences on his subsequent educational and occupational aspirations. Analysis of their survey data, from a one-sixth random sample of nonfarm seniors attending public and private high schools in Wisconsin, revealed that, even with measured intelligence controlled, the levels of educational and occupational aspiration of adolescents of both sexes were associated with the social status of their families (Sewell, Haller, and Straus, 1957: 67-73). Although their study does not deny the importance of intelligence to aspirations, the results may be interpreted as indicating that status does make an independent contribution.

In a study dealing with parental influence, anticipatory socialization, and social mobility, Simpson and Simpson

also found that middle class boys had higher aspirations than working class boys (Simpson and Simpson, 1962b: 520).

Data obtained from 1,844 students attending high school in selected areas of Manitoba support Siemen's hypothesis that the educational and occupational aspiration levels of high school boys and girls increase with increasing socio-economic status of family of orientation (Siemens, 1965: 62). Related results with reference to Manitoba students have been reported by Siemens and Driedger (1965: 35), Sharp and Kristjanson (1966: 16-17), and Krescy (1970: 126-128).

Likewise, the prestige level of the father's occupation, often inextricably related to the family's socio-economic status, may through social contacts, determine the number and variety of roles to which the child is exposed and upon which the child may base his occupational preferences. According to Gottlieb and Ramsey, the most important influence on an adolescent's occupational choice is the occupation of his father. These authors suggest that many boys follow their father's occupation and an even larger proportion follows an occupation which is in the same status category as that of their father (Gottlieb and Ramsey, 1964: 149). The findings from a number of studies attest to the persistence of the "occupational inheritance" phenomenon.

In their sample of approximately three thousand junior and senior high school students from Washington state, Edlefson and Crowe (1960) found that respondents from middle and high occupational status families wanted to attain at least the same occupational prestige levels as their fathers.

In general, there appears to be a consensus, among authors reviewed, supporting the assertion that children whose parents have high occupational status have a greater chance to complete their education and inherit parental status than children with parents of lower occupational status have to improve their position (Porter, 1961: 195). Empirical confirmation of the tendency for children to follow in the career and social class patterns of their parents is quite prevalent (Lipsett, 1962: 435; Simpson and Simpson, 1962: 264; Krippner, 1963: 590-595; Mowsesian et al., 1966: 238-242; Werts, 1968: 48). Furthermore, Rytina and her associates found that among their respondents "nine-tenths or more of all income groups felt that occupational inheritance was more likely than upward or downward occupational mobility" (Rytina et al., 1970: 709).

Parallel patterns of relationships between fathers' occupational prestige and the aspirational levels of Manitoba high school students have been reported by Siemens (1965: 64) and Sharp and Kristjanson (1966: 17). Both analyses revealed that the educational and occupational aspiration levels of

high school boys and girls increased as the occupational status of their fathers increased.

Recognizing the importance of taking into consideration the fairly consistent separate relationships of socio-economic status, measured intelligence, and sex with students' occupational aspirations (and the existence of complex inter-relationships among all three of these independent variables) reported by previous researchers (for example: Sewell, Haller and Straus, 1957; Pavalko and Bishop, 1966; Sewell and Shah, 1968a), Kristjanson instituted several controls in an attempt to determine whether these variables impinged upon or possibly accounted for the observed relationships between the students' levels of occupational aspiration and the prestige level of their fathers' occupations. With sex and I.Q. held constant a significant relationship was still found. On the other hand, when sex and socio-economic status were controlled no relationship occurred between level of occupational aspiration and fathers' occupational prestige. However, when sex, I.Q. and socio-economic status were controlled simultaneously a statistically significant relationship was found. Kristjanson speculates that the variation in these findings could indicate a closer relationship between occupational prestige level and socio-economic status than between I.Q. and occupational prestige (Kristjanson, 1967:55). In his conclusions Kristjanson notes that when sex,

I.Q. and/or socio-economic status are controlled no relationship is found between level of occupational aspiration and a number of independent variables that have been found to be related in earlier studies. Hence, it is suggested that a great deal of the variation in occupational aspirations of high school youth can be explained by their intelligence (as measured by I.Q. tests) and the socio-economic status of their parents (Kristjanson, 1967: 78).

Sewell and Shah have pointed out that positive correlations between socio-economic status and occupational aspiration are prevalent despite wide differences among studies with respect to "the nature of their samples, the age level of their subjects, their measurement procedures, and the particular cutting points used to categorize the variables" (Sewell and Shah, 1968a: 559). Interesting evidence which supports this assertion is provided by Haller and Miller, who examined data from published and unpublished studies in an attempt to test the hypothesis of a positive correlation between level of occupational aspiration and social class status. Of the total twenty-six tests available, the hypothesis was supported in eighteen instances and the authors were somewhat doubtful about the validity of the measures employed in the eight contrary cases (Haller and Miller, 1967: 30-32).

In sum it may be said that the research results cited

so far generally support the hypothesis that the higher the family's socio-economic status, the higher the child will aspire. Some authors have asserted that the working class are less ambitious both for themselves and for their children. Others, however, have argued that there is little difference between classes as to aspiration levels.

Bronfenbrenner, for example, assumes that the levels of aspiration are identical, but suggests that the working class parent

> while accepting middle class levels of aspiration ... has not yet internalized sufficiently the modes of response which make these standards readily available for himself or his children (Bronfenbrenner, 1958: 423).

Scanzoni's data also indicate that "aspirations among working class youth are approximately as strong as those within the middle class" (Scanzoni, 1967: 456). In addition, results of an Arkansas study reveal that the aspirations of boys in a low-income area compare favorably with those of boys in higher-income areas (Bender et al., 1967: 278).

More specifically, a study of 878 students attending nine central Indiana high schools revealed that students from different income groups respond similarly to questions dealing with the value of education (Coster, 1958: 61-66). Weiner and Murray contend that lower socio-economic parents also have high levels of aspiration for their children's

education. They maintain that it is mandatory to distinguish between "ideal" and "reality" goals and suggest that the differences lie not so much in desires, but rather in the attitudes that parents (and, it often follows, their children) have with respect to the attainability or "reachableness" of the educational goals (Weiner and Murray, 1963: 319).

Following the same line of thought, Empey suggested that there may be a large discrepancy between the occupations preferred by members of the lower class and the ones they think they can actually enter. Like the majority of investigators dealing with occupational aspirations in absolute terms (i.e. when an absolute standard is used, the aspirations of lower class individuals are compared with those of upper class individuals), Empey found that the occupational status aspirations of male high school seniors from the middle and upper classes were significantly higher than those of seniors from the lower classes. More original and informative, however, was his finding that the relative occupational status aspirations (i.e. when a relative standard is used, each respondent's occupational choice is compared with that of his father) of lower class seniors indicated that they preferred and anticipated having significantly higher occupational statuses than their fathers (Empey, 1956: 487). Thus, when their stratums of origin were taken into consideration, the occupational aspirations of the lower class boys

frequently equalled and often exceeded those of their middle class counterparts. Empey emphasized that the overall findings from his Washington study provide little support for the idea that lower class seniors limit their aspirations to their present class horizon (Empey, 1956: 493).

In his studies Stephenson sought to determine his subjects' occupational aspirations (i.e. what they wanted for a career) and their plans (i.e. what they realistically expected to achieve) separately, in an attempt to prevent appraisals of actual life chances from impinging upon statements of aspirations. Examining data obtained from a sample of 443 ninth graders, he found a relatively close relationship between the students' occupational plans and their fathers' occupational group. However, when the students' aspirations were compared with their fathers' occupational group, little relationship was revealed. All the students had relatively high occupational aspirations (Stephenson, 1955: 34). The results of Stephenson's more recent study of 1,000 ninth graders from four semi-industrial, medium-sized communities in New Jersey showed that students' stratification positions were positively associated with both their plans and aspirations (Stephenson, 1957: 207). Unlike Empey (1956: 709) who discerned little difference among high school male seniors of all social classes in the degree to which they reduced their occupational aspirations when faced with the necessity

of choosing between their preferred and anticipated occupations, Stephenson (in both of the studies cited above) demonstrated that the discrepancy between a student's plans and aspirations becomes markedly greater with descent in the occupational hierarchy. That is, students from lower socioeconomic families lowered their aspirations the most (Stephenson, 1955: 34 and 1957: 207). In conclusion Stephenson suggests that the fairly high degree of agreement with respect to aspiration results from a common cultural orientation which cuts across social classes, while expectations "reflect class differences in opportunity and general life chances" and as such represent an adjustment to the constraints of the real world (Stephenson, 1957: 212).

Supporting evidence for Stephenson's aspiration-plan distinction has been obtained by Morland in a comparative study of the educational and occupational aspirations and expectations of mill and town students attending high school in a southern Piedmont community. His findings indicated that the lower class mill children, in contrast to the upper class town children, modified their educational aspirations significantly in the face of actuality. In addition, Morland maintained that his findings constitute strong evidence to the effect that, although the mill children expressed lower educational aspirations than town children, they did share the American tradition of wanting to get

ahead. He found that they aspired to higher educational and occupational levels than those of their parents and that their occupational aspirations were not significantly different from those of town children (Morland, 1960: 171-175).

Likewise Lueptow found that socio-economic status was not significantly related to occupational preferences (Lueptow, 1968: 306).

Additional evidence in support of the aspiration-plan distinction advanced by Stephenson was obtained by Bennett and Gist in their study of the educational and occupational aspirations and plans of 800 urban high school students in relation to social class and types of family experience. In general, it was found that the classes did not differ significantly in terms of educational aspirations and expectations or occupational aspirations. Only occupational plans varied with class. The authors suggest that the students are perceptive enough to assess their life chances and plan accordingly (Bennett and Gist, 1964: 167-173).

In summary it may be stated that the initial location of an adolescent in the stratification system is not dependent upon his personal achievements, but is ascribed on the basis of his parents' status. Students from lower socio-economic families, by definition, are faced with social and financial disadvantages which could affect the amount and quality of education available to them and thus restrict

the occupational alternatives from which they may choose (to the extent that educational and occupational achievement are related). A family also provides a framework for the formulation of values and assessment of opportunities and, as such, its socio-economic status could influence a youth's orientation toward society, in general, and the educational and occupational spheres, in particular. In addition, a family's position in the social structure could affect its ability to provide vocationally relevant experience and information for its members.

Several studies in the area of stratification research have reported sizable social class differences in aspirations, expectations and eventual achievements. It has been found that adolescents from higher status families, in contrast to their lower class counterparts, are more inclined to want and plan to attain high educational and occupational goals. However, the findings of some researchers have not substantiated the assertion that lower class respondents have lower aspiration levels. It has been demonstrated that some children from lower socio-economic status families aspire to and achieve high level educational and occupational goals despite the limitations imposed on them by virtue of their social class background. This suggests that not only do some lower status families allocate a considerable portion of their scarce resources to higher education,

but also socialize their children to high levels of aspiration and expectation.

While socio-economic status is one continuum along which the respondents' values, opportunity orientations, aspirations and expectations may vary, there are other factors which past research has shown to be significant.

Parents' Educational Levels

Although several authors have concurred with the opinion that "the level of education of those who are or will become parents is an important factor in the transmission of values about education" (Porter, 1961: 113), studies specifically examining the extent of relationship existing between parents' levels of education and their children's values or subjective impressions of the opportunity structure are scarce. Bertrand, for example, suggests

> it is logical to assume that, in the family, educational values are transmitted to children somewhat in proportion to the education of the parents (Bertrand, 1962: 230).

In general, empirical confirmation of this type of assumption is lacking.

Schwarzweller's analyses of the relationships between length of the father's formal schooling and students'

occupational value orientations constitute notable exceptions to this tendency. Values on hard work were found to be negatively related to an increase in father's length of schooling, while those on friendship, mental work, and creative work were found to be positively related. According to Schwarzweller, these findings support the view that

> the interactional influences indexed by the educational level within the family of origin play a very significant role in determining what values youths learn in the socialization process (Schwarzweller, 1959: 255).

This conclusion was supported further by similar findings obtained when the length of the mother's formal schooling was correlated with the students' value orientations.

In a later study Schwarzweller examined the occupational values of high school boys' and girls' separately. For the boys, values on hard work and external conformity were negatively related to father's education, whereas the value placed on achievement was positively related. In the case of girls, values on material comfort and external conformity were negatively related to father's education, while the value placed on service to society was positively related (Schwarzweller, 1960: 133).

With reference to perceptions of opportunity, Rytina and her associates found that the same general pattern of

relationships appeared when the data were analyzed by the educational level of the respondents as when the data were analyzed by their socio-economic status. Support for the ideology of equal opportunity increased directly with educational level (Rytina et al., 1970: 714).

There appears to be fairly consistent findings to the effect that parents' levels of educational attainment are positively related to the educational and occupational aspirations and expectations of their children. Youmans' study (1956), as a case in point, showed that the occupational expectations of twelfth grade Michigan boys increased as the educational levels of their fathers increased.

Data from Slocum's Washington state sample of 2,000 students revealed that 70 percent of those with college graduate fathers also planned on college; whereas, students with fathers of lesser educational achievement more often planned on seeking employment rather than additional education (Slocum, 1956).

Similarly from a more recent study, also conducted in Washington state, Bowles and Slocum found that parents' education is associated with the educational plans of students. In general, those planning vocational or business education had parents with less education than the students who planned to attend college (Bowles and Slocum, 1968: 8).

In yet another study, Slocum found that the associations

between educational aspirations, expectations and education of the student's father were positive and stronger for expectations than for aspirations. The level of mother's education was also positively associated with aspirations and expectations. Considering the data provided by several indicators (i.e. education of father, education of mother, number of brothers and sisters who attended college, number of brothers and sisters who were drop-outs, and a Guttman-type scale of perceived family attitudes toward education) Slocum concluded that the intellectual tradition of a family has a substantial influence on the level of educational aspirations and expectations of its members (Slocum, 1968: 12-13).

Floud and Halsey point out that family-related factors such as parents' attitudes towards their children's education and future occupation, the mother's educational level, or her occupation before marriage, have been shown to be more highly correlated with measured intelligence and school performance than others such as income or the social grading of the father's occupation (Floud and Halsey, 1958: 184).

Likewise in a study of high school seniors in Utah, Christiansen and his associates noted significant relationships between plans to attend college and parents' education, parents' attitude toward college education and parents' attitudes toward prospective occupations for their children

(Christiansen et al., 1962).

Employing education of parents as their criterion, Simpson and Simpson found that students choosing business occupations tended to come from slightly lower social backgrounds than the rest of their sample (Simpson and Simpson, 1960: 119).

Important among the variables which Bélanger (1961) examined (in an extensive study of drop-outs from Quebec schools) as influencing the child's staying in school was the educational level of the parents. Bélanger contends that inter-generational continuity of educational level seems to be borne out by his data on school drop-outs.

An Alberta study of a similar nature, revealed that 55 percent of students coming from homes where one or both parents had some college education achieved their grade 12 diplomas, in comparison to 35 percent of students coming from homes where neither parent attained any level of college education (Larson, 1958: 212-215).

Furthermore, Bertrand's analysis of factors affecting school attendance and attainment indicated that the parents of youngsters still in school almost invariably had completed more grades in school than the parents of drop-outs (Bertrand, 1962: 230).

Porter has reported that a Dominion Bureau of Statistics Survey on a sample of 11,858 Canadian university students

showed that for arts and science students 20.6 percent had fathers who were university graduates as compared to less than 4.6 percent of all family heads between thirty-five and sixty-five (Porter, 1961: 188).

Sewell has succinctly summarized the essence of several studies in his assertion that "the variables related to the socio-economic and educational level of the student's family are among the most powerful determinants of educational perspectives" (Sewell, 1963: 18). His statewide study of Wisconsin high school seniors revealed that 51 percent of students whose parents ranked high in educational achievement had college plans as compared with 22 percent whose parents ranked low. Similarly, 56 percent of students with parents ranking high had high occupational aspirations as compared with 28 percent of students with parents ranking low in educational attainment (Sewell, 1963: 16).

In their study of a randomly selected sample of Wisconsin seniors who were followed for a seven-year period (1957-1964) after graduation from high school, Sewell and Shah found that father's education had a slightly stronger effect than mother's education on perceived parental encouragement, college plans, college attendance and college graduation for males, but that both father's and mother's education have almost equal effect for females. Mother's education had a modest effect independent of father's

education, but the independent effect of mother's education was stronger for females than for males. In addition it was observed that the optimal situation for the inducement of high levels of educational aspiration and achievement occurred when both parents had high levels of educational achievement (Sewell and Shah, 1968b: 191).

Essentially similar findings have been reported as a result of studies conducted in Manitoba. Siemens, for example, noted that the educational and occupational aspiration levels of high school boys and girls increased along with level of fathers' educational achievement. Similarly, the educational and occupational aspiration levels of the boys and the educational aspiration levels of the girls increased along with level of mothers' educational achievement. A significant relationship was not found between mothers' educational level and the girls' level of occupational aspirations, as measured by the Haller scale (Siemens, 1965: 66-68).

Specifically with respect to educational aspirations, Siemens and Driedger reported that their tests indicated that the higher the educational aspirations of the student, the higher the level of the father's education. Also, the higher the educational aspiration level of the student, the higher the mother's education (Siemens and Driedger, 1965: 36).

In their analysis of the associations between father's education and various aspirational variables, Sharp and Kristjanson found significant relationships for both occupational and educational aspirations and for both male and female samples. The general pattern appeared to be one in which the proportion of students with high aspirational levels increases with each higher educational achievement category of the father. Furthermore, the pattern of relationships found between mother's education and the aspiration variables paralleled that for father's education (Sharp and Kristjanson, 1966: 18). Positive correlations between parents' educational levels and students' occupational aspirations have also been recorded by Krecsy (1970: 126-128).

On the other hand Kristjanson, whose analyses incorporated controls for sex and measured intelligence, sex and socio-economic status, and these three variables simultaneously, found no significant relationship between student occupational aspirations (also measured by the Haller scale) and either parent's level of educational achievement. On the basis of these results Kristjanson suggests that "the relationship normally found between educational achievement of parents and L.O.A. reflects something beyond education per se" (Kristjanson, 1967: 51).

Thus, with the exception of two cases, the majority of

studies reviewed in this section concur with respect to the suggestion that children of well educated parents have higher aspirations than children of poorly educated parents (Herriott, 1963: 159). Several possible explanations for the existence of such a relationship have been advanced. For one thing, the educational example set by the parents apparently affects the educational aspirations and plans of their children. Krauss has suggested that any college experience on the part of working class parents is particularly relevant in this respect.

> Working-class parents who have attended college have not only been exposed to middle-class values that influence their children to seek further schooling, but in addition their having gone to college, even for a limited time, may suggest to their offspring that such aspirations are not unreasonable (Krauss, 1964: 871).

Having demonstrated that advanced education is attainable, the parent may serve as a role model for his son or daughter. In support of his contention Krauss cites data indicating that in working class families in which the father had college training, 61 percent of the children planned to obtain higher education; in contrast, only 35 percent of the youngsters whose fathers did not complete high school planned to attend college (Krauss, 1964: 871).

It has also been suggested that differences in educational success could be due to differences in educational

sophistication (Brookover and Gottlieb, 1963: 6). Parents who have attended university or taken technical or vocational training after high school have an insight into how centers of higher education operate and can provide their children with practical information (for example, about entrance requirements, application forms, etc.). In addition, a parent's educational level could be an indicator of his familiarity with the requirements of various occupational roles and hence, could affect the type of advice offered to his children when they are formulating their occupational preferences. As pointed out by Sharp and Kristjanson, parental education probably reflects both the student's knowledge of occupational alternatives and the manner in which he evaluates them (Sharp and Kristjanson, 1966: 18).

Frequently it has been inferred that if the educational and occupational achievements of family members are relatively low the children in these families could not be expected to have high educational or occupational aspirations. Past studies, however, have shown that parents who are dissatisfied with their own educational or occupational attainments tend to project their ambitions onto their children and consequently try to motivate them to achieve (Kahl, 1953: 186-203; Perucci, 1967: 134; Sewell and Shah, 1968b: 192). Thus, it may be expected that parents' educational levels, whether high or low, exert some influence on their children's

values, opportunity orientations, aspirations and expectations.

The Role of Residence - Community Size and Isolation

Several studies, some of which are cited below, have documented rural-urban differentials in educational aspirations, expectations and eventual attainment. Hence, the increased impetus

> to discover and identify the factors associated with the educational attainment of rural youth and to assess which of these can be influenced to bring about educational achievement for them (Middleton and Grigg, 1959: 21).

Research endeavors conducted by Slocum (1956) and Burchinal (1961) found generally lower educational aspirations among rural adolescents than among urban. Similarly, Berdie's statewide survey in Minnesota reported higher educational aspirations among urban as compared with rural youth (Berdie, 1954). Data obtained by Nam and Cowhig in their national sample of high school seniors disclosed even sharper rural-urban differences in relationships between educational plans and actual college enrollment. A comparison of the percentage of youths who had college plans and actually fulfilled them revealed almost twice as many urban adolescents to be characterized by this pattern. In addition, their study showed that students from farm families are

considerably less likely to plan on attending college after graduation from high school than are rural non-farm and urban students, and that girls in all residence categories are less likely to plan on college than boys (Cowhig and Nam, 1961). Rogoff also noted that seniors who attend high school in rural communities (under 2,500) are considerably less likely to plan on college than those who attend school in larger communities (Rogoff, 1961: 241-251).

In his study of the educational plans of 10,322 Wisconsin high school seniors, Sewell found that with each increase in community size category the percentage of students with college plans increases ranging from 21.5 percent for those from farms to 42.4 percent for those from large cities. Sewell suggested that intelligence and socio-economic status explain most of the differences among girls in this sample, but additional factors are required to account for residential differences in the college plans of boys (Sewell, 1964: 24).

More recently, Slocum's study of sophomores, juniors and seniors from a random sample of thirty rural Washington high schools revealed reversals in the direction of residential influences on educational aspirations and expectations. Significantly more farm boys (80.2%) than non-farm boys (72.3%) aspired to attend college. Similarly the

proportions of farm boys with college expectations also tended to be higher than those of non-farm students: 75.3% of the farm boys compared to 69.0% of the non-farm boys expected to attend college. The proportion of farm and non-farm girls with college aspirations were roughly equal. (Slocum, 1968: 51).

Other studies in Washington (Slocum, 1956), Michigan (Youmans, 1956), Florida (Middleton and Grigg, 1959; Grigg and Middleton, 1960), Kentucky (Schwarzweller, 1960), Iowa (Burchinal, 1961) and Utah (Christiansen et al., 1962) all report that adolescents reared on farms, in rural non-farm areas, or in smaller cities aspire to lower prestige and lower salaried occupations than those reared in larger communities.

Middleton and Grigg found that males from urban communities were more likely to have higher educational and occupational aspirations than those from rural areas. In the case of females there was a significant rural-urban difference in educational, but not occupational, aspirations. Girls from both rural and urban places of residence aspired to white collar occupations in uniformly high proportions (Middleton and Grigg, 1959: 347). In their Florida study, which compared the aspirations of ninth grade students attending school in communities of under 2,500 with those of students attending in urban communities of various sizes,

Grigg and Middleton found that the larger the community the higher the occupational aspirations of the boys. This relationship held even when intelligence and father's occupation were taken into consideration (Grigg and Middleton, 1960: 303).

Sewell and Orenstein's research, based on a sample of 9,986 Wisconsin high school seniors, indicated that community context, as measured by size of community, is clearly associated with the occupational plans of youth. Specifically, they found that the proportion of students choosing high-status occupations increased as the size of community of residence increased. In subsequent analyses these researchers endeavored to diminish the rural-urban differences by controlling the effects of some of the variables associated with both occupational choice and residence. The introduction of separate controls for intelligence and socio-economic status, although generally reducing the rural-urban differences, did not remove them for either the boys or the girls in the sample. However, when sex, family socio-economic status and measured intelligence were controlled simultaneously differences in occupational choice by residence were eliminated for girls but persisted for boys (Sewell and Orenstein, 1965: 551). According to Sewell and Armer, the reduction in the original relationship between community size and occupational aspiration when certain controls are

introduced permits the tentative conclusion that "differences in aspirations may be due more to differences in the sex, socio-economic, and ability composition of high schools than to normative differences in community contexts" (Sewell and Armer, 1966: 160).

Similar relationships have been manifested in the majority of Manitoba studies. In their endeavor to determine the extent to which type of residence is an important factor in the formation of the educational and occupational aspirations of 1,844 eleventh and twelfth grade students attending high school in the Interlake, Central Plains and selected suburban areas of Manitoba, Siemens and Driedger employed a three-way classification (farm, rural non-farm, and suburban) to facilitate comparison. Their results revealed that

> Two-thirds of the suburban youth held high educational aspirations hoping to go to university. Very few did not plan to continue their education beyond high school. About one-third, or half as many farm youth aspired to university education, but more aspired to enter vocational training such as teachers' college or nurses' training... The same trend was evident in occupational aspirations, although the relationship was not as strong (Siemens and Driedger, 1965: 30).

Despite his finding of a significant relationship between aspirational levels and size of community of residence for both boys and girls, Siemens qualified the

acceptance of his hypothesis (that "the educational and occupational aspiration levels of high school boys and girls increase with the size of the family's community of residence") with respect to boys in rural towns of less than 2,500 population (Siemens, 1965: 60). The qualification was regarded as required because boys from smaller towns registered slightly higher aspiration levels than did boys from larger rural centers. Siemens suggested that a possible explanation for this deviation from the hypothesized relationship might be that

> ... high school boys in larger rural centers (501 - 2500) have a greater likelihood of finding a job locally than boys in smaller centers (500 and less). Hence some of the less motivated boys in the larger towns feel that they can 'get by' in life by anticipating a job their home town has to offer. However, this local job opportunity is not likely to exist for boys in smaller centers, and more of these boys may realize that their only hope for a reasonably secure livelihood lies in further education and ultimately in a higher level of employment than is available in the home town (Siemens, 1965: 59).

Sharp and Kristjanson's analysis also showed that students in the suburban areas indicated the highest levels of educational and occupational aspirations for both males and females. At the other extreme, students from farm residences indicated the lowest levels, with the exception of occupational aspirations for females residing in places below 500 population. However, no clear-cut relationship was

found when the two intermediate categories were examined (Sharp and Kristjanson, 1966: 16).

When these same data were re-examined with socio-economic status controlled, Forcese and Siemens found significant variation in educational aspiration levels between rural and urban students within the high and low socio-economic status groups. That is, of those students whose families may be classified into either the high or low socio-economic status categories, the urban students tended to have higher educational aspirations than the rural students. When occupational aspiration levels were examined, holding socio-economic status constant, no significant variation in occupational aspiration levels was observed. The authors noted that much of the variation in aspiration levels by region, initially detected in the data, disappeared when socio-economic status was controlled. However, in view of the fact that some variation persisted even with socio-economic status held constant, Forcese and Siemens concluded that "at least in some part the variation in aspiration levels reflects broader economic and cultural differences between the rural and urban school environments than measured by the S.E.S. scale" (Forcese and Siemens, 1965: 10).

Kristjanson, cognizant of the fact that earlier studies frequently failed to control certain apparently important

factors associated with place of residence, employed an analysis which included stringent controls for sex and measured intelligence, sex and socio-economic status and sex, measured intelligence and socio-economic status simultaneously. With these variables held constant, a statistically significant relationship between size of place of residence and level of occupational aspiration was not found. Recognizing that this finding ran counter to the bulk of results previously reported, Kristjanson suggested that "particular attention be paid to this variable in future studies" (Kristjanson, 1967: 59).

Although most of the studies cited above do seem to indicate that community size has some effect on aspirations and expectations, they don't explain much about the nature of these influences. More recently researchers, dissatisfied with the mere description of effects, have sought to establish plausible explanations for the "why" of some of the observed trends. They have examined the structural composition and normative climates of the social contexts in which individuals live in an attempt to understand why certain communities furnish less incentive to high aspiration and offer less opportunity for high level achievement. Much of the resultant literature suggests that specific elements of community structure may have an important bearing on educational and occupational aspirations. One of these being the limited

post-high school educational opportunities found in most rural communities. Conceivably, the greater cost and difficulty of attending a university or technical school a long way from home may prevent youth in relatively isolated communities from continuing their education beyond high school. Subsequently, this places restrictions on the range of occupational positions available to them and may result in their aspiring to lower-status positions. Thus, distance from institutions of higher learning may be a limiting factor in the occupational selection process. According to Burchinal,

> it appears likely that relative geographical isolation and its attendant features such as relatively poor schools, few occupations visible to the youth, etc. may well be the main factor producing the chain of somewhat low educational and occupational aspirations, reduced educational achievement, and finally, relatively low occupational achievement ... (Burchinal, 1965: 166).

Variations in adolescents' aspirations by size of community of residence have frequently been attributed to differences in the quantity and quality of educational facilities and opportunities available. Lipset, for example, attempted to explain rural youth's lack of ambition for higher education and lower occupational aspirations in terms of their limited access to colleges and universities, their attendance at relatively poor high schools, their limited

personal contacts, and the fact that they encounter relatively few occupational alternatives. Lipset asserts that youth from large urban areas

> ... are more likely to be acquainted with the occupational possibilities which exist in such communities than will those who are raised in the occupationally less heterogeneous smaller communities (Lipset, 1955: 226).

Haller and Sewell tested Lipset's contention by comparing the educational and occupational aspirations of a rural and urban Wisconsin sample. In contrast with previous studies, they found that for high-school senior boys educational aspiration was but occupational aspiration was not, associated with residential background and that the association was not to be explained by intelligence. Farm boys appeared as likely to desire to enter high-status occupations as non-farm boys, but tended to underestimate the importance of education for achieving these positions. Among girls, neither educational nor occupational aspirations were significantly related to residence (Haller and Sewell, 1957: 407).

Rogoff hypothesized that part of the differential achievement of children from the same type of family background can be explained not by processes occurring within the family but by the kind of community setting in which the family and school are located. Rogoff contended that "the ecological environment leads to formal and informal

arrangements within and outside of the schools, affecting the educational attainment of residents" (Rogoff, 1961: 242). Using data on the college plans of 35,000 senior high school students, Rogoff classified the communities in which the schools were located into nine categories based upon population size and relationship to a metropolitan area (small, independent towns of three sizes; suburbs of three sizes; and cities of three sizes). Controlling for family socioeconomic status and correcting for the fact that certain kinds of schools retain more students through to the twelfth grade, Rogoff found that the large suburban high school made the best showing, and that high schools in the larger cities produced about the same proportions of college aspirers as those in small towns (Rogoff, 1961: 243).

By means of a survey of relevant research literature, Elder investigated several factors which appeared likely to account for a large portion of rural-urban differences in educational and occupational perspectives. He concluded that rural adolescents, as compared to urban youth, are less likely

> 1) to have access to achievement opportunities; 2) to have close social contact with persons who espouse achievement values and goals; and 3) to experience child rearing practices and learning opportunities which develop the potential for achievement as evidenced in the desire to achieve, personal autonomy, and intellectual ability (Elder, 1963a: 36).

Elder also points out that the educational possibilities of a community and the actual functioning of its educational system are both conditioned by the size of its population, and that the financial resources reserved for the support of schools are likely to decrease as community size decreases. Elder states that, in general, schools situated in smaller communities are less likely to have sufficient funds to permit the acquisition of a superior teaching staff, a counselling staff and adequate library and laboratory facilities. In addition, schools with no more than twenty-five or fifty seniors have difficulties offering a variety of scholastic programs without increasing the cost of education per student. Elder echoes Lipset's concern that rural youth may be disadvantaged with respect to achievement opportunities due to the paucity of education-requiring positions in rural areas. Accepting the premise that occupational opportunities are related to community size, the author asserts that adolescents residing in larger centers are more likely to be exposed to a diversity of occupational alternatives (Elder, 1963a: 39).

Using data from a questionnaire survey of 1,701 Canadian high school girls, Boyle attempted an empirical evaluation of three possible explanations (1. financial resources and needs, 2. educational opportunities, 3. the sociocultural context of community life) advanced to account

for the lower aspirations of students in smaller communities. The results of his analysis indicated that educational opportunity explains most of the relationship; and when both educational opportunity and community context are controlled, all relationship between community size and college aspiration disappears (Boyle, 1966c: 277).

Attention has also been directed toward identifying the values and attitudes which make the cultures of smaller communities distinctive. Several researchers concur on the idea that adolescents tend to acquire values consonant with those prevalent in their communities. Straus, for example, found that farm-oriented boys were more likely to consider "work with things" as the most important work value, while non-farm boys more frequently favored "work involving relationships with people" and "working with ideas" (Straus, 1956: 257). The occupational values least favored by farm-oriented boys in a study conducted by Burchinal were "chance of advancement" and "intellectual challenge" (Burchinal, 1960: 12-15). Thompson found that "what others would think about you because of your occupation" was highly important to students who lived in urban areas (Thompson, 1966: 851). Rural students placed more importance on power and security than their urban counterparts (Thompson, 1966: 853). Schwarzweller, on the other hand, found that comparison of the occupational value orientations of boys from urban and

rural regions in Kentucky revealed a strikingly similar pattern. In addition, comparison of the occupational value orientations of girls from the two regions did not reveal a sharp difference in pattern (Schwarzweller, 1961: 131).

Thus, findings from a number of studies suggest that not only a farm, rural non-farm or urban background, but the size of the community of residence as well, is associated with differences in high school students' educational and occupational aspirations and expectations. In general, the larger the community the higher the average level of aspiration and expectation. Several tentative explanations for the existence of such relationships have been advanced throughout the literature. Some research endeavors have been conducted expressly for the purpose of identifying specific contextual influences such as opportunity structures and value climates. As evidenced by the studies reviewed in the preceding section various explanatory factors, thought to account for residential differences in educational and occupational perspectives and contribute to the persistence of regional disparities, have been enumerated and empirically evaluated.

Parental Encouragement

Research evidence attesting to the importance of the parental push toward higher education and occupational achievement is quite prevalent. Several investigators have

found a relationship between perceived parental encouragement and students' levels of aspiration.

Aberle and Naegele noted relationships between a father's occupational role and his educational and occupational expectations for his children. More specifically, their findings confirmed the assumption that middle class fathers desire college training and either professional or business careers for their sons. For daughters, the majority of fathers plan a college education, but there is considerably more willingness to admit that the child may not go, either because she does not want to or because she may get married first (Aberle and Naegele, 1952: 370).

In earlier studies, Duvall found that mothers within the various societal subcultures differ significantly in their conceptions of parenthood and in what they expect of their children (Duvall, 1946: 202) and Davis found that lower middle class parents, in particular, exert "a strenuous and unrelenting push to motivate their children" to continue their education and obtain a skilled or white collar occupation (Davis, 1941: 353).

From the 3,971 respondents to questionnaires distributed to male sophomore and junior high school students from the Boston metropolitan area, Kahl selected twenty-four boys for interview analysis in an attempt to determine why students with similar I.Q's and social backgrounds differ

decidedly in their college aspirations. All of the boys studied tested in the top three I.Q. deciles in their schools and all had fathers in "common man" or "working" class occupations (that is lower level white collar workers or skilled laborers), but half of the boys aspired to go to college and prepare for middle class occupations and the other half did not desire to go to college and looked forward to "common man" occupations. Directing his attention to possible social determinants of the differential aspirations, Kahl noted that nine of the twelve boys having college aspirations were strongly encouraged by their parents to take school seriously as preparation for a good job. Thus, Kahl's interview material disclosed one main factor differentiating the two groups: parental pressure, that is a clear and overt attempt by either or both parents to influence their son to go to college. Unlike the boys without college aspirations, whose parents tended to be content with their way of life, those boys who planned on college had parents who were not satisfied with their own achievements and who applied steady pressure on their sons to do better via higher education. Parents who believed in the value of "getting ahead" rewarded good school performance and punished poor performance, they paid attention to what was happening at school, they stressed that higher education was necessary for occupational success and they suggested

various occupations that they thought would be suitable for their sons. According to Kahl, the interviews indicated that "the boys learned to an extraordinary degree to view the occupational system from their parents' perspective" (Kahl, 1953: 202). They adopted their parents' views on the opportunities available, on the desirability and possibility of change of status, on the techniques to be used if change was desired and on the appropriate goals for boys who performed as they did in school (Kahl, 1953: 203). Kahl's findings provided the impetus for a number of subsequent investigations devised to examine parental encouragement as an intervening variable in the relationship between socio-economic status and level of aspiration.

Bordua found that sex, religious affiliation and socio-economic status were independently related to the presence or absence of college plans among 1,529 ninth through twelfth graders from two cities in Massachusetts. Cognizant of the considerable amount of literature concerning the importance of student motivation derived from values and socialization practices, Bordua inquired as to whether these relationships could be accounted for by the factor of parental stress on college, that is whether these relationships were due to differential emphases on college by the parents of boys as opposed to girls, high occupational levels as opposed to low, and Jews as opposed to Protestants and

Catholics (Bordua, 1960: 266). Controlling for parental stress on college, he found that the effects of religious affiliation and socio-economic status were both reduced (the latter drastically) but not eliminated entirely (Bordua, 1960: 268).

Upon examining the educational and occupational aspirations of youth residing in communities of different sizes, Burchinal noted that youth in urban areas generally aspired higher than youth in small towns and farming areas. His hypotheses that the parents of youth living in rural areas were neither as frequently involved in their children's occupational planning nor gave as much encouragement for continued education as other parents were both supported (Burchinal, 1961: 107-121).

Simpson found a significant relationship between parental guidance and the occupational aspirations of male students from two urban high schools in North Carolina. Parental influence on educational and occupational aspirations was found to be stronger than the influence exerted by the friends of high school boys from middle or working class families. In addition, it is worth noting that when both types of influence were either high or low they came close to nullifying the effects of class background on career aspiration (Simpson, 1962: 517).

Similarly, Bell found that the educational and occupa-

tional aspiration levels of high I.Q. male high school students were positively associated with the motivational directives of parents. More specifically, the adolescents whose parents provided high aspirational motivation tended to have higher ambition levels than those who received low motivation. In general, it was found that parental motivation was a better predictor of high ambition than was social class position of the boys (Bell, 1963: 179 and 183).

In their study of a randomly selected sample of 10,318 Wisconsin high school seniors, Sewell and Shah found that parental encouragement was a powerful intervening variable between socio-economic class background and intelligence of the child and his educational aspirations (Sewell and Shah, 1968a: 559).

The above mentioned finding is in keeping with Herriott's contention that children of higher income families have higher educational aspirations than do children in low income families, not simply because their parents have more money, but because social forces conducive to planning for college are operating more upon them than they are upon children in low income families. More specifically he states that variables, such as the individual's assessment of his achievement level relative to others and the expectations which he perceives significant others hold for his behavior, are capable of intervening between an adolescent's

social, economic and intellectual characteristics and his educational plans (Herriott, 1963: 159).

In his study of the relationships between the aspiration levels and the family backgrounds of a selected sample of Manitoba students, Siemens found support for his hypothesis that the educational and occupational aspiration levels of high school boys and girls increase with increasing strength of fathers' and mothers' encouragement for continuing education (Siemens, 1965: 68-69). Two subsequent analyses of the same raw data revealed similar results (Sharp and Kristjanson, 1966: 19; Kristjanson, 1967: 46).

The studies cited in the preceding section are indicative of the considerable attention that has been directed toward discerning the degree to which children perceive their parents as encouraging or even pressuring them to have high educational and occupational goals. For the most part, researchers have reported positive relationships between perceived parental encouragement and students' levels of educational and occupational aspirations and, on the basis of their findings, have suggested that parental interest and expectations (whether explicitly expressed or merely implied) provide the impetus necessary for the development of a child's motivation to achieve.

(2) Subjective Family Factors

Parental Influence

Parental insight and influence with respect to occupational choice can be noted in a number of ways, one being the accuracy with which parents can predict their children's occupational interest patterns. As a result of asking the parents of forty tenth grade students to respond to the Kuder Preference Test as they thought their child would, Hill and Hole found that eighty percent were able to match two or three of their child's top three interest areas. The authors pointed out that mothers estimated their children's interests slightly more accurately than fathers. They attributed this finding to the fact that the mother's role typically involves more continuous interaction with the child than the father's role, but suggested that "further study of parental conceptions of the vocational interests of their children would be a fruitful line of inquiry" (Hill and Hole, 1958: 175).

Perrone administered an occupational value-orientation instrument to 196 seventh and eighth grade girls and their parents. His results revealed that parents and daughters agreed that a good income and a secure future were important, and that being helpful to others, working with things, and being free from supervision were unimportant (Perrone, 1965: 253).

In a study conducted in a New York community, it was found that lower socio-economic level children and their parents were generally in agreement concerning vocational aspirations (Wiener and Murray, 1963: 320). On the other hand, the findings from a more recently conducted questionnaire survey of 345 tenth grade students attending school in Toronto showed that the higher the socio-economic position of the respondent the more likely congruency will obtain between the respondent's occupational choice and his parents' occupational hopes for him (Harvey and Harvey, 1970: 145).

Some investigators have endeavored to delineate specific conditions which promote, or at least facilitate, parental influence. Elder, for example, found indications that parental influence is strongest when parental authority is "democratic" (involving joint parent-adolescent decision-making) and "legitimate" (involving frequent explanations by parents of their decision). In addition, Elder explored the implications of this finding for academic motivation and aspirations. An examination of relevant data revealed that adolescents with democratic and explaining parents were most likely to have high educational goals (Elder, 1963: 63).

Gottlieb, Reeves and Tenhouten (1966) found evidence that adolescents choose as referents, in the area of occupational goals, those who are perceived as having the desire

and ability to help the adolescent attain his goals. The fact that parents seem to exert more influence upon the vocational decisions of adolescents than upon decisions of other kinds has been interpreted by Soloman (1961: 393-395) and Brittain (1963: 385-390) in terms of the special competence of adults in the vocational realm. Similarly, Smith's findings suggest that the adolescent's belief in the parent's possession of useful knowledge may provide the father or mother with a potential for educational influence upon the adolescent (Smith, 1970: 334).

The studies cited above attest to the existence of some intergenerational congruences and lend credence to the assertion that parents exert considerable influence upon adolescents' decisions. Others have focused on dissonance in parent-youth orientations stemming from "the decelerating rate of socialization" (Davis, 1940), generational differences in value orientations (Meier, 1970) and the importance of peers in shaping adolescent perspectives (Haller and Butterworth, 1960; Coleman, 1960 and 1961; Alexander and Campbell, 1964; McDill and Coleman, 1964; Duncan, Haller and Portes, 1968).

In summary, several authors have proposed that the family is the primary source of highly enduring attitudes and values that are reflected in an adolescent's aspirations. However, there are those who challenge this contention and assert that the parents' influence decreases as the adolescent

grows older, while the influence of friends augments. Proponents of this point of view suggest that peer, rather than parental, influences predominate during the transitional period of adolescence. Coleman, for example, suggests that economic and educational changes in society have fostered the emergence of adolescent subcultures "... with values and activities quite distinct from those of the adult society" (Coleman, 1960: 337).

It appears logical to assume that adolescents' values and achievement motivations are influenced by their associations in friendship groups as well as by the interactions they experience within the family milieu. With respect to the present study, peer influences constitute a theoretically probable factor contributing to any observed divergence of student-parent values, opportunity orientations, aspirations or expectations.

The foregoing review of literature endeavored to point out the main foci of recent research interest in areas relevant to the present study and to give some indication of the nature of the knowledge which is resulting from such research. It is evident that a considerable amount of research effort has been expended in the area of adolescent aspirations and expectations. A number of variables have been examined in relation to the educational and occupational aspirations and plans of high school students. Of special interest for purposes of comparison are the previous studies concerned

with the factors related to the aspirations of high school students from the central and western sections of the province of Manitoba.

In addition, there is a rapidly accumulating body of literature dealing with attempts to delineate socio-cultural correlates of students' educational and occupational values. Few studies, however, have been reported that deal directly with the nature and extent of the relationships between selected social factors and respondents' opportunity orientations. Scant attention has been directed toward discerning students' subjective perceptions of the educational and occupational opportunities available to them.

Throughout the review of literature an attempt was made to note any discrepancies or apparent contradictions in the results of previous research endeavors considered pertinent to the present study. On the whole, however, the findings from past studies were sufficiently consistent to permit directional refinement of the general hypotheses guiding the phases of this study. It will be recalled that three general hypotheses of a non-directional nature were derived from the theoretical frameworks and stated at the end of Chapter II. Specific working or research hypotheses, indicating the directional relationships anticipated on the basis of the findings reviewed, will be presented in appropriate subsequent chapters prior to the presentation of the findings used to test them.

CHAPTER IV

SOURCE OF THE DATA

Population Studied

The population studied may be delineated as all students registered in the twelfth grade in the five selected single enterprise communities, who were present on the day(s) the questionnaires were administered, and their mothers.

As stated at the outset, the present study, being conducted under the auspices of the Center for Settlement Studies, University of Manitoba, is part of a interdisciplinary research program organized for the express purpose of gathering information on a variety of aspects of life in single enterprise communities along Canada's northern resource frontier (Siemens, 1970: 2). In keeping with the overall aims and objectives of the larger project, this specific study focused its concern on examining the socio-cultural correlates of the educational and occupational achievement orientations of twelfth grade students and their mothers residing in five single enterprise communities in northern Manitoba and Ontario. Random selection procedures or province-wide sampling were not employed precisely because the context of the achievement orientations to be studied was specified. Thus, in accordance

with statistical usage of the term "population" as an arbitrarily defined aggregate of persons, objects or events about which information is desired (Ferguson, 1959: 112; Hoel, 1966; 1; Walpole, 1968: 55), the subjects from whom the data for this study were obtained may be designated as a population.

The decision to study twelfth grade students has important implications. The study of these students automatically excludes those youth who drop out of school before their senior year. Since the drop-out group undoubtedly contains a disproportion of individuals with negative opportunity orientations and low levels of educational and occupational aspiration, their omission affects the results in foreseeable directions. A study of ninth or tenth graders would considerably reduce the drop-out bias, however, the lack of realism characteristic of the occupational choices of younger students may have affected the findings. Sewell, Haller and Straus stress the importance of restricting investigations to older youth so that the subjects' statements of their aspirations derive from impending decisions, thus omitting the fantasy aspirations of younger persons (Sewell, Haller and and Straus, 1957: 67). Similarly, in a longitudinal study of the vocational value statements of students, Gribbons and Lohnes discerned a decided shift from "idealism" to "realism" over the five year period between the eight and twelfth grades

(Gribbons and Lohnes, 1965: 251). For this study, the advantage of securing subjects, the vast majority of whom would be forced by the imminence of their graduation to think realistically about their futures, was judged to outweigh the drawback of sample loss due to drop-outs.

Mothers were chosen for the "parents" portion of the study primarily because numerous sources have indicated that mothers are more important in the indoctrination of children than fathers. Hyman, for example, notes that the youth of both sexes and all classes are closer in their values to adult women than to adult men. He states that this finding is suggestive of the greater influence of mothers in the transmission of values (Hyman, 1953: 492). Perrucci points out that the father has not enjoyed the same position of importance concerning his children's mobility as has the mother. Mothers have been found to be much more influential in their children's decision to attend college (Perrucci, 1967: 134). Similarly, Hill and Hole report that mothers were able to predict the occupational interest patterns of their children somewhat more accurately than fathers (Hill and Hole, 1958: 177). The above mentioned differences have frequently been attributed to the greater amount of time available to the mother to influence her children. The maternal role requires greater contact and involvement with the children and hence results in a more accurate insight into their educational and occupa-

tional preferences.

Single Enterprise Community - A General Definition

The term "single enterprise community" designates a town or city so dominated by a single, basic economic enterprise that the practical existence of that community depends in large part on its continuance. Perhaps the chief characteristic of a single enterprise "company town" is that a major proportion of its population is employed by one enterprise. Moreover, in a single enterprise community the service industries are auxiliary entities, heavily dependent on the major enterprise for their subsistence. This is probably due to the fact that such a large proportion of the market they reach is employed by the same dominant enterprise.

It can be argued that the above mentioned definitive factors are too restrictive and too severe, but an endeavor should be made to grasp the general emphasis given by this "survival type" definition. To be sure, some single enterprise communities could survive the closing of their mine or mill, however, their fundamental functioning would be severely threatened and inevitably impaired. It is contended that the resultant community would be either so depleted in facilities or different in economic structure that, in a sociological sense, it would constitute a "new" community, a "new" and essentially different context for educational and occupational attainment.

Having specified how the phrase "single enterprise community" will be employed throughout the thesis, a brief summary of some of the main characteristics of the specific communities studied is in order. The five single enterprise communities involved in this study were selected by representatives of the Department of Sociology in conjunction with representatives of the Faculty of Education.

The Specific Single Enterprise Communities

The economy and continued existence of each of the five communities selected for study are basically dependent upon a single enterprise. In Flin Flon, Thompson and Lynn Lake, Manitoba and Red Lake, Ontario mining constitutes the main industry. In Pine Falls, Manitoba the pulp and paper mill predominates. Large segments of their populations are employed by the dominant enterprise and, thus, derive their livelihood directly from this source. Indirectly, the single enterprise also supports retail merchants, service personnel and government officials, that is, those persons involved in dispensing the ancilliary services necessitated by the requirements of the major industry's numerous employees. Four of the five communities studied have an additional characteristic in common. They are situated in relatively remote sections of the province.

The following commentaries, on the specific single enterprise communities studied, constitute compilations and syn-

theses from a number of diverse sources. Notable among these are the Community Reports published by Manitoba's Department of Industry and Commerce and the Industrial Directories of Municipal Data published by Ontario's Department of Trade and Development.

Pine Falls, Manitoba:

The town of Pine Falls is located 85 miles north-east of Winnipeg on the south bank of the Winnipeg River and, as such, is the least geographically remote of the five communities studied. With its present population of approximately 1,245, it is also the smallest.

The C.N.R. operates daily freight service (except Saturday and Sunday) to Winnipeg. No passenger service is provided. However, Pine Falls is easily accessible by road. There are two ways of reaching the town by road and both routes (Highways 11 and 12) are paved. The eastern route cuts across the Winnipeg River and then follows it north to the townsite, while the northern route parallels the beach resorts on the eastern shore of Lake Winnipeg and then angles off south-east to reach the town. These paved highways make it possible for Gray Goose Bus Lines to provide three trips daily (each route to Winnipeg and return) and R.C. Owen Transport Company to provide trucking service twice daily to Winnipeg and return. Pine Falls receives radio stations from Winnipeg, Altona and Portage La Prairie and television stations from Winnipeg.

The town owes its existence to the fact that Abitibi Manitoba Paper Limited established a pulp and paper plant there in 1927. Pine Falls was planned and built to provide housing and services for the employees of the plant. At the present time, the plant has an annual production capacity of 150,000 tons of newsprint and employs 388 persons (382 male, 6 female) on a year-round basis, plus an additional 125 in the winter woods operation. The town also has 8 retail outlets and 18 service outlets, but none of these employ more than 10 persons (the average is 3).

Flin Flon, Manitoba:

The mining centre of Flin Flon is located at the northern end of Highway No. 10, 550 road miles north-west of Winnipeg. The recently completed Hanson Lake Road, connecting Flin Flon to Prince Albert, Saskatchewan makes an interchange of personnel possible in this part of the north. Flin Flon was incorporated as a city in 1970 and has a population of approximately 10,200 persons.

Transair-Midwest Limited operates two flights daily. The C.N.R. operates a freight train to Winnipeg daily (except Sunday) and a combined passenger and freight train daily (except Saturday and Sunday). In addition, the paved road makes truck and bus service possible. Gardewine and Sons Limited has truck service to Winnipeg five times a week and Manitoba Motor Transit provides daily passenger service to

Winnipeg. With regard to communication facilities, Flin Flon has a daily newspaper (Flin Flon Daily Reminder), a local radio station (CFAR) and a local television station (Kinesco).

The economy of the city is based primarily on the operation of Hudson Bay Mining and Smelting Company Limited. The Company, incorporated in 1927, owns and mines zinc, copper, cadmium, gold and silver properties in the area. In terms of production, it operates the third largest copper smelter and third largest zinc refinery in Canada. Its concentrator can treat up to 6,000 tons of ore daily. Total employment is approximately 2,700 (1900 male, 100 female) including 700 at nearby Snow Lake, Manitoba and Creighton, Saskatchewan. The second largest employer, Flin Flon General Hospital, has a staff of 176 (13 male, 163 female). Flin Flon has 67 retail outlets and 42 service outlets.

Thompson, Manitoba:

Thompson, with its estimated population of 20,000 persons, is the largest community studied. Originally carved out of bushland only eleven years ago, Thompson was incorporated as a city on July 20, 1970. Thompson is emerging as the administrative and regional centre for northern Manitoba. A number of provincial and federal offices are now located there and it is the head office of the Norman Regional Corporation, an organization promoting the economic develop-

ment of the north.

Thompson is located 400 air miles north of Winnipeg, however, actual road distance is approximately 700 miles. Road access to the southern section of Manitoba is provided by Provincial Road No. 391, an all-weather gravelled highway which is presently being paved. A 112 mile connecting road to this highway from Grand Rapids will provide another route south (extension of Highway No. 6). Manitoba Motor Transit operates buses daily (Winnipeg, Brandon and return). Gardewine and Sons, Allied Vans and Safeway and other groceterias supply trucking services. C.N.R. provides passenger service daily except Sunday and freight five times a week. In addition, Transair-Midwest Limited has three flights daily Monday to Friday, two flights Saturday and one Sunday. Thompson's two newspapers, the Thompson Citizen and the Nickel Belt News, are published twice a week. Thompson receives radio station CHJM (local) and CESM (local) and CBWT (Winnipeg) television stations.

The people of Thompson have occupations of every kind found in other communities of comparable size, although the largest block owes its living to the International Nickel Company of Canada. This multi-million dollar development, started in 1958-59, accounts for a large percentage of Manitoba's total mineral (metal) production. It's the world's largest nickel producing complex, turning out about 460,000,000

pounds annually and holding long term mining rights to an 80 mile by 10 mile wide area in northern Manitoba. The company's original shaft is currently being extended. Inco's present mill and smelter are being expanded to handle additional tonnage of ore. Copper, cobalt and precious metals are secondary smelter products. Inco currently employs 4400 persons (4300 male, 100 female). The School District of Mystery Lake, Thompson General Hospital, and the City of Thompson have 224, 187, 115 staff members, respectively. Thompson has 76 retail outlets and 135 service outlets. The importance of Inco to the community has been documented in a recent article which states that

> They...know that without Inco, the town wouldn't exist (Stephenson, 1971: 26).

Lynn Lake, Manitoba:

Lynn Lake, with a population of 2,900 people, is located 150 miles north of Flin Flon at the terminus of a branch line of the Canadian National Railways. It can be considered to be the most geographically remote of the communities studied in that it is not accessible by road. Transportation is provided by rail and airlines. C.N.R. operates a mixed passenger-freight service three times a week out of the Pas, south of Flin Flon. In addition, Lynn Lake is serviced regularly by Transair-Midwest Limited (Winnipeg and return daily, two flights daily Monday to Saturday and one on Sunday) and by

three chartered airways. Lynn Lake's newspaper (Lynn Lake Lyre) is published twice a month. The community receives C.B.C. satellite radio and tape rebroadcast television. Like Pine Falls, Flin Flon and Thompson, Lynn Lake has a library.

The community was designated a Local Government District in 1951. Municipal administration is provided by a Resident Administrator, an appointee of the Provincial Government.

The economy is based mainly on the nickel-copper-cobalt mining operations of Sherritt Gordon Mines Limited, which suspended operations at Sherridon and moved to the present site more than fifteen years ago. When the reserves at Sherridon were depleted, the entire town was moved north by winter tractor train to Lynn Lake to mine nickel and copper ores. Copper concentrates are shipped to the Hudson Bay mining smelter at Flin Flon and nickel concentrates to the company's refineries at Fort Saskatchewan. Sherritt Gordon Mines presently employ 880 persons (760 male, 120 female) at Lynn Lake. The second largest employer Masse and Gauthier, a contract mining firm, has a staff of 152 (150 male, 2 female). Lynn Lake has 47 retail outlets and 33 service outlets.

Red Lake, Ontario:

The mining town of Red Lake, situated on the body of water of that name, was the sole non-Manitoba community studied. The Red Lake area, with five producing mines, attempts to preserve its present and past history as the foremost gold

camp in the country. Secondary school students residing in Balmertown, Cochenour and Madsen commute by bus to the Red Lake District High School. The students may study arts, sciences, trade or vocations according to their aptitudes. Red Lake High School has classes in trade and technical training. The Red Lake division engages 26 teachers for a high school enrollment of 422.

The population of Red Lake is 2,510 persons and the population of the Red Lake District (including Red Lake, Balmertown, Cochenour and Madsen) at the 1966 census was approximately 4,500 persons.

According to a 1968 government study, four gold mines in the Red Lake area (Campbell Red Lake, Cochenour-Willans, Dickenson and Madsen) produce 25 percent of Ontario's gold yield. Based on that report, the 1969 estimated market value for gold and silver from the Red Lake region is $15 million. The Griffith Mine which commenced production in 1968 has stabilized the communities of Ear Falls and the Red Lake Area.

Campbell Red Lake Mine continues to be outstanding for maintaining steady and profitable productions. This mine (which employs 275 men) and the Dickenson Mine (which employs 245 men) constitute the sustaining factors in the community of Balmertown. The Madsen Mine went into production in 1938, making it the oldest by a year of the ones still producing in the Red Lake district. There are 186 men employed at the

Madsen mine and approximately 130 at Cochenour-Willans. Shaft deepening programs and the addition of modern mechanized equipment, coupled with continuing exploration and development, encourage an optimistic outlook for the future. As recently as October 13, 1970 Red Lake-Balmertown has been designated as one of Northwestern Ontario's thirteen growth centres. The Ontario government intends to

> encourage the mining, forest-based and tourist industries in the areas adjacent to these communities, as well as to reduce disparities in educational opportunity, health and social services. Design for Development: Northwestern Ontario region contains provisions for access road construction, airstrip development and improved communications (The Dryden Observer, 1970: 42).

Red Lake and the adjacent communities are 175 road miles north of Kenora, Ontario and 140 miles from Dryden. The area is accessible by paved road on Highway No. 105, which extends to Red Lake, via Ear Falls, from the vicinity of Vermilion Bay on the Trans-Canada Highway. There is daily bus service to the southern communities. Trucking companies do an immense business in freight transportation throughout the area. Motorways (a combination of Patricia Transport and Soo Security), Kingsway Transportation, C.P. Transport and Reimer's Express Lines are companies active in the region. Transair flies daily between Red Lake and Winnipeg. Non-scheduled flights between specific points and non-scheduled chartered flights are provided by several air

transportation companies and local operators. The Red Lake airport was established before the highway opened in 1946. Three light manufacturing enterprises, located in Red Lake, employ between three and fifteen persons. Various government agencies employ approximately sixty persons.

The outlines presented above were included to provide insights on the geographic locations, economic structures, and communication facilities of the communities involved in this study. It constituted an endeavor to ennumerate certain elements deemed essential for an accurate, albeit brief, depiction of the context of the achievement orientations examined. Having described the "where" of data collection, it is necessary to specify how, and by what methods, this was accomplished.

CHAPTER V

METHODOLOGY

One of the goals of this study was to obtain quantifiable data on the respondents' educational and occupational values, opportunity orientations, aspirations and expectations and to relate the above mentioned to selected social factors. This chapter presents information on the construction and administration of the research instruments, the operationalization and measurement of the independent and dependent variables involved and a comment on the method of analysis employed.

The Questionnaires

The data necessary for this study were obtained by means of questionnaires. This form of inquiry was used in previous research endeavors of a similar nature to the study at hand and proved to be an expedient way of gathering a large amount of information in a relatively short period of time.

The student questionnaire was comprised of three parts. The initial section contained questions designed to obtain information on the selected social factors (familial socioeconomic status, parental educational levels, community of residence, and perceived parental encouragement for continuing education and for occupational achievement), which served as the independent variables for Parts I and II of

this study. The second section of the questionnaire was directed toward discerning the students' educational values, opportunity orientations, aspirations and expectations. Similarly, the third section consisted of questions on the students' occupational values, opportunity orientations, aspirations and expectations. Thus, the last two sections of the student questionnaire supplied the dependent variables for Part I of the study.

For comparative purposes crucial to the general project, the questions pertaining to levels of educational and occupational aspiration paralleled those employed by Krecsy (1970).[3] Keeping in mind items revealed to be relevant by a review of literature, the value and opportunity questions were formulated to provide additional information not acquired in previous studies of Manitoba high school students. In view of the overall similarity of format found between this study's questionnaire and those used in earlier studies of a similar nature, and the one employed in the initial phase of the present project, pre-testing of the instrument was not considered to be necessary.

3. The questionnaire utilized by Krecsy (1970) was the result of a co-operative effort, undertaken in May of 1969, among members from the Faculty of Education and Department of Sociology to modify a form employed in an earlier investigation of Manitoba high school students, various aspects of which are reported in Siemens, 1965; Siemens and Jackson, 1965; Forcese and Siemens, 1965; Siemens and Driedger, 1965; Kristjanson and Sharp, 1966; and Kristjanson, 1967.

For the purpose of obtaining comparable information, the mothers' questionnaire was designed to parallel the student questionnaire. The first part of the questionnaire for mothers contained essentially the same questions as those in the second and third parts of the student questionnaire appropriately rephrased to elicit the mothers' educational and occupational values, opportunity orientations, aspirations and expectations for their sons and/or daughters currently attending Grade XII. Thus, this initial section of the mothers' questionnaire supplied the dependent variables for Part II of the study. The questions on some of the social factors were not repeated because the required information was readily obtainable from the student questionnaires. In addition, for purposes of the project as a whole, the final portion of the mothers' questionnaire contained questions pertaining to parent-teacher relations in the community. Copies of the student and mothers' questionnaires are presented in Appendix A.

Questionnaire Administration

In mid-December, 1970 letters were sent to the superintendents (where applicable, or the school trustee or principal) of the schools slated for inclusion in the study acquainting them with its nature and aims and requesting their permission for the distribution of questionnaires to the twelfth grade students. Permission was granted and assurance of further

assistance received. In early April, 1970 letters were sent to the principals familiarizing them with the study and setting up tentative dates for questionnaire distribution in their schools. The principals were contacted by phone to confirm that the scheduled days were convenient for the teachers and students involved. Without exception, the principals and teachers co-operated fully thus permitting the researcher and an assistant to administer the questionnaire in late April and early May, 1971.

One class period (between 40-50 minutes) allowed sufficient time for introductory remarks, necessary instructions and questionnaire completion. The researcher remained present to respond to student inquiries regarding the questionnaire or the study in general.

The students were informed that two questionnaires were involved. One for them to complete and hand in at the end of the period and one to take home for their mothers to complete. They were requested to return their mother's questionnaire the following day to the General Office (a place designated by the principals as most convenient for the majority of students). It was explained that the researchers were visiting several communities and had a time schedule to keep. In addition, it was asked that those students whose mothers were unavailable for response indicate the reason for this on the mother's questionnaire

and return it along with their own.

Lists of student respondents were compiled and compared with class lists in order to identify absentees. Efforts were made to contact these students the following day when researchers returned to collect the mothers' questionnaires. The principals co-operated by mailing questionnaires returned after the specified day. In addition, approximately three weeks after the initial distribution, questionnaires accompanied by an explanatory letter (see Appendix A) were sent to the mothers who had not yet responded.

In sum, questionnaires were completed by 319 or 82 percent of all twelfth grade students enrolled in the five high schools involved. This total was made up of 158 males and 161 females. With reference to the 319 students present on the days the questionnaires were distributed, 203 of their mothers (94 boys' mothers and 109 girls' mothers) completed the mothers' questionnaire. For a breakdown of Grade XII enrolment figures, questionnaires completed and percent coverage by sex for each school, the reader is referred to Appendix A, Table 1.

Thus, the findings to be presented in Chapter VI for Part I of the thesis are based on the responses of 319 twelfth grade students. Those presented in Chapter VII pertinent to Part II are based on the responses of 203 mothers of twelfth grade students. Finally, the findings

presented in Chapter VIII for Part III are based on the responses of 94 male twelfth grade students and those of their mothers and 109 female twelfth grade students and those of their mothers.

Independent Variables: Operationalized

Selected social factors is a composite term utilized mainly for convenience in referring to the nine independent variables for Parts I and II of the study.

1. Socio-Economic Status (S.E.S.)

Data for the assessment of familial socio-economic status were taken from a question regarding the present occupation of the student's father. The occupation that the students ascribed to their fathers was rated according to Blishen's Socio-Economic Index for Occupations in Canada (Blishen, 1967: 41-53).

Several authors have contended that occupation is an appropriate indicator of socio-economic status. Warner and his associates are usually linked with indices of class position based on subjective criteria. In addition, however, Warner showed that it was possible to break down the subjective index into a number of objective factors and to use these objective criteria to present a relatively accurate depiction of actual social divisions. Warner stated that, among objective criteria, occupation constituted the

best single index of class (Warner et al., 1949). Similarly having compared nineteen indexes of socio-economic status, Kahl and Davis concurred with Warner and concluded that occupation is the best predictor of socio-economic status (Kahl and Davis, 1955: 321). After reviewing several studies, Deasy also suggested that "there seems to be a consensus among American social scientists that it (occupation) is the best single index of socio-economic status" (Deasy, 1956: 186).

The rationale for the utilization of occupational position as a measure of socio-economic status should be made explicit. The fundamental idea underlying this contention is that social class in industrial societies is primarily a function of man's relationship to the economy which is evident in the way in which he earns a living, that is, the occupational position he has achieved (Blishen, 1970: 111). Hence, position in an occupational hierarchy can serve as an indicator of class position. Occupations, in turn, can be ranked hierarchically according to education and income. Reiss suggests the following reason for ranking occupations in this fashion:

> a man qualifies himself for occupational life by obtaining an education; as a consequence of pursuing his occupation he obtains income. Occupation therefore, is the intervening activity linking income to education. If we characterize an occupation according to the prevailing levels of education

> and income of its incumbents, we are not only estimating its "social status" and its "economic status," we are also describing one of its major "causes" and one of its major "effects." It would not be surprising if an occupation's "prestige" turned out to be closely related to one or both of these factors (Reiss, 1961: 116-117).

Thus, occupations can also be ranked in terms of the prestige evaluations of individual occupations by the population. Blishen combined these three rankings in terms of education, income, and prestige into a socio-economic index of individual occupations, which can then be ranked in terms of the values of the index (Blishen, 1967: 41-53).

Blishen's socio-economic index for 320 occupations in Canada is essentially an updated and revised version of the original Blishen scale, wherein 343 Canadian occupations were ranked and grouped into seven classes according to combined standard scores for income and years of schooling calculated on the basis of data from Canada's 1951 census (Blishen, 1958: 519-531). The more recent index utilized 1961 census data. To construct the index the percentage of males in each occupation whose income was reported to be $5,000 or over during the preceding twelve month period, and the percentage who had attended at least the fourth year of high school, were calculated. From the list of 320 occupations 88 were chosen that were comparable with occupations included in a prestige scale of occupations constructed by

Pineo and Porter (1967) based on the average evaluation of an occupational title by a national sample of respondents. A regression equation was constructed using as the dependent variable the Pineo-Porter scores for the 88 occupations which correspond with the census list, and using as the independent variables the corresponding income level and educational level of these occupations. The regression weights thus obtained were then applied to the 320 census occupations and resulted in a socio-economic index score for each (Blishen, 1970; 111-112). It was from this list of 320 occupations with scores ranging from 76.69 for chemical engineers to 25.36 for trappers and hunters that socio-economic status scores were assigned to the students' statements of their fathers' occupations.

The rank correlation between the 1967 Socio-Economic Index and the 1958 Occupational Class Scale was .96. This is important because a rank correlation of .94 was found between the ratings of occupational prestige in the Blishen scale and those of the National Opinion Research Center, (N.O.R.C.) of the United States. This latter correlation is significant in that the Haller Occupational Aspiration Scale (also utilized in this study) was based upon the N.O.R.C. ratings.

2. and 3. Parental Educational Attainment

The variables fathers' education and mothers' education refer to the highest levels of fathers' and mothers' educational achievements as reported by the students. In separate questions for their mother and father, the respondents were asked to check the appropriate category from among the following: some grade school; completed grade school; some high school; completed high school; completed high school and also had other training (fathers - for example, technical training; mothers - for example, business course, teacher training); some university; university graduate; some graduate work; graduate degree (M.D., M.A., Ph.D., etc.). The code scores assigned ranged from a low of 1 for the first category to a high of 9 for the last category.

4. Size of Community of Residence

The communities were ranked directly according to population size. As stated in the commentary on the communities studied, their populations ranged from 1,245 for the smallest community, Pine Falls, to approximately 20,000 for the largest community, Thompson. The rank-score assigned to each community is shown in Figure 3.

FIGURE 3

THE FIVE COMMUNITIES RANKED BY SIZE

Rank-score	Community
5	Thompson (Largest)
4	Flin Flon
3	Red Lake
2	Lynn Lake
1	Pine Falls (Smallest)

5. Isolation of Community of Residence

For an assessment of the relative isolation of the communities involved, the writer relied on the Index of Isolation developed for these specific single enterprise communities during the initial phase of the project. This was done to facilitate comparison and maintain uniformity from one phase to another.

The rankings assigned to the communities were composite scores representing a variety of factors including accessibility in terms of transportation, presence of highways, actual geographic remoteness, that is, distance from inhabited areas of the country and communication facilities available in the community (Peach, 1970: 42; Krecsy, 1970: 68-69). A summary of these characteristics for each specific community was given in Chapter IV. Figure 4 presents the rank-scores assigned to each community with reference to

relative isolation.

FIGURE 4

THE FIVE COMMUNITIES RANKED
BY ISOLATION

Rank-score	Community
5	Lynn Lake (Most isolated)
4	Red Lake
3	Thompson
2	Flin Flon
1	Pine Falls (Least isolated)

6. and 7. Parental Encouragement for Continuing Education

The variables fathers' encouragement for continuing education and mothers' encouragement for continuing education were based on the students' responses to five statements intended to record their perceptions of the strength of encouragement received from their parents regarding the continuation of their education. In separate questions for their father and mother, the students were asked to indicate if each parent had strongly encouraged them to continue; had given them some encouragement to continue; had encouraged them to graduate from high school and then go to work; had encouraged them to quit school now and work; or had never said much about it. The degree of encouragement was scored from 1 indicating weak ("has never said much

about it") to 5 indicating strong ("has strongly encouraged me to continue") for each parent. These scores represent a reverse ordering of the way in which the alternatives were presented in the questionnaire (see Appendix A).

8. and 9. Parental Encouragement for Occupational Achievement

The variables fathers' encouragement for occupational achievement and mothers' encouragement for occupational achievement were based on the students' responses to five statements intended to record their perceptions of the strength of encouragement received from their parents regarding occupational achievement. In separate questions for their father and mother, the students were asked to indicate if each parent wanted them to get a very good job, wanted them to get a job that is better than most jobs in their community; wanted them to get a job that is as good as most jobs in their community; has never said much about it; or does not care what kind of job they go into. The code scores assigned ranged from a low of 1 ("does not care") to a high of 5 ("wants me to get a very good job"). The alternatives were presented randomly on the questionnaire (see Appendix A).

Dependendent Variables: Operationalized[4]

The eleven dependent variables involved in Parts I and II of the study can be placed into the three distinct groups listed below.

Values:
1. Expressive Educational Values
2. Instrumental Educational Values
3. Expressive Occupational Values
4. Instrumental Occupational Values

Opportunity Orientations:
5. Educational Opportunity Orientation
6. Occupational Opportunity Orientation

Aspirations and Expectations:
7. Educational Aspirations
8. Educational Expectations
9. Occupational Aspirations (Haller)
10. Occupational Aspirations (Blishen)
11. Occupational Aspirations (Blishen)

These three groups of dependent variables constitute the focus of discussion for the final sections of this chapter.

4. It is to be noted that the students' educational and occupational values, opportunity orientations, aspirations and expectations are the dependent variables for Part I of the study. The mothers' educational and occupational values, opportunity orientations, aspirations and expectations for their children are the dependent variables for Part II. On the basis of priority in time, the mothers' values, opportunity orientations, aspirations and expectations have been designated as the independent variables for Part III, with those of their children the dependent variables.

Values

Differing Definitions

Schwarzweller contends that an examination of contemporary sociological literature reveals that attempts at conceptual definitions of values are plagued by semantic difficulties (Schwarzweller, 1959: 247). Various definitions of the term have been advanced. Notable among these is Aberle's definition of a value as "an effectively charged idea or attitude in terms of which objects, events, actions, individuals, etc. are judged on a scale of approval-disapproval" (Aberle, 1950: 495) and the well known Kluckhohn definition:

> a value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group, of the desirable which influences the selection of available modes, means and ends of action (Kluckhohn, 1959: 395).

Similarly, Williams states that values in the sense of standards are "conceptions of the desirable" (Williams, 1961: 58). For Rosenberg values meant things in which people are interested - things they want, desire to be or become, feel as obligatory, worship or enjoy (Rosenberg, 1957: 11).

Perrone points out the confusion arising from the multiplicity of ways in which the term occupational value has been used (Perrone, 1956: 254). Thompson utilized the term to refer to "job characteristics," that is, certain features of the occupation itself (Thompson, 1966: 850). For Singer and Stefflre, job values referred not to the kind of work or duties performed, but to the source of satisfaction in the work (Singer and Stefflre, 1954: 483).

Studies Relevant for the Selection of the Educational Values

Selection of the specific educational values utilized in this study was guided by existing theory and research (especially: Downey, 1960; Kane, 1961; Williams, 1961; Mizruchi, 1964; Slocum, 1967; Hodgkins and Herriott, 1970; Meier, 1970).

Downey endeavored to determine the extent to which the public perceived certain elements (grouped along intellectual, social, personal and productive dimensions) as important aspects of education. Responses obtained from residents of four geographic regions in the United States and one in Canada revealed differential perceptions of the purpose of the public school. Canadians stressed that the school should serve the individual, whereas Americans believed it should serve society. Canadians, as a group, assigned considerably higher priority than did Americans to knowledge, scholarly attitudes, creative skills, aesthetic appreciation, and morality, as outcomes of an education. Americans, on the other hand, emphasized physical development, citizenship, patriotism, social skills and family living. According to Downey, the former attitudes may be attributable to a value orientation emphasizing the perfection of the individual, the latter to a value orientation stressing the improvement and well-being of society. In essence, Downey depicts the Canadian image of education as concentrating on creativity,

aesthetic appreciation, and the desire for knowledge (Downey, 1960: 213-214).

Kane contends that in a pluralistic society there will be, as there are today, various kinds of values and consequently various kinds of education. As a challenge to those who equate the general idea of "success" with vocational preparation, he points out that over half of his Arts and Letters sample was "success-oriented, although these students had not chosen vocational preparation" (Kane, 1961: 87).

Williams asserts that since the educational system is part of the larger social system, its aims reflect the value-patterns prevalent in society. He states that

> In a culture which strongly emphasizes universalistic rules and an active, instrumental approach to life, the stress upon individual achievement, especially in business occupations, tends to direct attention and energy away from collective goals, as well as away from expressive and contemplative concerns (Williams, 1961: 65).

Having identified what he believes to be the dominance of the "instrumental," as opposed to "expressive," elements in current American society, Williams endeavors to delineate the ramifications of this distinction for the educational system. He contends that the above mentioned cultural emphasis, when translated into educational aims, accounts for the priority given to vocational preparation rather than to "the ideal of the mind broadly trained to understand

and appreciate the whole of life" (Williams, 1961: 68). Williams acknowledges that the aim of "aiding the individual to unfold his potentialities, to extend the scope and acuteness of his experience, to more clearly and richly know the external world, other people, and himself" persists as a "conception of the desirable," but feels it has been relegated to second place by the increasing emphasis given to the economic "value" of education - the enhanced earning power acquired through education for competitive placement in the occupational system (Williams, 1961: 73).

After speculating on the pervasiveness of the expressive-instrumental distinction in the societal and educational spheres, Williams examined data from the Cornell Value Studies in an attempt to determine if his assertions were substantiated by empirical evidence. The students studied were found to be approximately equally divided between those who regarded vocational preparation as the primary goal of an ideal education and those who chose a general liberal education. More specifically, Williams states that "success-oriented" students choose vocational preparation (this finding runs counter to Kane's contention cited above) while the "other-directed" choose goals of social adjustment ("getting along with people") (Williams, 1961: 75).

Similarly, a survey of undergraduates on eleven univer-

sity campuses conducted by Goldsen and associates showed that in about equal proportions the majority of undergraduates regarded either vocational training or general education as "most important" among five types of educational goals (Goldsen et al., 1960: 5-7).

Mizruchi presented his subjects with some reasons different people have given for wanting their children to finish a certain amount of education and asked them to indicate which one they felt was most important. Grouping the responses into instrumental perception of education (that is, education viewed as a means toward other ends, for example, as one of several alternative means for achieving "success") and noninstrumental perception of education (education viewed as an end in itself), Mizruchi found that the 205 respondents were almost evenly divided between the two categories. Fifty-two percent perceived education as a means-value, while 48 percent perceived it as an ends-value (Mizruchi, 1964: 80).

On the basis of his findings from a statewide Washington study, Slocum concluded that the concept of a college education as a fundamental means or "favored channel" to occupational success has reached rural students (Slocum, 1967: 277).

Personnel equipped with basic technical skills (for example, reading, writing, mathematics and science) are a mandatory pre-requisite for the effective functioning of a

modern industrial society. In general, it is recognized that formal education is primarily responsible for imparting such skills and knowledge (Halsey et al., 1961; Eisenstadt, 1956). According to Hodgkins and Herriott,

> ... from a societal perspective the transmission of basic knowledge and skills and of an instrumental orientation constitute the substantive nature of the educational socialization process and can be viewed as the primary institutional goals of formal schooling (Hodgkins and Herriott, 1970: 92).

In his study of generational differences in value orientations toward higher education, Meier asked each respondent to nominate the single statement that ranked highest as an expression of his father's, his mother's and his own hopes and expectations for his college education. According to Meier, the statements employed could be classified as indicators of instrumental or expressive aims. The instrumental category included orientations toward upward socio-economic mobility, economic security, and vocational self-fulfillment. The expressive items concerned liberal educational aims, socio-humanistic aims, and personal happiness (Meier, 1970: 75).

Studies Relevant for the Selection of the Occupational Values

As was the case with the educational values employed in this study, selection of the specific occupational values and their instrumentation was guided by existing theory and research (especially: Centers, 1949; Miller, 1956; Rosenberg, 1957; Schwarzweller, 1959 and 1960; Dipboye and Anderson, 1959; Simpson and Simpson, 1960 and 1962; Gribbons and Lohnes, 1965; Lueptow, 1968).

Centers (1949) developed a Job Values and Desires questionnaire consisting of ten job values (leadership, interesting experience, esteem, power, security, self-expression, profit, fame, social service and independence) from which his sample of adult men were to choose the one job value which they considered most important in selecting an occupation. The instrument developed by Centers was subsequently utilized by Singer and Stefflre (1954) in their comparative investigation of the job values of high school seniors. More recently, Thompson (1966) used an adapted version of Centers' occupational value scale to determine how important certain features of a vocation were to students as freshman and later as sophomores. Wagman (1965) used Centers' Job Values and Desires questionnaire to study the occupational value preferences of university students.

In his attempt to test the hypothesis that the fre-

quency with which a particular value is regarded as important is related to expressed occupational choice, Miller used an instrument consisting of four groups of four items each, arranged in pairs so that each item was paired with each other item not in its own group, making a total of ninety-six comparisons. Subjects were asked to indicate which of the two items in a given pair seemed more important to them in choosing an occupation. The four groups of items were intended to be indicators of values named security, career satisfaction, prestige and social rewards (Miller, 1956: 244).

In their study of sex differences in the ordering of occupational values by high school freshmen and seniors, Dipboye and Anderson asked their subjects to rank nine "things people look for when choosing a job" (Dipboye and Anderson, 1959: 122). Their list of occupational values closely paralleled that of Centers but their technique differed in that they instructed their subjects to assign ranks to all nine items, rather than selecting the most important one.

Gribbons and Lohnes constructed inferred vocational value hierarchies from the protocols of interviews conducted with 111 eighth, tenth and twelfth grade students. They found that the following twelve categories accommodated the responses tallied as value indicators: advancement, demand,

geographic location, interest, marriage and family, social service, personal contact, preparation (ability), satisfaction, and personal goals (Gribbons and Lohnes, 1965: 250).

On the basis of findings from his study dealing with occupational choice and personal values among college students, Rosenberg suggests that people who enter different kinds of occupations have basically different outlooks on work as a facet of life. Rosenberg computed a coefficient of association, Q, for every pair of values employed in his study and distinguished three main "value-orientations" or "value-foci." To some people, work is an end in itself, valued for the opportunity it gives to express oneself directly (Rosenberg labelled this the intrinsic or "self-expression oriented" value complex). To others, work itself is of value but more for the chance it provides to deal with people or be of service to them than for any intrinsic interest in the tasks or skills of work ("people-oriented" value complex). To still others, work may only be regarded as a means to obtain leisure and luxury off the job ("extrinsic-reward oriented" or instrumental value complex). In addition to delineating these occupational value orientations, Rosenberg endeavored to demonstrate that these groupings were not separate and distinct but, rather, link into one another in a fairly orderly chain of values. On the basis of a value matrix, Rosenberg ordered the values

so that each occupational value was related to the values adjacent to it and decreasingly related to values increasing in psychological distance from it. Rosenberg's constructed continuum of occupational values ranged from the "self-expression" to the "extrinsic-reward" values. In essence, he found the strongest value difference to be between those who emphasize the satisfactions they will derive from the work itself (work as an end in itself as a goal value) and those who focus on the rewards given for the work they do (work as an instrumental value) (Rosenberg, 1957: 11-14). The set of occupational value items reported by Rosenberg was used by Lueptow in his study of values as intervening variables in need-goal relationships (Lueptow, 1968: 304-311) and by Harvey and Harvey in their research on the relationship between social class and adolescents' occupational expectations (Harvey and Harvey, 1970: 138-147).

Goodwin, in his comparative study of the occupational goals of college professors, students and business executives, used items grouped under headings which have general correspondence to those used by Rosenberg. However, rather than having the respondents rank the items or choose the <u>one</u> they considered to be most important, they were asked to rate each item on a ten-point scale; the higher the rating, the greater the agreement with the statements (Goodwin, 1969: 171).

For his study of the occupational value orientations of seniors in eight Kentucky rural high schools, Schwarzweller selected twelve value variables from three broad areas of meaning: (1) orientation toward ends extrinsic to the job selection situation, or "instrumental value-orientations" (e.g. achievement); (2) orientation toward ends intrinsic in the job selection situation, or "expressive value-orientations" (e.g. mental work); and (3) orientation toward ends associated with moral considerations, satisfying or protecting certain conditions of living, or "conditional value-orientations" (e.g. familism). Interrelation analysis between value variables suggested that job-choosing criteria tend to be found as though in clusters. Three distinct clusters of occupational values were revealed. Schwarzweller stated that these clusters resembled the types of orientation isolated by Rosenberg in his study of the occupational values of college students. Cluster #1 (including values on material comfort, security, hardwork and external conformity) appeared to be quite like what Rosenberg labelled the "extrinsic reward-oriented" value complex; cluster #2 (including values on mental work and creative work) was like his "self-expression-oriented" value complex; and cluster #3 (including values on friendship, work with people and service to society) was similar to what he called a "people-oriented" value complex. Schwarzweller suggested that "future research ... will find

this theoretical schema useful in selecting meaningful value variables" (Schwarzweller, 1960:133).

In their study of the three-way relationships between values, personal influence and occupational choice, Simpson and Simpson utilized occupational values adapted from Rosenberg's formulation and found that prospective businessmen tended to be interested in money and leisure, and uninterested in work itself; the scientific and esthetic students were more interested in the work itself; and the general cultural respondents had a somewhat greater than average propensity to stress the contribution their work might make to the welfare of others (Simpson and Simpson, 1960: 124-125). In a subsequent study, Simpson and Simpson employed a dual classification of occupational values. Responses were classified as indicating either positive attraction to the work itself or the career it offered (enjoy the work, self-expression, serve humanity, good income, chance for advancement, etc.) or a negative uninterested approach which stressed extrinsic considerations more than the work itself or its career possibilities (Simpson and Simpson, 1962: 269).

The studies cited in the two preceding sections point to the pervasiveness of the generalized expressive-instrumental distinction and attest to its utility for classifying the educational and occupational values selected for

inclusion in the present study (see Figure 5). The differing definitions noted previously illustrate the necessity of explicitly stating what is meant by the various value terms employed in the present study.

Definitions

A value is defined as a conception of the desirable which is implied by a set of preferential responses to symbolic desiderata (Catton, 1959: 310-319).

Occupational Values are defined as conceptions of the desirable characteristics of an occupation.

Educational values are defined as conceptions of the desirable purposes of an education.

A value-orientation is defined as an empirically measured tendency to react favorably or unfavorably to certain generalized conceptions (Schwarzweller, 1960: 127).

An expressive occupational value-orientation is defined as the empirically measured tendency to react favorably or unfavorably to a generalized conception of work (or the type of career it offers) as an end in itself. As shown in Figure 5, the expressive occupational values category focuses on self-expression (items b and e), interpersonal relations (item d) and service to society (item g).

FIGURE 5

EXPRESSIVE-INSTRUMENTAL CATEGORIZATION OF THE EDUCATIONAL AND OCCUPATIONAL VALUES

Educational Values	Occupational Values
Instrumental:	Instrumental:
a) To help me achieve a secure way of life	a) Stable, secure future which this occupation provides
c) To help me get a good paying job and become economically independent	c) Chance to earn a good deal of money
f) To obtain prestige and a high social position in the community	f) The high social status and prestige provided by this occupation
h) To develop the knowledge and skills applicable to a career	h) The amount of leisure time this occupation provides (good working hours and holidays)
Expressive:	Expressive:
b) To develop my mind and enable me to formulate my own ideas, beliefs and values	b) Chance to use my special skills and abilities
d) To develop the ability to get along with people	d) Chance to work with people rather than alone or with things
e) To help me understand myself better	e) Chance to be creative and original
g) To help me become a good citizen in my community	g) Chance to help others and contribute to society

An instrumental occupational value-orientation is defined as the empirically measured tendency to react favorably or unfavorably to a generalized conception of work as a means for attaining external rewards, such as security (item a), a good salary (item c), prestige (item f), leisure (item h); that is, a concern with the rewards to be obtained for work rather than the gratifications to be derived from the work.[5]

An expressive educational value-orientation is defined as the empirically measured tendency to react favorably or unfavorably to a generalized conception of education as an end in itself. As shown in Figure 5, the expressive educational values category includes liberal educational or self-fulfillment aims (items b and e) and socio-humanistic aims (items d and g).

An instrumental educational value-orientation is defined as the empirically measured tendency to react favorably or unfavorably to a generalized conception of education as a means to further ends, such as the attainment of a career (item h), a secure way of life (item a),

5. It might be noted that items a, c, f and h of the occupational value set focus on rewards extrinsically associated with occupations, whereas items b, d, e and g focus on rewards or gratifications intrinsic to occupations (see Rosenberg, 1957: Chapter 2).

a good income (item c) and prestige (item f).[6]

Instrumentation of the Value Variables

In the question designed to elicit expression of educational values, the respondents were presented with a list of eight statements identified in an introductory sentence as "the various purposes an education serves." The students were asked to indicate how important they considered each statement to be in describing what they wanted to get out of an education (see Appendix A, Student Questionnaire, p. 6, #20). The mothers were asked to indicate how important they considered each statement to be in describing what they wanted their son (daughter) to get out of an education (see Appendix A, Mothers' Questionnaire, p. 5, #10).

In the question designed to elicit expression of occupational values, the respondents were presented with a list of

6. As pointed out by Meier, there exists a commonsense logic in which getting an education may be seen as necessarily "instrumental" to some post-educational end. Likewise the actual process through which an education is obtained may be appreciated expressively as a life experience in and for itself. The intent here, however, is to take the educational purpose or objective as the value-laden point of reference. Thus, the educational aims are viewed in terms of anticipated goal states which may be valued primarily in and for themselves or in terms of goal states that are primarily adaptive to post-educational realities, that is education as a means for attaining further socially desirable rewards, e.g. income and social standing (Meier, 1970: 75).

eight items identified in an introductory sentence as "characteristics people look for when choosing an occupation." The students were asked to indicate how important they considered each characteristic to be when choosing an occupation (see Appendix A, Student Questionnaire, p. 9, #32). The mothers were asked to indicate how important they would like each characteristic to be to their son (daughter) when choosing an occupation (see Appendix A, Mothers' Questionnaire, p. 8, #22).

As stated previously, on the basis of a review of relevant literature and the results of past research endeavors, the items comprising the educational and occupational value sets were categorized in accordance with the generalized expressive-instrumental distinction. As shown in Figure 5, four items in each value set were classified as expressive (items b, d, e, g,) and four as instrumental (items a, c, f, h). Since the students' and their mothers' expressive and instrumental educational and occupational value scores were derived in the same manner, the general procedure employed will be described with reference to the educational values only.

The respondents were asked to indicate the importance of each of the eight items comprising the educational value set by circling a number from 1 to 9, with 1 indicating "very unimportant" to 9 indicating "very important." Thus, the

respondents rated each item on a nine-point scale; the higher the rating, the more important the item. The random order of item presentation utilized in the questions is designated by the letters accompanying the items in Figure 5. The respondents' ratings of each of the four items pre-coded as being indicators of expressive educational aims (items b, d, e, g, of the educational value set) were summed to obtain their expressive educational value scores. Similarly, the respondents' ratings of each of the four items pre-coded as being indicators of instrumental educational aims (items a, c, f, h) were summed to obtain their instrumental educational value scores. The same procedure was employed with the respondents' ratings of the items in the occupational value set to arrive at their expressive and instrumental occupational value scores. The total scores, thus derived, indexed the respondents' value-orientations. Operationally, the higher the expressive score the more expressive the value-orientation; the higher the instrumental score the more instrumental the value-orientation. The possible range for these total or summated scores was from a low of 4 (if a respondent rated the 4 individual items 1 each) to a high of 36 (if a respondent rated the four individual items 9 each). Descriptive statistics for these value scores are presented in Figure 6.

FIGURE 6

DESCRIPTIVE STATISTICS FOR MEASURES OF VALUE ORIENTATION

Population	Value Score	N	Mean	SD*	Range
Boys	Expressive Educ.	158	24.68	6.41	5-36(31)
	Instrumental Educ.	158	26.00	5.66	4-36(32)
	Expressive Occup.	158	25.98	6.71	4-36(32)
	Instrumental Occup.	158	24.55	5.96	4-36(32)
Girls	Expressive Educ.	161	26.86	6.10	6-36(30)
	Instrumental Educ.	161	25.53	5.70	7-34(27)
	Expressive Occup.	161	27.79	5.61	4-36(32)
	Instrumental Occup.	161	22.45	6.91	6-36(30)
Boys' Mothers	Expressive Educ.	94	30.19	7.95	4-36(32)
	Instrumental Educ.	94	27.63	6.50	9-36(27)
	Expressive Occup.	94	28.90	7.13	16-36(20)
	Instrumental Occup.	94	24.83	7.65	4-36(32)
Girls' Mothers	Expressive Educ.	109	30.17	7.59	5-36(31)
	Instrumental Educ.	109	26.97	6.98	5-36(31)
	Expressive Occup.	109	29.56	7.48	4-36(32)
	Instrumental Occup.	109	22.56	8.32	5-36(31)

* Standard deviation

Value Patterning

Correlation matrices were constructed to examine the interrelationships between the respondents' ratings of the individual items comprising the educational and occupational value sets, in an attempt to determine whether the theoretically proposed expressive-instrumental value groupings were discernable. Inspection of the eight correlation matrices contained in Appendix D reveals that the scores on the educational values were predominantly positively related. Likewise, the scores on the occupational values were found to be positively related. This finding differs from those reported by certain previous researchers.

With respect to occupational values for example, Rosenberg, utilizing a coefficient of association, found the creative item negatively related to security (Rosenberg, 1957: 14). Similarly, Schwarzweller ran every item in his occupational value set against every other and tested the statistical significance of the associations by Chi-Square. For both boys and girls, he found security negatively related to creative work, work with people, and service to society. He also found the last three values to be positively interrelated (Schwarzweller, 1960: 133).

In addition, the intercorrelations reported by Miller indicate that, for his respondents, scores on the help people item were negatively related to security and pres-

tige (Miller, 1956: 246). However, Miller procedes to point out a crucial factor which may account for the difference between interrelationships found in the present study and those in the studies mentioned above. Miller states that probably "the independence of the categories is more apparent than real, because of the forced-choice technique employed" (Miller, 1956: 244). Meier cautions that when forced-choice methods of questioning are used, "imputation of a dominant orientation cannot be taken as implying disavowal of alternatives" (Meier, 1970: 80). He concedes that it is quite conceivable that students and mothers might place a high value on more than one type of educational goal.

In the present study, rather than forcing the respondents to choose the "most important" educational aim or occupational characteristic and rather than having them rank the value items relative to each other, they were permitted to assign a score to each. Thus, if the respondents considered more than one item to be highly important the method of measurement employed allowed them to express this. The positive correlations found in the matrices, taken in conjunction with the fairly high mean scores for each of the items, suggest that the respondents considered most of the values (with the exception of prestige in both

of the value sets) to be quite important.[7] This concurs with Thompson's finding that certain occupational values are accepted almost universally as very important by students.

> Judged important by over 80 per cent of the students were the occupational characteristics of an interesting job, the opportunity for self-expression, a secure position, and the opportunity to help others (Thompson, 1966: 850).

Mizruchi concluded that the middle class respondents tend to see education not <u>only</u> as a means of achieving a better job or income, but <u>also</u> as a source of personal satisfaction (Mizruchi, 1964: 80). Similarly, Goodwin's findings suggest that, as a result of more young people attending college, the occupational goals traditionally associated with the academic world may become more widely dispersed in society. According to Goodwin, this does not necessarily mean that goals of "monetary accumulation" and "getting ahead of others" will decline. Instead he suggests that it may mean that the latter goals will become more closely <u>merged</u> with greater concern with others and society (Goodwin, 1969: 186).

Thus, the lack of negative correlations between the items taken to be indicators of expressive value orienta-

7. The mean scores for the respondents' ratings of the educational and occupational values are presented in Chapter VIII, Tables 21-A and 21-B.

tions and those intended to be indicators of instrumental value orientations may be the result of the greater sensitivity of the method of value measurement employed (as opposed to forced-choice techniques) to the mergings of these two themes in the minds of the respondents. In view of the finding that the respondents considered the majority of educational and occupational values to be important, polar extremes (that is, negative correlations) in value orientation are not to be anticipated. However, the question still remains as to whether any prominant value patterns or clusters may be detected on the basis of degree of relationships?

In order to investigate this idea further for the four groups of respondents studied, the eight educational and the eight occupational values along with the four other value items most strongly correlated with them were listed. For both the students and the mothers, on both value sets, the predominant value patterns (that is, groupings of four most strongly interrelated items) found were those theoretically predicted to appear on the basis of prior expressive-instrumental classifications.

In general, the expressive and instrumental patterns appeared more frequently among the mothers' values than among the students'; more frequently among the girls' mothers' values than among those of the boys' mothers; and

with equal frequency among the boys' and girls' values. In addition, patterns were slightly more prevalent in the occupational value sets than in the educational. Expressive patterns appeared more frequently in the educational value sets and instrumental patterns in the occupational.

On the basis of the patterns thus discerned, the expressive-instrumental categorization of the value items was retained. However, in view of the fact that the negative relationships noted in certain previous research endeavors were not replicated, the relationships between the selected social factors and each of the items comprising the educational and occupational value sets will be reported in addition to the relationships found between the selected social factors and the respondents' summated expressive and instrumental value scores.[8]

8. For a discussion of differing definitions and uses of the terms "expressive" and "instrumental" and of the salience of this dimension with respect to occupational choice see McKinley, 1964: 252-256.

Opportunity Orientations

Past studies have employed various indices to assess availability of educational and occupational opportunities. For the most part investigators have utilized a quantitative approach to the problem and with respect to the appraisal of educational opportunities, for example, focused their attention on comparing physical facilities, curricula offered, teacher-pupil ratios, per pupil expenditures, teachers' salaries, etc. This approach and the attendant use of objective indicators, while enlightening in many respects, neglects less tangible phenomena such as differential perceptions of opportunity structures. It is recognized that such phenomena constitute perceived reality, which may or may not be commensurate with "true" reality. However, as pointed out by Anderson and Safar, perceptions of a phenomenon or condition often play a more important role in determining the behavior of the perceiver than the conditions as they may appear to an independent observer (Anderson and Safar, 1967: 220). This perspective parallels the thinking of situational sociologists (for example, Thomas and Znaniecki, 1920) and perceptual psychologists (for example, Combs and Snygg, 1959) who view behavior as based largely on an individual's perception and subjective definition of the situation.

Hughes has suggested that sentiments can be regarded in terms of three different modes: (1) what is; (2) what ought to be; and (3) what is desired. The first mode mentioned was

designated as "orientational, that charting of the world in terms of which people expect, interpret, and act" (Hughes, 1960: 137). The way in which the term "orientation" is employed in the present study parallels the concept advanced by Merton as "... the theme underlying the complex of social roles performed by an individual. It is the (tacit or explicit) theme which finds expression in each of the complex of social roles in which the individual is implicated" (Merton, 1957: 392).

With these general considerations concerning "perceptions of opportunities" and "orientations" kept in mind, what is meant by the phrases "educational and occupational opportunity orientations," employed throughout the present study, may be examined more specifically.

Definitions

An educational opportunity orientation is defined as: the student's subjective perception of his (her) opportunities for obtaining the education he (she) wants; also, the mother's subjective perception of her child's opportunities for obtaining the education she would like him (her) to have.

An occupational opportunity orientation is defined as: the student's subjective perception of his (her) opportunities for obtaining the occupation he (she) wants; also, the mother's subjective perception of her child's opportunities for obtaining the occupation she would like him (her) to have.

Instrumentation of the Opportunity Orientations

In the question designed to elicit the respondents' appraisals of educational opportunities, the students were asked to indicate how good they thought their opportunities were for obtaining the education they wanted (see Appendix A, Student Questionnaire, p. 4, #15). The mothers were asked to indicate how good they thought their son's (daughter's) opportunities were for obtaining the education they would like him (her) to have (see Appendix A, Mothers' Questionnaire, p. 3, #5).

In the question designed to elicit the respondents' appraisals of occupational opportunities, the students were asked to indicate how good they thought their opportunities were for obtaining the occupation they wanted (see Appendix A, Student Questionnaire, p. 7, #25). The mothers were asked to indicate how good they thought their son's (daughter's) opportunities were for obtaining the occupation they would like him (her) to have (see Appendix A, Mothers' Questionnaire, p. 6, #15).

For both the educational and occupational opportunity questions, the respondents were asked to check the appropriate category from among the following: very good; good; not too good; poor; non-existent. The code scores assigned ranged from a low of 1, which corresponded with the non-existent category, to a high of 5, which corresponded with the very good category. Operationally, the higher the score

the more positive or optimistic the opportunity orientation. In general, judging from the mean scores presented in Figure 7, the opportunity orientations of the population studied appear to be quite positive.

For purposes of the analysis, the responses to the questions described above were used as the indicators of the respondents' educational and occupational opportunity orientations. However, in order to gain insight into the respondents' evaluative perceptions and to explore their answers to the structured or forced-choice type of questions, open-ended inquiries were included in the questionnaires. This form was employed to permit the subjects freedom of response. The students were asked to explain why they felt their opportunities for obtaining the education they wanted were: very good, good, not too good, poor or non-existent, that is, the category they checked in the preceding question (see Appendix A, Student Questionnaire, p. 5, #16). Similarly, the mothers were asked to explain why they felt that their son's (daughter's) opportunities for obtaining the education they wanted him (her) to have were: very good, good, not too good, poor or non-existent, that is, the category they checked in the preceding question (see Appendix A, Mothers' Questionnaire, p. 3, #6). Open-ended questions phrased in the same manner only referring to the respondents' appraisals of occupational opportunities appeared on both the students' and mothers' questionnaires

FIGURE 7

DESCRIPTIVE STATISTICS FOR MEASURES OF OPPORTUNITY ORIENTATION

Population	Opportunity Orientation	N	Mean	SD*	Range
Boys	Educational	158	4.03	.80	1-5(4)
	Occupational	158	3.90	.97	1-5(4)
Girls	Educational	161	3.95	.95	1-5(4)
	Occupational	161	3.70	1.00	1-5(4)
Boys' Mothers	Educational	94	4.21	.75	1-5(4)
	Occupational	94	4.16	.90	1-5(4)
Girls' Mothers	Educational	109	4.08	.91	1-5(4)
	Occupational	109	4.13	.85	1-5(4)

* Standard deviation

(see Appendix A, Student Questionnaire, p. 7, #26 and Mothers' Questionnaire, p. 6, #16). The classification or coding categories were formed directly from the respondents' statements and will be discussed in more detail in Chapter VIII.

Aspirations and Expectations

As was the case with differing definitions of "value" cited previously, researchers have not reached a consensus regarding the terms "aspiration" and "expectation." Kuvlesky and Bealer contend that a lack of explicit conceptualization has hindered the usefulness of past aspirational studies on two counts.

> First, it is often difficult to compare the findings of the numerous studies. Most researchers rely on operational definitions to set out the meanings for their terms. When the operations vary (as they often do) and there is no clearly conceptualized base point to gauge that diversity, the danger of misunderstanding is magnified. Second, the same term is often used for different ideas and different terms for the same idea. Such semantic confusion leads to the danger of erroneous implications being drawn and impedes both an understanding of the phenomena and the efficient utilization of knowledge concerning occupational placement in our society (Kuvlesky and Bealer, 1966: 265-266).

Even a cursory review of relevant articles reveals ample evidence of terminological ambiguity, justifying the accusation made by Kuvelsky and Bealer.

Often in writing and research the terms "aspiration" and "plan" are used interchangeably. In several studies the dependent variable is identified as "educational aspiration", yet the data for analysis is taken from responses to questions concerning the education the student planned to obtain. The following excerpts illustrate this point.

> All students definitely planning to enter a regular four year college program or its equivalent were classified as having high educational aspirations (Sewell, Haller and Straus, 1957: 69).

> Measures on the dependent variable (educational aspiration) were obtained by asking each adolescent to read carefully the eight plans presented in Table 3 and then to indicate which one of them was most like what he was planning to do (Herriott, 1963: 166).

The titles of certain articles explicitly state that the studies dealt with "educational aspirations", but a close scrutiny of their contents reveals that the information obtained pertains to educational plans. The students' statements were categorized according to their plans for college, technical school, or no further education (Haller and Sewell, 1957: 408; Krauss, 1964: 868; Sewell and Shah, 1968a 562 and 1968b: 194).

In Scanzoni's study occupational aspirations were obtained by asking what type of future occupation a student realistically expected to enter (Scanzoni, 1967: 452).

Similarly, Middleton and Grigg used the question "In what occupation do you think that you will most likely be working ten years from now?" to elicit occupational aspirations (Middleton and Grigg, 1959: 305).

Some sociologists have taken exception to cases (such as those referred to above) where stimulus questions eliciting expectations or plans are used as indicators of aspirations, and object to the equation of the terms involved. They have stressed the necessity of distinguishing (conceptually and empirically) between what a person wants (aspirations) and what a person expects to get (expectations or plans).

Advocates of this distinction have based their analytical approach on the contention (which has accrued some empirical confirmation) that aspirations represent the normative system ("the way things should be") while expectations reflect perception of the factual order ("the way things are") (Mizruchi, 1964: 91). Proponents of this point of view suggest that adolescents, being cognizant of their life chances, can and do take reality factors into consideration, and that their statements of expectations more readily reflect these factors than their statements of aspiration. Consequently they adhere to the opinion that studies which neglect to note actual expectations present a distorted depiction of the degree of realism inherent in the students' educational or occupational choices. Conversely, those that concentrate on plans alone

ignore the "ideal" dimension of aspiration (Empey, 1956; Stephenson, 1955 and 1957; Schwarzweller, 1959 and 1960; Simpson and Simpson, 1960; Morland, 1960; Mizruchi, 1964; Bennett and Gist, 1964; Breton and McDonald, 1968). In addition, Kuvlesky and Bealer insist that expectations should not be equated with aspirations because the object involved with an expectation is an anticipated occurrence and, as such, need not be desired and, therefore, need not be a goal (Kuvlesky and Bealer, 1966: 273). In keeping with this line of thought the following definitions may be advanced.

Definitions

Level of Aspiration is defined as: the student's statement of the level of achievement he (she) would like to reach in reference to a particular goal-area (e.g. education, occupation); also, the mother's statement of the level of achievement she would like her son (daughter) to reach in reference to a particular goal-area.[9]

9. For a descriptive account of the introduction and development of the term "level of aspiration" and a discussion of its use see Gardner, 1940: 59-68 and Deutsch, 1954: 181-222. Pioneer studies endeavoring to elucidate the concept include: Chapman and Volkmann, 1939: 225-238 and Frank, 1935a: 119-128 and 1935b: 285-293.

Level of Educational Aspiration (LEA) is defined as: the student's statement of the educational level he (she) would like to reach; also, the mother's statement of the educational level she would like her son (daughter) to reach.

Level of Occupational Aspiration (LOA) is defined as the student's statement of the occupational position he (she) would like to reach; also, the mother's statement of the occupational position she would like her son (daughter) to reach.

Level of Expectation is defined as: the student's estimation of his (her) probable attainment in reference to a particular goal-area (Kuvlesky and Bealer, 1966: 273); also, the mother's estimation of her son's (daughter's) probable attainment in reference to a particular goal-area.

Level of Educational Expectation (LEE) is defined as: the student's estimation of the educational level he (she) will actually attain; also the mother's estimation of the educational level her son (daughter) will actually attain.

Level of Occupational Expectation (LOE) is defined as: the student's estimation of the occupational position he (she) will actually attain; also, the mother's estimation of the occupational position her son (daughter) will actually

attain.

Instrumentation

Data for the assessment of the above mentioned variables were taken from responses to the following questions.[10] In the question designed to elicit educational expectations the students were asked to indicate what further education, if any, they planned to attain after completing high school. The question read: "When you are finished high school, what are your plans for further education?" (see Appendix A, Student Questionnaire, p.4, #13). Similarly, the mothers were asked to indicate what further education, if any, they thought their son or daughter would obtain. The question read: "What further education do you think your son (daughter) will actually obtain?" (see Appendix A, Mothers' Questionnaire, p.2, #4).

On both questionnaires, the question designed to elicit educational aspirations followed directly after the one on anticipated educational attainments. The students were asked to indicate what further education, if any, they would plan to attain if they were completely free to choose. The question read: "If you were completely free to choose, what would your plans for future education be?" (see Appendix A,

10. Studies utilizing similar stimulus questions include Stephenson, 1955: 27 and 1957: 211; Schwarzweller, 1959: 249; Morland, 1960: 170; Simpson and Simpson, 1960: 118; Siemens, 1965: 46-47; Breton and McDonald, 1968: 271.

Student Questionnaire, p. 4, #14). The mothers were asked to indicate what further education, if any, they would like their son (daughter) to obtain. The question read "When your son (daughter) finishes high school what further education would you like him (her) to obtain?" (see Appendix A, Mothers' Questionnaire, p.2, #3).

For each question the respondents were asked to make a forced choice from among the following alternatives: (1) No further education; (2) Business College; (3) Nurses Education; (4) Teachers Education; (5) Technical-Vocational Training; (6) Community College; (7) University; (8) Other (specify). For analysis the respondents' educational expectations and aspirations were coded as follows: number (1) received a code score of 1, numbers (2), (5) and (6) received a code score of 2, numbers (3) and (4) a score of 3, and finally, number 7 received a code score of 4.

Questions concerning occupational choice were devised to determine what the students would "like to be" as well as what they "planned to be". In order to ascertain their occupational expectations the students were asked; "After your education is completed, what occupation do you plan to go into?" (see Appendix A, Student Questionnaire, p.7, #21). Likewise, the mothers were asked: "What occupation do you think your son (daughter) will actually go into?" (see Appendix A, Mothers' Questionnaire, p.6, #13).

Immediately after the question designed to elicit occupational expectations was the one which endeavored to elicit occupational aspirations. The students were asked "If you were completely free to choose, what occupation would you like to go into?" (see Appendix A, Student Questionnaire, p.7, #23). The mothers were asked "What occupation would you like your son (daughter) to go into?" (see Appendix A, Mothers' Questionnaire, p.6, #11).

The occupations the respondents selected were rated according to Blishen's Socio-Economic Index for Occupations in Canada (Blishen, 1967: 41-53). To facilitate coding and to insure that the assignment of Blishen scores would be as accurate as possible the respondents were asked to specify the kind of work involved in the occupations they named in the open-ended questions (see Appendix A, Student Questionnaire, p.7, #'s 22 and 24; Mothers' Questionnaire, p.6, #'s 12 and 14).

The results of previous research endeavors have indicated that the placement of a "free choice" type of question immediately after one on plans elicits responses most closely approaching aspirations. This type of question is intended to allow the respondent a free choice relatively unrestricted by reality factors. On the other hand, it is usually assumed that in replying to the "plans" question the respondent takes into account reality

factors as he perceives them. As Stephenson pointed out, answers to the questions designed to elicit aspirations are not necessarily completely devoid of reality considerations, nor are the responses to the questions intended to elicit plans completely devoid of some degree of wishful thinking. However, judging from the results of prior research, it appeared plausible that these particular questions, along with their placement, would discriminate between aspirations and plans and tend to "express polar points on an expectation-aspiration continuum" (Stephenson, 1957: 205).

Several authors have specified certain elements they consider to be essential for the definition and measurement of aspirations. As early as 1939 Lewin distinguished between what he termed "real" and "ideal" aspirations, the former being what the person thought he might really be able to attain, and the latter what he hoped to attain providing all went well (Lewin, 1939, 868-897). Gardner, however, restricted his definition of level of aspiration to "a quantitative indication which an individual makes concerning his future performance in an activity" (Gardner, 1940: 66). According to Reissman, stimulus questions designed to determine aspirations should require the respondent to make a realistic assessment in reference to a future time period (Reissman, 1953: 233 and 239).

Empey, recognized mainly for his delineation of the difference between absolute and relative levels of aspiration, also noted discrepancies between preferred and anticipated occupational choices. The latter he referred to as "reality aspirations" (Empey, 1956: 487). By plans Stephenson meant the "realistic" expectation of the student for his future occupation, as opposed to his more "idealistic" aspiration (Stephenson, 1957: 205). Simpson and Simpson included a time element ("right now") in their question on occupational plans, but not in their question on aspirations which focused on a "fantasy" element (Simpson and Simpson, 1960: 121). Gist and Bennett asked their sample of students to state "the occupation they would like to have when they are 30 years old" and the occupation "they think they will actually have when they are 30 years old" (Gist and Bennett, 1963: 43). Thus, the same time period was included in both questions. From the preceding discussion four dimensions, deemed necessary for consideration in the operationalization of the aspiration concept, can be extracted. These are: an ideal dimension, a real dimension and two time periods: the present or immediate future and the distant future. Haller and Miller have used four possible combinations of these dimensions in the instrument they devised to measure level of occupational aspiration, the Occupational Aspiration Scale or OAS

(Miller and Haller, 1964: 448-455; Haller and Miller, 1967: 39-50).

Unlike the advocates of the aspiration-plan distinction who regard aspiration as unidimensional, Haller and Miller have attempted to index what they consider to be the concept's four facets. Integral to Haller and Miller's conceptualization of the terms "level of aspiration," in general, and "level of occupational aspiration," in particular, is the idea that the range of an individual's level of aspiration is bounded in two general ways: (1) by what he views as realistically probable versus idealistically desirable for him, and (2) by the goals which he has for the near versus the distant future (Miller and Haller, 1964: 448). With these considerations in mind, the second measure of level of occupational aspiration employed in this study may be presented.

Definition

Level of Occupational Aspiration is defined as the area (a point or limited range of points) of the occupational prestige hierarchy which an individual views as a goal (Miller and Haller, 1964: 448).

Instrumentation

The OAS is an eight item forced-choice instrument. It is comprised of items eliciting responses at two expression

levels, realistic (R) and idealistic (I), each at two goal-periods, referred to as career periods in this context, short range (S - end of schooling) and long range (L - at age 30). These yield four combinations: RS, IS, RL, and IL, which are incorporated into four wordings for questions. Each of these four questions is presented twice, thus giving a total of eight OAS items.

The question wordings are presented in Figure 8 (also see Appendix A, Student Questionnaire, p.10-12, #33; Mothers' Questionnaire, p.9-11, #23). The numbers in parentheses in Figure 8 indicate the question numbers in which each item-wording is used, while the letters in parentheses refer to the combination of expression levels and goal-ranges for each question.

Each of the eight stimulus questions of the OAS is followed by a set of ten occupational titles, which constitute its response alternatives. The occupational titles were selected from among the ninety occupations ranked by the National Opinion Research Center's study of the prestige of occupations (NORC, 1947: 3-13). In all, eighty occupations are used (eight stimulus questions by ten alternatives per question). Each occupation is presented as a possible response only once among the eight items. It was necessary to make minor adjustments in the occupations used in the scale because all of the original are not

FIGURE 8

OAS FORMAT: COMBINATION OF EXPRESSION LEVELS AND GOAL-PERIODS FOR EACH OF THE FOUR QUESTION-WORDINGS*

Expression levels	Goal-Periods	
	Short-range (S)	Long-range (L)
Idealistic (I)	Of the jobs listed in this question, which ONE would you choose if you were FREE TO CHOOSE ANY of them you wished when your SCHOOLING IS OVER? (2 and 4)	Of the jobs listed in this question, which ONE would you choose to have when you are 30 YEARS OLD, if you were FREE TO HAVE ANY of them you wished? (6 and 8)
Realistic (R)	Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN GET when your SCHOOLING IS OVER? (1 and 3)	Of the jobs listed in this question, which is the BEST ONE you are REALLY SURE YOU CAN HAVE by the time you are 30 YEARS OLD? (5 and 7)

* Haller and Miller, 1967: 45.

FIGURE 9

DISTRIBUTION OF PRESTIGE SCORES OF OCCUPATIONAL TITLES FOR EACH OAS ITEM*

Order of Presentation	Score
1	7
2	4
3	8
4	2
5	9
6	0
7	6
8	3
9	5
10	1

* Haller and Miller, 1967: 47.

applicable in Canada. In four cases comparable Canadian positions were substituted, for example, "Provincial Premier" was used in place of "State Governor" (Kristjanson, 1967: 8).

Each of the eight items is scored in the same way. There are ten alternatives for each question, and only one alternative may be checked. On the OAS form, Haller and Miller placed the prestige ranks for each set of ten alternatives in a non-hierarchical distribution to insure that the order of presentation would not correspond to the order of prestige. The same order of presentation is used for each set of response alternatives. Figure 9 shows the re-arrangement of prestige scores and the corresponding scores for each of the ten response alternatives. Each set of ten occupational alternatives spans the entire range of occupational prestige and is scored from zero to nine. Operationally, an item score of nine means that the respondent has chosen the highest prestige occupation in the item, while an item score of zero indicates that he has chosen the lowest prestige occupation. The sum of all eight item scores is taken as the individual's level of occupational aspiration as measured by the OAS. The total score, which may range from zero to seventy-two, may be interpreted simply as a relative indicator of the prestige level on the occupational hierarchy which an individual views as a goal (Miller and Haller, 1964: 454).

In addition to an overall index of occupational aspira-

tions, it is possible to obtain subscores for each of the four dimensions (RS, IS, RL, IL). Although the analysis only included the respondents' total scores, the mean subscores were examined to determine whether certain theoretical expectations were confirmed. Haller and Miller point out that general level of aspiration theory and research holds that:

> on the average, level of aspiration at the idealistic level is higher than level of aspiration at the realistic level, and similarly that level of aspiration in terms of long-range goals is higher than level of aspiration in terms of short-range goals (Miller and Haller, 1964: 452).

In terms of the OAS, therefore, it was expected that the mean idealistic short-range score would be larger than the mean realistic short-range, and that the mean idealistic long-range would be larger than the mean realistic long-range. This was the case for all four groups comprising the population of the present study.[11]

On the basis of the second premise, it was anticipated that the mean realistic long-range score would be larger than the mean realistic short-range, and that the mean idealistic long-range would be larger than the idealistic short-

11. For the boys $7.27 < 11.90$ and $9.50 < 12.58$; for the boys' mothers $8.81 < 13.09$ and $10.34 < 13.34$; for the girls $6.43 < 12.78$ and $8.07 < 12.48$; for the girls' mothers $7.59 < 12.57$ and $9.92 < 12.54$.

range. This contention was confirmed for the boys and boys' mothers, but only partly confirmed (two out of four cases) for both the girls and girls' mothers.[12] It is to be noted that the differences are a matter of decimal points in the contradictory cases and, as such, may not be significant. Two factors might have contributed to their occurrence. The occupational achievement level of an individual is usually expected to rise some extent as an individual's career progresses. This may be true with respect to males, but the careers of females frequently are interrupted or even terminated because of marital commitments. Thus, for the majority of twelfth grade girls the near, as opposed to far distant, future may be the most meaningful context when considering high occupational goals. Another possibility is that the high status alternatives in the questions designed to elicit the idealistic long-range (IL) dimension of level of occupational aspiration may be slightly more male oriented than the high status alternatives in the questions designed to elicit the idealistic short-range (IS) dimension. Slocum and Bowles have suggested that many females tend to reject occupations traditionally identified with males (Slocum and Bowles, 1968: 754).

12. For the boys $7.27 < 9.50$ and $11.90 < 12.58$; for the boys' mothers $8.81 < 10.34$ and $13.09 < 13.34$; for the girls $6.43 < 8.07$ <u>but</u> $12.78 > 12.48$; for the girls' mothers $7.59 < 9.92$ <u>but</u> $12.57 > 12.54$. For a similar reversal see Miller and Haller, 1964: 452.

It is necessary to note that the OAS has been validated only for males. The relatively extensive results of previous research endeavors conducted in the United States suggest that the scale may be classified as one of the most thoroughly validated instruments for measuring the levels of occupational aspiration of American male adolescents. Haller and Miller concluded that

> the OAS appears to be a practical, reliable, and evidently valid instrument for measuring differential levels of occupational aspiration. It is probably the best available single combination of practicability, reliability and validity (Haller and Miller, 1967: 77-78).

Siemens (1965), Kristjanson (1967) and Krescy (1970) each selected the OAS as the best available measure of level of occupational aspiration. Siemens (1965: 49) and Kristjanson (1967: 8) both point out that a detailed analysis has not been made to determine the validity of the scale for a Manitoba population. Preliminary results, according to Siemens, indicate that the scale is an appropriate instrument (Siemens, 1965: 49). Haller and Miller offer the following opinion in reference to the scale's suitability for females.

> It is the belief of the writers that it may work well with females as well as with males, at this or younger ages, but this belief has yet to be demonstrated (Haller and Miller, 1967: 40).

The OAS was used for both boys and girls in the present study.

In addition, to this writer's knowledge, it is the first time the scale has been used to measure a parent's level of occupational aspiration for her child. Slight modifications in the stimulus questions were mandatory (see Appendix A, Mothers' Questionnaire, p. 9-11. #23).

The foregoing discussion supports Kuvlesky and Bealer's assertion, made with respect to aspirational research, that the same term can have different meanings depending upon the operational definition and instrumentation procedure employed (Kuvlesky and Bealer, 1966: 265). To distinguish the two measures of level of occupational aspiration used in the present analysis, along with their attendant definitions, they will be referred to as the Blishen and Haller approaches, respectively. The former name is utilized to denote a unidimensional conception of aspiration and a technique wherein level of occupational aspiration is determined by assigning Blishen's socio-economic index scores to the occupation given by an individual in response to a single open-ended stimulus question. The latter name designates level of occupational aspiration elicited by the multiple-item forced choice occupational aspiration scale developed by Haller and Miller. When abbreviations are necessary LOA will stand for the technique using Blishen scores and OAS for the Occupational Aspiration Scale.

As stated in the definition section, the term expectation

is used to refer to a respondent's indication of his anticipated attainment. This study does not restrict the term to "only those things alter wants of ego," that is, simply speaking of "A's expectation for B and B's aspiration for himself" (Haller, 1968: 484; Herriott, 1963: 164). It was felt that a mother could "aspire for" as well as "anticipate for" her child.

The descriptive statistics for the measures of level of occupational aspiration and level of occupational expectation employed in the present study are contained in Figure 10.

Analysis of the Data

After alloting the necessary identification numbers to the students' and mothers' questionnaires and assigning the appropriate code scores for the various scales and categories, the respondents' answers were transferred to IBM cards. The computer in the University of Manitoba Computer Centre was utilized for the correlational analysis. The data were processed through a correlation program written by Chebib.[13]

Essentially, a correlation coefficient describes the degree (or strength) and direction of relationship between two variables (Blalock, 1960: 285-302; Freeman, 1965: 89-107;

13. See the Computer Centre's Statistical Package, Winnipeg, Manitoba: The University of Manitoba, (no publication date available): 17.

Figure 10

DESCRIPTIVE STATISTICS FOR MEASURES OF LOA AND LOE

Population	LOA and LOE Measures	N	Mean	SD*	Range**
Boys	Occup. Asp. Haller	158	41.25	10.61	17-62 (45)
	Occup. Asp. Blishen	158	58.06	15.24	28-76 (48)
	Occup. Exp. Blishen	158	54.12	15.05	29-77 (48)
Girls	Occup. Asp. Haller	161	39.75	9.48	20-63 (43)
	Occup. Asp. Blishen	161	57.26	11.03	29-76 (47)
	Occup. Exp. Blishen	161	54.52	9.46	31-75 (44)
Boys' Mothers	Occup. Asp. Haller	94	45.64	8.02	25-67 (42)
	Occup. Asp. Blishen	94	57.26	14.46	30-76 (46)
	Occup. Exp. Blishen	94	55.60	13.76	29-76 (47)
Girls' Mothers	Occup. Asp. Haller	109	42.55	9.88	21-63 (42)
	Occup. Asp. Blishen	109	57.50	8.63	31-76 (45)
	Occup. Exp. Blishen	109	56.31	10.32	31-75 (44)

* Standard Deviation
** Possible range for Haller scores: 0-72; for Blishen scores: 25-77.

Hoel, 1966: 192-208; Anastasi, 1968: 72-77; Anderson and Zelditch, 1968: 126-134; Walpole, 1968: 284-287; Mueller et al., 1970: 307-323). It is denoted by the letter r, ranges from -1 to +1, and can be interpreted in a number of ways.[14] The strength of the relationship is given by the magnitude of r. A perfect relationship exists between two variables when $r = \pm 1$. If r is close to zero the relationship between the variables is weak. The sign indicates whether the variables are related directly (plus sign) or inversely (minus sign). The coefficients found in actual practice generally fall between these extremes, having some value higher than zero but lower than one (Anastasi, 1968: 74).

14. r can be expressed and interpreted as a kind of mean (Anastasi, 1968: 74; Mueller et al., 1970: 317), as a rate of change and a probability (Freeman, 1965: 101). An interpretation frequently advanced is based upon r^2 rather than r (Blalock, 1960: 298; Freeman, 1965: 101; Walpole, 1966: 286; Anderson and Zelditch, 1968: 131; Mueller et al., 1970: 314-319). The square of the correlation coefficient can be interpreted as the proportion of the total variation in one variable "accounted for" or "explained by" its relation to the other. Furthermore, percent variation explained can be calculated by considering $r^2 \times 100$. For example, if $r = .5$ then $r^2 = .25$ and indicates that 25 percent of the variation in either variable is being accounted for by the other. It is to be recognized that with correlations of .3 or less only a small fraction of the variation is being accounted for. Considerable amounts of residual variance to be explained suggest the need for introducing additional variables into the system. In view of the number of coefficients involved, the amount of variance explained is not reported in the present study. For a delineation of the differences between r and r^2 see Mueller et al., 1970: 318-319.

On the whole, the correlation coefficients found for the relationships examined in Parts I and II of this study (which will be presented and discussed in Chapter VI and VII) tend to be weak, but compare favorably with those reported by Haller and Miller (1967: 89-90) and Krecsy (1970: 125-128). This general finding is understandable if it is recalled that the independent variables included in the initial phases of this study are concentrated in the "family factors" category and, as such, represent only one group of potential correlates. Past studies have shown that a wide variety of non-family factors primarily pertaining to an individual's psychological and social characteristics (for example: self-related variables such as self-concept, intelligence and past academic performance along with school-related variables such as teacher-student interactions, extra-curricular activities, and peer-group interactions) are also correlated with values, perceptions of opportunity, aspirations and expectations. Taking into consideration the multiplicity of variables previously found to be associated with these dependent variables, it is not surprising to find a relatively weak relationship between a single factor, or a particular group of factors, and any of these variables.

The correlation coefficients found for the relationships examined in Part III of this study (which will be presented and discussed in Chapter VIII) range from moderate to

relatively strong. The coefficients in the value section especially, compare favorably with those noted by Perrone (1965: 255).

Only those coefficients equal to or exceeding the arbitrarily selected standard of .1 are considered to be findings. Statistical significance levels are not presented because a population, rather than sample of respondents, constitutes the focus of concern for the present study (Anastasi, 1968: 76).

Research has consistently revealed sex differences in educational and occupational values (Ginzberg, 1951; Singer and Stefflre, 1954; Rosenberg, 1957; Dipboye and Anderson, 1959; Schwarzweller, 1959 and 1960; Gribbons and Lohnes, 1965; Wagman, 1965; Thompson, 1966), opportunity orientations (Elder, 1963; Zavalloni, 1968), aspirations (Haller and Sewell, 1957; Sewell, Haller and Straus, 1957; Herriott, 1963; Gottlieb and Ramsay, 1964; Siemens, 1965; Pavalko and Bishop, 1966) and expectations (Stephenson, 1957; Porter 1961 and 1965; Sewell and Shah, 1968a and 1968b). In general, it has been observed that boys tend to stress the extrinsic rewards derived from work, whereas girls consider the chance to help people and serve society to be of prime importance; that boys tend to be more optimistic in their outlook on the opportunity structure than girls; and that, in both the educational and occupational spheres, boys aspire to and expect

to attain higher levels of achievement than girls.

In view of the differences found in previous studies when data have been stratified by sex and also because Haller and Miller's Occupational Scale has been validated only for American males, it was considered mandatory to analyze the boys' and girls' data separately. The separate analysis made for males and females provides an opportunity to observe whether or not similar relationships hold for both sexes.

Furthermore, since socialization studies have suggested that patterns of parental treatment for the two sexes (in terms of what they are taught, what is expected of them and what roles are regarded as appropriate for them to pursue) tend to differ (Bronfenbrenner, 1963: 350), the responses of the boys' mothers were analyzed separately from those of the girls' mothers. Throughout the presentation of the findings sex differences, as well as generational differences, in patterns of relationships will be pointed out.

CHAPTER VI

PRESENTATION OF FINDINGS ON THE RELATIONSHIPS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES FOR GRADE TWELVE BOYS AND GIRLS

This chapter presents findings pertinent to the relationships between the nine selected social factors (independent variables) and the eleven dependent variables for the 319 twelfth grade boys and girls in this study. Throughout the next three chapters the same format will be followed. Findings relating to the hypotheses being examined are presented in the order in which the hypotheses were stated in Chapter III. To facilitate reference to the tables and to identify the distinct groupings of dependent variables, the presentation is divided into three major parts, namely:

Values - within which is contained findings on the relationships between the independent variable and the four value scores: expressive educational values, instrumental educational values, expressive occupational values, and instrumental occupational values. In addition to these total scores, the noteworthy relationships between the independent variable and each of the individual value items comprising the indices will be included.

Opportunity Orientations - within which is contained findings on the relationships between the independent variable and the educational and occupational opportunity orientations. Whenever appropriate remarks from the open-ended opportunity questions will be quoted.

Aspirations and Expectations - within which is contained findings on the relationships between the independent variable and educational and occupational expectations and aspirations.

A discussion section, comprised of suggestive speculations on and possible explanations of specific findings, will be included at the end of each chapter. Whenever possible, consistency with or convergence from previous research results will be reported. Having outlined the general format to be utilized, it is possible to proceed with the presentation of the findings.

The first independent variable considered is the socio-economic status of the students' family. The relationships between familial socio-economic status and each of the dependent variables are shown in Table 1.

Socio-economic Status

Hypothesis 1: The higher the socio-economic status of the family,
- a) the more expressive and the less instrumental the educational and occupational values of the students;
- b) the more positive the educational and occupational opportunity orientations of the students;
- c) the higher the level of educational and occupational aspirations of the students;
- d) the higher the level of educational and occupational expectations of the students.

TABLE 1

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SOCIO-ECONOMIC STATUS OF FAMILY (INDEPENDENT VARIABLE 1) AND THE DEPENDENT VARIABLES

Socio-Economic Status of Family and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.06	-.06
Instrumental Educational Value Score	.10	-.09
Expressive Occupational Value Score	.02	-.11
Instrumental Occupational Value Score	-.01	-.08
Opportunity Orientations:		
Educational Opportunity Orientation	.17	.17
Occupational Opportunity Orientation	.09	.07
Aspirations and Expectations:		
Educational Aspirations	.05	.26
Educational Expectations	.16	.24
Occupational Asp. (Haller)	.19	.22
Occupational Asp. (Blishen)	.20	.09
Occupational Exp. (Blishen)	.24	.09

Values:

As indicated in Table 1, a weak positive relationship of .10 was found between socio-economic status and the boys' instrumental educational value scores. This suggests that the higher their family's socio-economic status, the higher the boys regard the instrumental educational values. No relationships were found to exist between socio-economic status and the boys' expressive educational value scores or their expressive and instrumental occupational value scores.

Examination of the individual educational value items (see Appendix B, Table 1) shows a weak positive relationship of .16 between the independent variable and the boys' scores on the monetary value item. This suggests that the higher their family's socio-economic status, the more the boys value education as a means of attaining a financially lucrative occupation and becoming economically independent. Examination of the individual occupational value items (see Appendix B, Table 10) reveals that no noteworthy associations exist between socio-economic status and any of the occupational values.

As indicated by the small correlation coefficient of -.11 in Table 1, socio-economic status of family was found to be negatively related to the girls' expressive occupational value scores. This appears to indicate that the

higher the socio-economic status of their families, the lower the girls' expressive occupational value scores, that is, the less emphasis they place on the expressive occupational value items. No relationships were found between this independent variable and the girls' expressive and instrumental educational value scores or their instrumental occupational value scores.

For the girls, examination of the individual educational value items (see Appendix B, Table 1) reveals a weak negative relationship of -.19 between socio-economic status and prestige and a weak negative relationship of -.10 between socio-economic status and understanding self. In other words, the higher their socio-economic status, the less the girls valued education as a means of obtaining a position of prestige in the community and as a means of understanding themselves better. In addition, analyses of the individual occupational value items (see Appendix B, Table 10) shows two weak negative relationships. Between socio-economic status and prestige a negative relationship of -.18 was found. Between socio-economic status and the creative and original occupational value item a negative relationship of -.14 was found, suggesting that the higher the socio-economic status of their families, the less the girls evaluate an occupation in terms of the opportunities it provides its incumbents for being creative and original.

Perhaps as an indication of the respondents' scoring consistency, it is interesting to note the similar small negative relationships between socio-economic status and the prestige item in both the educational and occupational value sets.

Opportunity Orientations:

From Table 1 it can be seen that, for both boys and girls, a weak positive relationship of .17 was found between familial socio-economic status and the educational opportunity orientations. In essence, the higher the socio-economic status of their family, the more positive or optimistic the students' appraisals of their educational opportunities. However, no relationships were found between socio-economic status and the boys' and girls' appraisals of their occupational opportunities.

Aspirations and Expectations:

For the boys, a relationship between socio-economic status of family and educational aspirations was not found. However, a weak positive correlation of .16 was discovered between socio-economic status and the boys' educational expectations. Socio-economic status of family was found to be positively related to the girls' educational aspirations ($r = .26$) and expectations ($r = .24$). As anticipated, these findings suggest that the higher their family's socio-

economic status, the higher the girls' educational aspirations and expectations and the higher the boys' educational expectations. There is a positive relationship between socio-economic status and the boys' occupational aspirations as measured by the Haller Occupational Aspiration Scale ($r = .19$). In addition, positive relationships were found to exist between the independent variable and the boys' occupational aspirations ($r = .20$) and expectations ($r = .24$), when the Blishen Index was utilized to categorize responses. For the girls, socio-economic status was found to be positively related to their level of occupational aspiration when the Haller scale was used ($r = .22$), but not to their occupational aspirations or expectations when Blishen scores were assigned.

Thus, on the basis of the results presented in Table 1, Hypothesis 1 cannot be accepted in its entirety. The data do not lend support to Part a of the hypothesis, which proposed that socio-economic status would be directly related to expressive educational and occupational values and inversely related to instrumental educational and occupational values. Relationships were found between socio-economic status and the boys' instrumental educational value scores and the girls' expressive occupational value scores, but these were weak and in a direction

opposite to that predicted. Part b of the hypothesis is supported partially, inasmuch as socio-economic status was found to be related to the students' appraisals of their educational opportunities, but not to their appraisals of their occupational opportunities. With regards to Parts c and d, the findings support the hypothesis except for the absence of noteworthy relationships between socio-economic status and the boys' educational aspirations and between socio-economic status and the girls' occupational aspirations and expectations when the Blishen Index is used for scoring these variables. In general, Parts c and d of Hypothesis 1 may be accepted tentatively while recognizing the above noted reservations.

Fathers' Educational Level

Hypothesis 2: The higher the level of fathers' educational attainment,
a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

The relationships between level of fathers' educational attainment and the dependent variables are shown in Table 2. For the twelfth grade boys essentially the same pattern of relationships emerges as that found between socio-economic status and the value variables. A weak positive relationship of .11 was found between fathers' educational level and the boys' instrumental educational value scores. As was the case with socio-economic status, no relationships were found between fathers' education and any of the boys' other value scores.

With regards to the separate value items, fathers' educational level was found to be positively related to the monetary item in the educational value set ($r = .11$, see Appendix B, Table 2) and negatively related to the leisure item in the occupational value set ($r = -.13$, see Appendix B, Table 11). Although these coefficients are small,

TABLE 2

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN FATHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 2) AND THE DEPENDENT VARIABLES

Fathers' Educational Level and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.01	-.12
Instrumental Educational Value Score	.11	-.09
Expressive Occupational Value Score	.05	-.05
Instrumental Occupational Value Score	-.03	-.07
Opportunity Orientations:		
Educational Opportunity Orientation	.21	.13
Occupational Opportunity Orientation	.11	.04
Aspirations and Expectations:		
Educational Aspirations	.09	.08
Educational Expectations	.18	.10
Occupational Asp. (Haller)	.13	.21
Occupational Asp. (Blishen)	.03	.12
Occupational Exp. (Blishen)	.06	.13

they seem to suggest that the higher their fathers' level of educational achievement, the more the boys' value education as a means to a good paying position and, when pondering a prospective occupation, the less they emphasize the amount of leisure time it provides.

For the girls, a weak negative correlation of -.12 was found between fathers' educational level and their expressive educational value scores. Fathers' education was not found to be related to any of the other value variables.

Examination of the separate educational value items reveals negative relationships between the independent variable and the girls' evaluation of the instrumental item - prestige ($r = -.22$) and between the independent variable and the girls' evaluation of the expressive item - understanding self ($r = -.18$, see Appendix B, Table 2). The two negative relationships reported here parallel those previously found between socio-economic status and these specific educational values. Likewise, a weak negative relationship of -.17 was found between fathers' educational level and the girls' evaluation of the prestige item in the occupational value set (see Appendix B, Table 11). The negative relationships found between fathers' education and the prestige item in the educational and occupational value sets, suggest that the

higher their fathers' level of educational attainment, the less the girls evaluate an education and an occupation as means of accruing social standing.

Opportunity Orientations:

As can be seen from Table 2, fathers' educational level was found to be positively related to the educational opportunity orientations of boys (r = .21) as well as girls (r = .13). That is, the higher the level of fathers' educational achievement, the more favorable the boys' and girls' appraisals of their educational opportunities. Similarly, a weak positive relationship of .11 was found between the independent variable and the boys' appraisals of their occupational opportunities. For the girls, however, no relationship was found between fathers' education and their occupational opportunity orientations.

Aspirations and Expectations:

As indicated in Table 2, positive relationships were found to exist between level of fathers' education and the boys' (r = .18) and girls' (r = .10) educational expectations. Relationships were not found between fathers' education and the students' educational aspirations. It is interesting to note that a coefficient of .13 was obtained for the correlation between fathers' educational level and the boys' occupational aspirations, when these aspirations are measured by

means of the Haller scale. However, no relationships were found when the Blishen Index was utilized to score the boys' responses to open-ended questions designed to elicit their occupational aspirations and expectations. For the girls, positive relationships were found between the independent variable and their occupational aspirations (Haller, $r = .21$; Blishen, $r = .12$) and expectations (Blishen, $r = .13$). These findings suggest that the higher their fathers' educational level, the higher the girls' levels of occupational aspiration and expectation.

Thus, as was the case with Hypothesis 1, Hypothesis 2 cannot be accepted in its entirety. Analysis of the data does not lend credence to Part a of the hypothesis, which contended that fathers' educational level would be directly related to the students' expressive educational and occupational values and inversely related to their instrumental educational and occupational values. Relationships were in evidence between the boys' instrumental and the girls' expressive educational value scores, but these were in directions contrary to those anticipated. Part b of the hypothesis is substantiated for the boys, but only partly established for the girls in that their appraisals of their educational, but not occupational, opportunities were related to the independent variable. The results support Parts c and d of the hypothesis for the girls, but not for the boys. As

stated previously, only the boys' educational expectations and occupational aspirations (when measured by Haller's OAS) were found to be slightly positively related to their fathers' educational level.

Mothers' Educational Level

Hypothesis 3: The higher the level of mothers' educational attainment,
a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

Table 3 contains the correlation coefficients for the relationships between mothers' educational level and the students' educational and occupational values, opportunity orientations, aspirations and expectations. Mothers' educational level was not found to be related to any of the boys' summated value scores. However, a review of the separate items comprising the educational value set reveals two weak positive relationships. Level of mothers' education was found to be positively related to the boys' evaluation of the monetary item ($r = .10$) and to their evaluation of the getting along with people item ($r = .10$, see Appendix B, Table 3).

TABLE 3

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN MOTHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 3) AND THE DEPENDENT VARIABLES

Mothers' Educational Level and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.02	-.04
Instrumental Educational Value Score	.08	-.11
Expressive Occupational Value Score	-.03	-.12
Instrumental Occupational Value Score	.09	-.16
Opportunity Orientations:		
Educational Opportunity Orientation	.10	.17
Occupational Opportunity Orientation	.03	.02
Aspirations and Expectations:		
Educational Aspirations	.11	.16
Educational Expectations	.16	.11
Occupational Asp. (Haller)	.20	.16
Occupational Asp. (Blishen)	.11	.10
Occupational Exp. (Blishen)	.12	.04

These exceedingly small coefficients merely suggest that the higher their mothers' level of educational attainment, the more the boys value an education as a means of obtaining a financially beneficial occupation and the more they emphasize the role of education in developing their ability to get along with people. A negative relationship of -.12 was noted between the independent variable and the boys' evaluation of the expressive occupational value item - helping others. Similarly, this small coefficient appears to indicate that the higher their mothers' education, the less the boys stress the desirability of obtaining an occupation that provides an individual with the chance to help other people and contribute to society.

Moreover, mothers' educational level was found to be negatively related to the girls' instrumental educational ($r = -.11$) and instrumental occupational ($r = -.16$) value scores. These relationships were both in the direction predicted. In addition, a weak negative relationship of -.12 was found between the independent variable and the girls' expressive occupational value scores.

For the girls, examination of the individual educational value items reveals four negative relationships: two between the independent variable and instrumental items and two between the independent variable and expressive items (see Appendix B, Table 3). As anticipated, negative relation-

ships were found between mothers' educational level and the girls' evaluation of the security ($r = -.10$) and prestige ($r = -.17$) items. Negative relationships were also found between the independent variable and the girls' evaluation of the expressive items: developing mind ($r = -.10$) and understanding self ($r = -.13$). It is necessary to note that these last two relationships were in directions opposite to those hypothesized. The above-mentioned coefficients suggest that the higher their mothers' educational level, the less the girls value education as a means of achieving a secure way of life and attaining social status. Similarly, the higher their mothers' education, the less emphasis the girls place on education as a source of self-understanding and as an aid in developing their minds and formulating ideas, beliefs, and values.

With regards to the separate items included in the occupational value set, negative relationships were found to exist between mothers' educational level and the girls' evaluation of the monetary ($r = -.15$), prestige ($r = -.21$), work with people ($r = -.10$) and creative and original ($r = -.17$) items. These coefficients appear to indicate that girls whose mothers have attained higher educational levels place less emphasis on economic benefits, prestige, the chance to work with people and the chance to be creative and original as criteria to be taken into consideration when choosing an occupation.

Opportunity Orientations:

As was the case with fathers' educational level, mothers' educational level was found to be positively related to the boys' (r = .10) and girls' (r = .17) appraisals of their educational opportunities. This result concurs with the hypothesis that the higher the mothers' level of education, the more positive the students' educational opportunities. Unlike fathers' education, however, relationships were not found between mothers' educational level and the students' perceptions of occupational opportunities.

Aspirations and Expectations:

From Table 3 it can be seen that mothers' educational level was found to be positively related to the boys' (r = .11) and girls' (r = .16) educational aspirations, as well as to the boys' (r = .16) and girls' (r = .11) educational expectations. It will be recalled that fathers' educational level was found to be related to the students' educational expectations, but not to their educational aspirations. In addition, positive relationships were found between mothers' educational level and the boys' occupational aspirations (Haller, r = .20; Blishen, r = .11) and expectations (Blishen, r = .12). For the girls, positive relationships were found to exist between the independent variable and their occupational aspirations (Haller, r = .16; Blishen, r = .10), but

only a very weak relationship was found between mothers' education and the girls' occupational expectations ($r = .04$). In general, these findings suggest that the higher the mothers' educational level, the higher the students' educational and occupational aspirations and expectations.

At this point, a few summary statements are required to place Hypothesis 3 in perspective. Part a of the hypothesis is supported only with regard to the relationships predicted to exist between mothers' educational level and the girls' instrumental educational and occupational values. As previously reported, analysis of the data revealed positive relationships between the independent variable and the students' appraisals of their educational opportunities. Hence, Part b of Hypothesis 3 is supported for the students' educational, but not occupational, opportunity orientations. Finally, Parts c and d may be accepted in that all the proposed relationships were found (albeit an exceedingly small relationship between mothers' educational level and the girls' occupational expectations).

Size of Community of Residence

Hypothesis 4: The larger the community of residence,
a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

As shown in Table 4, no relationships were found to exist between size of community of residence and either the boys' educational or occupational summated value scores.

Inspection of the individual educational value items shows a positive relationship of .11 between community size and the boys' scoring of security and a positive relationship of .10 between community size and the boys' evaluation of the prestige item (see Appendix B, Table 4). These coefficients suggest that the larger the community of residence, the more the boys value education as a means of obtaining a secure way of life and a position of prestige in the community. Examination of the individual occupational value items reveals a positive relationship of r = .10 between the independent variable and the boys' scoring of leisure (see Appendix B, Table 13). In other words, the larger the

TABLE 4

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SIZE OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 4) AND THE DEPENDENT VARIABLES

Size of Community of Residence and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	-.00	.01
Instrumental Educational Value Score	.05	.06
Expressive Occupational Value Score	.04	.07
Instrumental Occupational Value Score	.03	.17
Opportunity Orientations:		
Educational Opportunity Orientation	-.01	-.04
Occupational Opportunity Orientation	-.06	.07
Aspirations and Expectations:		
Educational Aspirations	.02	-.00
Educational Expectations	-.12	-.09
Occupational Asp. (Haller)	-.03	-.01
Occupational Asp. (Blishen)	.08	-.01
Occupational Exp. (Blishen)	-.04	-.20

community of residence, the more the boys evaluate an occupation in terms of the amount of leisure time it provides.

For the girls, no relationships were found between community size and their expressive and instrumental educational value scores or their expressive occupational value scores. However, a positive correlation of .17 was found between size of community of residence and the girls' instrumental occupational value scores.

After analysis of the associations between the independent variable and the separate occupational value items, the following relationships were revealed. Positive correlations were found between community size and money ($r = .24$); between community size and leisure ($r = .13$); between community size and special skills and abilities ($r = .19$) and between community size and creative and original ($r = .11$) (see Appendix B, Table 13). This indicates that the larger the community of residence, the more emphasis the girls place on the chance to earn a good deal of money, the amount of leisure time, the chance to use their special skills and abilities and the chance to be creative and original, as criteria taken into consideration when choosing an occupation. It is to be noted that the relationships between place of residence and the expressive occupational values (chance to use special skills and abilities and chance to be creative and original) were in the direction anticipated.

However, the relationships between size of community and the instrumental occupational values (chance to earn a good deal of money and the amount of leisure time provided by the occupation) were found to be in directions opposite to those predicted.

It is interesting to note that the larger the community of residence the more both boys ($r = .11$) and girls ($r = .12$) value education as a means for attaining a secure way of life. In addition, the larger the community size the more the girls would like an education to enhance their ability to get along with people ($r = .11$). (see Appendix B, Table 4). For both boys and girls, positive relationships were found between community size and the instrumental occupational value item - leisure (see Appendix B, Table 13). In other words, the larger the community of residence, the more both boys and girls stressed that the amount of leisure time provided by the occupation was an important item to consider in job selection.

Opportunity Orientations:

As shown in Table 4, the students' educational and occupational opportunity orientations were not found to be related to the size of their community of residence. Two potential interpretations of this finding will be explored in the discussion section of this chapter.

Aspirations and Expectations:

Table 4 reveals no relationships between community size and the students' educational or occupational aspirations. In the present study, size of community of residence was found to be negatively related to the boys' educational expectations ($r = .12$). This suggests that the larger the community of residence, the lower the boys' educational expectations.

For the girls, a negative correlation of $-.20$ was found between size of community and occupational expectations. This coefficient indicates that the larger the community of residence, the lower the girls' occupational expectations.

In general, the results presented in Table 4 do not support Parts a, b, or c of Hypothesis 4. With the sole exception of the girls' instrumental occupational value scores, no noteworthy relationships were found between size of community of residence and the students' educational and occupational value scores, opportunity orientations and aspirations. In addition, Part d is not substantiated in that the negative associations found between community size and the boys' educational expectations and community size and the girls' occupational expectations represent interesting inversions of the hypothesized relationships. Possible explanations of these reversals will be presented in the discussion section of this chapter.

Isolation of Community of Residence

Hypothesis 5: The less isolated the community of residence,
a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

Table 5 presents the correlation coefficients for the relationships between isolation of community of residence and the dependent variables. As hypothesized, community isolation was found to be negatively related to the boys' expressive educational ($r = -.10$) and expressive occupational ($r = -.19$) value scores. These coefficients indicate that the less isolated their community of residence, the higher the boys' expressive value scores. Contrary to the hypothesis, a weak negative correlation of $-.12$ was found between the independent variable and the boys' instrumental occupational value scores. A relationship was not found between community isolation and the boys' instrumental educational value scores.

No relationships of noteworthy size were found between

TABLE 5

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ISOLATION OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 5) AND THE DEPENDENT VARIABLES

Isolation of Community of Residence and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	-.10	-.06
Instrumental Educational Value Score	-.01	-.18
Expressive Occupational Value Score	-.19	-.04
Instrumental Occupational Value Score	-.12	-.17
Opportunity Orientations:		
Educational Opportunity Orientation	-.09	-.06
Occupational Opportunity Orientation	-.09	-.06
Aspirations and Expectations:		
Educational Aspirations	-.03	-.03
Educational Expectations	-.13	.04
Occupational Asp. (Haller)	-.06	-.01
Occupational Asp. (Blishen)	-.10	-.05
Occupational Exp. (Blishen)	-.16	-.06

isolation of community of residence and the boys' educational values, when these were examined separately (see Appendix B, Table 5). Inspection of the individual instrumental occupational value items reveals weak negative relationships between community isolation and the boys' evaluations of the security ($r = -.13$) and leisure ($r = -.18$) items (see Appendix B, Table 14). These findings suggest that the less isolated the community of residence, the more the boys emphasize the security and leisure time provided by prospective occupations. Similarly, examination of the separate expressive occupational values shows weak negative relationships between community isolation and the boys' evaluations of the work with people ($r = -.18$), creative and original ($r = -.15$), and help others ($r = -.15$) items. These coefficients appear to indicate that the less isolated their community of residence, the more the boys would like their future occupations to give them a chance to work with people, a chance to be creative and original and an opportunity to help others and contribute to society. The relationships found between the independent variable and the boys' evaluations of the expressive occupational value items were in keeping with Part a of Hypothesis 5, but the relationships between the independent variable and the boys' evaluations of the instrumental occupational value items were in directions opposite to those proposed.

As shown in Table 5, negative relationships were found between isolation of community of residence and the girls' instrumental educational ($r = -.18$) and instrumental occupational ($r = -.17$) value scores. Relationships were not found between community isolation and the girls' expressive educational or occupational value scores.

Isolation of community of residence was found to be negatively related to the girls' evaluations of the following items included in the educational value set: security ($r = -.19$), money ($r = -.19$), career ($r = -.20$) and good citizen ($r = -.10$). In other words, the less isolated the community of residence, the more the girls would like an education to help them develop the skills and abilities necessary for a career; to help them get a good paying occupation; to help them achieve a secure way of life; and finally, to help them become good citizens in their communities. As was the case with the boys' instrumental occupational values, negative relationships were found between the independent variable and the girls' evaluations of the security ($r = -.26$) and leisure ($r = -.15$) items (see Appendix B, Table 14). Relationships were not found between community isolation and the girls' evaluations of any of the expressive occupational values.

Opportunity Orientations:

As was the case with community size, no appreciable associations were found between isolation of community of residence and the students' appraisals of their educational and occupational opportunities.

Aspirations and Expectations:

For the boys, isolation of community of residence was found to be negatively related to their educational expectations ($r = -.13$) and to their occupational aspirations ($r = -.10$) and expectations ($r = -.16$) when these were assigned Blishen scores. These coefficients suggest that the less isolated the community of residence, the higher the boys' educational and occupational expectations and occupational aspirations. No relationships were found between the independent variable and the boys' educational aspirations or the boys' occupational aspirations, when the latter were measured by means of the Haller scale.

For the girls, community isolation was not found to be related to their educational and occupational aspirations and expectations.

In essence, the findings presented in Table 5 only partially support Hypothesis 5. Part a of the hypothesis holds with regards to the boys' expressive educational and occupational values, but remains unsubstantiated for the boys' instrumental educational and occupational values.

Similarly, Part a is not substantiated for any of the girls' value scores. As stated previously, no relationships were found between isolation of community of residence and the students' educational and occupational opportunity orientations. Thus, Part b of the hypothesis remains unsupported. In keeping with Parts c and d, negative relationships were found between community isolation and the boys' educational and occupational expectations and occupational aspirations. However, no relationships were found between the independent variable and the boys' educational and occupational aspirations (as measured by Haller's OAS). Also, the girls' data do not lend support to Parts c and d of Hypothesis 5.

Fathers' Encouragement for Continuing Education

Hypothesis 6: The stronger the fathers' encouragement for post-high school education,

a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

As shown in Table 6, only the boys' expressive educational value scores were found to be related to the strength of fathers' encouragement for continuing education (r = .12). No relationships were found between this independent variable and the boys' other value scores.

With regards to the separate educational values, weak positive relationships were found between strength of fathers' encouragement for continuing education and the boys' evaluation of the security (r = .11), career (r = .10) and good citizen (r = .12) items (see Appendix B, Table 6). Relationships were not found between the independent variable and the boys' evaluation of any of the individual occupational value items.

For the girls, weak positive correlations were found between strength of fathers' encouragement for continuing education and their expressive (r = .10) and instrumental (r = .16) value scores and their expressive occupational value scores (r = .15). The relationships between the independent variable and the girls' expressive scores were in the directions anticipated, but the relationship between the independent variable and the girls' instrumental educational value scores was in a direction opposite to that predicted.

More specifically, strength of fathers' encouragement for continuing education was found to be positively related

TABLE 6

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION (INDEPENDENT VARIABLE 6) AND THE DEPENDENT VARIABLES

Strength of Fathers' Encouragement for Continuing Education and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.12	.10
Instrumental Educational Value Score	.09	.16
Expressive Occupational Value Score	.03	.15
Instrumental Occupational Value Score	.01	.09
Opportunity Orientations:		
Educational Opportunity Orientation	.12	.28
Occupational Opportunity Orientation	.05	.19
Aspirations and Expectations:		
Educational Aspirations	.15	.03
Educational Expectations	.15	.13
Occupational Asp. (Haller)	.28	.17
Occupational Asp. (Blishen)	.11	.05
Occupational Exp. (Blishen)	.16	.12

to the girls' evaluations of the security (r = .25) and monetary (r = .17) items in the instrumental educational value set. Likewise, a weak positive relationship of .17 was revealed between the independent variable and the expressive educational value item - develop mind (see Appendix B, Table 6). Positive relationships were found between the independent variable and the girls' evaluation of the following items in the occupational value set: security (r = .18), leisure (r = .10), special skills and abilities (r = .22), work with people (r = .15) and help others (r = .10).

Opportunity Orientations:

Table 6 reveals that positive relationships were found between strength of fathers' encouragement for continuing education and the boys' (r = .12) and girls' (r = .28) appraisals of their educational opportunities. Similarly, positive relationships were found between fathers' encouragement and the boys' (r = .05 - albeit a very weak relationship) and girls' (r = .19) appraisals of their occupational opportunities. These coefficients suggest that the stronger the fathers' encouragement for continuing education, the more positive the students' perceptions of the opportunity structure.

Aspirations and Expectations:

Strength of fathers' encouragement for continuing education was found to be positively related to the boys' educational ($r = .15$) and occupational aspirations Haller: $r = .28$, Blishen: $r = .11$) and to the boys' educational ($r = .15$) and occupational expectations ($r = .16$). In general, it was found that the boys' levels of educational and occupational aspiration and expectation increase with increasing strength of fathers' encouragement for post-high school education.

For the girls, a weak positive relationship was found between fathers' encouragement and their educational expectations ($r = .13$), but not their educational aspirations. In addition, strength of fathers' encouragement for continuing education was found to be positively related to the girls' occupational aspirations as measured by the Haller scale ($r = .17$) and to the girls' occupational expectations as designated by the Blishen scale ($r = .12$). However, no relationship was found between fathers' encouragement regarding education and the girls' levels of occupational aspiration as indexed by the Blishen scale.

In summary, it may be said that the relationships presented in Table 6 lend partial support to Hypothesis 6. Part a of the hypothesis holds for the boys' and girls' expressive educational value scores and the girls'

expressive occupational value scores. Furthermore, the positive relationships found between strength of fathers' encouragement for continuing education and the students' appraisals of their educational and occupational opportunities substantiate Part b of Hypothesis 6. Parts c and d, which proposed that strength of fathers' encouragement for continuing education would be positively related to the students' educational and occupational aspirations and expectations are supported for the boys. Similarly, Parts c and d of Hypothesis 6 are supported for the girls with the exception of the lack of relationships between the independent variable and the girls' educational and occupational aspirations (when the latter were indexed by Blishen scores).

Mothers' Encouragement for Continuing Education

Hypothesis 7: The stronger the mothers' encouragement for post-high school education,
- a) the more expressive and the less instrumental the educational and occupational values of the students;
- b) the more positive the educational and occupational opportunity orientations of the students;
- c) the higher the level of educational and occupational aspirations of the students;
- d) the higher the level of educational and occupational expectations of the students.

Values:

Table 7 shows the relationships between mothers' encouragement for continuing education and the students' educational and occupational values, opportunity orientations, aspirations and expectations. It reveals that mothers' encouragement was found to be positively related to all four of the boys' value scores. More specifically, positive relationships were found between the independent variable and the boys' expressive ($r = .18$) and instrumental ($r = .21$) educational value scores and between the independent variable and the boys' expressive ($r = .15$) and instrumental ($r = .11$) occupational value scores. The directions of the above-mentioned relationships were as predicted for the expressive educational and occupational value configurations, but not as predicted for the instrumental.

Table 7, Appendix B, shows that positive relationships were found between mothers' encouragement for continuing education and the boys' evaluations of the following items in the educational value set: security ($r = .27$), money ($r = .14$), career ($r = .21$), develop mind ($r = .16$) and good citizen ($r = .18$). In particular, it is interesting to note that the stronger their mothers' encouragement for post-high school education, the more the boys would like an education to help them develop skills and abilities applicable to a career and to help them achieve a secure way of life.

TABLE 7

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION (INDEPENDENT VARIABLE 7) AND THE DEPENDENT VARIABLES

Strength of Mothers' Encouragement for Continuing Education and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.18	.04
Instrumental Educational Value Score	.21	-.06
Expressive Occupational Value Score	.15	.15
Instrumental Occupational Value Score	.11	-.13
Opportunity Orientations:		
Educational Opportunity Orientation	.04	.15
Occupational Opportunity Orientation	-.02	-.02
Aspirations and Expectations:		
Educational Aspirations	.19	.12
Educational Expectations	.13	.24
Occupational Asp. (Haller)	.20	.16
Occupational Asp. (Blishen)	.03	.03
Occupational Exp. (Blishen)	.08	.09

Similarly, a weak positive relationship of .16 was found between the independent variable and the boys' evaluation of the security item in the occupational value set (see Appendix B, Table 16). In addition, positive relationships were found between maternal encouragement and the boys' evaluation of the expressive occupational values: creative and original ($r = .13$) and help others ($r = .20$).

For the girls, a positive relationship of .15 was found between strength of mothers' encouragement for continuing education and their expressive occupational value scores, whereas a negative relationship of -.13 was noted between the independent variable and their instrumental occupational value scores. Although these relationships must be classified as weak, cognizance can be taken of the fact that they are in the directions predicted. Unlike the results for the boys, no relationships were found between the independent variable and the girls' expressive or instrumental educational value scores.

Inspection of the individual items included in the educational value set reveals a weak negative correlation of -.13 between strength of maternal encouragement for continuing education and the girls' evaluation of the instrumental item - prestige and a weak positive correlation of .10 between the independent variable and their evaluation of the expressive item - understand self (see Appendix B, Table 7). In other

words, those girls, who perceived their mothers' encouragement as strong, placed less emphasis on education as a means of attaining social status and more emphasis on education as an aid to self-understanding than girls who perceived their mothers' encouragement for continuing education to be weak. With regards to their occupational values examined separately, weak negative relationships were found between maternal encouragement and the girls' evaluation of the monetary ($r = .14$), prestige ($r = -.12$), and leisure ($r = -.15$) items. On the other hand, weak positive relationships were found between the independent variable and the girls' evaluations of the work with people ($r = .15$) and help others ($r = .10$) items (see Appendix B, Table 16).

Opportunity Orientations:

As indicated in Table 7, no relationships were found between maternal encouragement for continuing education and the boys' appraisals of their educational or occupational opportunities. Mothers' encouragement was not found to be related to the girls' evaluation of the existence of occupational opportunities, but was positively related to their appraisals of educational opportunities ($r = .15$). In other words, the stronger the mothers' encouragement for continued education, the more positive or optimistic the girls' assessments of the availability of educational

opportunities.

Aspirations and Expectations:

Positive relationships were found to exist between maternal encouragement for continuing education and the boys' educational aspirations ($r = .19$) and expectations ($r = .13$). Likewise, positive relationships of .12 and .24 were found between the independent variable and the girls' educational aspirations and expectations, respectively. As anticipated, the stronger the mothers' encouragement for continued education, the higher the students' levels of educational aspiration and expectation.

With regard to the boys' and girls' occupational aspirations, as measured by Haller's OAS, a similar trend emerges. Both the boys' ($r = .20$) and girls' ($r = .16$) occupational aspirations were found to be positively related to strength of mothers' encouragement for continuing education. However, no relationships were found between the independent variable and the boys' and girls' occupational aspirations and expectations when the Blishen Index was utilized.

It is necessary to note that only certain specific portions of Hypothesis 7 have been supported by the above mentioned findings. Part a is supported with regard to the boys' expressive educational and occupational value scores, but not with regard to their instrumental value scores. For the girls, Part a of the hypothesis, which proposed that

strength of mothers' encouragement for continuing education would be directly related to expressive educational and occupational values and inversely related to instrumental educational and occupational values, holds for the girls' occupational, but not educational, value scores. The sole support for Part b is the positive relationship found between the independent variable and the girls' appraisals of their educational opportunities. Part c is supported for both boys and girls. Part d of the hypothesis holds when the students' occupational aspirations were measured by the Haller scale,but not when students' occupational aspirations and expectations were assigned Blishen scores.

Fathers' Encouragement for Occupational Achievement

Hypothesis 8: The stronger the fathers' encouragement for occupational achievement,
a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

As indicated in Table 8, no relationships were found between strength of fathers' encouragement for occupational achievement and any of the boys' summated value scores.

Analysis of the educational values separately, however, revealed a weak positive relationship of .12 between the independent variable and the boys' evaluations of the monetary item (see Appendix B, Table 8). Inspection of the individual occupational values shows that a weak negative relationship of -.14 was found between fathers' encouragement for occupational achievement and the boys' evaluations of the leisure item. In addition, a weak positive relationship of .11 was found between the independent variable and the boys' evaluations of the work with people item (see Appendix B, Table 17). These coefficients suggest that the stronger the fathers' encouragement for occupational achievement, the less emphasis the boys placed on the amount of leisure time provided by a position and the more emphasis they placed on the chance to work with people, when considering what they would like from an occupation.

Table 8 shows that positive relationships were found between strength of fathers' encouragement for occupational achievement and all four of the girls' value scores. The correlation coefficients for the relationships between the independent variable and the girls' value scores were found

TABLE 8

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT (INDEPENDENT VARIABLE 8) AND THE DEPENDENT VARIABLES

Strength of Fathers' Encouragement for Occupational Achievement and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.06	.10
Instrumental Educational Value Score	.06	.13
Expressive Occupational Value Score	.03	.22
Instrumental Occupational Value Score	.00	.31
Opportunity Orientations:		
Educational Opportunity Orientation	.19	.13
Occupational Opportunity Orientation	.11	.13
Aspirations and Expectations:		
Educational Aspirations	.10	-.04
Educational Expectations	.14	.08
Occupational Asp. (Haller)	.20	.15
Occupational Asp. (Blishen)	.01	.06
Occupational Exp. (Blishen)	.20	.16

to be as follows: expressive educational value scores ($r = .10$), instrumental educational value scores ($r = .13$), expressive occupational value scores ($r = .22$), and instrumental occupational value scores ($r = .31$).

Analysis of the relationships between strength of fathers' encouragement for occupational achievement and the girls' evaluations of each of the items in the educational value set revealed two positive relationships. A positive relationship of .18 was found between the independent variable and the girls' evaluations of the instrumental item - security. Similarly, a positive relationship of .20 was found between the independent variable and the girls' evaluations of the expressive item - develop mind. Strength of fathers' encouragement for occupational achievement was found to be positively related to the girls' evaluations of the following items in the occupational value set: security ($r = .18$), money ($r = .18$), prestige ($r = .15$), leisure ($r = .27$), special skills and abilities ($r = .24$), work with people ($r = .11$), creative and original ($r = .10$) and help others ($r = .10$). Thus, the stronger their fathers' encouragement for occupational achievement the more important the girls considered all eight occupational value items.

Opportunity Orientations:

Positive relationships were found between the independent variable and the boys' appraisals of their educational ($r = .19$) and occupational ($r = .11$) opportunities. Parallel relationships were detected between the independent variable and the girls' appraisals of their educational ($r = .13$) and occupational ($r = .13$) opportunities. Thus, in accordance with Part b of Hypothesis 8, the stronger their fathers' encouragement for occupational achievement, the more positive the students' educational and occupational opportunity orientations.

Aspirations and Expectations:

As shown in Table 8, strength of fathers' encouragement for occupational achievement was found to be positively related to the boys' educational aspirations ($r = .10$) and expectations ($r = .14$). In addition, positive relationships were found between the independent variable and the boys' occupational aspirations (Haller, $r = .20$) and expectations (Blishen, $r = .20$). No relationship was found between fathers' encouragement and the boys' occupational aspirations when the Blishen Index was utilized.

Unlike the boys, no noteworthy relationships were found between strength of fathers' encouragement for occupational achievement and the girls' educational aspirations and

expectations. Like the boys, however, positive relationships were found between the independent variable and the girls' occupational aspirations (Haller, r = .15) and expectations (Blishen, r = .16). As was the case for boys, no relationship was found between strength of fathers' encouragement for occupational achievement and the girls' occupational aspirations when the Blishen Index was utilized.

Thus, on the basis of the findings presented in Table 8, Hypothesis 8 cannot be accepted completely. The boys' data do not lend support to Part a of the hypothesis. For the girls, the relationships between strength of fathers' encouragement for occupational achievement and their expressive value scores concur with those predicted. However, the relationships between the independent variable and the girls' instrumental value scores were found to be in directions opposite to those hypothesized. Part b of Hypothesis 8, is substantiated in that positive relationships were found between strength of fathers' encouragement for occupational achievement and the students' assessments of their educational and occupational opportunities. Part c of the hypothesis is supported for the boys' educational aspirations and the boys' and girls' occupational aspirations when the Haller scale was employed, but is not supported for the girls' educational aspirations or the boys' and girls' occupational aspirations when the Blishen Index was utilized.

Part d of the hypothesis holds for both the boys' and girls' occupational expectations, but only for the boys' educational expectations.

Mothers' Encouragement for Occupational Achievement

Hypothesis 9: The stronger the mothers' encouragement for occupational achievement,
a) the more expressive and the less instrumental the educational and occupational values of the students;
b) the more positive the educational and occupational opportunity orientations of the students;
c) the higher the level of educational and occupational aspirations of the students;
d) the higher the level of educational and occupational expectations of the students.

Values:

The relationships between strength of mothers' encouragement for occupational achievement and the dependent variables are presented in Table 9. For the boys, weak positive relationships were found between the independent variable and their expressive educational ($r = .14$) and expressive occupational ($r = .12$) value scores. No relationships were found between maternal encouragement for occupational achievement and the boys' instrumental educational and occupational value scores.

A review of the separate items included in the educational value set reveals two weak positive relationships

TABLE 9

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT (INDEPENDENT VARIABLE 9) AND THE DEPENDENT VARIABLES

Strength of Mothers' Encouragement for Occupational Achievement and -	Boys r	Girls r
Values:		
Expressive Educational Value Score	.14	.02
Instrumental Educational Value Score	.02	.13
Expressive Occupational Value Score	.12	.12
Instrumental Occupational Value Score	-.07	.07
Opportunity Orientations:		
Educational Opportunity Orientation	.21	.03
Occupational Opportunity Orientation	.13	-.01
Aspirations and Expectations:		
Educational Aspirations	.20	-.09
Educational Expectations	.15	.06
Occupational Asp. (Haller)	.17	-.03
Occupational Asp. (Blishen)	-.07	.00
Occupational Exp. (Blishen)	.11	.05

(see Appendix B, Table 9). Maternal encouragement for occupational achievement was found to be positively related to the boys' evaluations of the expressive items: develop mind ($r = .12$) and get along with people ($r = .12$). Furthermore, mothers' encouragement for occupational achievement was found to be related to the following occupational value items: leisure ($r = -.18$), special skills and abilities ($r = .18$), work with people ($r = .13$), creative and original ($r = .15$) and help others ($r = .10$) (see Appendix B, Table 18). The directions of these relationships were as predicted. The negative relationship between strength of mothers' encouragement for occupational achievement and the boys' evaluations of the leisure item parallels the previously reported relationship between strength of fathers' encouragement for occupational achievement and the boys' evaluation of the leisure item in the occupational value set. The positive relationships found between the independent variable and the boys' evaluations of the expressive items suggest that the stronger their mothers' encouragement for occupational achievement the more important it is to the boys that the occupation of their choice provide them with a chance to use their special skills and abilities, a chance to be creative and original, a chance to work with people, and a chance to help others and contribute to society.

For the girls, weak positive relationships were found

between maternal encouragement for occupational achievement and their instrumental educational (r = .13) and their expressive occupational (r = .12) value scores. Relationships were not found between the independent variable and the girls' expressive educational or instrumental occupational value scores.

Examination of the educational values separately reveals a positive relationship of .23 between mothers' encouragement for occupational achievement and the girls' evaluations of the security item (see Appendix B, Table 9). In addition, the independent variable was found to be positively related to the girls' evaluations of the good citizen item (r = .11) and negatively related to their evaluations of the get along with people item (r = -.10). Examination of the items comprising the occupational value set reveals weak positive correlations between strength of maternal encouragement for occupational achievement and the girls' evaluations of the security (r = .19), monetary (r = .10), prestige (r = .10) and working with people (r = .15) items (see Appendix B, Table 18).

Opportunity Orientations:

Positive correlations were found between the independent variable and the boys' educational (r = .21) and occupational (r = .13) opportunity orientations. No relationships were

found between strength of mothers' encouragement for occupational achievement and the girls' appraisals of their opportunities.

Aspirations and Expectations:

For the boys, maternal encouragement for occupational achievement was found to be positively associated with their educational aspirations ($r = .20$) and expectations ($r = .15$); and with their occupational aspirations (Haller, $r = .17$) and expectations ($r = .11$). Thus, these coefficients suggest that the boys' levels of educational and occupational aspiration and expectation increase with increasing strength of mothers' encouragement for occupational achievement. It is necessary to note that a relationship was not found between the independent variable and the boys' occupational aspirations when these were measured by means of Blishen scores. In addition, no relationships were found between strength of mothers' encouragement for occupational achievement and any of the girls' aspirational or expectational variables.

At this point, a few summary statements are mandatory in order to focus the findings just presented. As can be seen from the correlation coefficients contained in Table 9, only specific segments of Hypothesis 9 have been supported. Part a of the hypothesis holds for the boys' expressive, but not instrumental, value scores. For the girls, the sole supportive case for the acceptance of Part a is the weak

positive relationship found between strength of mothers' encouragement for occupational achievement and their expressive occupational value scores. Part b of the hypothesis is supported for the boys, but not for the girls. Parts c and d hold for the boys, with the exception of the lack of a noteworthy relationship between the independent variable and the boys' occupational aspirations when Blishen scores were used. The girls' data, however, do not lend support to Parts c and d of Hypothesis 9.

Discussion

This section is comprised of a discussion of the findings presented above with the intention not only of offering possible interpretations and explanations, but also of comparing and contrasting the results of the present study with those reported in previous research endeavors. To facilitate reference to the review of literature contained in Chapter III, the separate segments of the discussion will be presented under the same headings used to order the past studies.

Socio-economic Status[15]

Students and non-student adults alike have been shown to be more inclined to emphasize the instrumental or "means oriented" educational and occupational values the lower their status level (re educational values: Goldsen et al., 1960: 14-16; Mizruchi, 1964: 78-81; Anderson and Safar, 1967: 226; Meier, 1970: 77 and re occupational values: Centers, 1949: Stephenson, 1957: 205; Simpson and Simpson, 1960: 119; Schwarzweller, 1960: 133; Perrone, 1965: 255; Thompson, 1966: 851). In addition studies have shown respondents to be more

15. A summary of the characteristics of the population studied with respect to socio-economic status determined by the assignment of scores from Blishen's Socioeconomic Status Index (1967) to the students' statements of their fathers' occupations is contained in Appendix A, Table 3.

inclined to stress expressive values the higher their status level (re educational values: Mizruchi, 1964: 78-81; Anderson and Safar, 1967: 226; Meier, 1970: 85 and re occupational values: Centers, 1949; Schwarzweller, 1960: 133). It was anticipated therefore that the salience of instrumental educational and occupational values would vary inversely with status level, whereas the emphasis on expressive values would vary directly with socio-economic status.

The positive relationship found between socio-economic status and the boys' instrumental educational values runs counter to the results of the studies cited above, but concurs with Rosenberg's assertion that students from higher backgrounds were more likely to stress extrinsic rewards, such as high income (Rosenberg, 1957: 14). Specifically, the higher their family's socio-economic status the more emphasis the boys in the present study placed on education as an avenue to pecuniary success. Unlike several prior studies (Stephenson, 1957: Stefflre, 1959; Simpson and Simpson, 1960; Schwarzweller, 1959 and 1960; Thompson, 1966) no noteworthy relationships were found between socio-economic status and the boys' occupational values.

The negative relationship found between socio-economic status and the girls' expressive occupational values was also in a direction opposite to that predicted. For comparative purposes it is interesting to note that Schwarzweller, using

the Sewell Short Form S.E.S. Scale to measure socio-economic status and chi-square to test the statistical significance of the association, found girls' values on creative work associated with high parental socio-economic status (Schwarzweller, 1960: 133). On the other hand, the present study and that of Perrone, using father's occupational level to index familial socio-economic status and correlation analysis to arrive at association, found a negative relationship between familial socio-economic status and the girls' ratings of the creative and original occupational value (see Perrone, 1965: 255). Until researchers establish the equivalence of the various socio-economic status indices involved and the multiplicity of value-measurement methods employed, current comparisons remain tentative rather than truly meaningful.

Correlations between socio-economic status and opportunity orientations were included in an attempt to ascertain whether or not social and psychological (i.e. objective and subjective) indicators of opportunity are intricately interwoven. There appeared to be a consensus among the authors cited that perceptions of opportunity are conditioned by a person's socio-economic position (Hyman, 1953; Empey, 1956; Mizruchi, 1964; Scanzoni, 1967; Zavalloni, 1968; Rosen, 1969; Rytina et al., 1970). This assertion is borne out with respect to the educational opportunity orientations

of the students participating in the present study. The lower their family's socio-economic status the more limited the students consider their educational opportunities to be. However, assessments of occupational opportunities do not appear to differ by status. This means, perhaps, that the students are not aware of the relationship (albeit not a perfect one) between educational and occupational achievement. They may not have realized that obstacles which preclude continuation of education could also impede occupational attainment. Related interpretations have been advanced by Haller and Sewell (1957: 411) and Morland (1969: 175).

A number of investigators have noted positive associations between familial socio-economic status and students' educational aspirations (Sewell et al., 1953; Rosen, 1956; Youmans, 1959; Krauss, 1964; Porter, 1965; Slocum, 1967) and expectations (Fleming, 1957; Bordua, 1960; Elder, 1963; Sewell, 1964; Jones, 1965; Pavalko and Bishop, 1966; Slocum, 1967; Sewell and Shah, 1968a). These findings have been confirmed with respect to the educational aspirations and expectations of the girls in the present study. Girls from higher socio-economic status families were more likely to aspire to, and expect to attain, higher levels of education than girls from lower status families.

It has been suggested that the relative importance of structural factors differs for aspiration and plan-choice

situations (Schwarzweller, 1959: 249). Several researchers have found the effect of socio-economic status to be more pronounced for plans than for aspirations (Stephenson, 1955 and 1957; Morland, 1960; Bennett and Gist, 1964). In the present study a positive correlation was found between socio-economic status and the boys' educational expectations, but not between socio-economic status and the boys' educational aspirations. For a similar set of findings wherein Stephenson noted that different social classes did not differ significantly in their aspirations, yet did differ in their plans, he proposed that a similar cultural value system (as reflected in aspirations) was operative throughout the sample but that the plans varied due to the students' awareness of economic and social obstacles (Stephenson, 1957: 212). Considered in conjunction with the positive correlation noted between socio-economic status and the boys' appraisals of their educational opportunities, this explanation appears to be plausible.

The stronger relationship of familial socio-economic status to the educational expectations of the girls in this study than to those of the boys is consonant with the findings of Sewell and Shah (1968a: 564-565) and could conceivably stem from the differential pattern of role expectations for adult males and females in our society. Advanced education is considered as desirable and increasingly

necessary for fulfilling male occupational roles, but for females the situation often is complicated by anticipated marital roles and economic considerations (e.g. the "worth" of higher education for females). Presumbly, therefore, family resources exert stronger influence on the educational plans of females than on those of males.

In addition, some past studies have demonstrated that students from higher socio-economic status families have higher occupational aspiration and expectation levels than students from lower socio-economic status families (Hollingshead, 1949; Ginzberg, 1951; Sewell, Haller and Straus, 1957; Edlefson and Crowe, 1960; Porter, 1961; Lipsett, 1962; Simpson and Simpson, 1962; Krippner, 1963; Gottlieb and Ramsey, 1964; Siemens, 1965; Siemens and Driedger, 1965; Mowsesian et al., 1966; Sharp and Kristjanson, 1966; Kristjanson, 1967; Haller and Miller, 1967; Werts, 1968; Sewell and Shah, 1968a; Krecsy, 1970). These results are reflected in the present study by the positive relationships found between socio-economic status and the students' occupational aspirations (as measured by the Haller scale). This pattern is given added support by consideration of the boys' occupational aspirations and expectations (as indexed by the Blishen scale), which also tend to follow stratum position. As was the case with Empey's sample of male high school seniors, when absolute

standards are employed, a direct relationship between socio-economic position and the status levels of the boys' preferred and anticipated occupational choices is noted (Empey, 1956: 490). For the girls, however, a relationship was not found between socio-economic status and their occupational aspirations and expectations when the Blishen Index was utilized. These variations are in keeping with Reissman's observation that "the relationship between class and aspirations is not a simple one" (Reissman, 1953: 241) and alert this researcher to the idea that resultant relationships may differ depending on the method of measuring aspirations used. It is interesting to note that even when they were given an opportunity to make a fantasy choice, the students from lower socio-economic status families tended to make more modest selections. The finding that aspirations are still somewhat related to socio-economic status points to the pervasiveness of this particular social factor.

Parents' Educational Levels

For the most part, the relationships found between the parents' educational levels and the dependent variables parallel those found between socio-economic status and the dependent variables. As was the case with socio-economic status, the higher their fathers' educational level the more optimistic the students are in appraising their educational opportunities, the higher their educational expectation levels and the higher their occupational aspiration levels (as measured by the Haller scale). These relationships held true when the analysis was repeated employing mothers' education. In addition, the positive correlation noted between fathers' education and the boys' instrumental educational value orientations (specifically the monetary item therein) paralleled that between socio-economic status and the boys' instrumental educational value orientations. Thus, the higher their fathers' level of educational achievement, the more inclined the boys are to view an education in terms of occupational preparation. For the girls, the negative correlation found between mothers' education and the girls' expressive occupational value orientations and the positive correlation found between mothers' education and the girls' educational aspirations parallel the ones found between socio-economic status and these dependent variables.

The parallels noted above are not surprising since it

is generally assumed that educational level and socio-economic status are related (Kahl and Davis, 1955: 321; Rosen, 1956: 210; Pavalko and Bishop, 1966: 293). Father's educational level is frequently used, alone or in combination with other items (for example, income and occupational prestige)to index socio-economic status (Schwarzweller, 1959: 255 and 1960: 132; Porter, 1961: 114; Swinehart, 1963: 393; Turner, 1964; Lueptow, 1968: 306; Sewell and Shah, 1968a: 562 and 1968b: 202; Sewell, Haller and Portes, 1969: 87). Furthermore, it has been observed that the education of a wife usually comes close to that of her husband (Kahl and Davis, 1955: 321). These assertions are substantiated in the present study. Socio-economic status was found to be correlated with fathers' education (boys: r = .58; girls: r = .56) and also with mothers' education (boys: r = .31; girls: r = .33). Moreover, mothers' education was found to be correlated with fathers' education (boys: r = .40; girls: r = .39). In view of the interrelationships among socio-economic status, father's education and mother's education, it is to be expected that they exhibit similarities in their separate relationships with the dependent variables.

Some of the dependent variables (boys' occupational opportunity orientations, girls' expressive educational values, girls' occupational aspirations and expectations - as indexed by the Blishen scale) are correlated with the

fathers' educational levels, but not with familial socio-economic status. This suggests that father's education exerts some influence independent of its interaction with socio-economic status.

Similarly, some of the dependent variables (boys' educational aspirations, girls' instrumental educational and occupational values) are correlated with the mothers' educational levels, but not with socio-economic status or the fathers' educational levels. This suggests that mother's education exerts some influence independent of its interactions with father's education and socio-economic status.

Schwarzweller found positive relationships between both parents' educational levels and students' values on creative work (Schwarzweller, 1959: 255). In the present study no relationships were noted between fathers' education and the boys' or girls' ratings of the creative and original item in the occupational value set. Mothers' education was not related to the boys' ratings of the creativity item, but was negatively related to the girls' rating of this occupational value. It is possible that girls whose mothers have attained higher educational levels are more aware of alternative ways of expressing creativity (for example, in drama, music, art, etc.) and thus, do not choose an occupation expressly for this purpose.

Students whose fathers and mothers had achieved higher levels of education tended to be more optimistic in their appraisals of their educational opportunities than students with parents having lower levels of educational achievement. The finding that the boys' perceptions of occupational opportunities were positively related to their fathers' educational level, but not to familial socio-economic status, suggests that a father's education (viewed in terms of the experience, information, and friends gained thereby) might enhance his son's chances for occupational achievement more than the possession of financial resources per se.

Furthermore, the finding of positive correlations between parents' educational levels and the students' educational expectation levels concurs with the relationships reported by Slocum (1956), Christiansen and his associates (1962), Sewell (1963), Krauss (1964), Bowles and Slocum (1968), and Slocum (1968). Whereas Sewell and Shah (1968b: 204) found that father's education had a slightly stronger effect than mother's education on the educational plans of the males in their sample, a comparison of the relevant correlation coefficients for the present study shows that the relationships between the mothers' educational levels and the students' levels of educational expectation and those between the fathers' educational levels and the students' levels of educational expectation are the same with respect

to direction and exceedingly similar with respect to strength.

In general, past studies have shown that parents' education, whether considered separately or jointly, is positively related to the educational aspirations of both sexes (Herriott, 1963; Siemens, 1965; Siemens and Driedger, 1965; Sharp and Kristjanson, 1966; Sewell and Shah, 1968b; Slocum, 1968). Sewell and Shah (1968b) employed separate tabulations for each sex because they perceived the possibility of differences in the influence of parents' education on the educational aspirations of males and females. This assertion was partially substantiated in the present study inasmuch as the relationship between the mothers' educational levels and the girls' levels of educational aspiration was found to be slightly stronger than that between the mothers' educational levels and the boys' levels of educational aspiration. However, the pattern of relationships observed was the same in that both the boys' and girls' educational aspirations were found to be positively associated with their mothers', but not fathers', levels of educational achievement. These findings suggest that a mother's education, rather than father's, exerts the greatest influence on the educational aspirations of their children, especially their daughters, and lends credence to the contention that a

mother's education is more important than a father's education in creating a social-psychological environment in the home conducive to high-level educational aspiration (Sewell and Shah, 1968b: 208). According to Krauss, it is conceivable that a mother's educational achievement may be the most significant if one considers the role she plays in child-rearing (Krauss, 1964: 870).

The boys' occupational expectations were found to be positively correlated with their mothers' educational levels; whereas, the girls' occupational expectations were positively correlated with their fathers' educational levels. This suggests that the influence of the parent of the opposite sex may be more pronounced than the influence of the parent of the same sex in certain areas.

Unlike Kristjanson's (1967: 51) observation of no significant relationship between the educational achievement of either parent and the students' levels of occupational aspiration and unlike Siemen's (1965: 68) observation of no relationship between mothers' education and the girls' levels of occupational aspiration, the present study found positive correlations between the parents' educational levels and the students' occupational aspiration levels as measured by the OAS. These relationships also held for the girls when their occupational aspirations were indexed by Blishen scores. Their mothers', but not their fathers', educational levels

were found to be associated with the boys' occupational aspirations as indexed by Blishen scores. Essentially similar findings have been reported by Simpson and Simpson (1960), Sewell (1963), Miller and Haller (1964), Sharp and Kristjanson (1966) and Krecsy (1970). It is to be noted, however, that in the present study and those cited above only sex was controlled, whereas Kristjanson's analysis included controls for the possible effects of sex and measured intelligence, sex and socio-economic status and all three of these variables simultaneously. Until the present data are subject to a comparable analysis wherein these same stringent controls are applied, Kristjanson's contention, that a considerable amount of the association between parents' educational levels and students' occupational aspiration levels is accounted for by socio-economic status and measured intelligence, can neither be confirmed nor denied.

Community Size and Isolation

The finding of no relationship between size of community of residence and the boys' occupational value orientations concurs with Schwarzweller's finding of similar patterns of evaluation of job characteristics among the students in his rural and urban samples and lends credence to his suggestion that high schools in smaller communities function as a cultural bridge, in terms of occupational values, between society-

at-large and the smaller communities creating a relative homogeneity of job choosing criteria among students from different communities (Schwarzweller, 1960: 131).

The findings of the present study indicate that "the chance to earn a good deal of money" and "the amount of leisure time provided by an occupation" were more important considerations among girls in the larger communities and presumably will be more influential in the career decisions of these girls than those of their counterparts in the smaller communities. The positive direction of the relationship between community size and the girls' evaluations of the monetary and leisure items in the occupational value set was not anticipated and therefore requires interpretation. These findings may be more understandable if the usual relationship between community size and occupational opportunities is recognized. The larger the community (that is, the larger the community's population) the greater the number and diversity of potential occupational roles the girls are exposed to and, presumably, the greater the probability of their obtaining an occupation that is on a par with those available to boys and accruing comparable employment benefits (for example, salary and leisure time). Thus, the more desirable these commodities become.

In smaller communities, on the other hand, stereotyped notions of the female role usually predominate. Marriage is

considered to be the most rewarding vocation for a girl (Elder, 1963: 39). Thus, for girls faced with limited selection of occupations offered by a small community and forced to consider moving to a larger center in order to compete for a position, marriage may represent a more viable vocational alternative. Girls who have grown up in small communities may be more likely to regard occupations as temporary tasks to be terminated in favor of getting married and having a family and hence, do not hold occupations that provide economic independence in high esteem nor deem them necessary.

No appreciable associations were found between the students' educational and occupational opportunity orientations and the size or isolation of their community of residence. Two potential explanations of this finding appear plausible. It may be that these two indicators of the impact of community context have less pervasive effects than those frequently attributed to them (cf. Elder, 1963: 39) or that these effects have been overshadowed in the present study by the operation of more powerful factors. It is possible that the socio-economic dominance of single enterprises in all five of the communities included in this study tends to neutralize differences associated with size or degree of geographical isolation. The reliance of these communities on a single industry for their existence and continuance may be the more salient feature with respect to the

structuring of educational and occupational opportunities. Usually, as the population size of a community increases a concomitant increment occurs in both the number and variety of occupational positions. However, since the majority of occupations in these communities are those required by the single industry, the larger communities may have more positions available than the smaller communities, but the types are likely to be very similar. Thus despite differences in size and isolation, these communities may have parallel opportunity structures in operation.

On the other hand, even if disparities were present they might not be recognized by the residents of the communities involved. It is possible that, in actuality, educational and occupational opportunities are differentially distributed among the communities in accordance with size and degree of isolation but that the students' appraisals of their opportunities, being subjective perceptions of the situation, do not reflect this. Students from the smaller or more isolated communities, for example, may not have been exposed to alternative opportunity structures and consequently, their inability to make invidious comparisons allays feelings of relative deprivation.

As was the case with opportunity orientations, the analysis revealed no relationships between size of

community of residence and the students' educational and occupational aspirations. These results seem to indicate that community size is not a discriminating variable in this study. Although they run counter to a considerable number of past researches which have reported positive relationships between size of community of residence and levels of educational and occupational aspiration, these findings concur with those presented by Haller and Sewell (1957: 407), Boyle (1966c: 292) and Kristjanson (1967: 57).

Boyle's findings appear to be particularly pertinent inasmuch as they point to one of the main factors to be taken into consideration in an attempt to reconcile the present results with those reported previously - namely: the definition of community size categories. His analysis of data from a questionnaire survey of 1,701 high school girls in western Canada (Ontario, Manitoba, Saskatchewan, Alberta, and British Columbia) showed that residents of cities ("city" = over 100,000 population) more frequently planned to attend college than did residents of smaller communities ("town" = 4,000-99,999; "village" = less than 4,000 population), but except for cities, distinctions of community size showed no relation to college plans (Boyle, 1966c: 292). According to Boyle, the important distinction appears to be between "residents of cities" and "residents of smaller communities." Aspirations were not differentiated

by finer subdivisions of the latter category. With a similar set of communities (that is, when the five communities in the present study are ranked by population size they become comparable to Boyle's finer discriminations of his "smaller communities" category), this study obtained similar results.

A survey of relevant research revealed that the population criteria used to define residence categories vary to a certain extent from study to study. However, in terms of a general comparison, it was found that the size range of the communities included in the present study (1,245 - 20,000) is relatively small compared with those employed in previous studies. With respect to Sewell's classification, for example, four of the five communities in the present study would fall into his small city (2,500 - 25,000) category (Sewell, 1964: 26). Viewed from this perspective, the findings of the present study regarding community size would be consistent with the results of previous research endeavors in that most have found intra-category variation to be minimal.

Size of community of residence was found to be negatively related to the boys' educational expectations. This indicated that the larger the community of residence, the lower the boys' educational expectations. What could account for this interesting directional deviation from the hypothesized relationship? As noted earlier, Lipset has suggested that a

community's occupational structure tends to condition adolescents' acquision of occupational aspirations (Lipset, 1955: 226). Likewise, it may exert considerable influence over educational aspirations and expectations. Positions not requiring post-high school education are usually more prevalent in larger communities. Opportunities for employment immediately upon, or even prior to, high school graduation are likely to initiate countervailing pressures to continuing education, particularly when decision pressure is great and the adolescent's time perspective is restricted. In the smaller centers, local occupational opportunities are likely to be scarce and the boys may recognize the necessity of continuing their education in order to attain a higher level of employment than is offered in their home town.

Another finding that did not appear to fit into any overall pattern was the negative correlation noted between community size and the girls' occupational expectations. This correlation suggested that the larger the community of residence, the lower the girls' levels of occupational expectation. A possible explanation is that girls residing in the larger communities are more cognizant of the competition to be encountered when seeking employment. In general, the job restrictions faced by women force them to enter essentially the same occupations, mainly teaching,nursing, social work or secretarial work (Sewell and Orenstein, 1965: 563).

However, the occupational alternatives for girls in small communities tend to be so severely limited that those who wish to work must look to the large communities for employment. Thus, in addition to competing with boys and girls from their own communities, girls in the larger centers must compete with their counterparts from smaller surrounding communities. Recognition of this increased competition might be sufficient to decrease occupational expectations.

CHAPTER VII

PRESENTATION OF FINDINGS ON THE RELATIONSHIPS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES FOR THE MOTHERS OF GRADE TWELVE BOYS AND GIRLS

This chapter presents findings pertinent to the relationships between the nine selected social factors (independent variables) and the eleven dependent variables for 203 mothers of twelfth grade students. As pointed out previously, the same nine independent variables correlated with the students' responses were also correlated with the mothers' responses. In essence, this section of the study endeavored to examine the social correlates of the mothers' educational and occupational values, opportunity orientations, aspirations and expectations. It is to be remembered that the mothers' responses did not constitute statements of achievement orientations for themselves, but were focused on their sons and/or daughters currently attending Grade Twelve. Thus, the mothers were asked what they would like their child to get out of an education and an occupation; they were asked to appraise their child's educational and occupational opportunities; they were asked what further education and type of occupation they would <u>like</u> their child to achieve; and, finally, they were asked to specify what further education and type of occupation they <u>expect</u> their child to obtain. These questions paralleled those designed to elicit

the students' values, opportunity orientations, aspirations and expectations.

To facilitate comparison with the results obtained after analyzing the students' data, the presentation of the findings from the mothers' data will follow the same format as Chapter VI.

Socio-economic Status

Hypothesis 10: The higher the socio-economic status of the family,
a) the more expressive and the less instrumental the educational and occupational values of the mothers;
b) the more positive the educational and occupational opportunity orientations of the mothers;
c) the higher the level of educational and occupational aspirations of the mothers;
d) the higher the level of educational and occupational expectations of the mothers.

Values:

As indicated in Table 10, a weak negative relationship of -.14 was found between socio-economic status and the boys' mothers' instrumental occupational value scores. No relationships were found between socio-economic status and boys' mothers' expressive occupational value scores or their expressive and instrumental educational value scores.

Examination of the individual educational values reveals a weak negative relationship of -.11 between the independent

TABLE 10

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SOCIO-ECONOMIC STATUS OF FAMILY (INDEPENDENT VARIABLE 1) AND THE DEPENDENT VARIABLES

Socio-Economic Status of Family and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	-.08	.05
Instrumental Educational Value Score	-.06	-.11
Expressive Occupational Value Score	-.07	-.01
Instrumental Occupational Value Score	-.14	-.14
Opportunity Orientations:		
Educational Opportunity Orientation	.16	.19
Occupational Opportunity Orientation	.12	.08
Aspirations and Expectations:		
Educational Aspirations	.14	.30
Educational Expectations	.11	.18
Occupational Asp. (Haller)	.43	.08
Occupational Asp. (Blishen)	.26	.02
Occupational Exp. (Blishen)	.28	.24

variable and the instrumental item - security and a negative relationship of -.21 between the independent variable and the expressive item - good citizen (see Appendix C, Table 1). Examination of the individual occupational values reveals negative associations between socio-economic status and the boys' mothers' evaluations of the following items: money (r = -.18), leisure (r = -.15) and helping others (r = -.19, see Appendix C, Table 10). These findings suggest that the higher their socio-economic status, the less important the mothers would like the above mentioned items to be to their sons when choosing an occupation.

For the girls' mothers, socio-economic status was found to be negatively related to their instrumental educational (r = -.11) and instrumental occupational (r = -.14) value scores. The directions of these relationships were as hypothesized. No relationships were found between the independent variable and the girls' mothers' expressive value scores.

Inspection of the separate educational values reveals a weak negative correlation of -.15 between socio-economic status and the girls' mothers' evaluations of the security item. Similarly, a weak negative relationship of -.14 was found between the independent variable and the girls' mothers' evaluations of the prestige item (see Appendix C, Table 1). These coefficients suggest that the higher their socio-economic

status, the less the girls' mothers valued education as a means of achieving a secure way of life and as a means of obtaining a position of prestige in the community. In addition, negative relationships were found between socio-economic status and the girls' mothers' evaluations of the following items in the occupational value set: security ($r = -.14$), money ($r = -.11$) and prestige ($r = -.21$, see Appendix C, Table 10).

Opportunity Orientations:

From Table 10 it can be seen that weak positive relationships were found between socio-economic status and the boys' mothers' educational ($r = .16$) and occupational ($r = .12$) opportunity orientations. Thus, in keeping with Part b of Hypothesis 10, the higher their socio-economic status the more positive the mothers' appraisals of their sons' educational and occupational opportunities. Likewise, a weak positive association was found between socio-economic status and the mothers' appraisals of their daughters' educational opportunities ($r = .19$). However, no relationship was found between the independent variable and the girls' mothers' occupational opportunity orientations.

Aspirations and Expectations:

Positive relationships were found between socio-economic

status and the boys' mothers' educational aspirations ($r = .14$), educational expectations ($r = .11$), occupational aspirations (Haller, $r = .43$; Blishen, $r = .26$) and occupational expectations ($r = .28$). Similarly, socio-economic status was found to be positively related to the girls' mothers' educational expectations ($r = .18$) and occupational expectations ($r = .24$). No relationships were found between the independent variable and the girls' mothers' occupational aspirations.

In general, on the basis of the findings presented in Table 10, Hypothesis 10 cannot be accepted in its entirety. Part a of the hypothesis is supported only with regard to the students' mothers' instrumental occupational value scores and the girls' mothers' instrumental educational value scores. The positive relationships found between socio-economic status and the boys' mothers' educational and occupational opportunity orientations and between socio-economic status and the girls' mothers' educational opportunity orientation support Part b of the hypothesis. Part c holds for the boys' mothers' educational and occupational aspirations and for the girls' mothers' educational, but not occupational, aspirations. Furthermore, the positive relationships found between socio-economic status and the mothers' educational and occupational expectations for their sons and/or daughters support Part d of Hypothesis 10.

Fathers' Educational Level

Hypothesis 11: The higher the level of fathers' educational attainment,
a) the more expressive and the less instrumental the educational and occupational values of the mothers;
b) the more positive the educational and occupational opportunity orientations of the mothers;
c) the higher the level of educational and occupational aspirations of the mothers;
d) the higher the level of educational and occupational expectations of the mothers.

Values:

As was the case with socio-economic status, fathers' educational level was found to be negatively related to the boys' mothers' instrumental occupational value scores ($r = -.10$). No relationships were found between fathers' education and any of the boys' mothers' other value scores.

With regard to the value items examined separately, fathers' educational level was found to be negatively related to the boys' mothers' evaluation of the security item in the educational value set ($r = -.15$, see Appendix C, Table 2) and also negatively related to their evaluations of the security ($r = -.19$), leisure ($r = -.11$) and creative and original ($r = -.12$) items in the occupational value set (see Appendix C, Table 11).

As shown in Table 11, weak negative associations were found between level of fathers' educational attainment and

TABLE 11

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN FATHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 2) AND THE DEPENDENT VARIABLES

Fathers' Educational Level and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	.00	-.01
Instrumental Educational Value Score	-.04	-.10
Expressive Occupational Value Score	-.09	-.12
Instrumental Occupational Value Score	-.10	-.11
Opportunity Orientations:		
Educational Opportunity Orientation	.07	.02
Occupational Opportunity Orientation	.02	.08
Aspirations and Expectations:		
Educational Aspirations	.07	.24
Educational Expectations	-.03	.11
Occupational Asp. (Haller)	.29	.07
Occupational Asp. (Blishen)	.12	.01
Occupational Exp. (Blishen)	.07	.23

the girls' mothers' instrumental educational ($r = -.10$), expressive occupational ($r = -.12$) and instrumental occupational ($r = -.11$) value scores. The relationships between the independent variable and the girls' mothers' instrumental value scores were in the directions anticipated, but the one between the independent variable and the girls' mothers' expressive scores was not.

More specifically, fathers' educational level was found to be negatively related to the girls' mothers' evaluations of the security ($r = -.12$) and monetary ($r = -.13$) items in the educational value set (see Appendix C, Table 2). In addition, negative relationships were found between the independent variable and the girls' mothers' evaluations of the following items in the occupational value set: security ($r = -.16$), money ($r = -.12$), prestige ($r = -.16$), work with people ($r = -.18$) and help others ($r = -.12$, see Appendix C, Table 11).

Opportunity Orientations:

No relationships were found between fathers' educational level and the mothers' appraisals of their sons' and/or daughters' educational and occupational opportunities.

Aspirations and Expectations:

Similarly, no relationships were found between the

independent variable and the boys' mothers' educational aspirations and their educational and occupational expectations. On the other hand, relationships were found between fathers' education and the mothers' occupational aspirations for their sons (Haller, r = .29; Blishen, r = .12).

Positive correlations were found between level of fathers' education and the girls' mothers' educational aspirations (r = .23) and educational (r = .11) and occupational (r = .23) expectations. However, as was the case with socioeconomic status, no relationships were found between level of fathers' educational attainment and the mothers' occupa- aspirations for their daughters.

As attested by the coefficients contained in the accompanying table, only specific sections of Hypothesis 11 have been supported. Part a, for example, is supported with regard to the girls' mothers' instrumental educational value scores and the boys' and girls' mothers' instrumental occupational value scores. The results do not support Part b of the hypothesis, which proposed that fathers' educational level would be positively related to the mothers' appraisals of their sons' and/or daughters' opportunities. In partial support of Part c, positive relationships were found between fathers' education and the mothers' occupational, but not educational, aspirations for their sons. This pattern of relationships is reversed for the girls' mothers, in that

positive relationships were found between the independent variable and the mothers' educational, but not occupational, aspirations for their daughters. Part d of the hypothesis holds for the girls' mothers', but not boys' mothers', educational and occupational expectations.

Mothers' Educational Level

Hypothesis 12: The higher the level of mothers' educational attainment,
a) the more expressive and the less instrumental their educational and occupational values;
b) the more positive their educational and occupational opportunity orientations;
c) the higher the level of their educational and occupational aspirations;
d) the higher the level of their educational and occupational expectations.

Values:

Table 12 reveals that negative relationships were found between mothers' educational level and all four of the boys' mothers' summated value scores. More specifically, negative relationships were found between the independent variable and the boys' mothers' expressive ($r = -.24$) and instrumental ($r = -.27$) educational value scores and between the independent variable and their expressive ($r = -.29$) and instrumental ($r = -.34$) occupational value scores. The relationships between mothers' education and

TABLE 12

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN MOTHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 3) AND THE DEPENDENT VARIABLES

Mothers' Educational Level and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	-.24	.01
Instrumental Educational Value Score	-.27	-.16
Expressive Occupational Value Score	-.29	-.07
Instrumental Occupational Value Score	-.34	-.21
Opportunity Orientations:		
Educational Opportunity Orientation	.12	.07
Occupational Opportunity Orientation	.19	.03
Aspirations and Expectations:		
Educational Aspirations	.20	.26
Educational Expectations	.18	.20
Occupational Asp. (Haller)	.39	.15
Occupational Asp. (Blishen)	.20	-.02
Occupational Exp. (Blishen)	.10	.09

their instrumental scores were in the predicted directions, but those between mothers' education and their expressive scores were not.

Examination of the educational values separately reveals negative relationships between level of mothers' education and the boys' mothers' evaluation of the following items: security ($r = -.31$), money ($r = -.16$), prestige ($r = -.14$), career ($r = -.21$), get along with people ($r = -.32$), understand self ($r = -.24$), and good citizen ($r = -.18$, see Appendix C, Table 3). Similarly, mothers' education was found to be negatively related to all eight of the items in the occupational value set (see Appendix C, Table 12). The correlation coefficients for the relationships between the independent variable and the boys' mothers' evaluation of these items were found to be as follows: security ($r = -.26$), money ($r = -.32$), prestige ($r = -.14$), leisure ($r = -.36$), special skills and abilities ($r = -.17$), work with people ($r = -.18$), creative and original ($r = -.32$), and help others ($r = -.29$).

Negative relationships were found between level of mothers' educational attainment and the girls' mothers' instrumental educational ($r = -.16$) and instrumental occupational ($r = -.21$) value scores. No relationships were found between the independent variable and the girls' mothers' expressive value scores.

In reference to the individual educational value items, mothers' educational level was found to be negatively related to the girls' mothers' evaluations of the security ($r = -.16$), money ($r = -.13$) and prestige ($r = -.14$) items (see Appendix C, Table 3). These small coefficients suggest that the higher their level of educational attainment, the less the mothers value their daughters' educations as means of attaining a financially lucrative occupation, and of achieving a secure way of life and a position of prestige in the community. Negative relationships were also noted between the independent variable and the girls' mothers' evaluations of the security ($r = -.22$), money ($r = -.15$), and prestige ($r = -.22$) items in the occupational value set. In addition, weak negative correlations were found between mothers' educational level and the girls' mothers' evaluations of the work with people ($r = -.12$) and help others ($r = -.10$) items (see Appendix C, Table 12).

Opportunity Orientations:

The independent variable was found to be positively related to the boys' mothers' educational ($r = .12$) and occupational ($r = .19$) opportunity orientations. Thus, as hypothesized, the higher the mothers' level of education, the more positive their appraisals of their sons' educational and occupational opportunities. Relationships were not

found between the independent variable and either of the girls' mothers' opportunity orientations.

Aspirations and Expectations:

As shown in Table 12, level of educational attainment was found to be positively related to the mothers' educational aspirations ($r = .20$) and expectations ($r = .18$) for their sons. Similarly, positive relationships were found between the independent variable and the mothers' occupational aspirations (Haller, $r = .39$; Blishen, $r = .20$) and expectations ($r = .10$) for their sons. In essence, these findings suggest that the higher the mothers' level of educational attainment, the higher their educational and occupational aspirations and expectations for their sons.

For the girls' mothers, positive relationships were found between level of mothers' education and their educational aspirations ($r = .26$) and expectations ($r = .20$) for their daughters. It is interesting to note that a weak positive correlation of .15 was found between the independent variable and the girls' mothers' occupational aspirations when the Haller scale was employed, but no relationship was found when Blishen scores were assigned. No relationship was found between the independent variable and the mothers' occupational expectations for their daughters.

In summary it may be said that Hypothesis 12 is

partially supported. Part a holds with regard to the boys' and girls' mothers' instrumental, but not expressive, value scores. Part b of the hypothesis is supported for the boys' mothers, but not girls' mothers. Finally, Part c and d are supported with the exception of the lack of correlations between the independent variable and the mothers' occupational aspirations and expectations for their daughters.

Size of Community of Residence

Hypothesis 13: The larger the community of residence,
a) the more expressive and the less instrumental the educational and occupational values of the mothers;
b) the more positive the educational and occupational opportunity orientations of the mothers;
c) the higher the level of educational and occupational aspirations of the mothers;
d) the higher the level of educational and occupational expectations of the mothers.

Values:

As indicated in Table 13, weak positive relationships were found between size of community of residence and the boys' mothers' expressive educational ($r = .10$) and occupational ($r = .10$) value scores. A weak negative correlation of $-.12$ was found between community size and the boys' mothers' instrumental educational value scores. The directions of these relationships concurred with those hypothe-

TABLE 13

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SIZE OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 4) AND THE DEPENDENT VARIABLES

Size of Community of Residence and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	.10	.03
Instrumental Educational Value Score	-.12	.08
Expressive Occupational Value Score	.10	-.03
Instrumental Occupational Value Score	-.08	.10
Opportunity Orientations:		
Educational Opportunity Orientation	.09	-.16
Occupational Opportunity Orientation	-.05	-.05
Aspirations and Expectations:		
Educational Aspirations	-.07	-.02
Educational Expectations	-.05	-.07
Occupational Asp. (Haller)	.05	.01
Occupational Asp. (Blishen)	.08	-.15
Occupational Exp. (Blishen)	.04	-.25

sized. A noteworthy relationship was not found between the independent variable and the boys' mothers' instrumental occupational value scores.

Inspection of the individual educational values reveals weak positive relationships between size of community of residence and the boys' mothers' evaluations of the two expressive items: develop mind ($r = .11$) and understand self ($r = .16$). In addition, weak negative relationships were found between community size and the boys' mothers' evaluations of the two instrumental items: security ($r = -.13$) and money ($r = -.16$, see Appendix C, Table 4). These coefficients suggest that the larger their community of residence, the more the mothers would like an education to help their sons to develop their minds and understand themselves and the less the boys' mothers value education as a means of attaining a financially beneficial occupation and a secure way of life. Examination of the separate occupational values reveals weak positive relationships between community size and the boys' mothers' evaluations of the two expressive items: work with people ($r = .12$) and creative and original ($r = .10$). In addition, weak negative relationships were found between the independent variable and the boys' mothers' evaluations of the two instrumental items: money ($r = -.12$) and leisure ($r = -.14$, see Appendix C, Table 13). These findings suggest that the larger their community of residence, the more

emphasis the mothers place on the chance to work with people and the chance to be creative and original, and the less emphasis they place on the chance to earn a good deal of money and leisure time as criteria they would like their sons to take into consideration when choosing an occupation.

For the girls' mothers a weak positive relationship of .10 was found between size of community of residence and their instrumental occupational value scores. It is necessary to note that the direction of this association was opposite to that predicted. No relationships were found between community size and any of the girls' mothers' other value scores.

After analysis of the associations between the independent variable and the separate educational and occupational values, the following relationships were revealed. Weak positive correlations were found between community size and the girls' mothers' evaluations of the monetary ($r = .10$) and prestige ($r = .12$) items in the educational value set (see Appendix C, Table 4). Weak relationships were also found between the independent variable and the girls' mothers' evaluations of the monetary ($r = .14$) and work with people ($r = -.11$) items in the occupational value set (see Appendix C, Table 13).

Opportunity Orientations:

No relationships were found to exist between size of community of residence and the mothers' appraisals of their sons' educational and occupational opportunities. For the girls' mothers', community size was found to be negatively related to their educational ($r = -.16$), but not occupational, opportunity orientations.

Aspirations and Expectations:

No noteworthy relationships were found between size of community of residence and the boys' mothers' educational and occupational aspirations and expectations. Similarly, relationships were not found between community size and the girls' mothers' educational aspirations and expectations or their occupational aspirations, when the latter were measured by means of the Haller scale. However, negative relationships were found between the independent variable and the girls' mothers' occupational aspirations ($r = -.15$) and expectations ($r = -.25$), when these were assigned Blishen scores.

On the whole, Hypothesis 13 lacks sufficient support to be accepted in its entirety. Part a is supported with regard to the relationships predicted to exist between community size and the boys' mothers' expressive and instrumental educational value scores and with regard to their expressive, but not

instrumental, occupational value scores. A weak positive relationship was found between size of community of residence and the girls' mothers' instrumental occupational value scores, but this was in a direction opposite to that predicted. Similarly, the negative direction of the relationship between community size and the mothers' appraisals of their daughters' educational opportunities was not anticipated. The negative associations found between size of community of residence and the mothers' occupational aspirations and expectations for their daughters represent interesting inversions of the hypothesized relationships and will be examined more closely in the discussion section of this chapter. In general, the findings presented in Table 13 do not support Parts b, c, and d of Hypothesis 13.

Isolation of Community of Residence

Hypothesis 14: The less isolated the community of residence,
- a) the more expressive and the less instrumental the educational and occupational values of the mothers;
- b) the more positive the educational and occupational opportunity orientations of the mothers;
- c) the higher the level of educational and occupational aspirations of the mothers;
- d) the higher the level of educational and occupational expectations of the mothers.

Values:

Table 14 presents the correlation coefficients for the relationships between isolation of community of residence and the dependent variables. Community isolation was found to be positively related to the boys' mothers' expressive educational value scores (r = .16). Relationships were not found between community isolation and any of the boys' mothers' other summated value scores.

More specifically, positive relationships were found between community isolation and the boys' mothers' evaluations of the monetary (r = .10), prestige (r = .17), develop mind (r = .19), get along with people (r = .13) and understand self (r = .22) items in the educational value set (see Appendix C, Table 5). A weak positive correlation of .10 was found between community isolation and the boys' mothers' evaluations of the prestige item in the occupational value set. This coefficient suggests that the less isolated their community of residence, the less emphasis the mothers would like their sons to place on the amount of prestige provided by a prospective occupation. In addition, a weak negative correlation of -.10 was found between community isolation and the boys' mothers' evaluations of the help others item in the occupational value set (see Appendix C, Table 14). This coefficient suggests that the less isolated their community of residence, the more the mothers would like

TABLE 14

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ISOLATION OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 5) AND THE DEPENDENT VARIABLES

Isolation of Community of Residence and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	.16	-.01
Instrumental Educational Value Score	.09	-.15
Expressive Occupational Value Score	.01	.02
Instrumental Occupational Value Score	-.00	-.05
Opportunity Orientations:		
Educational Opportunity Orientation	-.07	-.11
Occupational Opportunity Orientation	-.01	.01
Aspirations and Expectations:		
Educational Aspirations	-.12	-.06
Educational Expectations	-.09	-.04
Occupational Asp. (Haller)	-.10	.09
Occupational Asp. (Blishen)	.01	-.09
Occupational Exp. (Blishen)	-.06	-.17

their sons to choose occupations that provided them with a chance to help others and contribute to society.

A weak negative relationship of -.15 was found between isolation of community of residence and the girls' mothers' instrumental educational value scores. No relationships were found between community isolation and any of the girls' mothers' other summated value scores.

Community isolation was found to be negatively related to the girls' mothers' evaluations of the educational items: security (r = -.16), money (r = -.21), get along with people (r = -.15) and positively related to the occupational value item: help others (r = .10, see Appendix C, Tables 5 and 14).

Opportunity Orientations:

As was the case with community size, no relationships were found between community isolation and the mothers' appraisals of their sons' educational and occupational opportunities. For the girls' mothers', community isolation was found to be negatively related to their educational (r = -.11), but not occupational, opportunity orientations.

Aspirations and Expectations:

Isolation of community of residence was found to be negatively related to the mothers' educational (r = -.12) and occupational (Haller, r = -.10) aspirations for their

sons. These small coefficients merely suggest that the less isolated their community of residence, the higher the mothers' educational and occupational aspirations for their sons. No appreciable associations were noted between the independent variable and the boys' mothers' educational and occupational expectations or their occupational aspirations, when Blishen scores were utilized to index the latter.

Similarly, noteworthy correlations were not found between community isolation and the girls' mothers' educational expectations or their educational and occupational aspirations. However, a weak negative relationship of -.17 was found between the independent variable and the girls' mothers' occupational expectations.

In general, the findings presented in Table 14 do not lend credence to Hypothesis 14. Part a of the hypothesis is not supported. Relationships were found between community isolation and the boys' mothers' expressive educational value scores and between community isolation and the girls' mothers' instrumental value scores, but these were weak and in directions opposite to those predicted. The sole supportive case for Part b is the weak negative relationship found between community isolation and the mothers' appraisals of their daughters' educational opportunities. Part c of the hypothesis is supported with respect to the boys' mothers', but not girls' mothers, educational and occupational aspira-

tions. Part d is supported only with respect to the mothers' occupational expectations for their daughters.

Fathers' Encouragement for Continuing Education
(As Perceived by the Students)

Hypothesis 15: The stronger the fathers' encouragement for post-high school education,
a) the more expressive and the less instrumental the educational and occupational values of the mothers;
b) the more positive the educational and occupational opportunity orientations of the mothers;
c) the higher the level of educational and occupational aspirations of the mothers;
d) the higher the level of educational and occupational expectations of the mothers.

Values:

As shown in Table 15, only the boys' mothers' instrumental educational value scores were found to be related to the boys' perceptions of paternal encouragement for continuing education ($r = -.10$). No relationships were found between the independent variable and the boys' mothers' other summated value scores.

With regard to the separate educational values, relationships were found between strength of fathers' encouragement for continuing education and the boys' mothers' evaluation of the security ($r = -.21$), monetary ($r = -.12$) and develop mind ($r = .13$) items (see Appendix C, Table 6).

TABLE 15

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 6) AND THE DEPENDENT VARIABLES

Strength of Fathers' Encouragement for Continuing Education and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	.05	-.06
Instrumental Educational Value Score	-.10	-.03
Expressive Occupational Value Score	-.06	.01
Instrumental Educational Value Score	-.09	-.00
Opportunity Orientations:		
Educational Opportunity Orientation	-.05	-.05
Occupational Opportunity Orientation	-.01	-.03
Aspirations and Expectations:		
Educational Aspirations:	.19	.08
Educational Expectations	.02	.15
Occupational Asp. (Haller)	.29	.27
Occupational Asp. (Blishen)	.24	.05
Occupational Exp. (Blishen)	.22	-.03

Weak negative relationships were found between the independent variable and the boys' mothers' evaluations of the security ($r = -.18$), special skills and abilities ($r = -.12$) and help others ($r = -.10$) items in the occupational value set (see Appendix C, Table 15).

Relationships were not found between strength of fathers' encouragement for continuing education and any of the girls' mothers' summated value scores.

However, an examination of the individual educational values reveals a weak negative relationship of $-.14$ between the independent variable and the girls' mothers' evaluations of the expressive item - develop mind (see Appendix C, Table 6). No relationships were found between strength of fathers' encouragement and the girls' mothers' evaluations of any of the occupational value items.

Opportunity Orientations:

No relationships were found between strength of fathers' encouragement for continuing education and the mothers' appraisals of their sons' and/or daughters' educational and occupational opportunities.

Aspirations and Expectations:

Strength of fathers' encouragement for continuing education was found to be positively related to the boys' mothers'

educational (r = .19) and occupational (Haller, r = .29; Blishen, r = .24) aspirations and to their occupational expectations (r = .22). A relationship was not found between the independent variable and the mothers' educational expectations for their sons.

Positive relationships were found between fathers' encouragement for continuing education and the girls' mothers' educational expectations (r = .15) and occupational aspirations (Haller, r = .27). Relationships were not found between the independent variable and the girls' mothers' educational and occupational expectations or their occupational aspirations, when the Blishen Index was employed to measure the latter.

At this point, a few summary statements are necessary to place Hypothesis 15 in perspective. The weak negative relationship found between strength of fathers' encouragement for continuing education and the boys' mothers' instrumental educational value scores constitutes the singular supportive case for part a. Since no relationships were found between the independent variable and the mothers' appraisals of their sons' and/or daughters' educational and occupational opportunities, Part b remains unsubstantiated. For the boys' mothers, Part c of the hypothesis is supported. Similarly, for the girls' mothers, Part c is supported with the exception of the lack of relationships between the independent variable and their educational and occupational aspirations, when the latter were

assigned Blishen scores. Recognition must be given to the positive relationship found between strength of fathers' encouragement for continuing education and the girls' mothers' occupational aspirations measured by the Haller scale. In addition, Part d of the hypothesis is supported with respect to the mothers' occupational, but not educational, expectations for their sons. For the girls' mothers the reverse occurs in that Part d is supported with respect to their educational, but not occupational, expectations.

Mothers' Encouragement for Continuing Education
(As Perceived by the Students)

Hypothesis 16: The stronger the mothers' encouragement for post-high school education,
a) the more expressive and the less instrumental their educational and occupational values;
b) the more positive their educational and occupational opportunity orientations;
c) the higher the level of their educational and occupational aspirations;
d) the higher the level of their educational and occupational expectations.

Values:

From Table 16 it can be seen that a weak positive correlation of .14 was found between the boys' perceptions of maternal encouragement for continuing education and their mothers' expressive educational value scores. This relationship was in the direction hypothesized. No appreciable

TABLE 16

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 7) AND THE DEPENDENT VARIABLES

Strength of Mothers' Encouragement for Continuing Education and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	.14	.02
Instrumental Educational Value Score	-.06	-.05
Expressive Occupational Value Score	-.06	.16
Instrumental Occupational Value Score	-.04	-.02
Opportunity Orientations:		
Educational Opportunity Orientation	-.02	-.01
Occupational Opportunity Orientation	-.00	.06
Aspirations and Expectations:		
Educational Aspirations	.17	.04
Educational Expectations	.08	.01
Occupational Asp. (Haller)	.13	.24
Occupational Asp. (Blishen)	.19	.04
Occupational Exp. (Blishen)	.14	.07

associations were found between the independent variable and the boys' mothers' other summated value scores.

More specifically, positive relationships were noted between the independent variable and the boys' mothers' evaluations of the develop mind (r = .22), get along with people (r = .16), and understand self (r = .11) items in the educational value set (see Appendix C, Table 7). On the other hand, a weak negative correlation of -.10 was found between the independent variable and the boys' mothers' evaluations of the special skills and abilities item in the occupational value set (see Appendix C, Table 16).

The girls' perceptions of maternal encouragement for continuing education were found to be positively related to their mothers' expressive occupational value scores. Relationships were not found between the independent variable and any of the girls' mothers' other value scores.

Inspection of the individual items included in the educational value set reveals a weak negative correlation of -.12 between the independent variable and the girls' mothers' evaluations of the prestige item, and a weak positive correlation of .11 between the independent variable and their evaluations of the career item (see Appendix C, Table 7). With regard to the occupational values examined separately, weak positive relationships were found between the girls' perceptions of maternal encouragement and their mothers'

evaluations of the security (r = .19), special skills and abilities (r = .17), work with people (r = .19) and help others (r = .19) items. In addition, weak negative relationships were found between the independent variable and the girls' mothers' evaluations of the prestige (r = -.10) and leisure (r = -.10) items (see Appendix C, Table 16).

Opportunity Orientations:

No relationships were found between the students' perceptions of strength of maternal encouragement and the mothers' appraisals of their sons' and/or daughters' educational and occupational opportunities.

Aspirations and Expectations:

As indicated in Table 16, weak positive relationships were found between the boys' perceptions of maternal encouragement for continuing education and their mothers' educational (r = .17) and occupational (Haller, r = .13; Blishen, r = .19) aspirations and occupational expectations (r = .14). In addition, a positive relationship was found between the independent variable and the mothers' occupational aspirations for their daughters (Haller, r = .24).

It is necessary to note that only certain segments of Hypothesis 16 are supported by the above mentioned findings. Part a, for example, is supported with respect to the boys'

mothers' expressive educational value scores and the girls' mothers' expressive occupational value scores. Since no relationships were found between the students' perceptions of maternal encouragement for continuing education and the mothers' appraisals of their sons' and/or daughters' opportunities, Part b remains unsubstantiated. For the boys' mothers, Part c of the hypothesis is supported. For the girls' mothers, the only supportive case for Part c is the positive relationship found between the independent variable and their occupational aspirations for their daughters. Part d holds for the boys' mothers' occupational, but not educational, expectations. For the girls' mothers, however, the data do not support Part d of the hypothesis.

Fathers' Encouragement for Occupational Achievement
(As Perceived by the Students)

Hypothesis 17: The stronger the fathers' encouragement for occupational achievement,
a) the more expressive and the less instrumental the educational and occupational values of the mothers;
b) the more positive the educational and occupational opportunity orientations of the mothers;
c) the higher the level of educational and occupational aspirations of the mothers;
d) the higher the level of educational and occupational expectations of the mothers.

Values:

As shown in Table 17, no relationships were found between the boys' perceptions of paternal encouragement for occupational achievement and any of their mothers' summated value scores.

Analysis of the educational values separately, however, reveals a weak positive relationship of .15 between the independent variable and the boys' mothers' evaluations of the prestige item (see Appendix C, Table 8). Examination of the individual occupational values shows that a weak negative relationship of -.17 was found between the boys' perceptions of paternal encouragement and their mothers' evaluations of the security item. In addition, weak positive relationships were found between the independent variable and the boys' mothers' evaluations of the prestige ($r = .10$) and leisure ($r = .10$) items (see Appendix C, Table 17).

A weak negative correlation of -.10 was found between the girls' perceptions of paternal encouragement and their mothers' expressive educational value scores. Relationships were not found between the independent variable and any of the girls' mothers' other summated value scores.

Examination of the educational values reveals a weak negative association of -.16 between the independent variable and the girls' mothers' evaluations of the get along with

TABLE 17

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 8) AND THE DEPENDENT VARIABLES

Strength of Fathers' Encouragement for Occupational Achievement and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	-.01	-.10
Instrumental Educational Value Score	-.00	.04
Expressive Occupational Value Score	.01	-.01
Instrumental Occupational Value Score	.00	-.03
Opportunity Orientations:		
Educational Opportunity Orientation	.15	.06
Occupational Opportunity Orientation	.12	.10
Aspirations and Expectations:		
Educational Aspirations	.17	-.07
Educational Expectations	.13	-.15
Occupational Asp. (Haller)	.30	.11
Occupational Asp. (Blishen)	.02	.13
Occupational Exp. (Blishen)	.08	.13

people item (see Appendix C, Table 8). No relationships were found between the independent variable and the girls' mothers' evaluations of the items included in the occupational value set.

Opportunity Orientations:

As indicated in Table 17, positive relationships were found between the boys' perceptions of their fathers' encouragement for occupational achievement and the mothers' appraisals of their sons' educational ($r = .15$) and occupational ($r = .12$) opportunities. Relationships were not found between the independent variable and the mothers' appraisals of their daughters' opportunities.

Aspirations and Expectations:

The boys' perceptions of strength of paternal encouragement for occupational achievement were found to be positively related to their mothers' educational aspirations ($r = .17$) and expectations ($r = .13$). Similarly, a positive correlation was found between the independent variable and the boys' mothers' occupational aspirations (Haller, $r = .30$). No relationships were found between the boys' perceptions of paternal encouragement for occupational achievement and their mothers' occupational expectations and aspirations, when these

were assigned by means of the Blishen Index.

Unlike the boys' mothers', a relationship was not found between the independent variable and the girls' mothers' educational aspirations. Relationships were found between the independent variable and the girls' mothers' educational ($r = .15$) and occupational ($r = .13$) expectations and their occupational aspirations (Haller, $r = .11$; Blishen, $r = .13$).

As can be seen from the correlation coefficients presented in Table 17, certain specific sections of Hypothesis 17 are supported. Part a of the hypothesis remains unsubstantiated. A relationship was found between the independent variable and the girls' mothers' expressive educational value scores, but it was in a direction opposite to that predicted. Part b is supported with respect to the boys' mothers', but not girls' mothers', educational and occupational opportunity orientations. Part c of the hypothesis is supported with respect to the boys' mothers' educational and occupational aspirations, when the latter were measured by means of the Haller scale. For the girls' mothers, Part c is supported for their occupational, but not educational, aspirations. Part d of the hypothesis holds for the boys' mothers' educational, but not occupational expectations. For the girls' mothers' the reverse pattern prevails in that Part d holds with respect to their occupational, but not educational expectations.

Mothers' Encouragement for Occupational Achievement
(As Perceived by the Students)

Hypothesis 18: The stronger the mothers' encouragement for occupational achievement,
a) the more expressive and the less instrumental their educational and occupational values;
b) the more positive their educational and occupational opportunity orientations;
c) the higher the level of their educational and occupational aspirations;
d) the higher the level of their educational and occupational expectations.

Values:

The boys' perceptions of strength of maternal encouragement for occupational achievement were found to be positively related to their mothers' expressive ($r = .10$) and instrumental ($r = .12$) educational value scores. The direction of the relationship between the independent variable and the boys' mothers' expressive scores was as anticipated, but the direction of the relationship between the independent variable and the boys' mothers' instrumental value scores was not. Relationships were not found between the boys' perceptions of maternal encouragement for occupational achievement and their mothers' expressive and instrumental occupational value scores.

A review of the separate items comprising the educational value set reveals weak positive relationships between the independent variable and the boys' mothers'

TABLE 18

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 9) AND THE DEPENDENT VARIABLES

Strength of Mothers' Encouragement for Occupational Achievement and -	Boys' Mothers r	Girls' Mothers r
Values:		
Expressive Educational Value Score	.10	.03
Instrumental Educational Value Score	.12	.09
Expressive Occupational Value Score	-.01	.12
Instrumental Occupational Value Score	.03	.06
Opportunity Orientations:		
Educational Opportunity Orientation	.17	-.10
Occupational Opportunity Orientation	.18	.05
Aspirations and Expectations:		
Educational Aspirations	.13	-.02
Educational Expectations	.14	-.12
Occupational Asp. (Haller)	.14	-.03
Occupational Asp. (Blishen)	.13	.10
Occupational Exp. (Blishen)	.13	-.10

evaluations of the security (r = .15), prestige (r = .12), and get along with people (r = .11) items (see Appendix C, Table 9). Furthermore, the boys' perceptions of maternal encouragement were found to be positively related to their mothers' evaluations of the leisure (r = .12) and creative and original (r = .16) items in the occupational value set (see Appendix C, Table 18).

A weak positive association of .12 was found between the girls' perceptions of maternal encouragement for occupational achievement and their mothers' expressive occupational value scores. Relationships were not found between the independent variable and any of the girls' mothers' other summated value scores.

More specifically, weak positive relationships were found between the independent variable and the girls' mothers' evaluations of the security (r = .16) and monetary (r = .11) items in the educational value set (see Appendix C, Table 9). Examination of the individual occupational values reveals weak positive relationships between the girls' perceptions of maternal encouragement and their mothers' evaluations of the following items: security (r = .12), money (r = .12), special skills and abilities (r = .12) and work with people (r = .15, see Appendix C, Table 18).

Opportunity Orientations:

As shown in Table 18, weak positive relationships were found between the boys' perceptions of strength of maternal encouragement for occupational achievement and their mothers' educational and occupational opportunity orientations. On the other hand, a weak negative correlation of -.10 was found between the independent variable and the mothers' appraisals of their daughters' educational opportunities.

A relationship was not found between the independent variable and the mothers' appraisals of their daughters' occupational opportunities.

Aspirations and Expectations:

The boys' perceptions of maternal encouragement were found to be positively related to their mothers' educational aspirations ($r = .13$), educational expectations ($r = .14$), occupational aspirations (Haller, $r = .14$; Blishen, $r = .13$) and occupational expectations ($r = .13$). For the girls' mothers, weak negative relationships were noted between the independent variable and their educational ($r = -.12$) and occupational ($r = -.10$) expectations for their daughters. A weak positive correlation was found between the girls' perceptions of maternal encouragement for occupational achievement and the mothers' occupational aspirations for

their daughters (Blishen, r = .10). Appreciable associations were not found between the independent variable and the girls' mothers' educational and occupational aspirations, when the latter were measured by means of the Haller scale.

In essence, the findings presented in Table 18 provide partial support for Hypothesis 18. Part a, for example, is supported with reference to the boys' mothers' expressive educational value scores and the girls' mothers' expressive occupational value scores. Part b of the hypothesis holds for the boys' mothers, but not for the girls' mothers. The positive relationships found between the independent variable and the boys' mothers' aspirational and expectational variables support Parts c and d of the hypothesis. For the girls' mothers, however, the weak positive relationship between the independent variable and their occupational aspirations constitutes the singular supportive case for Part c. Part d remains unsubstantiated in that a negative, rather than the predicted positive, relationship was found between the independent variable and the mothers' educational expectations for their daughters. In addition, a relationship was not found between the girls' perceptions of maternal encouragement for occupational achievement and the mothers' occupational expectations for their daughters.

Discussion

Throughout the discussion section of Chapter VI consistency with or divergence from the findings of previous studies was pointed out. Due to the lack of parallel past research for mothers, this discussion will concentrate on delineating similar, as well as dissimilar, patterns of relationships between the independent and dependent variables for the students' and mothers' data.

Socio-economic Status

Looking first at the analysis for socio-economic status effects it is clear that, unlike the case for the students, the hypothesized inverse variation occurred with respect to the boys' mothers' instrumental occupational values and the girls' mothers' instrumental educational and occupational values (cf. Mizruchi, 1964: 78-81; Meier, 1970: 77-85; Perrone, 1965: 255).[16] Thus, the lower their socio-economic status the more inclined the mothers appear to be toward instrumental value orientations (that is, valuation of an item as a means to further ends - Kluckhohn, 1959: 413).

16. This finding also concurs with the results of the studies cited in the preceding chapter in support of the hypothesized inverse relationship between socio-economic status and the respondents' instrumental value orientations (for example, Goldsen et al., 1960: 14-16; Anderson and Safar, 1967: 226; Centers, 1949; Stephenson, 1957: 205; Simpson and Simpson, 1960: 119; Schwarzweller, 1960: 133; Thompson, 1966: 851). The three studies referred to here received priority because they dealt with parents in particular.

The higher their socio-economic status the less both sets of mothers value education as a means of attaining a secure way of life. In addition, the higher their socio-economic status the less important the mothers would like the security criteria to be to their daughters when choosing an occupation. These findings, in conjunction with those of Centers (1949), Stephenson (1957), Schwarzweller (1960) and Thompson (1966), tend to indicate that the job value of security is more important to lower strata respondents than to those having higher socio-economic status. This is in keeping with Maslow's theory of motivation hierarchies (1954) which suggests that more affluent respondents, free from stringent breadwinning demands, do not have to concentrate on security per se and thus can free themselves for consideration of an occupation in terms of its intrinsic value and hence facilitate self-actualization processes.

Negative relationships were noted between socio-economic status and the girls' and girls' mothers' ratings of the prestige item in both the educational and occupational value sets. The higher their socio-economic status the less importance the female respondents, from both generations, attached to education and an occupation as means for obtaining a recognized social position in the community. Perhaps higher status mothers visualize more viable alternatives for accruing prestige. For example, a well-chosen circle of friends may

enhance their daughter's social standing more than her education or occupation. Society, in general, is more concerned with assessing the prestige of "male" occupations than "female" occupations (as evidenced by the lack of formalized instruments for scaling or indexing the prestige dimension of occupations classified, in accordance with cultural stereotypes, as being appropriate for women). Perhaps keeping in mind that an adolescent girl's status is ascribed according to her family's social standing; that a girl's occupation is generally regarded as a temporary or transitional phase in her life span prior to marriage (Elder, 1963: 39); and that her future status will be assigned on the basis of her husband's occupational level, girls and mothers from higher strata do not consider a girl's occupation to be crucial for the allotment of prestige or the attainment of security. Lower status respondents, on the other hand, may be more inclined to regard a girl's occupation as a means of surpassing her ascribed social position and supplementing her security.

Downey reported that Canadians, in contrast to Americans, do not stress citizenship, patriotism and the enhancement of social skills as educational purposes (Downey, 1960: 213-214). The present study found that the higher their socio-economic status the less emphasis the boys' mothers placed on education as an aid in developing good citizens. Thus, this finding supports the application of Downey's general assertion to a

specific segment of Canadian society. Perhaps the individualistic viewpoint attributed to the Canadians by Downey also accounts for the negative correlation found between socio-economic status and the boys' mothers' rating of the help others item in the occupational value set.

Unlike the positive correlation found between socio-economic status and the boys' evaluation of education as a means of getting a good paying job, a negative relationship was noted between socio-economic status and the importance the boys' mothers attached to income as a criteria to be taken into consideration when selecting an occupation. Like the present study, Meier's findings indicated that, in striking contrast to the parental pattern, male students tend to be less inclined toward extrinsic rewards the lower their status level (Meier, 1970: 79). It is conceivable that the direct relationship resulting in the analysis of the boys' data could be a function of the predominantly middle and lower class composition of the population studied (see Appendix A, Table 3). Ever since Weber posited the existence of the Protestant Ethic (Weber, 1904-5; translated 1958), the drive to excel and the accumulation of capital accompanying it have been associated with members of the middle class (Rosen, 1956: 204; Mack, Murphy and Yellin, 1956: 298). This explanation, however, would not account for the inverse relationship noted between socio-economic status

and the boys' mothers' evaluations of the monetary item in the occupational value set. Possibly mothers from higher strata assigned less importance to occupational income than lower status mothers because they saw that their sons could derive finances from other sources, for example: inheritance, trust funds, etc. The boys, on the other hand, might spurn such sources and stress salary precisely because it provides economic independence. The differing directions of the relationships found for the boys and mothers may indicate that adherence to instrumental values is the result of paternal rather than maternal influence. This suggestion is in keeping with Parsons' assertion that parental role configurations are at least roughly differentiated on an instrumental-expressive axis (Parsons, 1955: Chapter II).

As was the case with boys' mothers, the higher their socio-economic status the less emphasis the girls' mothers placed on pecuniary occupational rewards. The occurrence of this relationship supported the expectations of this study, but differed from Perrone's finding of a positive correlation between fathers' occupational level and parents' ratings of how important they felt a good income should be for their daughter in her career decision (Perrone, 1965: 255). These directionally opposite relationships might be accounted for by the fact that the present research concentrated on ascertaining mothers' ratings of the values (For reasons

outlined previously, fathers were not included in the population studied), whereas Perrone considered mothers' and fathers' ratings jointly. His employment of "parent-pairs" as single units of analysis might have obscured differences (possibly deriving from differential role commitments) which may be discovered if mothers' and fathers' evaluations are examined separately. Consequently, it appears feasible for future researchers to attempt a comparative analysis of mothers' and fathers' ratings in order to determine the amount of congruency prevailing in the parental diad with reference to occupational values.

The historical roots of the sociology of education stemmed from concern with educational inequalities between social classes (Floud and Halsey, 1958: 166). The data at hand indicate that perceived inequalities in educational opportunities persist and are present in the population being studied. As was the case with the students, the lower their socio-economic status the more inclined the mothers are to consider their children's educational opportunities to be circumscribed. A direct relationship was also noted between socio-economic status and the mothers' appraisals of their sons' occupational opportunities.

As noted in the preceding chapter, of particular importance to the current discussions are the numerous studies which have examined the significance of socio-economic

status for the educational and occupational preferences and plans of adolescents. With few exceptions these studies have concluded that differences in social class will lead to variations in the kinds of attitudes and expectations transmitted from parent to child. The positive correlations found between socio-economic status and the mothers' educational aspirations and expectations for their sons and daughters lend credence to the contention that parents in higher socio-economic status positions, in contrast to those in lower socio-economic statuses, are more inclined to desire and expect their children to achieve high levels of educational attainment (cf. Rosen, 1956; Ausubel, 1958; Swinehart, 1963; Bordua, 1960).

As was the case for the boys, the higher their socio-economic status the higher the mothers' occupational aspirations and expectations for their sons. For the girls' mothers, no relationship was noted between socio-economic status and their occupational aspirations, but a positive correlation was found between socio-economic status and their occupational expectations for their daughters. These findings suggest that the mothers, despite their differing socio-economic statuses, have similar occupational aspirations for their daughters but that their expectations, with respect to their daughters' occupational attainments, tend to reflect their own positions in the stratification system. Furthermore,

this pattern, which parallels the one found between socio-economic status and the boys' educational aspirations and expectations (i.e. the boys' educational plans, but not their aspirations, varied with their socio-economic status) provides additional support for the aspiration-plan distinction (Empey, 1956; Stephenson, 1955 and 1957; Morland, 1960; Weiner and Murray, 1963; Bennett and Gist, 1964) and lends credence to Stephenson's conclusion that "plans or expectations are more definitely class based and hence, may reflect class differences in opportunity and general life chances" (Stephenson, 1957: 212). Comparison of the patterns of relationships between socio-economic status and the dependent variables at both generational levels reveals that the overall status effects are slightly more pronounced for the mothers than for the students (cf. Meier, 1970: 77).

Parents' Educational Levels

Like the pattern of relationships noted in the students' data, the relationships found between the parents' educational levels and the mothers' values, opportunity orientations, aspirations and expectations generally parallel those found between socio-economic status and these dependent variables. All three variables (socio-economic status, fathers' education and mothers' education) were found to be negatively related to the boys' mothers' instrumental occupational value

orientations and positively related to the mothers' occupational aspirations (as indexed by both Blishen and Haller scores) for their sons. Similarly, these three variables were all found to be negatively related to the girls' mothers' instrumental educational and occupational value orientations and positively related to the mothers' educational aspirations and expectations for their daughters.

Furthermore, the positive relationships found between the boys' mothers' educational levels and their educational and occupational opportunity orientations, their educational aspirations and expectations, and their occupational expectations parallel the relationships found between socio-economic status and these variables. The positive correlation found between fathers' education and the girls' mothers' occupational expectations parallels that found between socio-economic status and the mothers' occupational expectations for their daughters.

However, the boys' mothers' instrumental educational and expressive educational and occupational value orientations, along with the girls' mothers' levels of occupational aspiration (as measured by the OAS), were found to be correlated with mothers' educational levels but not with familial socio-economic status or fathers' educational levels. These findings suggest that mothers' education exerts some influence independent of its interaction with fathers' education and socio-

economic status. Similarly, the girls' mothers' expressive occupational value orientations were found to be correlated with fathers' educational levels, but not with socio-economic status or mothers' educational levels. This finding suggests that fathers' education has some influence apart from its association with socio-economic status.

Similar negative relationships were noted between fathers' education and the boys' and boys' mothers' ratings of the importance of the leisure item in the occupational value set. The higher the fathers' level of educational attainment the less the boys and boys' mothers emphasized the amount of leisure time provided by a prospective occupation. Likewise, the higher the fathers' educational level the lower the girls' and girls' mothers' ratings of the prestige item in the occupational value set.

In addition, similar negative relationships were found between level of mothers' education and the boys' and boys' mothers' evaluations of the expressive occupational item - helping others; and between level of mothers' education and the girls' and both sets of mothers' instrumental educational and occupational value orientations.

CHAPTER VIII

PRESENTATION OF FINDINGS ON THE RELATIONSHIPS BETWEEN THE STUDENTS' AND MOTHERS' VALUES, OPPORTUNITY ORIENTATIONS, ASPIRATIONS AND EXPECTATIONS

The third section of this study endeavored to determine whether relationships exist between the twelfth grade students' educational and occupational values, opportunity orientations, aspirations and expectations and the values, opportunity orientations, aspirations and expectations their mothers have for them. This chapter presents the findings pertinent to the above stated purpose. Essentially the same format is followed as that in the two previous chapters. However, the discussion portions present additional information derived for the express purpose of elucidating the results.

Hypothesis 19: The students' ratings of the educational and occupational values are positively related to their mothers' ratings of these values.

Values:

The correlation coefficients between 203 students' (94 boys and 109 girls) value scores and those of their mothers are given in Table 19. Positive correlations were found between the boys' and their mothers' instrumental educational ($r = .19$) and expressive occupational ($r = .11$) value scores. No noteworthy relationships were found

TABLE 19

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STUDENTS' EDUCATIONAL AND OCCUPATIONAL VALUES, OPPORTUNITY ORIENTATIONS, ASPIRATIONS AND EXPECTATIONS AND THOSE OF THEIR MOTHERS

Dependent Variables	Boys and their Mothers r	Girls and their Mothers r
Values:		
Expressive Educational Value Score	.07	.31
Instrumental Educational Value Score	.19	.35
Expressive Occupational Value Score	.11	.28
Instrumental Occupational Value Score	.02	.31
Opportunity Orientations:		
Educational Opportunity Orientation	.14	.17
Occupational Opportunity Orientation	.11	.25
Aspirations and Expectations:		
Educational Aspirations	.44	.51
Educational Expectations	.49	.55
Occupational Asp. (Haller)	.34	.53
Occupational Asp. (Blishen)	.30	.38
Occupational Exp. (Blishen)	.49	.71

between the boys' expressive educational and instrumental occupational value scores and those of their mothers.

Examination of the separate educational values reveals positive correlations between the boys' and their mothers' evaluations of the security (r = .17), prestige (r = .33), and develop mind (r = .11) items (see Table 20-A). Inspection of the individual items comprising the occupational value set reveals positive relationships between the boys' and their mothers' ratings of the following: prestige (r = .22), leisure (r = .10), work with people (r = .24) and help others (r = .17,see Table 20-B).

In addition relationships were found between all four of the mothers' and daughters' value scores. More specifically, positive correlations were found between the girls' and their mothers' expressive (r = .31) and instrumental (r = .35) educational value scores and between their expressive (r = .28) and instrumental (r = .31) occupational value scores.

Examination of the educational values separately reveals positive correlations between the girls' and their mothers' ratings of the security (r = .35), monetary (r = .16), prestige (r = .31), career (r = .13), get along with people (r = .27), understand self (r = .35) and good citizen (r = .26) items (see Table 20-A). Similarly, with regard to the occupational values, positive correlations were found

TABLE 20-A

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STUDENTS' AND MOTHERS' RATINGS OF EDUCATIONAL VALUES

Educational Values	Boys and their Mothers r	Girls and their Mothers r
Instrumental:		
Security	.17	.35
Money	.02	.16
Prestige	.33	.31
Career	-.04	.13
Expressive:		
Develop mind	.11	.07
Get along with people	-.08	.27
Understand self	.06	.35
Good citizen	.07	.26

TABLE 20-B

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STUDENTS' AND MOTHERS' RATINGS OF OCCUPATIONAL VALUES

Occupational Values	Boys and their Mothers r	Girls and their Mothers r
Instrumental:		
Security	-.09	.40
Money	.05	.37
Prestige	.22	.23
Leisure	.10	.13
Expressive:		
Special skills and abilities	.06	.16
Work with people	.24	.38
Creative and original	.07	.23
Help others	.17	.33

between the mothers' and daughters' evaluations of the security (r = .40), monetary (r = .37), prestige (r = .23), leisure (r = .13), special skills and abilities (r = .16), work with people (r = .38), creative and original (r = .23) and help others (r = .33) items (see Table 20-B).

Discussion

In referring to Tables 20-A and 20-B, it can be seen that there were positive correlations between sons' and mothers' ratings of three educational and four occupational values. Furthermore, positive correlations were found between daughters and mothers on seven educational and eight occupational values. There appears to be a closer correspondence between mother and daughter ratings than between mother and son.

The above mentioned correlation coefficients satisfy the writer's intention of ascertaining the amount of agreement between the students' ratings of educational and occupational values and those of their mothers, but confine further discussion to statements on the presence or absence of congruency per se. From the findings presented thus far one does not know about the nature of the agreement, that is, whether the students and their mothers agreed that the value items involved are important or unimportant; are to be given high or low priority when delineating what is to be derived from an education or what constitutes a salient

consideration in job selection.

To examine the idea of importance, typal hierarchies of educational and occupational values were constructed by ordering the respondents' mean scores for each value item (see Dipboye and Anderson, 1959; Gribbons and Lohnes, 1965). The resultant rankings given to the eight educational and eight occupational values for the students and their mothers are found in Tables 21-A and 21-B. Separate orderings are presented for the total number of students studied (319) and for those students whose mothers responded (203). With the exception of three slight inversions, the patterns established by the larger group are replicated by the smaller. Because the correlation coefficients presented in this chapter were based on the value ratings of the 203 students and their mothers, the discussion will refer only to their orderings.

A few general remarks are in order before specific comparisons are made. Despite the limitations inherent in the utilization of mean scores, it was felt that these rankings would provide some insight into the previously reported relationships. In addition, it is necessary to note that, with the exception of the prestige items, the mean scores for all values are fairly high. The respondents considered fourteen out of sixteen values to be within the "important" to "very important" range. Thus, in the follow-

TABLE 21 A

THE ORDERING OF EDUCATIONAL VALUES BY GRADE TWELVE STUDENTS AND THEIR MOTHERS

Values		Boys N - 158	Boys N - 94	Boys' Mothers N - 94	Girls N - 161	Girls N - 109	Girls' Mothers N - 109
Instrumental							
Security	M.	7.01 (3)	7.24 (3)	7.63 (3)	7.02 (5)	7.15 (5)	7.48 (4)
	S.D.	2.10	1.85	2.06	2.07	2.00	2.05
Money	M.	7.29 (1)	7.62 (1)	7.35 (6)	7.20 (4)	7.28 (4)	7.12 (7)
	S.D.	1.98	1.71	2.23	1.96	1.85	2.21
Prestige	M.	3.68 (8)	3.82 (8)	4.57 (8)	3.44 (8)	3.28 (8)	4.39 (8)
	S.D.	2.47	2.44	2.51	2.46	2.40	2.81
Career	M.	7.13 (2)	7.31 (2)	8.07 (1)	7.70 (1)	7.83 (1)	7.92 (1)
	S.D.	2.12	1.97	1.91	1.74	1.70	1.96
Expressive							
Develop mind	M.	6.68 (4)	6.95 (4)	7.90 (2)	7.27 (2)	7.33 (3)	7.83 (2)
	S.D.	2.18	2.01	2.15	1.97	1.84	1.98
Get along with people	M.	6.36 (5)	6.62 (5)	7.55 (4)	7.26 (3)	7.40 (2)	7.57 (3)
	S.D.	2.14	2.01	2.28	1.96	1.78	2.12
Understand self	M.	5.62 (6)	5.79 (6)	7.34 (7)	6.46 (6)	6.54 (6)	7.30 (6)
	S.D.	2.40	2.37	2.50	2.42	2.39	2.16
Good citizen	M.	4.96 (7)	5.33 (7)	7.39 (5)	5.42 (7)	5.59 (7)	7.46 (5)
	S.D.	2.59	2.39	2.40	2.47	2.45	2.21

TABLE 21 B

THE ORDERING OF OCCUPATIONAL VALUES BY GRADE TWELVE STUDENTS AND THEIR MOTHERS

Values		Boys N - 158	Boys N - 94	Boys' Mothers N - 94	Girls N - 161	Girls N - 109	Girls' Mothers N - 109
Instrumental							
Security	M.	7.32 (1)	7.62 (1)	7.82 (2)	7.19 (3)	7.28 (1)	7.30 (3)
	S.D.	2.16	1.96	2.07	2.05	2.04	2.29
Money	M.	6.83 (3)	6.88 (3)	6.33 (6)	6.30 (5)	6.29 (5)	5.67 (6)
	S.D.	2.13	2.05	2.30	2.38	2.43	2.62
Prestige	M.	3.91 (8)	3.96 (8)	4.48 (8)	3.75 (8)	3.49 (8)	4.12 (8)
	S.D.	2.43	2.38	2.67	2.51	2.42	2.82
Leisure	M.	6.15 (5)	6.05 (7)	6.12 (7)	5.36 (7)	5.39 (7)	5.45 (7)
	S.D.	2.42	2.29	2.55	2.27	2.33	2.65
Expressive							
Special skills and abilities	M.	7.20 (2)	7.23 (2)	8.14 (1)	7.18 (4)	7.21 (4)	7.90 (1)
	S.D.	2.09	2.07	1.89	1.95	1.97	2.02
Work with people	M.	6.29 (4)	6.38 (4)	6.69 (4)	7.41 (1)	7.26 (3)	7.28 (4)
	S.D.	2.43	2.51	2.43	2.02	2.09	2.08
Creative and original	M.	6.08 (6)	6.13 (6)	6.67 (5)	6.20 (6)	6.06 (6)	6.66 (5)
	S.D.	2.31	2.21	2.12	2.07	2.05	2.50
Help others	M.	5.99 (7)	6.28 (5)	7.41 (3)	7.40 (2)	7.27 (2)	7.66 (2)
	S.D.	2.20	2.23	2.25	1.87	1.87	2.21

ing discussion when certain values are referred to as being more important than others, it must be kept in mind that the discriminations being made are fairly fine. In particular, the girls' mothers' mean scores on the educational values are rather uniform. However, the other means are more amenable to ordering and thus the ranks more clear-cut on the other value sets.

In referring to Table 21-A (in conjunction with Table 20-A) it can be seen that mothers and sons agree on the importance of an education as a means of attaining a secure way of life and developing one's mind. They also agree on the unimportance of an education as a means of obtaining prestige and social standing.

Mothers and daughters agree on the importance of an education for providing the knowledge and skills applicable to a career. Similarly, they agree on the importance of the expressive educational values: develop mind and get along with people. Economic independence, self-understanding and good citizenship are designated as moderately important. As was the case with the boys and their mothers, prestige is relegated to the position of least importance.

The congruence between mothers and daughters in according high priority to the instrumental educational value of career preparation runs counter to Meier's prediction of generational differences in value orientations due to a

decided shift in young people's educational values away from the prevailing instrumentally slanted view espoused by their parents. It is interesting to note that in his own study, Meier's hypothesis of a generation gap in educational goal orientations was confidently supported with respect to fathers only. He concluded that student-paternal divergence with respect to instrumental orientations exceeded to a surprising degree student-maternal divergence (Meier, 1970: 78). In the present study convergence, rather than divergence, was found between the boys and their mothers on two out of four instrumental educational values (security and prestige); and between the girls and their mothers on all four instrumental educational values.

Furthermore, by referring to Table 21-B (in conjunction with Table 20-B) it can be seen that mothers and sons agree on the importance of the expressive occupational values: work with people and help others. This finding may indicate that a fairly prevalent maternal "expressive pull" is experienced by these male students (Parsons, 1954: 89-103). In addition, mothers and sons are in complete agreement on the unimportance of prestige and leisure.

Daughters and mothers agree that security, helping others, working with people and using special skills and abilities are important criteria to take into consideration when choosing an occupation. Salary and the chance to be

creative and original are regarded as being moderately important. As was the case with mothers and sons, mothers and daughters agree on the unimportance of leisure and prestige. It will be recalled that Perrone (1965: 255) found that parents and daughters agree on the importance of a good income and a secure future. The findings of the present study regarding agreement among mothers and daughters on the importance of these two occupational values are similar. However, unlike the result reported by Perrone that parents and daughters agree on the unimportance of being helpful to others, this study found mothers and daughters in agreement on the importance of this item.

Although correlation coefficients were not available to assess the amount of agreement between boys' and girls' value ratings or between the boys' mothers' and girls' mothers' ratings, comparisons of the value hierarchies constructed on the basis of ordered mean scores reveals some interesting information on sex and generational similarities and differences.

A look at the items occupying the first four positions in the educational hierarchies (Table 21-A) reveals that for the boys three items are from the instrumental category and one from the expressive. For the girls and both sets of mothers two are instrumental and two are expressive. This lends slight substantiation to the suggestion that males are

more likely than females to be instrumentally oriented with regard to educational aims (Meier, 1970: 77).

The importance placed on instrumental educational aims (for the boys, income ranked number one; for the girls and both sets of mothers, career preparation ranked number one) runs counter to the contentions of Kane (1961: 87) and Meier (1970: 69) cited previously, but is in accord with the assertions of Williams (1961: 73), Slocum (1967: 277) and Hodgkins and Herriott (1970: 92) concerning the prominence of instrumental educational purposes.

In addition, the data at hand lend some support to Downey's depiction of the Canadian image of education being "individualistic" as opposed to "societal" (Downey, 1960: 214). For the boys, the first four educational values pertain to individual aims, that is, personal betterment or well-being. For the girls and their mothers the educational value - get along with people ranks third; whereas for the boys' mothers, it ranks fourth. In all four educational value hierarchies, developing the mind is found above becoming a good citizen. Thus, as asserted by Downey (1960: 214) "perfection of the individual" does seem to supercede societal aims such as developing social skills and encouraging good citizenship.

In view of the mass media's emphasis on adolescence as a time of transition wherein youth "find themselves," it is interesting to note the low evaluation given, by both the

students and their mothers, to education as an aid in understanding oneself.

Examination of the items occupying the first four positions in the occupational value hierarchies (Table 21-B) reveals that, for the boys, two items are expressive and two instrumental. For the girls and both sets of mothers, three are expressive and one is from the instrumental category. This lends slight support to the suggestion that females favor the expressive options, while males favor the instrumental (Meier, 1970: 82).

Since several authors have found sex differences in occupational values (Singer and Stefflre, 1954; Dipboye and Anderson, 1959; Gribbons and Lohnes, 1965; Wagman, 1965; Thompson, 1966), it seemed worthwhile to study the orderings from this standpoint. Probably the most significant finding is the general overall similarity in the pattern of mean rankings for boys and girls. However, closer consideration of the value hierarchies for the two sexes does reveal an important difference. The boys tended to give higher scores than the girls to the chance to use special skills and abilities and to the chance to earn a good deal of money. The girls, on the other hand, gave higher scores to the help others and work with people items.

This finding parallels those reported in previous studies. Singer and Stefflre, for example, found that selection

of the value "A very highly paid job" is positively related to being a boy, while the desire for "A job where you could help other people" is characteristic of girls to a significantly greater extent than it is of boys (Singer and Stefflre, 1954: 484). Similarly, in the case of twelfth grade boys and girls, Dipboye and Anderson found boys giving higher rankings to the value of salary, while the girls ranked relations with others higher (Dipboye and Anderson, 1959: 121). In addition, Gribbons and Lohnes found that "where the boys have given high rank to salary...., the girls have given high rank to personal contact (work with people) and social service values (Gribbons and Lohnes, 1965: 251). Thompson also discerned some differences in the rating of occupational values when his data were stratified by sex. He found that female high school students place significantly less emphasis than do males upon the importance of a job where one would be a leader or the boss, where high pay was involved, and where recognition was possible. In contrast, male students placed significantly less importance than did females on a job that would permit the expression of one's own ideas and one where the individual could help other people (Thompson, 1966: 851). Wagman found that the job value of social service distinguishes university sophomore men and women as it does high school senior boys and girls (Wagman, 1965: 261).

The findings of the studies cited above in conjunction with those of the present study lend some empirical support to the theoretical contention of Harrod and Griswold that girls are people-oriented in that they like to meet people and help them, whereas boys are career or extrinsic-reward-oriented in that they are most concerned with salary (Harrod and Griswold, 1960: 60-66).

Singer and Stefflre comment that high school boys (in preferring the job values of profit, power, and independence) and high school girls (in preferring the job values of interesting experience and social service) were conforming to cultural definitions of their expected role or sex stereotype (Singer and Stefflre, 1954: 484). Stereotyped sex-differences in occupational value preference were not found to be pronounced for the students in the present study. Despite the slight differences in the importance placed on a good income and the use of special skills and abilities (boys), as opposed to helping others and working with people (girls), comparison of the value hierarchies for the two sexes reveals dominant similarities. Both groups, for example, give high scores to the value of security. The two hierarchies are also in agreement on the low positions accorded to being creative and original, and accruing prestige and leisure time (see Table 21-B).

According to Dipboye and Anderson, age is a possible

explanation for students giving higher scores to security than to occupational benefits. These authors suggest that specific occupational concerns such as good working hours, wages, and vacations have not yet entered their "life space" (Dipboye and Anderson, 1959: 124). This contention constitutes a possible, but not probable, explanation in the study at hand because a considerable number of students reported employment experience (i.e. part-time and summer jobs) and thus would be familiar with the specific items mentioned above. A more plausible explanation for the importance placed on security lies in the predominantly middle and lower (as opposed to upper) class composition of the population being studied. However, the fact that the students considered security to be very important and high pay only moderately important indicates that their idea of a secure way of life cannot be equated with the accumulation of financial resources.

It is interesting to note that the use of special skills and abilities, rather than security, occupies first place on the mothers' hierarchies. The difference between students and mothers on this point could be a function of generational viewpoint. The mothers, cognizant of the security presently provided by the family circle, would like their sons and/or daughters to choose an occupation where they could use their special skills. The students, faced

with graduation, a new stage in their educational process or a job hunting situation, are aware of impending insecurities and perhaps look forward to the time when they are established in an occupation.

As shown in Table 21-B, there is a striking similarity between the boys' mothers and girls' mothers occupational value hierarchies. With the exception of the reverse positioning of security and help others, all of the values are in the same order. If one accepts the idea of value transmission as a socialization process and the assumption that mothers are the main socializing agents for their children, then, given the similarity between the boys' mothers' and girls' mothers' occupational value hierarchies, the above-mentioned similarities between the boys' and girls' hierarchies are not surprising.

In summary, it may be said that the correlation coefficients presented in the Values section of Table 19 attest to the acceptance of Hypothesis 19 with respect to the girls' and their mothers' ratings of the educational and occupational values. Positive relationships were found between all four of the mothers' and daughters' value scores. For the boys and their mothers, Hypothesis 19 is supported with respect to their instrumental educational and expressive occupational value scores.

The foregoing discussion endeavored to elucidate the

reported relationships. The typal hierarchies, utilized in conjunction with the correlation coefficients, permitted examination of the nature of the congruencies found. On the basis of the hierarchies alone, some speculations on specific sex and generational similarities and differences were offered.

Hypothesis 20: The students' educational and occupational opportunity orientations are positively related to the educational and occupational opportunity orientations their mothers have for them.

Opportunity Orientations:

The correlation coefficients for the relationships between 203 students' (94 boys and 109 girls) opportunity orientations and those of their mothers are presented in Table 19. Positive relationships were found between the boys' and their mothers' educational ($r = .14$) and occupational ($r = .11$) opportunity orientations. Similarly, the girls' and their mothers' educational ($r = .17$) and occupational ($r = .25$) opportunity orientations were found to be positively related. These findings support Hypothesis 20 and suggest that the students and their mothers are in agreement with respect to appraisals of educational and occupational opportunities.

Discussion

The operationalized opportunity orientations employed in the correlation analysis were derived from questions

designed to elicit the students' assessments of their educational and occupational opportunities and the mothers' appraisals of their children's opportunities.[17] In separate questions, the students were asked to indicate whether they thought their educational and occupational opportunities were very good, good, not too good, poor or non-existent. The mothers were asked to indicate whether they thought their son's (daughter's) educational and occupational opportunities were very good, good, not too good, poor or non-existent. It is to be noted that the respondents' rankings are not necessarily commensurate with reality, but represent their subjective perceptions of the situation. Since individuals tend to act in terms of their perceptions (that is, "If men define a situation as real it is real in its consequence." Thomas, 1920), it was felt that the objective nature of the opportunity structure was of less importance than the attitudes and ideas individuals have about their chances of reaching their educational and occupational goals. To gain further insight into the respondents' evaluative perceptions, an examination of their answers to the open-ended opportunity questions appears

17. The operationalization of the opportunity orientations has been outlined in Chapter V.

to be in order.

It will be recalled that the respondents were also asked to explain why they had ranked their own (or their child's, as the case may be) educational and occupational opportunities as they did. The various reasons given are presented in Tables 22-A and 22-B, respectively. Two broad groupings were readily discernable. Those who considered their opportunities to be "good" or "very good" gave positive replies, which referred to factors they thought would help or aid them in achieving their goals (hence, the "helps" category). On the other hand, those who regarded their opportunities as "not to good," "poor," or "non-existent" mentioned factors or circumstances that would hinder the pursuit of their goals (hence, the "hindrances" category). The items employed for classification purposes were formed directly from the respondents' statements.

The ranking was based on the frequency with which a particular item was mentioned as the respondents' first reason. The rank ordered sets of opportunity items are presented separately by sex and generation. Separate orderings are also presented for the total number of students studied (319) and for the students (203) for whom comparable data was obtained from their mothers. Because the correlation coefficients presented in the foregoing section indicate the amount of congruency between the 203 students' (94 boys and 109 girls)

TABLE 22 A

FREQUENCY DISTRIBUTIONS AND RESULTANT RANKINGS OF STUDENTS' AND MOTHERS' RESPONSES ON THE OPEN-ENDED EDUCATIONAL OPPORTUNITIES QUESTIONS

	Boys N - 158	Boys N - 94	Boys' Mothers N - 94	Girls N - 161	Girls N - 109	Girls' Mothers N - 109
Helps:						
Ability present	52 (1)	35 (1)	27 (1)	48 (1)	37 (1)	28 (1)
Money present	35 (2)	22 (2)	19 (3)	38 (2)	28 (2)	10 (3)
Interest present	21 (3)	10 (3)	20 (2)	13 (3)	7 (3)	24 (2)
Education available	9 (4)	6 (4)	3 (5)	6 (5)	3 (5)	3 (5)
Low enrollment (need)	0	0	0	3 (6)	3 (5)	0
Willing to work hard	7 (5)	6 (4)	4 (4)	9 (4)	5 (4)	10 (4)
Hindrances:						
Ability absent	3 (5)	1 (4)	2 (2)	9 (2)	4 (3)	1 (4)
Money absent	6 (2)	4 (2)	6 (1)	14 (1)	9 (1)	5 (2)
Interest absent	10 (1)	6 (1)	2 (2)	7 (3)	5 (2)	10 (1)
Education not available	4 (4)	0	2 (2)	5 (5)	3 (4)	3 (3)
High enrollment (competition)	2 (6)	2 (3)	0	3 (6)	2 (5)	3 (3)
Wrong preparatory courses	5 (3)	1 (4)	0	6 (4)	3 (4)	0
No response	4	1	9	0	0	12
Total	158	94	94	161	109	109

TABLE 22 B

FREQUENCY DISTRIBUTIONS AND RESULTANT RANKINGS OF STUDENTS' AND MOTHERS' RESPONSES ON THE OPEN-ENDED OCCUPATIONAL OPPORTUNITIES QUESTIONS

	Boys N - 158	Boys N - 94	Boys' Mothers N - 161	Girls N - 161	Girls N - 109	Girls' Mothers N - 109
Helps:						
Ability present	24 (2)	12 (3)	22 (2)	21 (1)	16 (1)	19 (2)
Money present	3 (6)	1 (6)	0	6 (4)	5 (5)	1 (7)
Interest present	30 (1)	21 (1)	29 (1)	20 (2)	13 (3)	32 (1)
Education prepares	8 (4)	5 (4)	0	21 (1)	14 (2)	3 (5)
Demand	21 (3)	16 (2)	6 (3)	16 (3)	1 (6)	10 (3)
Qualifications present	3 (6)	3 (5)	2 (5)	2 (7)	8 (4)	2 (6)
Willing to work hard	6 (5)	5 (4)	4 (4)	5 (5)	0	5 (4)
Work experience	8 (4)	3 (5)	2 (5)	3 (6)	0	2 (6)
Position present	6 (5)	3 (5)	4 (4)	5 (5)	0	2 (6)
Distance not a factor	1 (7)	0	1 (6)	2 (7)	0	1 (7)
Hindrances:						
Ability absent	12 (1)	8 (1)	0	13 (2)	5 (4)	2 (4)
Money absent	4 (4)	1 (4)	1 (2)	15 (1)	9 (2)	3 (3)
Interest absent	7 (2)	4 (2)	5 (1)	10 (4)	8 (3)	6 (1)
Education does not prepare	5 (3)	1 (4)	1 (2)	5 (5)	5 (4)	1 (5)
No demand	7 (2)	4 (2)	1 (2)	12 (3)	8 (3)	5 (2)
Qualifications absent	2 (5)	2 (3)	0	1 (6)	15 (1)	1 (5)
Distance a factor	1 (6)	1 (4)	0	1 (6)	0	0
No response	10	4	16	3	2	14
Total	158	94	94	161	109	109

opportunity orientations and those of their mothers, only their sets of responses will be examined more extensively.

Judging from the mean scores previously presented in Figure 7 (Chapter V), the opportunity orientations of the population studied appear to be quite optimistic. This optimistic tone is also evident in the responses to the open-ended inquiries. Tha majority of respondents mentioned "helps" rather than "hindrances." More specifically, 84 percent of the boys, 76 percent of the girls, 78 percent of the boys' mothers and 69 percent of the girls' mothers emphasized the existence of specific educational opportunities; whereas, only 15 percent of the boys, 24 percent of the girls, 13 percent of the boys' mothers and 20 percent of the girls' mothers noted the presence of certain obstacles which restricted their (or their child's) educational opportunities. Similarly, with respect to occupational opportunities, 73 percent of the boys, 52 percent of the girls, 75 percent of the boys' mothers and 71 percent of the girls' mothers listed helping factors as opposed to 22 percent of the boys, 46 percent of the girls, 9 percent of the boys' mothers and 17 percent of the girls' mothers who reported hindrances.

Upon obtaining similar results in previous studies, some researchers have raised the question as to whether or not their respondents were well-informed about the barriers

that usually must be surmounted in order to attain desirable educational and occupational goals in contemporary society. Kuvlesky and Bealer, for example, have spoken of "the optimism of youth" and have suggested that

> Due to a lack of experience and knowledge of the larger society, an adolescent may grossly underestimate the limiting quality of his situation... (Kuvlesky and Bealer, 1966: 274).

However, the fact that essentially the same pattern (that is, more mentioning aids than obstacles) emerged when the mothers' replies were categorized might indicate that the optimism evident in the students' responses stems from accurate appraisals of reality rather than youthful inexperience. On the other hand, the possibility exists that the mothers, as well as the students, might be insufficiently informed about the educational and occupational opportunities available to youth (c.f. Gottlieb and Ramsey, 1964: 147). A review of the various explanations given by the respondents should elucidate the above mentioned alternatives.

As shown in Table 22-A, the "helps" items mentioned by the boys (who positively appraised their educational opportunities) were, in order of frequency: ability present, money present, interest present, willingness to work hard and education available. The order of the "helps" items

given by the girls was the same as that for the boys, with the addition of the low enrollment item. The order of the "helps" items given by the girls' mothers was exactly the same as that for the boys' mothers. For both sets of mothers the rank order of reasons was the same as that for students except that interest replaced money as the second most frequent reason. Among those who negatively appraised their (their child's) educational opportunities, the two most frequently mentioned items were lack of interest and lack of money.

Ability was the factor most frequently mentioned as contributing to educational opportunities by all four sets of respondents. Assessments of ability and general intelligence were made largely in terms of aptitude test results, marks and progress in specific courses. Projections with respect to future learning situations tend to be based upon past academic experiences of success or failure. The following quotations illustrate the students' emphases on grades and course content.

> "My opportunities are very good since engineering interests me and I have good marks in mathematical subjects."

> "I am interested in and fairly good at the electronics part of the Grade XII physics course this year and I know this will help me get into Red River Community College."

Similarly, a number of the mothers referred to their children's "good grades" and expressed confidence in their "academic ability." Among those citing obstacles, some of the students stated that their marks were "not up to par," while others suggested that the difficulties they were encountering in one or two courses would deter their pursuit of higher education ("The only thing holding me back is Maths"). Thus, for most of the respondents, ability (as indicated by high school marks) was the main consideration in decisions about continuing education.

For the majority of students financing further education did not appear to be problematical. Most indicated a willingness and ability on the part of their parents to provide the necessary funds. Remarks such as "my parents will pay for the cost of going to college" and "my family can afford it" were typical. On the whole, the students were eager to share the expenses with their parents or at least make some contribution to the total cost. This attitude is exemplified in the following excerpt.

> "Parents have or can obtain sufficient funds. I have the opportunity to make money to help pay."

Some stated that part time and summer employment enabled them to save enough money to cover the cost of continuing their education. Others indicated their intentions of

working their way through.

> "We have a mill in Pine Falls in which I could earn enough money to pay for this education."

Most felt that they could count on assistance from their parents in the event that their own efforts fell short.

> "There is no real money shortage as my parents would supply money if I was unable to earn enough."

A small minority was relying solely on student loans and government bursaries.

For the most part, the mothers' responses lend credence to the students' assertions that financial resources are readily available. A number of the mothers mentioned that "funds had been set aside" and that "financial backing would be gladly given."

In the present study only 13 students (4 boys and 9 girls) and 11 mothers (6 boys' mothers and 5 girls' mothers) stated that financial difficulties were preventing them (their children) from continuing their education. This finding may be regarded as surprising in view of the numerous studies, cited in the review of literature, which imply that financial problems are the main reason why individuals do not continue their education.

At this point it should be recalled that this study

focused on twelfth grade students. It is possible that selective processes due to social class differences with their attendant economic inequalities are operative at an earlier stage and hence, are important determinants of the extent of high school drop-out. At this level of the educational system economic difficulties have probably already taken their toll. Most likely, students from families experiencing financial hardships are forced to leave school before reaching the twelfth grade. Thus, in these particular communities, the ability to finance a high school education might be a good indicator of ability to finance a post high school education.

In addition, it is possible that economic considerations are operating in a more subtle manner for students in the present study. As well as being an important factor in decisions on whether or not to continue, financial resources may have a direct bearing on the form the continued education will take. There are grounds for considering the suggestion that many of the students planning to attend community colleges do so because the courses offered there are short and thus, less of a financial burden. Future researchers should endeavor to ascertain the veracity of this speculative assertion.

The frequency with which interest was referred to by the respondents attests to the importance of motivational factors in the attainment of higher education. A number of

the students stated that they felt their educational opportunities were good because they intended to enter the course that they "wanted," "desired," "liked," "would enjoy" or were "totally interested in." Comments such as the following were typical.

> "I want to obtain further education and I think I will like it so will be able to do the work."

> "Because I feel I would be interested in Commerce and/or Law and whatever I like I do well."

Mothers who thought their children "had a strong desire" or "really wanted" to continue their education were more likely to submit positive appraisals of their offsprings' educational opportunities than those who considered their children to be "lacking in motivation" or "tired of school."

A few of the students were concerned with the fact that course choices made early in their academic careers were preventing them from pursuing newly acquired interests. As one girl expressed it:

> "Never took Science or Biology - now realize I want to be a nurse not a secretary."

Others expressed feelings of frustration and disappointment upon finding out that the course they were completing was not considered to be appropriate preparation for the type of

advanced education they wanted to enter. One boy stated

> "In my opinion my opportunities are poor because I have found out too late that I took the wrong high school courses and therefore I don't have the requirements."

Similarly, one of the mothers suggested that her son's educational opportunities were limited because:

> "He is in the General Course and I imagine Oceanography requires University."

Some of the students who elaborated on their positive appraisals of their educational opportunities did so in a way that indicated they were expressing an ideal: "Where there is a will, there is a way;" "If a person is determined enough nothing can really stop him from reaching his goal in life." A number of the students suggested that by studying and working hard they could, in effect, create their own opportunities.

> "I figure if I work hard enough, it should not be too difficult to obtain the kind of education I would like."

The respondents were also asked to explain why they had rated their (their child's) occupational opportunities as they had. An examination of Table 22-B reveals that many of the "helps" and "hindrances" mentioned with respect

to occupational opportunities are the same as, or similar to, those mentioned with respect to educational opportunities.

When asked whether they would like to work in their home community after completing their education 31 percent of the boys and 35 percent of the girls replied in the affirmative, while 67 percent of the boys and 61 percent of the girls replied in the negative.

Responding to a similar question 38 percent of the boys' mothers and 40 percent of the girls' mothers stated that they would like their son and/or daughter to work in their home community after completing his or her education. On the other hand, 49 percent of the boys' mothers and 49 percent of the girls' mothers indicated that they would not. Six percent of the boys' mothers and 5 percent of the girls' mothers stated that this decision was entirely up to their child. Three percent of the boys' mothers and 2 percent of the girls' mothers replied that "it didn't matter to them one way or another."

In view of what appears to be the operation of powerful "pull" forces, future research should endeavor to examine the relationship between the respondents' educational and occupational aspirations, their subjective perceptions of opportunities and their mobility orientations. Indications of the present study were that incongruencies between

adolescents' aspirations and the educational and occupational opportunities available in relatively isolated single enterprise communities result in a considerable amount of out-imigration. The above mentioned percentages suggest that because of the lack of educational and occupational opportunities available within their home communities most adolescents are forced to seek opportunities elsewhere.

Hypothesis 21: The students' educational and occupational aspirations are positively related to the educational and occupational aspirations their mothers have for them.

Aspirations:

Table 19 shows that positive relationships were found between the boys' and their mothers' educational ($r = .44$) and occupational (Haller, $r = .34$; Blishen, $r = .30$) aspirations. Similarly, positive relationships were found between the girls' and their mothers' educational ($r = .51$) and occupational (Haller, $r = .53$; Blishen, $r = .38$) aspirations. The above mentioned correlation coefficients attest to the acceptance of Hypothesis 21.

Hypothesis 22: The students' educational and occupational expectations are positively related to the educational and occupational expectations their mothers have for them.

Expectations:

Table 19 also reveals that positive relationships were found between the boys' and their mothers' educational ($r = .49$) and occupational ($r = .49$) expectations. In addition, positive relationships were found between the girls' and their mothers' educational ($r = .59$) and occupational ($r = .71$) expectations. The strength of this last relationship appears to be particularly noteworthy. These

correlation coefficients support Hypothesis 22.

Discussion

In discussing aspirations some consideration should be given to the theoretical bases of the methods used to measure them. In the present study, the students were asked to indicate both the amount of education they would like to obtain and the amount of education they planned to obtain. They were also asked to name the occupation and describe the type of work they would like to have as a career if they had their choice and the type of work or occupation they expect to have as a career. In asking the students about their future career an attempt was made to employ questions that would differentiate between aspirations and plans or between preferences and expectations because the results of a number of past studies indicate that students respond differently when they are asked about their actual intentions than when the question does not set any constraint on what is possible. Empirical evidence illustrates that adolescents differentiate between aspirations and expectations, and also that there is an important qualitative difference between what a person wants and what he expects to get in relation to occupations (Empey, 1956; Stephenson, 1955 and 1957; Schwarzweller, 1959 and 1960; Morland, 1960; Simpson and Simpson, 1960; Weiner and Murray, 1963; Bennett and Gist, 1964; Mizruchi, 1964;

Kuvlesky and Bealer, 1966; Breton and McDonald, 1968).

The available evidence also indicates that expectations are more closely related to existing opportunities than are aspirations. Stephenson suggests that it is important to distinguish aspirations from expectations since "plans or expectations are more definitely class based and, hence, may reflect class differences in opportunity and general life chances" (Stephenson, 1957: 212).

It has been noted that in our society, there is a tendency to place one's aspirations just a little higher than one's expectations (Frank, 1935). Pedersen and Etheridge, for example, found that the wish for college was higher than the expectation of attending in 98 percent of their cases (Pedersen and Etheridge, 1970: 74-75). Empey's findings showed that seniors from most strata anticipated having occupations somewhat lower than their preferred ones (Empey, 1956: 493). Similarly, Slocum noted that the occupational expectations of high school students tended to be somewhat lower than their occupational aspirations (Slocum, 1968: 2). Approximately 76 percent of the young people in Schwarzweller's study expressed a positive aspiration to enter college. However, only 55 percent of the young people expressed a positive plan to enter college. When given a "free choice," approximately 55 percent of these young people chose high-status occupations. When asked to indicate the choice

"actually expected," 45 percent chose high-status occupations (Schwarzweller, 1959: 292). On the other hand, one may aspire to an occupation lower than that actually expected (Taylor, 1968: 197). In general, past studies using questions incorporating "free choice" situations to index aspirations, as opposed to "actually expected" situations to index plans, have found that respondents do differentiate between aspirations and expectations.

In the present study, however, striking similarities were noted in the responses to these two types of questions. With respect to educational plans and aspirations, 77 percent of the boys, 72 percent of the girls, 72 percent of the boys' mothers and 68 percent of the girls' mothers gave the same answers to the "free choice" and "actually expected" questions. Moreover, positive relationships were found to exist between educational plans and educational aspirations (boys: $r = .59$; girls: $r = .67$; boys' mothers: $r = .74$; girls' mothers: $r = .61$). In addition, 54 percent of the boys, 62 percent of the girls, 39 percent of the boys' mothers and 53 percent of the girls' mothers mentioned the same occupations in response to separate questions on preferred and anticipated occupational choices. Positive relationships were found between the respondents' levels of occupational aspiration (LOA) and their levels of occupational expectation (LOE) (boys: $r = 68$; girls: $r = .73$;

boys' mothers: r = .60; girls' mothers: r = .55).

The similarity of aspirations and plans could indicate that both are based on wishful thinking. Alternatively, it could indicate that the respondents have adjusted their career goals to bring them more closely into line with realistic possibilities. This latter suggestion is in keeping with the theory of cognitive dissonance (Festinger, 1962) which states that people tend to bring their wishes into some correspondence with reality simply to alleviate the unpleasant sensation of dissonance.

Throughout the analysis, plans and aspirations have been treated as distinct decisions on the part of the student. The foregoing findings suggest that aspirations and plans are quite similar and intricately interrelated. Thus, these findings lend some support to the theoretical contention that idealistic and realistic choices constitute two levels or dimensions of one concept, namely: aspiration (cf. Haller, 1968: 485). These findings also suggest that the educational and occupational choice process be viewed as a compromise between preferred and anticipated courses of action.

Some of the students commented that although they felt "free to choose" they could not be absolutely sure or certain of their choices. In general, the respondents appeared to be cognizant of the fact that one's educational and occupational attainments are conditioned not only by the preferences and desires of a person (the aspect strongly implied as

crucial by the term "choice") but also by a number of non-aspirational factors, such as the nature and composition of the occupational structure and the degree of specialization in the labor force, over which the individual has little or no control (Epperson, 1964: 96; Gottlieb and Ramsay, 1964: 159; Hyman, 1966: 488; Kuvlesky and Bealer, 1966: 273).

Freedom of choice is also restricted by lack of (or inadequate) information on the multiplicity of educational and occupational alternatives available. Taylor has asserted that the absence of appropriate formal mechanisms for communicating occupational characteristics and requirements forces aspirants to rely on information gained through more or less informal interpersonal relationships (Taylor, 1968: 189). The impact of interpersonal relationships influences the awareness of occupations and accordingly decisions for or against them. This is illustrated by the empirical findings that many individuals can identify parents, teachers, counselors, friends and others as having influenced their choice for or against a designated occupation (Taylor, 1968: 194).

The Idea of Influence

The correlation coefficients presented and discussed in the three preceding sections of this chapter show that positive relationships were found between the students' educational and occupational values, opportunity orientations,

aspirations and expectations and those of their mothers. Strictly interpreted, these correlations indicate that the students' and mothers' educational and occupational values, opportunity orientations, aspirations and expectations are similar. On the basis of these coefficients alone one can not conclude that the students have been influenced by their mothers (that is, correlation is a necessary, but not sufficient, indicator of causation).

A major proposition of reference group theory is that an individual's attitudes and modes of behavior stem from and are related to those of his significant others, and that this congruence of attitudes and behavior is a function of the process of internalization and legitimation of referents' expectations (Rosen, 1955b: 138). Reference group theory alerts the researcher to the idea that, in order to examine the influence process, it is necessary to find out who an adolescent's significant others are. One way of approaching this problem is to put the question to the adolescent himself.

The students in the present study were asked: "Concerning your educational plans, which of the following would you say has influenced you the most?" (see Appendix A, Student Questionnaire, p.5, #19). The distribution of their responses to this question is presented in Table 23. It is noteworthy that 57 percent of the boys and 67 percent of the girls

TABLE 23

STUDENTS' SIGNIFICANT OTHERS FOR THEIR EDUCATIONAL PLANS

	Boys		Boys		Girls		Girls	
	No.	%	No.	%	No.	%	No.	%
Father	16	10	8	9	14	9	12	11
Mother	27	17	17	18	21	13	17	16
Both parents equally	45	29	28	30	61	38	44	40
Teachers	4	3	2	2	6	4	2	2
One teacher	2	1	1	1	9	5	5	5
Friends at school	7	4	5	5	6	4	3	3
Friends not at school	7	4	4	4	12	7	7	6
Relatives	4	3	1	1	3	2	1	1
Other	44	28	27	29	29	18	18	16
No response	2	1	1	1	0	0	0	0
Total	158	100	94	100	161	100	109	100

named one or both of their parents.

In addition, the students were asked: "Concerning your occupational plans, which of the following would you say has influenced you the most?" (see Appendix A, Student Questionnaire, p.8, #31). The distribution of their responses to this question is presented in Table 24. Once again the parents appeared most often in the adolescents' replies: 13 percent of the boys named their fathers, 14 percent their mothers and 32 percent both parents (that is, 59 percent of the boys named one or both of their parents); 6 percent of the girls named their fathers, 14 percent their mothers, 37 percent both parents (that is, 57 percent of the girls named onr or both of their parents).

Thus, the answers to both questions indicate that the twelfth grade students involved in the present study considered their parents to be significant others (people whose opinion they valued) with regard to their educational and occupational decisions. This finding was anticipated on the basis of an examination of theoretical contentions on the family's role in the socialization process, but runs counter to the results of some previous research studies stressing the importance of peer group influence (Haller and Butterworth, 1960; Coleman, 1960 and 1961; Alexander and Campbell, 1964; McDill and Coleman, 1964; Duncan, Haller and Portes, 1968).

TABLE 24

STUDENTS' SIGNIFICANT OTHERS FOR THEIR OCCUPATIONAL PLANS

	Boys		Boys		Girls		Girls	
	No.	%	No.	%	No.	%	No.	%
Father	18	11	12	13	9	6	7	6
Mother	19	12	13	14	21	13	15	14
Both parents equally	45	28	30	32	59	37	40	37
Teachers	3	2	1	1	5	3	3	3
One teacher	5	3	5	5	9	5	5	4
Friends at school	9	6	5	5	6	4	4	4
Friends not at school	6	4	3	3	4	2	3	3
Relatives	5	3	2	2	5	3	5	4
Other	47	30	22	24	42	26	26	24
No response	1	1	1	1	1	1	1	1
Total	158	100	94	100	161	100	109	100

CHAPTER IX

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter endeavors to place the study in perspective. In the initial section the major objectives and overall design of the study are reviewed. The second section is devoted to a summarization of the main findings. Concluding comments, indicating possible implications the results of the present study have for future research and relevant action programs, are advanced in the final section.

Attention was concentrated on three considerations. Firstly, this study endeavored to determine whether relationships existed between selected social factors and the educational and occupational values, opportunity orientations, aspirations and expectations of twelfth grade students. Secondly, it attempted to ascertain whether the same selected social factors were related to the educational and occupational values, opportunity orientations, aspirations and expectations of the mothers of these students. Thirdly, an attempt was made to determine whether relationships existed between the students' educational and occupational values, opportunity orientations, aspirations, and expectations and those their mothers had for them.

To gain insight into the phenomena under study and to focus the phases of the problem being investigated, three

general hypotheses were derived from relevant stratification and socialization theory.

A review of existing literature and research revealed that further specification and directional refinement of the general hypotheses was possible. The resultant research hypotheses (twenty-two all told) were considered to be suitable for testing.

The data, required to test the hypotheses, were gathered in late April and early May of 1971 by means of questionnaires distributed to twelfth grade students and their mothers residing in the five single enterprise communities of Flin Flon, Lynn Lake, Pine Falls and Thompson in Manitoba and Red Lake in Ontario. Questionnaires were completed by 319 students (158 boys and 161 girls) and 203 of their mothers (94 boys' mothers and 109 girls' mothers).

Data were obtained that provided measures of family background factors (socio-economic status, parental educational levels and perceived parental encouragement), situational variables (size and isolation of community of residence) and the respondents' educational and occupational values, opportunity orientations, and levels of aspiration and expectation.

The statistical technique employed in testing the hypothesized relationships was correlational analysis. In view of the number of previous studies documenting sex

differences in the propensity to pursue higher education and higher status occupations, separate analyses were made for males and females. In addition, the responses of the boys' mothers and those of the girls' mothers were analyzed separately.

The relationships found between the selected social factors and the students' educational and occupational values, opportunity orientations, aspirations and expectations have been presented and discussed, whenever possible, with reference to the results of past studies. The relationships found between the selected social factors and the mothers' educational and occupational values, opportunity orientations, aspirations and expectations have been presented and compared with the relationships obtained in the analyses of the students' data. The relationships found between the students' educational and occupational values, opportunity orientations, aspirations and expectations and those their mothers had for them have also been presented. Additional information was derived from the data for the express purpose of elucidating these results.

The various associations revealed in the correlational analyses are summarized in Tables 25 - 36 of the present chapter. In addition, those relationships that were found to be in the directions predicted, and thus considered to support the hypotheses in question, are summarized below.

TABLE 25

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES FOR GRADE TWELVE BOYS

Independent Variables	Dependent Variables										
	Ex.Educ. Values	In.Educ. Values	Ex.Occup. Values	In.Occup. Values	Educ. Opp.	Occup. Opp.	LEA	LEE	OAS	LOA	LOE
S.E.S.		(.10)			.17			.16	.19	.20	.24
Fathers' Education		(.11)			.21	.11		.18	.13		
Mothers' Education					.10		.11	.16	.20	.11	.12
Community Size								(-.12)			
Community Isolation	-.10		-.19	(-.12)				-.13		-.10	-.16
Fathers' Encour. Educ.	.12				.12		.15	.15	.28	.11	.16
Mothers' Encour. Educ.	.18	(.21)	.15	(.11)			.19	.13	.20		
Fathers' Encour. Occup.					.19	.11	.10	.14	.20		.20
Mothers' Encour. Occup.	.14		.12		.21	.13	.20	.15	.17		.11

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 26

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES FOR GRADE TWELVE GIRLS

Independent Variables	Dependent Variables										
	Ex.Educ. Values	In.Educ. Values	Ex.Occup. Values	In.Occup. Values	Educ. Opp.	Occup. Opp.	LEA	LEE	OAS	LOA	LOE
S.E.S.			(-.11)		.17		.26	.24	.22		
Fathers' Education	(-.12)				.13			.10	.21	.12	.13
Mothers' Education		-.11	(-.12)	-.16	.17		.16	.11	.16	.10	
Community Size				(.17)							(-.20)
Community Isolation		(-.18)		(-.17)							
Fathers' Encour. Educ.	.10	(.16)	.15		.28	.19		.13	.17		.12
Mothers' Encour. Educ.			.15	-.13	.15		.12	.24	.16		
Fathers' Encour. Occup.	.10	(.13)	.22	(.31)	.13	.13			.15		.16
Mothers' Encour. Occup.		(.13)	.12								

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 27

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES FOR THE BOYS' MOTHERS

Independent Variables	Dependent Variables										
	Ex.Educ. Values	In.Educ. Values	Ex.Occup. Values	In.Occup. Values	Educ. Opp.	Occup. Opp.	LEA	LEE	OAS	LOA	LOE
S.E.S.				-.14	.16	.12	.14	.11	.43	.26	.28
Fathers' Education				-.10					.29	.12	
Mothers' Education	(-.24)	-.27	(-.29)	-.34	.12	.19	.20	.18	.39	.20	.10
Community Size	.10	-.12	.10								
Community Isolation	(.16)						-.12		-.10		
Fathers' Encour. Educ.		-.10					.19		.29	.24	.22
Mothers' Encour. Educ.	.14						.17		.13	.19	.14
Fathers' Encour. Occup.					.15	.12	.17	.13	.30		
Mothers' Encour. Occup.	.10	(.12)			.17	.18	.13	.14	.14	.13	.13

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 28

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT AND DEPENDENT VARIABLES FOR THE GIRLS' MOTHERS

Independent Variables	Dependent Variables										
	Ex.Educ. Values	In.Educ. Values	Ex.Occup. Values	In.Occup. Values	Educ. Opp.	Occup. Opp.	LEA	LEE	OAS	LOA	LOE
S.E.S.		-.11		-.14	.19		.30	.18			.24
Fathers' Education		-.10	(-.12)	-.11			.24	.11			.23
Mothers' Education		-.16		-.21			.26	.20	.15		
Community Size				(.10)	(-.16)					(-.15)	(-.25)
Community Isolation		(-.15)			-.11						-.17
Fathers' Encour. Educ.								.15	.27		
Mothers' Encour. Educ.			.16						.24		
Fathers' Encour. Occup.	(-.10)					.10		(-.15)	.11	.13	.13
Mothers' Encour. Occup.			.12		(-.10)			(-.12)		.10	(-.10)

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 29

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE BOYS' EDUCATIONAL VALUES

Independent Variables	Educational Values							
		Instrumental				Expressive		
	Security	Money	Prestige	Career	Develop Mind	Get Along With People	Understand Self	Good Citizen
S.E.S.		(.16)						
Fathers' Education		(.11)						
Mothers' Education		(.10)				.10		
Community Size	(.11)		(.10)					
Community Isolation								
Fathers' Encour. Educ.	(.11)			(.10)				.12
Mothers' Encour. Educ.	(.27)	(.14)		(.21)	.16			.18
Fathers' Encour. Occup.		(.12)						
Mothers' Encour. Occup.					.12	.12		

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 30

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE GIRLS' EDUCATIONAL VALUES

Independent Variables	Educational Values							
		Instrumental				Expressive		
	Security	Money	Prestige	Career	Develop Mind	Get Along With People	Understand Self	Good Citizen
S.E.S.			-.19				(-.10)	
Fathers' Education			-.22				(-.18)	
Mothers' Education	-.10		-.17		(-.10)		(-.13)	
Community Size	(.12)					.11	(-.10)	
Community Isolation	(-.19)	(-.19)		(-.20)				-.10
Fathers' Encour. Educ.	(.25)	(.17)			.17			
Mothers' Encour. Educ.			-.13				.10	
Fathers' Encour. Occup.	(.18)				.20			
Mothers' Encour. Occup.	(.23)					(-.10)		.11

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 31

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE BOYS' MOTHERS' EDUCATIONAL VALUES

Independent Variables	Educational Values							
		Instrumental				Expressive		
	Security	Money	Prestige	Career	Develop Mind	Get Along With People	Understand Self	Good Citizen
S.E.S.	-.11							(-.21)
Fathers' Education	-.15							
Mothers' Education	-.31	-.16	-.14	-.21		(-.32)	(-.24)	(-.18)
Community Size	-.13	-.16			.11		.16	
Community Isolation		.10	.17		(.19)	(.13)	(.22)	
Fathers' Encour. Educ.	-.21	-.12			.13	.10		
Mothers' Encour. Educ.					.22	.16	.11	
Fathers' Encour. Occup.			(.15)					
Mothers' Encour. Occup.	(.15)		(.12)			.11		

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 32

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE GIRLS' MOTHERS' EDUCATIONAL VALUES

	Educational Values							
	Instrumental					Expressive		
Independent Variables	Security	Money	Prestige	Career	Develop Mind	Get Along With People	Understand Self	Good Citizen
S.E.S.	-.15		-.14					
Fathers' Education	-.12	-.13						
Mothers' Education	-.16	-.13	-.14					
Community Size		(.10)	(.12)					
Community Isolation	(-.16)	(-.21)				-.15		
Fathers' Encour. Educ.					(-.14)			
Mothers' Encour. Educ.			-.12	(.11)				
Fathers' Encour. Occup.						(-.16)		
Mothers' Encour. Occup.	.16	.11						

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 33

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE BOYS' OCCUPATIONAL VALUES

Independent Variables	Occupational Values							
	Instrumental			Expressive				
	Security	Money	Prestige	Leisure	Special Skills and Abilities	Work With People	Creative and Original	Help Others
S.E.S.								
Fathers' Education				-.13				
Mothers' Education								(-.12)
Community Size				(.10)				
Community Isolation	(-.13)			(-.18)		-.18	-.15	-.15
Fathers' Encour. Educ.								
Mothers' Encour. Educ.	(.16)						.13	.20
Fathers' Encour. Occup.				-.14		.11		
Mothers' Encour. Occup.				-.18	.18	.13	.15	.10

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 34

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE GIRLS' OCCUPATIONAL VALUES

Independent Variables	Occupational Values							
		Instrumental				Expressive		
	Security	Money	Prestige	Leisure	Special Skills and Abilities	Work With People	Creative and Original	Help Others
S.E.S.			-.18				(-.14)	
Fathers' Education			-.17					
Mothers' Education		-.15	-.21			(-.10)	(-.17)	
Community Size		(.24)		(.13)	.19		.11	
Community Isolation	(-.26)			(-.15)				
Fathers' Encour. Educ.	(.18)			(.10)	.22	.15		.10
Mothers' Encour. Educ.		-.14	-.12	-.15		.15		.10
Fathers' Encour. Occup.	(.18)	(.18)	(.15)	(.27)	.24	.11	.10	.10
Mothers' Encour. Occup.	(.19)	(.10)	(.10)			.15		

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 35

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE BOYS' MOTHERS' OCCUPATIONAL VALUES

Independent Variables	Occupational Values							
		Instrumental			Expressive			
	Security	Money	Prestige	Leisure	Special Skills and Abilities	Work With People	Creative and Original	Help Others
S.E.S.		-.18		-.15				(-.19)
Fathers' Education	-.19			-.11			(-.12)	
Mothers' Education	-.26	-.32	-.14	-.36	(-.17)	(-.18)	(-.32)	(-.29)
Community Size		-.12		-.14		.12	.10	
Community Isolation			.10					-.10
Fathers' Encour. Educ.	-.18				(-.12)			(-.10)
Mothers' Encour. Educ.					(-.10)			
Fathers' Encour. Occup.	-.17		(.10)	(.10)				
Mothers' Encour. Occup.				(.12)			.16	

( ) - Indicates relationship in direction opposite to that hypothesized.

TABLE 36

SUMMARY OF THE RELATIONSHIPS BETWEEN THE INDEPENDENT VARIABLES AND THE GIRLS' MOTHERS' OCCUPATIONAL VALUES

Independent Variables	Occupational Values							
		Instrumental				Expressive		
	Security	Money	Prestige	Leisure	Special Skills and Abilities	Work With People	Creative and Original	Help Others
S.E.S.	-.14	-.11	-.21					
Fathers' Education	-.16	-.12	-.16			(-.18)		(-.12)
Mothers' Education	-.22	-.15	-.22			(-.12)		(-.10)
Community Size		(.14)				(-.11)		
Community Isolation								(.10)
Fathers' Encour. Educ.								
Mothers' Encour. Educ.	(.19)		-.10	-.10	.17	.19		.19
Fathers' Encour. Occup.								
Mothers' Encour. Occup.	(.12)	(.12)			.12	.15		

( ) - Indicates relationship in direction opposite to that hypothesized.

Part I

For the 319 students (158 boys and 161 girls):

Hypothesis 1: Socio-economic status was found to be positively related to the boys' educational opportunity orientations, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls, socio-economic status was found to be positively related to their educational opportunity orientations, levels of educational aspiration, levels of educational expectation and levels of occupational aspiration (Haller).

Hypothesis 2: Fathers' educational level was found to be positively related to the boys' educational opportunity orientations, occupational opportunity orientations, levels of educational expectation and levels of occupational aspiration (Haller).

For the girls, fathers' educational level was found to be positively related to their educational opportunity orientations, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

Hypothesis 3: Mothers' educational level was found to be positively related to the boys' educational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls, mothers' educational level was found to be negatively related to their instrumental educational values,

negatively related to their instrumental occupational values and positively related to their educational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller) and levels of occupational aspiration (Blishen).

Hypothesis 4: Size of community of residence
No supportive relationships were found.

Hypothesis 5: Isolation of community of residence was found to be negatively related to the boys' expressive educational values, expressive occupational values, levels of educational expectation, levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls, no supportive relationships were found.

Hypothesis 6: Fathers' encouragement for continuing education was found to be positively related to the boys' expressive educational values, educational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls, fathers' encouragement for continuing education was found to be positively related to their expressive educational values, expressive occupational values, educational opportunity orientations, occupational opportunity orientations, levels of educational expectation, levels of occupational aspiration (Haller) and levels of occupational expectation (Blishen).

Hypothesis 7: Mothers' encouragement for continuing education was found to be positively related to the boys' expressive educational values, expressive occupational values, levels of educational aspiration, levels of educational expectation and levels of occupational aspiration (Haller).

For the girls, mothers' encouragement for continuing education was found to be negatively related to their instrumental occupational values and positively related to their expressive occupational values, educational opportunity orientations, levels of educational aspiration, levels of educational expectation and levels of occupational aspiration (Haller).

Hypothesis 8: Fathers' encouragement for occupational achievement was found to be positively related to the boys' educational opportunity orientations, occupational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller) and levels of occupational expectation (Blishen).

For the girls, fathers' encouragement for occupational achievement was found to be positively related to their expressive educational values, expressive occupational values, educational opportunity orientations, occupational opportunity orientations, levels of occupational aspiration (Haller) and levels of occupational expectation (Blishen).

Hypothesis 9: Mothers' encouragement for occupational achievement was found to be positively related to the boys' expressive educational values, expressive occupational values, educational opportunity orientations, occupational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller) and levels of occupational expectation (Blishen).

For the girls, mothers' encouragement for occupational achievement was found to be positively related to their expressive occupational values.

Part II

For the 203 mothers (94 boys' mothers and 109 girls' mothers):

Hypothesis 10: Socio-economic status was found to be negatively related to the boys' mothers' instrumental occupational values and positively related to their educational opportunity orientations, occupational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls' mothers, socio-economic status was found to be negatively related to their instrumental educational values, negatively related to their instrumental occupational values and positively related to their levels of educational aspiration, levels of educational expectation and levels of occupational expectation (Blishen).

Hypothesis 11: Fathers' educational level was found to be negatively related to the boys' mothers' instrumental occupational values and positively related to their levels of occupational aspiration (Haller) and levels of occupational aspiration (Blishen).

For the girls' mothers, fathers' educational level was found to be negatively related to their instrumental educational values, negatively related to their instrumental occupational values and positively related to their levels of educational aspiration, levels of educational expectation and levels of occupational expectation (Blishen).

Hypothesis 12: Mothers' educational level was found to be negatively related to the boys' mothers' instrumental educational values, negatively related to their instrumental occupational

values and positively related to their educational opportunity orientations, occupational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls' mothers, mothers' educational level was found to be negatively related to their instrumental educational values, negatively related to their instrumental occupational values and positively related to their levels of educational aspiration, levels of educational expectation and levels of occupational aspiration (Haller).

Hypothesis 13: Size of community of residence was found to be negatively related to the boys' mothers' instrumental educational values and positively related to their expressive educational values and expressive occupational values.

For the girls' mothers, no supportive relationships were found.

Hypothesis 14: Isolation of community of residence was found to be negatively related to the boys' mothers' levels of educational aspiration and levels of occupational aspiration (Haller).

For the girls' mothers, isolation of community of residence was found to be negatively related to their educational opportunity orientations and levels of occupational expectation (Blishen).

Hypothesis 15: Fathers' encouragement for continuing education was found to be negatively related to the boys' mothers' instrumental educational values and positively related to their levels of educational aspiration, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls' mothers, fathers' encouragement for continuing education was found to be positively related to their levels of educational expectation and levels of occupational aspiration (Haller).

Hypothesis 16: Mothers' encouragement for continuing education was found to be positively related to the boys' mothers' expressive educational values, levels of educational aspiration, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

For the girls' mothers, mothers' encouragement for continuing education was found to be positively related to their expressive occupational values and levels of occupational aspiration (Haller).

Hypothesis 17: Fathers' encouragement for occupational achievement was found to be positively related to the boys' mothers' educational opportunity orientations, occupational opportunity orientations, levels of educational aspiration levels of educational expectation and levels of occupational aspiration (Haller).

For the girls' mothers,fathers' encouragement for occupational achievement was found to be positively related to their occupational opportunity orientations, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen) and levels of occupational expectation (Blishen).

Hypothesis 18: Mothers' encouragement for occupational achievement was found to be positively related to the boys' mothers' expressive educational values, educational opportunity orientations, occupational opportunity orientations, levels of educational aspiration, levels of educational expectation, levels of occupational aspiration (Haller), levels of occupational aspiration (Blishen),

and levels of expectation (Blishen).

For the girls' mothers, mothers' encouragement for occupational achievement was found to be positively related to their expressive occupational values.

Part III

For the 203 students (94 boys and 109 girls) and their mothers:

Hypothesis 19: The boys' instrumental educational and expressive occupational values were found to be positively related to those of their mothers.

The girls' expressive and instrumental educational values and their expressive and instrumental occupational values were found to be positively related to those of their mothers.

Hypothesis 20: The boys' educational and occupational opportunity orientations were found to be positively related to those of their mothers.

The girls' educational and occupational opportunity orientations were found to be positively related to those of their mothers.

Hypothesis 21: The boys' educational and occupational aspirations (Haller and Blishen) were found to be positively related to those of their mothers.

The girls' educational and occupational aspirations (Haller and Blishen) were found to be positively related to those of their mothers.

Hypothesis 22: The boys' educational and occupational expectations were found to be positively related to those of their mothers.

The girls' educational and occupational expectations were found to be positively related to those of their mothers.

In general, the hypotheses advanced at the outset of this study have been supported (in part at least) by the findings presented above. For a detailed delineation of the specific sections of the hypotheses that have been accepted, the reader is referred to the summary paragraphs following the presentation of findings for each particular hypothesis.

Although it is recognized that any assertions on the existence of apparent trends must be made with caution in view of the situation specific nature of some of the relationships involved, the following comments appear to be in order. At the risk of oversimplifying, it can be concluded the certain selected social factors are related to, and can be considered to account for some of the variation in, the educational and occupational values, opportunity orientations, aspirations and expectations of twelfth grade students and their mothers. The parental educational and encouragement variables appear to be most salient for the students' achievement orientations. Socio-economic status effects are slightly more pronounced in the mothers' orientations. On the whole, however, similarities in the patterns of relationships for both generations are most striking.

The empirical evidence presented in this study supports those who interpret current youth phenomena in

terms of intergenerational congruency rather than conflict. The students and mothers involved in the present study appear to have bridged the "generation gap," at least with respect to the educational and occupational spheres.

Although the foregoing findings answer some questions, they also generate others. A few might be mentioned as suggestive of the problems remaining for analysis. The present study employed an expressive-instrumental distinction in its examination of educational and occupational values. What are alternate dimensions along which value orientations could be dichotomized? The present study endeavored to ascertain the respondents' subjective perceptions of educational and occupational opportunities. Do these perceptions constitute accurate appraisals of reality? In view of some of the differing relationships noted when two measures of level of occupational aspiration were employed in the present study, future research should attempt to examine the extent to which the use of different instruments influences the outcome obtained. Moreover, might the use of differing operational definitions and their attendant techniques of measurement account for some of the varying results reported in the occupational choice literature?

The importance of objective and subjective familial influences indicated by this study suggests that programs

of educational and vocational guidance should involve not only youth but parents as well. Particular emphasis should be placed on the dissemination of information on viable educational and occupational alternatives to aid youth in making their decisions and to aid their parents in assisting them.

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APPENDIX A

Data on Questionnaire Completion and the Questionnaires

TABLE 1

DATA ON QUESTIONNAIRE COMPLETION FOR GRADE TWELVE STUDENTS

Community	School	Class List Enrolment		Questionnaires Completed	Percent Coverage
Flin Flon	Hapnot Collegiate	Boys	108	69	63.88
		Girls	84	70	83.33
		Total	192	139	72.39
Lynn Lake	West Lynn Heights School	Boys	8	8	100.00
		Girls	7	6	85.11
		Total	15	14	93.33
Pine Falls	Pine Falls Collegiate	Boys	23	21	91.30
		Girls	15	15	100.00
		Total	38	36	94.74
Red Lake	Red Lake District High School	Boys	26	26	100.00
		Girls	36	29	80.56
		Total	62	55	88.71
Thompson	R.D. Parker Collegiate	Boys	39	34	87.18
		Girls	44	41	93.18
		Total	83	75	90.36
TOTAL		Boys	204	158	77.45
		Girls	186	161	86.56
		Total	390	319	81.80

TABLE 2

DATA ON QUESTIONNAIRE COMPLETION FOR
MOTHERS OF GRADE TWELVE STUDENTS

Community	Potential Population*		Questionnaires Completed	Percent Coverage
Flin Flon	Boys' Mothers	69	39	56.52
	Girls' Mothers	70	53	75.71
	Total	139	92	66.19
Lynn Lake	Boys' Mothers	8	7	87.50
	Girls' Mothers	6	4	66.66
	Total	14	11	78.57
Pine Falls	Boys' Mothers	21	17	80.95
	Girls' Mothers	15	12	80.00
	Total	36	29	80.56
Red Lake	Boys' Mothers	26	10	38.46
	Girls' Mothers	29	14	48.28
	Total	55	24	43.64
Thompson	Boys' Mothers	34	21	61.76
	Girls' Mothers	41	26	63.41
	Total	75	47	62.67
TOTAL	Boys' Mothers	158	94	59.49
	Girls' Mothers	161	109	67.70
	Total	319	203**	63.64

* This is based on the number of students present on the days the questionnaires were distributed.

** An additional 25 mothers were accounted for, but as a result of students' reasons (for example, mother deceased, out of town, parents separated, etc.) were classified as unavailable for response.

TABLE 3

SOCIO-ECONOMIC STATUS COMPOSITION OF STUDENT POPULATION STUDIED

Class	Socio-economic Index*	Boys No.	Boys %	Girls No.	Girls %	Total No.	Total %
I	70+	8	5	5	3	13	4
II	60-69	6	3	8	5	14	5
III	50-59	17	11	15	9	32	10
IV	40-49	45	28	53	33	98	31
V	30-39	72	45	65	41	137	43
VI	below 30	9	6	9	5	18	5
No response		1	1	6	4	7	2
Total		158	100	161	100	319	100

* Blishen, 1970: 112.

CENTER FOR SETTLEMENT STUDIES

THE UNIVERSITY OF MANITOBA

STUDENT QUESTIONNAIRE

Name.....
(Last Name) (Given Names)

This questionnaire deals with your family background, your education and your future occupational plans. Please read each item CAREFULLY and answer EACH question as best as you can.

The answers you give will be held in strict confidence. After the replies of all the students have been gathered, they will be analyzed statistically by means of an electronic computer. Although this is an attitude questionnaire and not a test it is important that you express your own ideas without discussing them with your neighbors.

To answer, please follow the directions given with each question. If you do not understand a question, please have the person giving you this form explain it to you.

Your co-operation is greatly appreciated.

==========

I. YOU AND YOUR FAMILY

1. Sex: Check one.

1_____ Male
2_____ Female

2. What is your present age? Check one.

1_____ 15 years
2_____ 16 years
3_____ 17 years
4_____ 18 years
5_____ 19 years
6_____ 20 years
7_____ 21 years
8_____ over 21 years

3. What is your father's occupation? Be as specific as possible. For example: sales clerk in _____ Hardware Store; owns bakery and has four employees; self-employed welder. (If your father is not living, indicate what his occupation was.)

_____

_____

_____

4. You believe that your father's job is: Check one.

1_____ a very good job
2_____ a fairly good job
3_____ not a good job

5. Is your mother employed outside the home? Check one.

1_____ employed full-time
2_____ employed part-time
3_____ not employed

6. What is your father's education? Check one.

1_____ some grade school
2_____ completed grade school
3_____ some high school
4_____ completed high school
5_____ completed high school and also had other training, for example: technical training
6_____ some university
7_____ university graduate
8_____ some graduate work
9_____ graduate degree (M.D., M.A., Ph.D., etc.)

7. What is your mother's education? Check one.

1_____ some grade school
2_____ completed grade school
3_____ some high school
4_____ completed high school
5_____ completed high school and also had other training, for example: business course, teacher training, etc.
6_____ some university
7_____ university graduate
8_____ some graduate work
9_____ graduate degree (M.D., M.A., Ph.D., etc.)

8. How long has your family lived in this community? Check one.

1_____ less than 2 years
2_____ 2-3 years
3_____ 4-5 years
4_____ 6-7 years
5_____ 8-9 years
6_____ 10-11 years
7_____ 12-13 years
8_____ 14-15 years
9_____ more than 15 years

==========

II. SCHOOL LIFE AND EDUCATION

9. The name of your school is.....

10. Compared with most others in your class, how would you rate your leadership ability? Check one.

1_____ below average ability
2_____ average ability
3_____ above average ability

11. What program are you taking in school? Check one.

1_____ Commercial Course
2_____ General Course
3_____ University Entrance
4_____ Other (specify.....)

12. What were your average marks in Grade 10 and 11 subjects? Check one.

1_____ mostly A's
2_____ mixed A's and B's
3_____ mostly B's
4_____ mixed B's and C's
5_____ mostly C's
6_____ mixed C's and D's
7_____ mostly D's
8_____ mixed D's and F's
9_____ mostly F's

13. When you are finished high school, what <u>are</u> your <u>plans</u> for further education? Check one.

1_____ No further education
2_____ Business College
3_____ Nurses Education
4_____ Teachers Education
5_____ Technical-Vocational Training (specify course.....)
6_____ Community College (specify course.....)
7_____ University (specify course.....)
8_____ Other (specify.....)

14. If you were completely <u>free to choose</u>, what <u>would</u> your plans for future education be? Check one.

1_____ No further education
2_____ Business College
3_____ Nurses Education
4_____ Teachers Education
5_____ Technical-Vocational Training (specify course.....)
6_____ Community College (specify course.....)
7_____ University (specify course.....)
8_____ Other (specify.....)

15. Realistically speaking, how good do you think your opportunities are for obtaining the kind of education you want? Check one.

1_____ very good
2_____ good
3_____ not too good
4_____ poor
5_____ non-existent

16. Please explain why you feel that your opportunities for obtaining the kind of education you want are very good, good, not too good, poor or non-existent:

_____

_____

_____

_____

_____

17. Concerning your education, which of the following best applies to your father? Check one.

1_____ My father has strongly encouraged me to continue.
2_____ My father has given me some encouragement to continue.
3_____ My father has encouraged me to graduate from high school and then go to work.
4_____ My father has encouraged me to quit school now and work.
5_____ My father has never said much about it.

18. Concerning your education, which of the following best applies to your mother? Check one.

1_____ My mother has strongly encouraged me to continue.
2_____ My mother has given me some encouragement to continue.
3_____ My mother has encouraged me to graduate from high school and then go to work.
4_____ My mother has encouraged me to quit school now and work.
5_____ My mother has never said much about it.

19. Concerning your educational plans, which of the following would you say has influenced you the most? Check one.

1_____ Father
2_____ Mother
3_____ Both parents equally
4_____ The teachers in your school
5_____ One particular teacher or guidance counselor
6_____ Friends at school
7_____ Friends not attending school
8_____ Relatives
9_____ Other (specify.....)

20. People place different degrees of importance on the various purposes an education serves. Indicate how important each of the following statements is in describing what you want to get out of an education. To indicate how important each is to you, CIRCLE ONE of the numbers from 1 to 9, with 1 indicating VERY UNIMPORTANT to 9 indicating VERY IMPORTANT.

	VERY UNIMPORTANT								VERY IMPORTANT
a) To help me achieve a secure way of life	1	2	3	4	5	6	7	8	9
b) To develop my mind and enable me to formulate my own ideas, beliefs and values	1	2	3	4	5	6	7	8	9
c) To help me get a good paying job and become economically independent	1	2	3	4	5	6	7	8	9
d) To develop the ability to get along with people	1	2	3	4	5	6	7	8	9
e) To help me understand myself better	1	2	3	4	5	6	7	8	9
f) To obtain prestige and a high social position in the community	1	2	3	4	5	6	7	8	9
g) To help me become a good citizen in my community	1	2	3	4	5	6	7	8	9
h) To develop the knowledge and skills applicable to a career	1	2	3	4	5	6	7	8	9

III. YOU AND YOUR FUTURE OCCUPATION

21. After your education is completed, what occupation do you plan to go into. (Give name of occupation.)

_____

22. This involves what kind of work? _____

_____

23. If you were completely free to choose, what occupation would you like to go into? (Give name of occupation.)

_____

24. This involves what kind of work? _____

_____

25. Realistically speaking, how good do you think your opportunities are for obtaining the occupation you want? Check one.

1_____ very good
2_____ good
3_____ not too good
4_____ poor
5_____ non-existent

26. Please explain why you feel that your opportunities for obtaining the occupation you want are very good, good, not too good, poor or non-existent:

_____

_____

_____

_____

_____

27. After completing your education, would you like to work in your present community? Check one.

1_____ yes
2_____ no

28. If you wanted to work or could work in a community other than your present community, where would you go?

Specify _____

29. Concerning your future occupation, which of the following best applies to your father? Check one.

1_____ My father wants me to get a job that is better than most jobs around here.
2_____ My father wants me to get a very good job.
3_____ My father has never said much about it.
4_____ My father does not care what kind of job I go into.
5_____ My father wants me to get a job that is as good as most jobs around here.

30. Concerning your future occupation, which of the following best applies to your mother? Check one.

1_____ My mother wants me to get a job that is better than most jobs around here.
2_____ My mother wants me to get a very good job.
3_____ My mother has never said much about it.
4_____ My mother does not care what kind of job I go into.
5_____ My mother wants me to get a job that is as good as most jobs around here.

31. Concerning your occupational plans, which of the following would you say has influenced you the most? Check one.

1_____ Father
2_____ Mother
3_____ Both parents equally
4_____ The teachers in your school
5_____ One particular teacher or guidance counselor
6_____ Friends at school
7_____ Friends not attending school
8_____ Relatives
9_____ Other (specify.....)

32. Below is a list of characteristics people look for when choosing an occupation. To indicate how important each of the following is to you in choosing an occupation, CIRCLE ONE of the numbers from 1 to 9, with 1 indicating VERY UNIMPORTANT to 9 indicating VERY IMPORTANT.

	VERY UNIMPORTANT								VERY IMPORTANT
a) Stable, secure future which this occupation provides	1	2	3	4	5	6	7	8	9
b) Chance to use my special skills and abilities	1	2	3	4	5	6	7	8	9
c) Chance to earn a good deal of money	1	2	3	4	5	6	7	8	9
d) Chance to work with people rather than alone or with things	1	2	3	4	5	6	7	8	9
e) Chance to be creative and original	1	2	3	4	5	6	7	8	9
f) The high social status and prestige provided by this occupation	1	2	3	4	5	6	7	8	9
g) Chance to help others and contribute to society	1	2	3	4	5	6	7	8	9
h) The amount of leisure time this occupation provides (good working hours and holidays)	1	2	3	4	5	6	7	8	9

33. The following 8 questions concern jobs. Read each question very carefully; the questions are not always the same. Please check one job in each question. Make sure it is the best answer you can give to the question. Answer every question; do not omit any. If you do not know what one of the jobs is, just ignore it.

1. Of the jobs listed in this question, which is the best one you are really sure you can get when your schooling is over? Check one.

1_____ lawyer
2_____ welfare worker for a city government
3_____ a member of the House of Commons
4_____ corporal in the army
5_____ Supreme Court Justice
6_____ night watchman
7_____ sociologist
8_____ policeman
9_____ district agricultural representative
10_____ filling station attendant

2. Of the jobs listed in this question, which one would you choose if you were free to choose any one of them you wished when your schooling is over? Check one.

1_____ director of a large corporation
2_____ undertaker
3_____ banker
4_____ machine operator in a factory
5_____ physician (doctor)
6_____ clothes presser in a laundry
7_____ accountant for a large business
8_____ railroad conductor
9_____ railroad engineer
10_____ singer in a night club

3. Of the jobs listed in this question, which is the best one you are really sure you can get when your schooling is over? Check one.

1_____ nuclear physicist
2_____ reporter for a daily newspaper
3_____ district judge
4_____ barber
5_____ provincial premier
6_____ soda fountain clerk
7_____ biologist
8_____ mail carrier
9_____ official of an international labor union
10_____ farm hand

4. Of the jobs listed in this question, which one would you choose if you were free to choose any one of them you wished when your schooling is over? Check one.

1_____ psychologist
2_____ manager of a small store in a city
3_____ head of a department in a provincial government
4_____ clerk in a store
5_____ cabinet member in the federal government
6_____ janitor
7_____ musician in a symphony orchestra
8_____ carpenter
9_____ radio announcer
10_____ coal miner

5. Of the jobs listed in this question, which is the best one you are really sure you can get by the time you are 30 years old? Check one.

1_____ civil engineer
2_____ bookkeeper
3_____ minister, priest or rabbi
4_____ city bus driver
5_____ diplomat in the Canadian Foreign Service
6_____ farm renter
7_____ author of novels
8_____ plumber
9_____ newspaper columnist
10_____ taxi driver

6. Of the jobs listed in this question, which one would you choose to have when you are 30 years old, if you were free to have any one of them you wished? Check one.

1_____ airline pilot
2_____ insurance agent
3_____ architect
4_____ milk route man
5_____ mayor of a large city
6_____ garbage collector
7_____ captain in the army
8_____ garage mechanic
9_____ owner-operator of a machine shop
10_____ railroad section hand

7. Of the jobs listed in this question, which is the best one you are really sure you can get by the time you are 30 years old? Check one.

1_____ artist who paints pictures that are exhibited in galleries
2_____ travelling salesman for a wholesale concern
3_____ chemist
4_____ truck driver
5_____ college professor
6_____ street sweeper
7_____ building contractor
8_____ local official of a labor union
9_____ electrician
10_____ restaurant waiter

8. Of the jobs listed in this question, which one would you choose to have when you are 30 years old, if you were free to have any of them you wished? Check one.

1_____ owner of a factory that employs about 100 people
2_____ playground director
3_____ dentist
4_____ lumberjack
5_____ scientist
6_____ shoeshiner
7_____ public school teacher
8_____ owner-operator of a lunch stand
9_____ trained machinist
10_____ dockworker

Please check to make certain that you have answered all the questions.

Thank you very much for your assistance.

CENTER FOR SETTLEMENT STUDIES

THE UNIVERSITY OF MANITOBA

QUESTIONNAIRE FOR MOTHERS

This questionnaire, dealing with students' hopes and plans for their education and future occupations, is part of a study being conducted by a research team from the Department of Sociology, University of Manitoba. In the past two years, similar questionnaires have been given to students and teachers and now we would like to obtain opinions from the mothers of these students.

You have been asked to fill out this questionnaire because you have a son (daughter) now in Grade 12. If you have two or more children in Grade 12, please fill out a questionnaire for each one.

To answer, please follow the directions given with each question. All of your answers will be held in strict confidence.

It is VERY IMPORTANT that your son (daughter) return this questionnaire the day after it is handed out, because the researchers have a time schedule to follow and must move on to other communities.

Your co-operation is necessary for the completion of this study and is greatly appreciated.

==========

PART I:

Please list the names of your child (children) now in Grade 12:

1.....
(Last Name) (Given Names)

2.....
(Last Name) (Given Names)

3.....
(Last Name) (Given Names)

1. How do you feel about the progress your son (daughter) is making in his (her) studies? Check one.

1_____ very satisfied
2_____ fairly satisfied
3_____ not very satisfied
4_____ very unsatisfied

2. Compared with most others in his (her) class, how would you rate your son's (daughter's) leadership ability? Check one.

1_____ below average ability
2_____ average ability
3_____ above average ability

3. When your son (daughter) finishes high school, what further education would you <u>like</u> him (her) to obtain? Check one.

1_____ No further education
2_____ Business College
3_____ Nurses Education
4_____ Teachers Education
5_____ Technical-Vocational Training (specify course.....)
6_____ Community College (specify course.....)
7_____ University (specify course.....)
8_____ Other (specify.....)

4. What further education do you think your son (daughter) will <u>actually</u> obtain? Check one.

1_____ No further education
2_____ Business College
3_____ Nurses Education
4_____ Teachers Education
5_____ Technical-Vocational Training (specify course.....)
6_____ Community College (specify course.....)
7_____ University (specify course.....)
8_____ Other (specify.....)

5. Realistically speaking, how good do you think your son's (daughter's) opportunities are for obtaining the kind of education you would like him (her) to have? Check one.

1_____ very good
2_____ good
3_____ not too good
4_____ poor
5_____ non-existent

6. Please explain why you feel that your son's (daughter's) opportunities for obtaining the kind of education you would like him (her) to have are very good, good, not too good, poor or non-existent:

_____

_____

_____

_____

_____

7. Concerning your son's (daughter's) education, which of the following best applies to <u>you</u>? Check one.

1_____ I have strongly encouraged him (her) to continue.
2_____ I have given him (her) some encouragement to continue.
3_____ I have encouraged him (her) to graduate from high school and then go to work.
4_____ I have encouraged him (her) to quit school now and work.
5_____ I have never said much about it.

8. Concerning your son's (daughter's) education, which of the following best applies to <u>your husband</u>? Check one.

1_____ He has strongly encouraged him (her) to continue.
2_____ He has given him (her) some encouragement to continue.
3_____ He has encouraged him (her) to graduate from high school and then go to work.
4_____ He has encouraged him (her) to quit school now and work.
5_____ He has never said much about it.

9. Concerning your son's (daughter's) educational plans, which of the following would you say has influenced him (her) the most? Check one.

1_____ Father
2_____ Mother
3_____ Both parents equally
4_____ The teachers in his (her) school
5_____ One particular teacher or guidance counselor
6_____ Friends at school
7_____ Friends not attending school
8_____ Relatives
9_____ Other (specify.....)

10. People place different degrees of importance on the various purposes an education serves. Indicate how important each of the following statements is in describing what you want your son (daughter) to get out of an education. To indicate how important each is, CIRCLE ONE of the numbers from 1 to 9, with 1 indicating VERY UNIMPORTANT to 9 indicating VERY IMPORTANT.

	VERY UNIMPORTANT								VERY IMPORTANT
a) To achieve a secure way of life	1	2	3	4	5	6	7	8	9
b) To develop his (her) mind and enable him (her) to formulate his (her) own ideas, beliefs and values	1	2	3	4	5	6	7	8	9
c) To get a good paying job and become economically independent	1	2	3	4	5	6	7	8	9
d) To develop the ability to get along with people	1	2	3	4	5	6	7	8	9
e) To understand himself (herself) better	1	2	3	4	5	6	7	8	9
f) To obtain prestige and a high social position in the community	1	2	3	4	5	6	7	8	9
g) To become a good citizen in the community	1	2	3	4	5	6	7	8	9
h) To develop the knowledge and skills applicable to a career	1	2	3	4	5	6	7	8	9

11. What occupation would you like your son (daughter) to go into? (Give name of occupation.)

_____

12. This involves what kind of work? _____

_____

13. What occupation do you think your son (daughter) will actually go into? (Give name of occupation.)

_____

14. This involves what kind of work? _____

_____

15. Realistically speaking, how good do you think your son's (daughter's) opportunities are for obtaining the occupation you would like him (her) to have? Check one.

1_____ very good
2_____ good
3_____ not too good
4_____ poor
5_____ non-existent

16. Please explain why you feel that your son's (daughter's) opportunities for obtaining the occupation you would like him (her) to have are very good, good, not too good, poor or non-existent:

_____

_____

_____

_____

17. After completing his (her) education, would you like your son (daughter) to work in this community? Check one.

1_____ yes
2_____ no

18. If your son (daughter) could work in a community other than this community, where would you want him (her) to go?

Specify _____

19. Concerning your son's (daughter's) future occupation, which of the following best applies to you? Check one.

1_____ I want him (her) to get a job that is better than most jobs around here.
2_____ I want him (her) to get a very good job.
3_____ I have never said much about it.
4_____ I do not care what kind of job he (she) goes into.
5_____ I want him (her) to get a job that is as good as most jobs around here.

20. Concerning your son's (daughter's) future occupation, which of the following best applies to your husband? Check one.

1_____ He wants him (her) to get a job that is better than most jobs around here.
2_____ He wants him (her) to get a very good job.
3_____ He has never said much about it.
4_____ He does not care what kind of job he (she) goes into.
5_____ He wants him (her) to get a job that is as good as most jobs around here.

21. Concerning your son's (daughter's) occupational plans, which of the following would you say has influenced him (her) the most? Check one.

1_____ Father
2_____ Mother
3_____ Both parents equally
4_____ The teachers in his (her) school
5_____ One particular teacher or guidance counselor
6_____ Friends at school
7_____ Friends not attending school
8_____ Relatives
9_____ Other (specify.....)

22. Below is a list of characteristics people look for when choosing an occupation. Please indicate how important you would like each of the following to be to your son (daughter) when he (she) chooses an occupation. To indicate the importance of each, CIRCLE ONE of the numbers from 1 to 9, with 1 indicating VERY UNIMPORTANT to 9 indicating VERY IMPORTANT.

	VERY UNIMPORTANT								VERY IMPORTANT
a) Stable, secure future which this occupation provides	1	2	3	4	5	6	7	8	9
b) Chance to use his (her) special skills and abilities	1	2	3	4	5	6	7	8	9
c) Chance to earn a good deal of money	1	2	3	4	5	6	7	8	9
d) Chance to work with people rather than alone or with things	1	2	3	4	5	6	7	8	9
e) Chance to be creative and original	1	2	3	4	5	6	7	8	9
f) The high social status and prestige provided by this occupation	1	2	3	4	5	6	7	8	9
g) Chance to help others and contribute to society	1	2	3	4	5	6	7	8	9
h) The amount of leisure time this occupation provides (good working hours and holidays)	1	2	3	4	5	6	7	8	9

23. The following 8 questions concern jobs. Please read each question very carefully; the questions are not always the same. Please check one job in each question. Answer every question; do not omit any. If you do not know what one of the jobs is, just ignore it.

1. Of the jobs listed in this question, which is the best one you are really sure your son (daughter) can get when his (her) schooling is over? Check one.

1_____ lawyer
2_____ welfare worker for a city government
3_____ a member of the House of Commons
4_____ corporal in the army
5_____ Supreme Court Justice
6_____ night watchman
7_____ sociologist
8_____ policeman
9_____ district agricultural representative
10_____ filling station attendant

2. Of the jobs listed in this question, which one would you like your son (daughter) to choose when his (her) schooling is over? Check one.

1_____ director of a large corporation
2_____ undertaker
3_____ banker
4_____ machine operator in a factory
5_____ physician (doctor)
6_____ clothes presser in a laundry
7_____ accountant for a large business
8_____ railroad conductor
9_____ railroad engineer
10_____ singer in a night club

3. Of the jobs listed in this question, which is the best one you are really sure your son (daughter) can get when his (her) schooling is over? Check one.

1_____ nuclear physicist
2_____ reporter for a daily newspaper
3_____ district judge
4_____ barber
5_____ provincial premier
6_____ soda fountain clerk
7_____ biologist
8_____ mail carrier
9_____ official of an international labor union
10_____ farm hand

4. Of the jobs listed in this question, which one would you like your son (daughter) to choose when his (her) schooling is over? Check one.

1_____ psychologist
2_____ manager of a small store in a city
3_____ head of a department in a provincial government
4_____ clerk in a store
5_____ cabinet member in the federal government
6_____ janitor
7_____ musician in a symphony orchestra
8_____ carpenter
9_____ radio announcer
10_____ coal miner

5. Of the jobs listed in this question, which is the best one you are really sure your son (daughter) can get by the time that he (she) is 30 years old? Check one.

1_____ civil engineer
2_____ bookkeeper
3_____ minister, priest or rabbi
4_____ city bus driver
5_____ diplomat in the Canadian Foreign Service
6_____ farm renter
7_____ author of novels
8_____ plumber
9_____ newspaper columnist
10_____ taxi driver

6. Of the jobs listed in this question, which one would you like your son (daughter) to have when he (she) is 30 years old? Check one.

1_____ airline pilot
2_____ insurance agent
3_____ architect
4_____ milk route man
5_____ mayor of a large city
6_____ garbage collector
7_____ captain in the army
8_____ garage mechanic
9_____ owner-operator of a machine shop
10_____ railroad section hand

7. Of the jobs listed in this question, which is the best one you are really sure your son (daughter) can get by the time that he (she) is 30 years old? Check one.

1_____ artist who paints pictures that are exhibited in galleries
2_____ travelling salesman for a wholesale concern
3_____ chemist
4_____ truck driver
5_____ college professor
6_____ street sweeper
7_____ building contractor
8_____ local official of a labor union
9_____ electrician
10_____ restaurant waiter

8. Of the jobs listed in this question, which one would you like your son (daughter) to have when he (she) is 30 years old? Check one.

1_____ owner of a factory that employs about 100 people
2_____ playground director
3_____ dentist
4_____ lumberjack
5_____ scientist
6_____ shoeshiner
7_____ public school teacher
8_____ owner-operator of a lunch stand
9_____ trained machinist
10_____ dockworker

PART II:

24. In general, how do you feel about the work of the teachers and the school in this community? Check one.

1_____ very satisfied
2_____ moderately satisfied
3_____ moderately dissatisfied
4_____ very dissatisfied

25. In general, do you think that parents in this community support the teachers and the school in what they are trying to do? Check one.

1_____ very much
2_____ a little
3_____ not at all

26. In general, how would you describe relations between parents and the school? Check one.

1_____ very good
2_____ good
3_____ not too good
4_____ poor

27. Do you think that the teachers in this community feel that they have the support of the parents in what they are trying to do in the school? Check one.

1_____ very much
2_____ a little
3_____ not at all

28. Do you feel that parents in this community show understanding of the problems of the teachers and the school? Check one.

1_____ yes
2_____ no

29. Although teachers have to concern themselves with many different things in their jobs, some teachers emphasize certain things more than others. Suppose you could choose the kind of teacher you wanted for your child (children) which <u>one</u> of the following would you choose? Check one.

1_____ The teacher should be most concerned with maintaining discipline, seeing that the students work hard, and teaching them to follow directions.
2_____ The teacher should see that the students know their subject matter well, cover the material thoroughly, and test students' progress regularly.
3_____ The teacher should make the class interesting and encourage students to be creative and figure things out for themselves.
4_____ The teacher should be friendly and well-liked by the students, and be able to understand and handle their problems.

30. Which <u>one</u> of these statements do you think "best describes" your child's (children's) teachers? Circle <u>one</u>.

1 2 3 4

31. Which <u>one</u> do you think your child (children) prefers (prefer)? Circle <u>one</u>.

1 2 3 4

32. People have different views concerning the main purposes which the school and education ought to serve. Which three of the following statements most nearly express your ideas, ranked in order of importance, giving 1st for most important, 2nd for the next most important, and 3rd for the third most important.

1_____ To develop the knowledge, skills and techniques directly applicable or preparatory to a career.
2_____ To develop the ability to get along with people.
3_____ To provide a basic general education and appreciation of ideas.
4_____ To develop knowledge of, and interest in community and world problems.
5_____ To develop moral capacities, ethical standards and values.
6_____ To produce good citizens for the community.
7_____ To develop self-knowledge and aid self-development.
8_____ To provide a discipline that is generally applicable in other areas of life.
9_____ To develop the ability to think.

33. Which three of the above ideas do you think your child's (children's) teachers would consider most important. Circle three numbers.

1 2 3 4 5 6 7 8 9

34. Which one of the above ideas do you think your child (children) is (are) most interested in. Circle one.

1 2 3 4 5 6 7 8 9

35. What are you most satisfied with concerning the teachers and the school?

_____

_____

36. What are you most dissatisfied with concerning the teachers and the school?

_____

_____

Thank you very much for your assistance.

The University of Manitoba

Department of Sociology
Winnipeg 19, Canada

UM

May, 1971

Dear Parent:

Recently researchers from the University of Manitoba visited your community to conduct a study dealing with students' hopes and plans for their education and future occupations. Each Grade Twelve student was given a questionnaire for his or her mother to fill out and return the following day.

For a variety of reasons this was not possible in all cases and we were unable to obtain the required responses from a number of mothers at that time. Now, in order to complete our project, we are asking the mothers to please fill out the questionnaire and use the enclosed stamped envelope provided for your convenience in returning the questionnaire.

All of the answers will be held in strict confidence. In the past two years, similar questionnaires have been given to students and teachers and now it is very important that we obtain opinions from the mothers. We would appreciate if you returned the questionnaire as soon as possible.

Thank you for your co-operation.

Sincerely,

==========

QUESTIONNAIRE FOR MOTHERS

PART I:

The name of your child in Grade Twelve is:

.....
(Last Name) (Given Names)

APPENDIX B

Tables for Relationships between Independent Variables and the Students' Values

1 - 9: Educational Values

10 - 18: Occupational Values

TABLE 1

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SOCIO-ECONOMIC STATUS OF FAMILY (INDEPENDENT VARIABLE 1) AND THE STUDENTS' EDUCATIONAL VALUES

Socio-Economic Status of Family and -	Boys r	Girls r
Instrumental:		
Security	.05	-.08
Money	.16	.01
Prestige	.08	-.19
Career	.06	.03
Expressive:		
Develop mind	.05	-.00
Get along with people	.05	.04
Understand self	.04	-.10
Good citizen	.05	-.09

TABLE 2

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN FATHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 2) AND THE STUDENTS' EDUCATIONAL VALUES

Fathers' Educational Level and -	Boys r	Girls r
Instrumental:		
Security	.06	-.07
Money	.11	.08
Prestige	.09	-.22
Career	.08	.01
Expressive:		
Develop mind	-.06	-.03
Get along with people	.08	-.08
Understand self	-.06	-.18
Good citizen	.06	-.06

TABLE 3

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN MOTHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 3) AND THE STUDENTS' EDUCATIONAL VALUES

Mothers' Educational Level and	Boys r	Girls r
Instrumental:		
Security	.03	-.10
Money	.10	.00
Prestige	.05	-.17
Career	.05	-.03
Expressive:		
Develop mind	-.05	-.10
Get along with people	.10	.06
Understand self	-.01	-.13
Good citizen	.03	.05

TABLE 4

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SIZE OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 4) AND THE STUDENTS' EDUCATIONAL VALUES

Size of Community of Residence and -	Boys r	Girls r
Instrumental:		
Security	.11	.12
Money	-.03	.00
Prestige	.10	.08
Career	-.06	-.06
Expressive:		
Develop mind	-.05	-.02
Get along with people	.08	.11
Understand self	-.04	-.10
Good citizen	.00	.04

TABLE 5

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ISOLATION OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 5) AND THE STUDENTS' EDUCATIONAL VALUES

Isolation of Community of Residence and -	Boys r	Girls r
Instrumental:		
Security	-.01	-.19
Money	-.01	-.19
Prestige	-.01	.02
Career	.00	-.20
Expressive:		
Develop mind	-.05	.09
Get along with people	-.08	-.09
Understand self	-.07	-.05
Good citizen	-.07	-.10

TABLE 6

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION (INDEPENDENT VARIABLE 6) AND THE STUDENTS' EDUCATIONAL VALUES

Strength of Fathers' Encouragement for Continuing Education and -	Boys r	Girls r
Instrumental:		
Security	.11	.25
Money	.04	.17
Prestige	.02	-.02
Career	.10	.09
Expressive:		
Develop mind	.08	.17
Get along with people	.06	.07
Understand self	.09	.00
Good citizen	.12	.05

TABLE 7

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION (INDEPENDENT VARIABLE 7) AND THE STUDENTS' EDUCATIONAL VALUES

Strength of Mothers' Encouragement for Continuing Education and -	Boys r	Girls r
Instrumental:		
Security	.27	.06
Money	.14	.00
Prestige	.03	-.13
Career	.21	-.08
Expressive		
Develop mind	.16	-.03
Get along with people	.09	-.04
Understand self	.08	.10
Good citizen	.18	.06

TABLE 8

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT (INDEPENDENT VARIABLE 8) AND THE STUDENTS' EDUCATIONAL VALUES

Strength of Fathers' Encouragement for Occupational Achievement and -	Boys r	Girls r
Instrumental:		
Security	.04	.18
Money	.12	.06
Prestige	.01	.07
Career	.01	.04
Expressive:		
Develop mind	-.01	.20
Get along with people	.09	.05
Understand self	.09	.02
Good citizen	-.00	.04

TABLE 9

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT (INDEPENDENT VARIABLE 9) AND THE STUDENTS' EDUCATIONAL VALUES

Strength of Mothers' Encouragement for Occupational Achievement and -	Boys r	Girls r
Instrumental:		
Security	.04	.23
Money	.02	.07
Prestige	.02	.08
Career	-.02	-.02
Expressive:		
Develop mind	.12	.03
Get along with people	.12	-.10
Understand self	.09	-.01
Good citizen	.09	.11

TABLE 10

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SOCIO-ECONOMIC STATUS OF FAMILY (INDEPENDENT VARIABLE 1) AND THE STUDENTS' OCCUPATIONAL VALUES

Socio-Economic Status of Family and -	Boys r	Girls r
Instrumental:		
Security	-.01	.01
Money	-.05	-.05
Prestige	.04	-.18
Leisure	.00	-.00
Expressive:		
Special skills and abilities	.09	.00
Work with people	-.00	-.09
Creative and original	-.03	-.14
Help others	-.00	-.06

TABLE 11

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN FATHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 2) AND THE STUDENTS' OCCUPATIONAL VALUES

Fathers' Educational Level and -	Boys r	Girls r
Instrumental:		
Security	.04	.03
Money	-.02	-.01
Prestige	.03	-.17
Leisure	-.13	-.03
Expressive:		
Special skills and abilities	.07	.02
Work with people	.01	-.07
Creative and original	.04	-.09
Help others	.03	.00

TABLE 12

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN MOTHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 3) AND THE STUDENTS' OCCUPATIONAL VALUES

Mothers' Educational Level and -	Boys r	Girls r
Instrumental:		
Security	.05	-.02
Money	.06	-.15
Prestige	.08	-.21
Leisure	.06	-.09
Expressive:		
Special skills and abilities	.01	-.05
Work with people	-.00	-.10
Creative and original	.03	-.17
Help others	-.12	.01

TABLE 13

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SIZE OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 4) AND THE STUDENTS' OCCUPATIONAL VALUES

Size of Community of Residence and -	Boys r	Girls r
Instrumental:		
Security	-.02	.05
Money	-.05	.24
Prestige	.05	.08
Leisure	.10	.13
Expressive:		
Special skills and abilities	-.00	.19
Work with people	.01	-.04
Creative and original	.01	.11
Help others	.09	-.08

TABLE 14

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ISOLATION OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 5) AND THE STUDENTS' OCCUPATIONAL VALUES

Isolation of Community of Residence and -	Boys r	Girls r
Instrumental:		
Security	-.13	-.26
Money	.03	-.04
Prestige	-.06	-.09
Leisure	-.18	-.15
Expressive:		
Special skills and abilities	-.05	-.05
Work with people	-.18	-.04
Creative and original	-.15	.03
Help others	-.15	-.06

TABLE 15

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION (INDEPENDENT VARIABLE 6) AND THE STUDENTS' OCCUPATIONAL VALUES

Strength of Fathers' Encouragement for Continuing Education and -	Boys r	Girls r
Instrumental:		
Security	.06	.18
Money	-.01	.06
Prestige	.02	-.05
Leisure	-.03	.10
Expressive:		
Special skills and abilities	-.05	.22
Work with people	-.03	.15
Creative and original	.07	-.05
Help others	.09	.10

TABLE 16

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION (INDEPENDENT VARIABLE 7) AND THE STUDENTS' OCCUPATIONAL VALUES

Strength of Mothers' Encouragement for Continuing Education and -	Boys r	Girls r
Instrumental:		
Security	.16	.02
Money	.09	-.14
Prestige	.09	-.12
Leisure	-.03	-.15
Expressive:		
Special skills and abilities	-.07	.09
Work with people	.04	.15
Creative and original	.13	.08
Help others	.20	.10

TABLE 17

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT (INDEPENDENT VARIABLE 8) AND THE STUDENTS' OCCUPATIONAL VALUES

Strength of Fathers' Encouragement for Occupational Achievement and -	Boys r	Girls r
Instrumental:		
Security	.02	.18
Money	-.06	.18
Prestige	-.00	.15
Leisure	-.14	.27
Expressive:		
Special skills and abilities	.08	.24
Work with people	.11	.11
Creative and original	.06	.10
Help others	.07	.10

TABLE 18

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT (INDEPENDENT VARIABLE 9) AND THE STUDENTS' OCCUPATIONAL VALUES

Strength of Mothers' Encouragement for Occupational Achievement and -	Boys r	Girls r
Instrumental:		
Security	.03	.19
Money	-.06	.10
Prestige	-.05	.10
Leisure	-.18	.04
Expressive:		
Special skills and abilities	.18	.09
Work with people	.13	.15
Creative and original	.15	.06
Help others	.10	-.01

APPENDIX C

Tables for Relationships between Independent Variables and the Mothers' Values

1 - 9: Educational Values

10 - 18: Occupational Values

TABLE 1

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SOCIO-ECONOMIC STATUS OF FAMILY (INDEPENDENT VARIABLE 1) AND THE MOTHERS' EDUCATIONAL VALUES

Socio-Economic Status of Family and -	Boys' Mothers r	Girls' Mothers r
Instrumental		
Security	-.11	-.15
Money	.01	-.08
Prestige	-.02	-.14
Career	-.07	.08
Expressive:		
Develop mind	.06	.08
Get along with people	-.01	-.03
Understand self	-.07	.07
Good citizen	-.21	.07

TABLE 2

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN FATHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 2) AND THE MOTHERS' EDUCATIONAL VALUES

Fathers' Educational Level and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.15	-.12
Money	-.00	-.13
Prestige	.02	-.04
Career	-.00	-.03
Expressive:		
Develop mind	.03	.05
Get along with people	-.01	-.05
Understand self	.04	-.07
Good citizen	-.05	.04

TABLE 3

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN MOTHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 3) AND THE MOTHERS' EDUCATIONAL VALUES

Mothers' Educational Level and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.31	-.16
Money	-.16	-.13
Prestige	-.14	-.14
Career	-.21	-.03
Expressive:		
Develop mind	-.07	.05
Get along with people	-.32	-.07
Understand self	-.24	.06
Good citizen	-.18	.01

TABLE 4

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SIZE OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 4) AND THE MOTHERS' EDUCATIONAL VALUES

Size of Community of Residence and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.13	.05
Money	-.16	.10
Prestige	.02	.12
Career	-.09	-.07
Expressive:		
Develop mind	.11	.03
Get along with people	-.00	.05
Understand self	.16	.06
Good citizen	.05	-.03

TABLE 5

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ISOLATION OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 5) AND THE MOTHERS' EDUCATIONAL VALUES

Isolation of Community of Residence and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.03	-.16
Money	.10	-.21
Prestige	.17	-.02
Career	.00	-.07
Expressive:		
Develop mind	.19	.01
Get along with people	.13	-.15
Understand self	.22	-.03
Good citizen	.00	.05

TABLE 6

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 6) AND THE MOTHERS' EDUCATIONAL VALUES

Strength of Fathers' Encouragement for Continuing Education and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.21	-.00
Money	-.12	-.02
Prestige	.00	-.02
Career	.02	-.01
Expressive:		
Develop mind	.13	-.14
Get along with people	.10	-.07
Understand self	.02	.05
Good citizen	-.07	-.07

TABLE 7

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 7) AND THE MOTHERS' EDUCATIONAL VALUES

Strength of Mothers' Encouragement for Continuing Education and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.08	.00
Money	-.05	-.06
Prestige	.01	-.12
Career	-.06	.11
Expressive:		
Develop mind	.22	-.02
Get along with people	.16	.01
Understand self	.11	.04
Good citizen	.00	.03

TABLE 8

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 8) AND THE MOTHERS' EDUCATIONAL VALUES

Strength of Fathers' Encouragement for Occupational Achievement and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.09	.03
Money	-.06	.04
Prestige	.15	.08
Career	-.04	-.02
Expressive:		
Develop mind	.02	-.07
Get along with people	-.02	-.16
Understand self	.06	-.02
Good citizen	-.07	-.09

TABLE 9

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 9) AND THE MOTHERS' EDUCATIONAL VALUES

Strength of Mothers' Encouragement for Occupational Achievement and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	.15	.16
Money	.08	.11
Prestige	.12	.01
Career	-.00	.04
Expressive:		
Develop mind	.05	.02
Get along with people	.11	.06
Understand self	.09	-.01
Good citizen	.08	.04

TABLE 10

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SOCIO-ECONOMIC STATUS OF FAMILY (INDEPENDENT VARIABLE 1) AND THE MOTHERS' OCCUPATIONAL VALUES

Socio-Economic Status of Family and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.09	-.14
Money	-.18	-.11
Prestige	-.02	-.21
Leisure	-.15	.04
Expressive:		
Special skills and abilities	-.04	-.03
Work with people	.05	-.06
Creative and original	-.06	-.01
Help others	-.19	.02

TABLE 11

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN FATHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 2) AND THE MOTHERS' OCCUPATIONAL VALUES

Fathers' Educational Level and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.19	-.16
Money	-.06	-.12
Prestige	.04	-.16
Leisure	-.11	.08
Expressive:		
Special skills and abilities	-.06	-.03
Work with people	-.03	-.18
Creative and original	-.12	-.08
Help others	-.09	-.12

TABLE 12

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN MOTHERS' EDUCATIONAL LEVEL (INDEPENDENT VARIABLE 3) AND THE MOTHERS' OCCUPATIONAL VALUES

Mothers' Educational Level and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.26	-.22
Money	-.32	-.15
Prestige	-.14	-.22
Leisure	-.36	-.07
Expressive:		
Special skills and abilities	-.17	-.02
Work with people	-.18	-.12
Creative and original	-.32	-.06
Help others	-.29	-.10

TABLE 13

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN SIZE OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 4) AND THE MOTHERS' OCCUPATIONAL VALUES

Size of Community of Residence and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.09	.06
Money	-.12	.14
Prestige	.06	.07
Leisure	-.14	.05
Expressive:		
Special skills and abilities	.04	.02
Work with people	.12	-.11
Creative and original	.10	.03
Help others	.05	.01

Table 14

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN ISOLATION OF COMMUNITY OF RESIDENCE (INDEPENDENT VARIABLE 5) AND THE MOTHERS' OCCUPATIONAL VALUES

Isolation of Community of Residence and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.04	-.09
Money	.03	-.06
Prestige	.10	-.01
Leisure	-.09	-.02
Expressive:		
Special skills and abilities	.06	.00
Work with people	-.00	-.07
Creative and original	.08	.06
Help others	-.10	.10

TABLE 15

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 6) AND THE MOTHERS' OCCUPATIONAL VALUES

Strength of Fathers' Encouragement for Continuing Education and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.18	.08
Money	-.07	-.02
Prestige	.01	-.00
Leisure	-.05	-.05
Expressive:		
Special skills and abilities	-.12	-.04
Work with people	-.01	.06
Creative and original	.03	-.03
Help others	-.10	.02

TABLE 16

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR CONTINUING EDUCATION - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 7) AND THE MOTHERS' OCCUPATIONAL VALUES

Strength of Mothers' Encouragement for Continuing Education and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.08	.19
Money	-.04	-.04
Prestige	.05	-.10
Leisure	-.04	-.10
Expressive:		
Special skills and abilities	-.10	.17
Work with people	.01	.19
Creative and original	-.03	-.00
Help others	-.09	.19

TABLE 17

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF FATHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 8) AND THE MOTHERS' OCCUPATIONAL VALUES

Strength of Fathers' Encouragement for Occupational Achievement and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	-.17	.00
Money	-.07	-.02
Prestige	.10	-.02
Leisure	.10	-.07
Expressive:		
Special skills and abilities	-.08	.03
Work with people	-.02	-.03
Creative and original	.09	-.02
Help others	.02	-.05

TABLE 18

CORRELATION COEFFICIENTS FOR THE RELATIONSHIPS BETWEEN STRENGTH OF MOTHERS' ENCOURAGEMENT FOR OCCUPATIONAL ACHIEVEMENT - AS PERCEIVED BY THE STUDENTS (INDEPENDENT VARIABLE 9) AND THE MOTHERS' OCCUPATIONAL VALUES

Strength of Mothers' Encouragement for Occupational Achievement and -	Boys' Mothers r	Girls' Mothers r
Instrumental:		
Security	.06	.12
Money	-.07	.12
Prestige	-.01	.02
Leisure	.12	-.06
Expressive:		
Special skills and abilities	-.08	.12
Work with people	-.05	.15
Creative and original	.16	.08
Help others	-.04	.06

APPENDIX D

Correlation Matrices for the Educational and Occupational Values

Variable Identification for Educational Values
Correlation Matrices

Matrix Number	Educational Value
1	Security (In.)
2	Develop mind (Ex.)
3	Money (In.)
4	Get along with people (Ex.)
5	Understand self (Ex)
6	Prestige (In.)
7	Good citizen (Ex.)
8	Career (In.)

Variable Identification for Occupational Values
Correlation Matrices

Matrix Number	Occupational Value
1	Security (In.)
2	Special skills and abilities (Ex.)
3	Money (In.)
4	Work with people (Ex.)
5	Creative and original (Ex.)
6	Prestige (In.)
7	Help others (Ex.)
8	Leisure (In.)

TABLE 1

CORRELATION MATRIX FOR BOYS' EDUCATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.18	.65	.20	.07	.23	.39	.54
2		1.00	.06	.22	.52	-.01	.27	.25
3			1.00	.14	-.03	.16	.28	.55
4				1.00	.42	.26	.46	.27
5					1.00	.18	.33	.24
6						1.00	.42	.24
7							1.00	.46
8								1.00

TABLE 2

CORRELATION MATRIX FOR GIRLS' EDUCATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.32	.58	.29	.26	.27	.40	.36
2		1.00	.21	.30	.50	.04	.14	.15
3			1.00	.30	.28	.26	.38	.46
4				1.00	.55	.11	.40	.28
5					1.00	.19	.41	.23
6						1.00	.40	.13
7							1.00	.33
8								1.00

TABLE 3

CORRELATION MATRIX FOR BOYS' OCCUPATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.46	.60	.36	.02	.24	.41	.13
2		1.00	.32	.42	.33	.08	.30	-.05
3			1.00	.21	-.02	.24	.15	.34
4				1.00	.25	.36	.52	.00
5					1.00	.19	.27	.13
6						1.00	.30	.30
7							1.00	.09
8								1.00

TABLE 4

CORRELATION MATRIX FOR GIRLS' OCCUPATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.33	.47	.28	.12	.30	.33	.34
2		1.00	.29	.13	.46	.19	.35	.20
3			1.00	.06	.25	.51	.10	.58
4				1.00	.22	.17	.38	.04
5					1.00	.33	.32	.14
6						1.00	.21	.41
7							1.00	.12
8								1.00

TABLE 5

CORRELATION MATRIX FOR BOYS' MOTHERS' EDUCATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.15	.60	.43	.26	.31	.32	.34
2		1.00	.25	.60	.65	.18	.42	.37
3			1.00	.46	.33	.49	.40	.48
4				1.00	.75	.35	.70	.63
5					1.00	.27	.67	.55
6						1.00	.23	.22
7							1.00	.74
8								1.00

TABLE 6

CORRELATION MATRIX FOR GIRLS' MOTHERS' EDUCATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.62	.72	.68	.56	.35	.53	.68
2		1.00	.48	.75	.77	.17	.77	.68
3			1.00	.49	.49	.46	.40	.57
4				1.00	.71	.09	.74	.60
5					1.00	.25	.67	.61
6						1.00	.17	.19
7							1.00	.64
8								1.00

TABLE 7

CORRELATION MATRIX FOR BOYS' MOTHERS' OCCUPATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.59	.52	.55	.48	.41	.40	.50
2		1.00	.40	.53	.64	.34	.59	.32
3			1.00	.44	.38	.62	.33	.50
4				1.00	.43	.54	.56	.37
5					1.00	.36	.65	.47
6						1.00	.36	.57
7							1.00	.55
8								1.00

TABLE 8

CORRELATION MATRIX FOR GIRLS' MOTHERS' OCCUPATIONAL VALUES

	1	2	3	4	5	6	7	8
1	1.00	.66	.60	.56	.39	.47	.58	.36
2		1.00	.45	.70	.54	.22	.74	.29
3			1.00	.40	.50	.67	.34	.55
4				1.00	.57	.30	.74	.24
5					1.00	.45	.53	.35
6						1.00	.29	.46
7							1.00	.25
8								1.00