

AN ANALYSIS OF SOME OF THE FACTORS  
WHICH INFLUENCE THE ADOPTION OF VALUES  
BY ADOLESCENTS

by

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B.H.E., University of British Columbia, 1964

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF  
THE REQUIREMENTS FOR THE DEGREE OF  
MASTER OF ARTS

in the Department  
of  
Counselling

We accept this thesis as conforming to the  
required standard:

THE UNIVERSITY OF BRITISH COLUMBIA

April, 1972

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## ABSTRACT

This study was done to determine if students, classified differently on certain environmental and physical determinants, come from differing value populations. This was done by use of two instruments, the Differential Values Inventory for personal values and the Occupational Values Rating Scale for vocational values. Three schools were used, two public schools and a private religious school. The public schools were situated in different socio-economic areas. The students were rated on each of 5 classifications: socio-economic standing, sex, grade, church attendance and school program. Scores were obtained for each student and were analyzed using the Hotelling  $T^2$  test which gave confidence intervals for acceptance or rejection of the hypotheses that students classified differently on the above named 5 factors would have the same values. It was found that students, when classified according to regularity of church attendance, sex, school program and grade did create populations which held significantly different values. When students were classified according to socio-economic status there was no significant difference in the values they held.

#### ACKNOWLEDGMENT

I would like to take this opportunity to express my thanks to Dr. M. Nevison for her help and advice throughout the development of this study; to Dr. R. Conry for his patience and guidance in rendering service beyond the call of duty; and, finally, to the many graduate students who provided the moral support needed when the going got rough.

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## CHAPTER I

### INTRODUCTION

Lehmann (1962) has suggested that education's main concern should be with behavior change as necessitated by normal processes of maturation. This implies concern with values as they define behavior. However, he emphasizes that optimum results of behavioral change does not always occur: an experience effective for one type of student might be ineffective for another. Research suggests that certain specific factors such as the student's family background, his sex and his church affiliation affect a student and thus must be considered in any educational setting that is to be effective for each student.

As counsellors in this educational system, our aim is the optimum development of each individual student within the school. This infers the achievement of identifiable values and goals by the student through processes of clarification, processes which can hopefully occur within a counsellor-student relationship. However, as Lehmann has suggested, in any educational system consideration needs to be given to the individual, his background and his environment, when rapport is being established.

This study has attempted to discover some of the factors which influence the formation of values by students. In order to understand value sorting in a counselling situation, information in two areas is beneficial. One is an awareness of the generally existing values and the second is an awareness of possible factors of influence on value adoption. It is not imperative that the counsellor have specific knowledge of the values of each student, although he does become involved in the

student's value discovery process and it is because of this involvement that the counsellor needs to be aware of some of the factors which influence the student in this growth process. For instance, as a counsellor, is it correct to assume that different grades and different sexes hold differing values? Do students from varying socio-economic or religious backgrounds ascribe to varying value systems? Are students on an academic program likely to favor different values than those on a non-academic program? The answers to these questions are important, not just in the knowledge they can give, but because of the benefit they would be to a counsellor in attempting to understand his students and develop rapport.

Within the school system itself, a knowledge of values and their influences is relevant to the establishment of organization and curriculum within each school. A major area of concern in education involves psychological need fulfillment of the students by the school. If students in different areas have different values, should school structures, programs and objectives be significantly different to meet these needs? To take this one step further, if a counsellor's effectiveness is determined by his ability to build rapport, and if students in different schools have significantly different values should the value systems of the counsellor be considered in counsellor placement? Battle (1957) would strongly suggest that this is so: "...patterns of values are effective in determining the quality of the relations that exist among persons (p. 27)." He implies that rapport is dependent on similar value ideals.

These questions posed above form the basis of this study. The problem was not so much to determine what the values of today's youth are, although some of these values have been implied, but more, what environmental or

other factors seem to influence the values that students adopt. Awareness of the subtle influences which affect youth in this process of value adoption and consequently in life style patterns is vital to a counsellor as he seeks to maximize the value clarification processes to which he and the school are committed.

### I. LIMITATIONS OF THIS STUDY

This study faces the same limitations as any paper-pencil attempt to empirically measure values, attitudes or behavior. This should not discredit or prohibit attempts in this area as long as proper precautions are used in making generalizations about proven or disproven hypotheses. Any study is limited by the operationally defined terms and concepts referred to in the study.

The two instruments used in this study limit the generalizing power of the data. Particularly in the Differential Values Inventory where symbols are used to infer values, statements can only be accurately stated in view of the symbolic desiderata defined by the instrument. No two instruments could be developed to measure precisely the same value.

Another consideration in this study involves the socio-economic status assigned each student. A different status index may have classified the subjects in a slightly different way, using different criteria of socio-economic status, thereby possibly changing the results.

The bias of the sample used must also not be overlooked. It was not a random sample as schools were chosen for specific reasons, however, it is hoped that it helped to verify the data more than detract from the study. As well as suggesting the data results as applied to the sample, the

possibility of suggesting trends in the population as a whole still is feasible.

In any study, factors such as have been discussed above must be considered as providing limitations on the findings. However, even though generalizations cannot justifiably be declared, evidence of trends occurring within the general population can be made. For it is only as this is done that the research assumes practical value.

## CHAPTER II

### REVIEW OF LITERATURE

Literature cited in this section includes a discussion of three general areas of information: the development of the term values, the development of the term socio-economic status and research related to this study.

#### I. VALUES

The functional significance of values, as concerned by this research, involves several major relationships: values and the individual, values and society, values and schools, value classification, value measurement and value definitions.

##### Values and the Individual

The concept of values evokes many differing ideas within the minds of researchers of psychological and sociological behavior. Therefore, in a paper studying values it is essential to attempt to map out a definition encompassing some of the aspects of the concept so that correct applications of the results can be made.

Generally, values arise from a process of valuing when actions which show the intensity of desire a person has for various objects are cited (Catton, 1959). From this assumption, it can be inferred that an individual indicates his values through the behavior he selects, however, this thought requires clarification and expansion. Rokeach (1968) develops the idea that values, as either modes of conduct or end-states of existence,

produce behavior that is personally and socially preferable to any alternative available, as the values become internalized and consequently multifunctional to the individual.

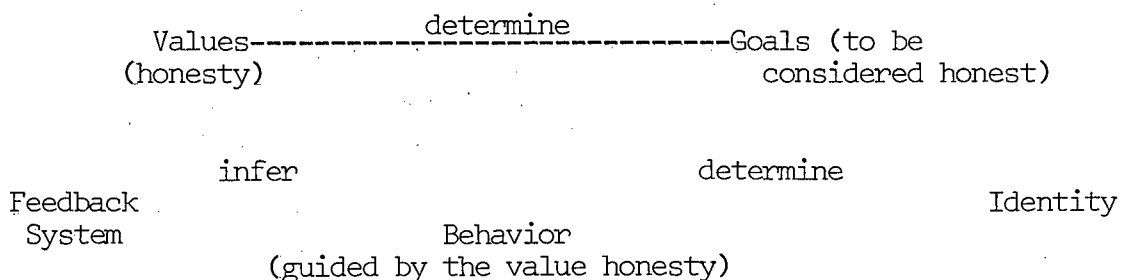
These personally internalized values obtained through processes of self discovery and clarification which could be termed "internalized parents," an individual develops into a hierarchy of values which functions to order the degree of priority which an individual might place on anything desired (Smith, 1963; Catton, 1959; Meek, 1964). This value system is unstable in that as new experiences occur, the values take on differing priorities. This shift in the value hierarchy provides a partial explanation for some of the conflicts which people, especially in the adolescent stage experience.

Alterations in the priorities which an individual adheres to can also occur due to certain prevailing circumstances. As discussed by both Catton (1959) and Scheibe (1970), some of these circumstantial factors are the proximity of the values involved, the social distance of the values, the remoteness in time of the value, the irrevocability or permanence of the values, past experiences, ecological conditions such as the weather, and the ease of attainability. Catton (1959) suggests that the greater the ease of attaining, the less the value. Adolescents would concur with him as they use this logic to justify certain behaviors, e.g. drinking. Any of these influences must be considered when researching to determine values.

Functionally, theories of personality would indicate that values are central to the organization of the personality (Smith 1963) and are

utilized as a criterion for guiding actions, developing and maintaining attitudes, justifying behavior, and making moral judgments and self comparisons (Rokeach, 1968). According to Schiebe (1970), values emerge from within the individual's personality organization as a result of the interaction between that particular person and that particular portion of his environment-- ". . .between the person and his psychological ecology (p. 47)." Because of this link with the psychological make-up of the individual, a bond between values, goals and identity appears inevitable.

This interaction between values and goals is discussed by such authors as Wheelis (1958), Heider (1958), Rokeach (1968) and Scheibe (1970). Generally these authors feel that values determine goals. And, because behavior is considered to be goal directed, it can be inferred that values influence behavior; or an individual's actions are determined by the goals which their values dictate to them. This modification of values by goals and behavior occurs via a feedback system.



Values are not goals, as such, but provide guidelines by which decisions regarding goals are made, e.g. an individual does not try to "reach" honesty but the value of honesty guides his behavior. Nor can values be used to explain behavior, as such, but they can be used to make behavioral predictions and thus can enter into explanations regarding



behavior. Meek (1964) explains the relationship: ". . .behavior is to satisfy needs and what satisfies needs takes on value (p. 224)."

From this relationship between values and goals emerges a relationship between values, goals and identity. Wheelis sums it up in this way: "Values define goals, and goals define identity; the problem of identity therefore, is secondary to some basic trouble about values (p. 174)."

Getzels (1958) echoes this thought suggesting that a person's identity is dependent on the values he internalizes. Thus an emphasis on values arises for workers involved in helping professions, e.g. counsellors, psychologists, and psychiatrists. Their need to be cognizant of value incongruence in identity crises becomes essential.

### Values and Society

Literature, within the past decade, has frequently emphasized the relationship between values and society, a bond which develops from the relationship between values and individuals.

Such prominent people as Carl Rogers, George Spindler (1955), Jacob Getzels (1957), M.V.C. Jeffreys (1962), Brewster Smith (1963), and Kenneth Kenniston (1968) have discussed in detail the confusion which now prevails in the realm of societal values. Rogers (undated) asserts that:

Youth, in almost any country, is deeply uncertain of its value orientation, the values associated with various religions have lost much of their influence, sophisticated individuals in every culture seem unsure and troubled as to the goals they hold in esteem (p. 1).

He blames this 'alienation' on the anachronism created by science which produces divergent value claims.

Smith (1963) claims that the cause of the chaos is a shift from the desirability of the traditional "ought" values to the acceptance of the "want" values. It is no longer what ought to be done, but what "I want," the "do-your-own-thing" philosophy. He suggests that anomie is inevitable when traditional societal values become replaced by personal values. However, he believes that social values and expectations no longer provide adequately for the predicaments of modern life.

Joseph Samler (1965), in a discussion emphasizing the need to examine life, society and its values, describes: "In the loosening of religious precepts and in the inevitable changes in the times we have lost a set of guidelines for behavior and living...a vacuum has been created--probably just when we could least afford it (p. 64)."

In 1955, George Spindler became cognizant of this inevitable turmoil of values. He labelled this conflict of values as a shift from the Traditional to the Emergent. These thoughts prompted Getzels (1958) to investigate as well. They classified values into sacred and secular categories. Sacred values, as exemplified by the American creed, constituted the relatively stable ideological beliefs of Americans. He saw four such values: democracy, individualism, equality and human perfectability. As society exists in the 1970's perhaps the adoption of these values by the youth of today could be justifiably questioned.

Secular values which involve the day-to-day activities Spindler (1955) also saw as undergoing a crucial transformation which inevitably caused a disruption of society. Spindler examined these secular values and classified them into dichotomous groups. He felt that the societal values which

he labelled as emergent values were becoming predominant and gaining impetus in society. This he blamed on such occurrences as wars and atomic blasts which seemingly created insecurities. He described the two groups of value adherers as: "The traditionalist views the emergentist as 'socialistic', 'communistic', 'spineless and weak-headed', and downright 'immoral'. The emergentist regards the traditionalist as 'hidebound', 'reactionary', 'selfish' or 'neurotically compulsive' (p. 150)." He suggests that there are few "pure" types, that most hold concomitantly certain elements of both value systems. This incongruence, he claims, intensifies the conflicts felt within society and the institutions which it supports.

Prince (1957) based his study on the value categories which were defined and developed by Spindler and Getzels. Riesman (1953) in his book, The Lonely Crowd, developed this dichotomy of ideas by depicting two types of people: the inner directed and the outer directed. The inner directed individual as described by Riesman would be the traditionalist; the outer directed individual, the emergentist.

Spindler (1955) developed four dichotomous areas existing between traditionalists and emergentists. He classified as dichotomous a Puritan Morality involving self denial and a strong moral commitment, against an attitude of moral relativism where there are no strong personal commitments and absolutes of right and wrong are questioned. Second was a shift from the notion of individualism where autonomy is sacred and independence prized to a value of group harmony and conformity where everything is relative to the group. Related to this was the third change from an emphasis on work to succeed and then "you'll get ahead" to an

attitude in which socializing, meeting people and travelling are the marks of success. This third dichotomy represented a trend away from a "rat-race" society which uses people, to a less "strive-oriented" society which develops people. Finally, he saw a shift from the importance of the future and present self denial to an attitude of hedonism where present pleasure takes priority over future gratifications. The specific categories as defined by Spindler are in the Appendix.

### Values and the School

Within this complexity and diversity of the value systems of individuals and society, it appears to be the unique function of the school to help students create order and thus is felt the need for a dialogue on morals in schools today. This idea is generally supported by writers, both past and current, in the area of values (Getzels, 1957; Kagan, 1961; Parsons, 1961; Meek, 1964; Slinger, 1966; Allport, 1969). Similarly, the main instruments of value teaching are agreed to be parents, peers, society and schools. The latter, as suggested above, is generally considered to be the unit with the greatest potential and power. This fact is accepted because, as described earlier in this chapter, the values of society, family and peer groups appear to be shifting and eroding away and people are rapidly losing faith in the long-held traditional values of society and the family. Schools are looked to as a force of stabilization where this confusion prevails.

Kagan (1961) describes schools as being surrogate parents in the teaching of values, and for this reason schools have become the scapegoat for the prevailing chaos in society. This attitude is also echoed by such

writers as Getzels (1957), Pope (1961), Samler (1965) and Snyder (1967). Because schools are seemingly held responsible for value teaching, they see as a prime function of the school the need to aid students as they examine life, both externally and internally. Writers are even encouraging the development of a course within the curriculum purely for this function.

This process of value development then, inevitably becomes the major responsibility of the school personnel, in particular teachers and counsellors. Allport (1969) explained this process by suggesting that as teachers and counsellors disclose what they themselves stand for, self discovery and thus value clarification by the students can occur. He continues by indicating the relative ease of this process as compared to other types of learning, by implying that values are absorbed faster than facts in a learning process because ". . . values, being matters of importance to the self, are always warm, central and ego involved and therefore claim priority on our attention (p. 469)."

Williamson (1966) concurs with this function of value clarification, particularly as a responsibility of counsellors. Both Allport and Williamson emphasize that ". . . if the school does not teach values, it will have the effect of denying them. . . some homes. . . give no fundamental value training. In such a case, it is only in the school that the child has any chance at all of finding ethical anchorage. (Allport, p. 468)."

The struggle surrounding value commitments reaches its peak during adolescence. This age demands strong support from stable identification models as it is at this time, that the function of parents and peers as agents of clarification is the weakest. Therefore, as value sorting and

"trying out" becomes imminent, counsellors must assume the responsibility to ". . .aid the individual to become aware of alternate values available for evaluation and choice (Williamson, p. 619)." This is desirable so that students can ultimately achieve excellence and ultimately their full potential. This process must become the aim of the high school counsellors as they seek to be effective in the lives of their "clients."

### Values and Classification

Values have been classified in several different ways. The first is the classification by Spindler (1955) and Getzels (1957), cited in the previous section.

Rokeach (1968) defines values as instrumental and terminal. The former is something which is personally and socially preferable in all situations with all objects and which represents a mode of conduct, e.g. courage. The latter represents something worth striving for--an end-state of existence such as peace. He suggests that this involves the development of two value hierarchies within the individual which inevitably will produce conflict in decision making.

Margeneau (1959) sees two kinds of values: normative, being the ratings which people ought to give objects, and factual, the observable preferences and desires which people express.

The most extensive work performed and cited has been done by Charles Morris (1956). He classified values into three types. First are the operative values, those that humans tend to prefer. They are the preferred or desired value, the "is" and are evidenced by the actual direction of preferential behavior toward one object over another.

The second type are the conceived values and involve a conception of something as being preferable or desirable. Here, preferential behavior is directed by an anticipation of a particular outcome from a symbol which represents a preferable (conceived) value.

Third are the object values, the "oughts." These are preferable regardless of whether or not they are preferred or conceived as preferable. "Object" values are determined by such influences as society. Heider (1958) expands on these "ought" values by suggesting that they are independent of a person's wishes and thus impersonal. He also considers them to be dispositional, reflective of interpersonal fiat, and lastly, representative of a cognized wish. Similar ideas are expressed by Smith (1963) as he struggled to define values.

### Values and Measurement

Because of the abstractness of the term "values" much controversy surrounds the validity of the measurement techniques used in research projects involving values.

However, the validity of measurement is supported by such authors as Catton (1954), Raths (1957), Thurstone (1959), Rokeach (1968), and Williams (1968). Basic to this theory enabling value measurement is Thurstone's law of Comparative Judgment which indicates that values can be measured relative to each other in the same manner as any verbal stimuli for which discriminial responses can be obtained. A complete discussion of this theory is beyond the scope of this paper, but readers are referred to the references quoted above. Abelson, as quoted in Williams (1968) "Summary of Values," suggests that literature on cognitive dissonance

indicates that when a person is induced to make a choice, he generally comes to see the chosen alternative as preferable. If this is assumed, and if values are what is preferred, they then become inferable from verbal statements and behavior patterns. Value studies, then, measure inferential constructs determined from selective behavior rather than measuring some directly observable phenomena. This, then, provides a concept valid for measuring.

Grace and Grace (1952), however, found that students when asked to predict and classify the behavior of others would have a tendency to act in ways other than how people would perceive them as acting. From their results, they concluded that verbal values differed from behavioral values. This, however, is only one study and the findings appear to be disputed by most writers in the area. Specific attention needs to be given to the value definitions used if these results are to be applied. This discrepancy could be explained by considering Morris' (1956) operative and conceived values.

Some of the practical problems prevalent in the area of value measurement are discussed by Scheibe (1970). He emphasized that values, for measurement, if seen as preferences exhibited by selected behavior, must possess two qualities. Firstly, they must be perceived from a moderate level of activity (a high level of activation would not necessarily indicate a value, it could be a result of an emotional arousal, e.g. fear). Secondly, studied values must be observed from reasoned, goal directed behavior, not causal behavior which occurs as a result of an environmental circumstance. These factors must be considered in the development and administration of the measurement instruments.



Robinson and Shaver (1968) discuss some of the communication problems which confront researchers in the measurement of values. In statement selection, they suggest there is difficulty in wording items so they are neither too general nor too specific. A second area of concern is that of measuring "what is desired" or "what ought to be desired." Attempts to clarify this point have been made by many writers of current literature. Some of their ideas will now be considered.

### Value Definitions

Morris (1956) states that because his three types of values all have a reference to "preferential" in their definition, they can all be determined from a study of preferential behavior. He continued:

Preferential behavior would then define the value field, and the various employments of the term 'value' would be explicated not as referring to different entities (different values), but as delineating different aspects of the value field (p. 12).

Much of the recent research of values has been based on the definition of values stated by Kluckhohn (1965): "A value is a conception, explicit or implicit, distinctive of an individual or characteristic of a group of the desirable which influences the selection from available modes, means and ends of action (p. 395)."

Kluckhohn (1965) in discussing this definition, continued by explaining that a value is more than just a preference; it is ". . . felt and/or considered to be justified. Even if a value remains implicit, behavior with reference to this conception indicates an undertone of the desirable--not just the desired (p. 396)." This would indicate an ability to handle empirically both conceived and object "ought" values as defined by Morris. However, Catton (1959) suggests that

because Morris did not define object values empirically, it is impossible to measure them by scientific methods. This leads to the necessity to study preferences among symbolic desiderata. This, however, has limitations also, as emphasized by Catton when he suggests that the value variables discovered from analyzing actual preferences might not be in agreement with the "ought" or preferable variables. He stresses that behavior and norm congruence or ". . . consistency between operative values and conceived values, must be discovered empirically, rather than assumed a priori (p. 312)." He therefore amends Kluckhohn's definition to read: "A value is a conception of the desirable which is implied by a set of preferential responses to symbolic desiderata (p. 312)." The amended section is underlined. Catton explains that his definition suggests studying conceived values which are taken by the individual involved to be object values.

Smith (1963) also discusses the feasibility of basing research on Kluckhohn's definitions, as he attempted to distinguish between values and preferences. He sees values as "desirables," and preferences as "desired." Smith feels that the tests used in value research detect consistent patterns of verbally expressed preferences and he indicates that there is no check that these are the preferable (desirable) conceived values suggested in Kluckhohn's definition. However, Smith does imply that people, more often than not, prefer what they think is preferable. On this statement, he would find it to be a natural tendency to perform analytical research where preferable and preferred statements are fused, but not acceptable to perform empirical studies.

The main reason for Smith's (1963) questioning of the validity of measuring desired and desirable values simultaneously is due to the phenomenological differences which those two words evoke. For instance, he would strongly question Kluckhohn's phrase "influences the selection." He would suggest that this is affected by the phenomenological field of each individual. For this reason he suggests three factors which are relevant in considering the value objectivity for each individual which inevitably will influence value selection. These are:

1. Social requiredness - the oughtness of a value; what others (society, culture) would say or do to influence values selection.
2. Personal requiredness - depends on the internalization of the values as influenced by the superego and the self (unconscious and conscious commitment).
3. Objective appropriateness - the goodness or correctness of the value choice considering the environment or social structure of the individual.

From his study in this field, Smith offers a restrictive definition of values to read: "Values are conceptions of the desirable that are relevant to selective behavior (p. 332)."

The Differential Values Inventory as developed by Prince (1957) was based on the definition by Kluckhohn. In light of the previous discussion, it would appear that the definition as suggested by Catton (1959) would be more accurate, where a value is implied by preferential responses to desired symbols. The instrument requested that "I ought to" be inserted at the beginning of each phrase thus empirically obtaining conceived values

as indicated by the verbal symbols used in each statement. This, according to both Catton and Smith (1963) is then considered to be a measure of object values. This would be more accurately true with the Differential Values Inventory than with the Occupational Values Rating Scale because of the preceding clause inferred with each statement.

In conclusion, a reference will be made to the frequent appearance of value studies in current literature. In the past values were ignored; attitudes, however, were commonly studied. Presently, an emphasis on values is apparent. Reasons for this are suggested by Scheibe (1970) and Rokeach (1968) in their recent books. Firstly, consideration of the previous discussion defining values should be illuminating--values determine attitudes, as well as behavior. Rokeach also suggests such factors as efficiency--people hold fewer values than attitudes. Also, a greater diversity of disciplines are interested in involvement in values research. Finally, he believes that values have, as well as cognitive, affective and behavioral components, strong motivational influences, therefore research in this area would be more advantageous to behavioral scientists.

## II. SOCIO-ECONOMIC STATUS

Measurement of an individual's social status has received much attention in the area of socio-psychological research and many differing criteria have been supported. And although no one device has been universally accepted, common concepts are evident in the schemes suggested. Some researchers would discount any results involving social status categorization. However, within the limitations of the method used, validity can be found for the behavioral research performed.

Several people have done extensive research in the area of social

status measurement. Among these, McGuire and White (1955) defined a social status index as "... (it) approximates the position of a person with regard to one of the frames of reference people employ to place one another (p. 1)." They suggest that four of the reference points used most frequently for classification are socio-economic level, social class participation, reputation and family or individual life style. They feel that behavior does vary according to status, and that behavioral roles are learned and become a functional aspect of their status.

Using these ideas, Lloyd Warner (1957) researched extensively in this area and developed three Indices which could be used to identify the class levels existing in any community. The first, an Index of Social Characteristics, is primarily an index of socio-economic factors and considers weighted ratings of occupation, source of income, house type and dwelling area. A second, the Index of Evaluated Participation, is used mainly for obtaining the social stratification of a community, and considers such factors obtained through interviews, as reputation, symbol identification, and institutional memberships. The third, the Index of Value Orientation, involves the life style of the individual, specifically rating education level, religious affiliation, occupation and source of income. For practical reasons, all of these ideas were not feasible for use in this study.

Another researcher in the field, Albert Reiss (1962) studied the possibility of obtaining a national rank-order of occupations according to prestige status. This rating, applied to the father's occupation, would define the socio-economic status of the family. Reiss recognized many

limitations in his study, for instance biases and value influences. However, he did obtain an occupational scale, developed from the prestige rank order assigned occupations by a large, varied sample of people, which could be used.

Morris Rosenberg (1965), in his intensive studies of adolescents and their self image, defined socio-economic status from the father's occupation, the father's educational level and the father's primary source of income. From these three figures, he obtained weighted scores and then grouped these scores into socio-economic status groups.

Other researchers in the area of behavioral sciences have devised similar methods of classification. Schneider and Lysgaard (1953) divided occupations into four groups according to the degree of supervisory control from "higher" occupations. The groups obtained were not homogeneous with respect to income, prestige, or social equality. Swinehart (1963) differentiated his subjects initially into two occupational classes--middle and lower. The middle class he further divided according to the amount of power and authority involved in the actual job performance and the amount of education needed to qualify for the occupation. The lower class he split according to the job skill involved and the living conditions of the family. Socio-economic levels of the father's occupation and parent's educational level were used by both Holzman (1968) and Weinberg and Skager (1966) in their research. Thompson (1965, 1968) and Prince (1957) defined socio-economic level using the father's occupation as ranked on Warner's Occupational Rating Scale.

One other factor which was considered as influential in determining

socio-economic status was suggested by Steiner (1953) and Hodge and Trieman (1966). They related to socio-economic level the class consciousness of the individual. In research done they found that their data demonstrated patterns of acquaintance and kinship as well as allegiance to be as important as objectively measured class status in determining class identity. This would seem to infer a necessity of some subjective analysis in order to insure complete accuracy in socio-economic class categorization. One limitation to using class allegiance, however, was suggested by Hodge and Trieman (1966) when they discovered that only 6% of the individuals they tested admitted to being in a "working class" when in fact, according to objective measures dealing with a normal population, approximately 15% should have been.

Kahl and Davis (1955) correlated results from 19 different Indices used in research. They found "relatively high positive correlations" among the Indices. Factor analysis produced two common factors; one was measures of occupations, the other was ecological measures. From their data they concluded that occupation was the best single predictor of socio-economic levels.

Finally, the basis of classification for this study involved an analysis of Canadian occupations done by Bernard Blishen in 1958, as developed from the Canadian census done in 1951. Education level and income level were used as classification indices by Blishen for the scale. Seven levels of socio-economic standing were formed from the occupations. Slight modifications for regionalization were performed by the Medical Faculty of the University of British Columbia for their research resulting in the actual rating scale which was used.

### III. RELATED RESEARCH

Many studies have been performed relating factors used in this study and values, both personal and occupational. The most extensive area of research has been in the area relating socio-economic status and values. Each factor investigated in this study will be discussed in view of the relevant research in that field.

#### Socio-Economic Status

Attempts to relate socio-economic status and values have found differing results. Prince (1957), in the initial research using the Differing Values Inventory in Chicago noted a relationship between values and socio-economic status--the lower class had the more emergent values. Lehmann, (1962), in a more intensive study also using the D.V.I. noted that a common value structure existed among students, with variations evident among and within socio-cultural groups. However, he found the reverse relationship true compared to Prince's findings on low social status. He discovered that students whose parents achieved some level of high school education or where the father was a labourer, attained a significantly higher mean traditional value score than those whose parents attended college or whose father was an executive or professional. Lehmann also found that students who lived the major part of their life on a farm had higher traditional scores than those who came from a predominantly city environment. Anderson (1961) using the D.V.I. to test the personal values of Edmonton students in Alberta, found that they also achieved higher traditional scores than emergent. These students generally come from farm and rural areas compared to the highly urban



areas such as Chicago and California.

Other instruments also appeared to detect a definite relationship between values and social status. Pine (1965) suggests from his results in studying delinquent students and their ideas regarding social status and social mobility, that a strong, direct relationship existed between social status and value systems. He claimed that social status could probably be measured more accurately in terms of the values expressed, rather than in the usual terms of occupation, housing or income. Gottlieb (1967) also discovered distinct values held by lower class youth, whether Negro or Caucasian. They valued "getting ahead in life," and "having a good job." Gottlieb suggests that to these "poor youth," a good job denotes room for advancement, good pay, job security and clean working conditions.

Two other studies, one by Schneider and Lysgaard in 1953, and one by Chwast in 1959, focused on the relationship between deferred gratification and social status. Both studies showed that living for the moment was more important than saving for the future for lower socio-economic students. With the D.V.I., present time orientation is an emergent value, thus their findings would concur with those of Prince in this value area.

Little or no significant relationship between social class and values is, however, also strongly supported by research. Thompson (1965, 1968) initiated two studies both using the D.V.I. in California. The first study found no relationship between the value profiles of students and their social class as defined by their Father's occupation. However, in 1968, he detected a significant relationship for freshman (Grade 9) students, but

no difference with Seniors (Grade 12's). At the Grade 9 level, Thompson found that low socio-economic students scored low on traditional values, particularly independence and work success, and high on emergent values, especially on sociability, conformity, and moral relativism. The reverse subscale scores were attained by the high socio-economic students in these four areas. Thompson offers as an explanation for his results the lessening impact of the family on the values of the student as he progresses through school and the increase in influence of the immediate environment. This study, although not conclusive in the area of social status, would also support the trend found by Prince that emergent values and low socio-economic status are related.

Bidwell (1963) was perhaps the most definite in suggesting a lack of relationship between values and social status. In his study involving traditional and emergent values and career choices, he found no relationship between value commitments and the nature or prestige of the father's work, his education, his income or his academic ability. Bidwell offers as an explanation the suggestion that the D.V.I. is independent of such status characteristics as occupation and class background. However, he felt that ". . . the genesis of T-E values is not in the social structure (e.g. father's occupation) but in the cultural system (e.g. religion and ethnicity) (p. 303)."

Diverse results exist also in the area of occupational values. Perrone (1967), using Centers Occupational Values Rating Scale, found value ratings of students in Grade 9 were not affected by aptitude, achievement, or social status. Centers (1949) in using his own Rating Scale, discovered value differences among the middle and low social economic groups. He discovered that

self expression was characteristic of occupational values with people of middle class whereas security and independence were most highly valued by low socio-economic people in their job search. Through his extensive research with social classes, Centers became cognizant of the fact that "Social classes can thus to a certain extent be characterized by the possession of common values as well as by the possession of common beliefs and attitudes (p. 153)."

Hilton and Korn (1964) confronted with this conflict of evidence regarding socio-economic status and values, suggested a possible explanation. In a study covering a 7-month interval, they noted a difference in personal values between members of various occupational, educational and social groups. They also noted that a significant change occurred in the values of individual members within each group in the time which elapsed. They suggested that individuals have a need to keep their values consistent with their actions, intentions and beliefs. Because social mobility is inevitable, the mobility status of the students sampled could affect the results and create inconsistencies between values held and social class membership; that as students experience socio-economic status mobility, they experience a shift in values.

### Sex

Little research has been done in this area, however the evidence available appears congruent. In his first study, Thompson (1965) concluded that girls scored significantly higher on puritan morality, and sociability, while boys scored higher on work success, conformity and present time orientation. When using Centers O.V.R.S. in 1968, Thompson found that at the .01 level of significance males rated leadership, power, profit and fame

as important in a job, while females, at the .05 level of significance rated self expression and social service as valuable in a job. Concerning the interrelationship of the D.V.I. scores and the O.V.R.S. scores for the sexes, Thompson noted that emergent males valued leadership, power, fame and social service in choosing an occupation. Traditional females valued leadership and social service, however emergent females placed importance on profit in job considerations.

In 1954, Singer and Stefflre (1954) compared senior high school males and females using the O.V.R.S. They found that boys preferred the values of power, profit and independence, while girls valued occupations of interest and with a social service value. Wagman (1965) using the same instrument found boys valued esteem significantly higher than girls, while girls valued social service significantly stronger than boys.

Using Allport's Study of Values, Leona Tyler (1968) discovered that men scored higher on theoretical, economic and political values. She suggested this indicates that men orient themselves more towards areas of abstract ideas, practical success and power. Women, because of their high scores in the areas of aesthetic, social and religious values, favor job areas of art, religion and social service. Tyler also indicated that males function better in a competitive society, while females prefer an environment free from restraint where self expression is encouraged.

Perrone (1967) tested occupational values using the O.V.R.S. over a 2-year period. He found that females in Grade 9 were more concerned with using their abilities, helping others and with security and less concerned with the occupational values of money, leadership, fame and independence.

Grade 9 boys valued using their abilities and security and placed little importance on leadership and independence in considering a job.

Rosenberg (1965) compared the values of the sexes as they influenced the self image. He discovered that both sexes stressed equally the value of getting along with people in opposition to the value of work success. Girls, he suggested, value moral virtues more than boys, while males value interpersonal control and dominance in their relationships with others. Rosenberg also suggested that males valued possessing and using a diversity of abilities.

#### Grade

Perrone's study, as cited above, indicated that the dominant occupational values of Grade 9's were the opportunity to use capabilities, social service and security, while they showed little concern for the values of leadership and independence.

Anderson (1961), using the D.V.I. with students in Alberta, discovered that there was little difference between the personal values of students in Grades 9 and 11. Generally, the values held were traditional with a gradual trend towards stronger traditional values as Grade increased. Thompson (1965) also suggested little difference between the values of Grade 9 and 11. The only scale showing a significant difference was work success where the older students scored higher. Total traditional and emergent scores between the grades were almost identical with less than 1.00 point difference on their total mean scores. In 1968, Thompson noted significant differences, however, showing Grade 9's scoring significantly higher on puritan morality and conformity and significantly lower on independence, work success and moral relativism compared to Grade 12's.

### Church Attendance

Prince (1957), Lehmann (1962) and Thompson (1965, 1968) all discovered a positive, significant relationship between church attendance and traditional values. Thompson concluded that a positive correlation existed between church attendance and traditional values, however he attributed this trend to two main variables of the D.V.I.: puritan morality and individualism. Future Time Orientation scores also progressively decreased as frequency of church attendance decreased. The reverse was true for Present Time Orientation scores. In 1968, Thompson found identical trends. However, in this study, he also noted that the subscale of sociability was not related to the frequency of church attendance.

### S

### School Program

Once again, Prince (1957) and Thompson (1965, 1968) have given evidence that students on an academic program tend to hold stronger traditional values than emergent values. Specifically, significant differences were detected in the subscale values of individualism and work success which were valued more highly by academic students and sociability which was valued more highly by non-academic students.

Related to school program is mark achievement. Although it is an undesirable trend and not conclusive, it is apparent that non-academic students generally achieve lower letter grades than academic students. The research done cites high-achieving students scoring higher on the variables of individualism, work success, and future time orientation while students making grades of C and below scored significantly higher in conformity. This suggests that high achievers in school adhere to stronger

traditional values, while emergent values and low achievers seem to be positively correlated. Battle (1957) suggests evidence indicating that grades earned were related to the value patterns of the teachers. Students getting low grades tended to have value patterns which differed from the "ideal" as seen by the teacher. He concluded that a relationship between two people was compatible and productive in proportion to the degree by which the value patterns of the two were similar.

#### Other Related Factors.

Wilson (1959) found a significant difference between the values of public and private school graduates. Prince (1957) detected no difference in the public and private schools he tested. However, he did find a difference between the values of parochial and private or public school students.

Cummins (1966), using the D.V.I., found that female students with discipline problems had more emergent values than non-disciplinary female offenders. However, this trend was not valid among the male population.

Anderson (1961) generally found Canadian students to be more traditional than their American counterparts from Chicago and California.

The limitations of each of these studies cannot detract from the obvious trends that appear, even though seemingly conflicting at times. Each study opens up a new area for investigation. And the importance and the need for information in this area of values, particularly as it can be related to education, cannot be stressed too greatly.

## CHAPTER III

### METHOD

This study has attempted to find a relationship between possible influencing factors in the lives of adolescents as related to the values they possess. Five factors were chosen for testing and it was felt that these five involved some of the critical influences that could determine differential selectivity of values by students. The relative ease of classification was also influential in deciding on the particular factors to consider. The five factors chosen for testing included sex, grade, the type of school program the student was studying in--either academic or non-academic--church attendance, and socio-economic background.

The subjects in the study were classified into groups in each of the factor categories. Then the question was studied whether students in the various classifications in each group held different values according to the instruments used or did these factors not influence students sufficiently to cause them to ascribe to differing value systems.

### I. HYPOTHESES TO BE TESTED

#### Hypotheses

The specific hypotheses tested in this analysis, as stated in the Null form were:

1. There will be no significant difference in the values between students of low and high socio-economic levels.
2. There will be no significant difference in values between



frequent and non-frequent church attenders.

3. There will be no significant difference in values between the sexes.

4. There will be no significant difference in values between students in Grades 9 and 11.

## II. INSTRUMENTS USED

Two instruments were chosen for this study, one to detect a shift in personal values from traditional to emergent, and the other to indicate the occupational values to which students adhere. The personal values questionnaire developed by Richard Prince was the Differential Values Inventory; the occupational instrument, used as a Q-sort and devised by Richard Centers, was the Occupational Values Rating Scale.

### Differential Values Inventory

This instrument was developed as part of a doctoral thesis by Richard Prince at the University of Chicago in 1957. It was structured to measure Traditional-Emergent values defined by Spindler and Getzels, as discussed earlier in this paper. The four categories of values measured in each dimension were:

- |             |                            |
|-------------|----------------------------|
| Traditional | - Puritan Morality         |
|             | - Individualism            |
|             | - Work Success             |
|             | - Future-time Orientation  |
| Emergent    | - Moral Relativism         |
|             | - Conformity               |
|             | - Sociability              |
|             | - Present-time Orientation |

The instrument consisted of 64 paired forced-choice questions. Each item included a Traditional and an Emergent statement. The basic intent of the instrument was to attempt to measure the individual's true internal feelings not what he might actually do, therefore the respondents were instructed to preface each statement with "I ought to..."

In the development of the questionnaire, both graphic item analysis and interview techniques were used to determine the validity and the internal consistency of the statements. Reliability was measured using the split half method and the test-retest procedure. Correlations computed on the test-retest following a one year time lapse ranged from .78 upward. Using the Kuder Richardson 21 formula on the split-half scores the test reliability was found to be 0.951. A factor analysis of the response on 1790 tests was also used and it revealed 7 unique factors with one which was less obvious. It was assumed that these eight factors were the personal value subscales built into the inventory (Prince, 1957; Lehmann, 1962; Thompson, 1968).

Scoring in this study of the D.V.I. was done by assigning one mark to the subscale of the selected item. The maximum total for each subscale was 16, the minimum score was 0. The maximum Traditional or Emergent score was 64, with the scores thus ranging along a continuum from Traditional to Emergent, depending on the subscale totals. Statistical analysis was done on both the subscale scores and the total Traditional and Emergent scores.

#### Occupational Values Rating Scale

This instrument, designed by Centers in 1949, consisted of a series

of 10 statements each statement describing a possible job characteristic. It was designed by Centers as a means of obtaining the occupational values desired by people in various social classes. This instrument has been used many times since its development by such researchers as Perrone (1967), Thompson (1965), Wagman (1965), Rosenberg (1965), Anderson (1961) and Singer and Stefflre (1954) however no statistics have been cited regarding the validity or reliability of the O.V.R.S. Centers recognized with regret that there was no adequate way of testing the validity or genuineness of the choices made and also that the experimental error was not trivial. But he suggested that the vastness of his sample used and the interviews which he conducted gave some indication of face validity and thus allowed for generalized trends to be recognized. It is on this basis that the instrument was used in this study without accurate reliability or validity statistics.

The students involved were asked to rank order the statements from the most desired to the least desired characteristic to them when considering a vocation. The statement ranked #1 was the least important. The statements included such desires as power, self expression, esteem, security leadership, social service and fame.

### III. GROUP CLASSIFICATIONS

Five specific groups were developed for the testing of the hypotheses. These groups were formed on the basis of the information sheet administered at the beginning of each class.

Grade, sex and type of school program were straightforward classifications from the information supplied by each student. From the latter, the

student was grouped as either academic or non-academic depending on the school program indicated according to the selection offered by the government of British Columbia, Department of Education.

Indication of church attendance created four groups, those attending once a week, once a month, once or twice a year and those never attending. Those in the first two groups were considered frequent church attenders; those in the latter two groups were considered non-frequent church attenders.

The socio-economic groups were assigned using the Blishen Scale of Canadian occupation classifications as modified and used by the Medical Faculty of the University of British Columbia. As the scale represents an empirical measure of social position, it was accepted that no statistics were available to support the validity or reliability of the scale. Blishen did not cite any statistics when he presented the scale in 1958. However, Reiss (1962) reaffirmed the face validity of Blishen's scale in a study mentioned earlier where he developed an occupational scale from a prestige rank ordering of occupations. The two scales demonstrated face validity when compared. A British Columbia medical study by Anderson and Larsen (1966) also supported the face validity of the Blishen scale and of the modified Blishen scale as developed by the authors and used in this study.

The problem of scale reliability becomes a coding problem. It is hoped that from the job descriptions given by the students, that relatively consistent coding of occupations was obtained. It should also be recognized that the occupational categories encompassed large occupational areas and further that only the upper and lower groups were used in the statistical analysis. The biases and influences however, which would have caused

slight discrepancies must be considered as limitations of the study.

For this study, the students were divided into five groups: high, high-middle, middle, low-middle, and low according to the description of their fathers' occupation. In the construction of this scale, Blishen (1958) considered both the educational level and the income level of the job. The scale is very explicit in specifying areas of work as well as position, e.g. manager of transportation industries; foreman of linemen and service-men--telephone, telegraph and power; proprietor of grocery store. Modifications by the Medical Faculty of Blishen's original scale involved adjustment for the lower mainland area of British Columbia which included minor deletions and additions, as well as some more specific categorizations in such areas as construction. However, the changes made did not significantly alter the scale. The occupations were still rated on a continuum from 1 to 7.

The first two groups of students were considered in a high socio-economic bracket and included such occupations as professionals and managers. The low socio-economic students were in the bottom two groups and their fathers were mainly farmers, semi-skilled and unskilled labourers. For a more complete discussion of socio-economic grouping see the Review of Literature.

Table I on the following page shows the frequency distributions of the groups within each category.

#### IV. ADMINISTRATIVE PROCEDURE

The two instruments, the Differential Values Inventory and the Occupational Values Rating Scale, were administered to approximately

TABLE I  
FREQUENCY DISTRIBUTION OF STUDENTS  
IN TESTING CATEGORIES

Category	Number	Percent	New Testing Categories	Number	Percent
<u>GRADE</u>					
9	342	51.74			
11	319	48.26			
<u>SEX</u>					
Male	319	48.26			
Female	342	51.74			
<u>SOCIO-ECONOMIC</u>					
High	115	17.40	High Socio-		
High-middle	90	13.62	Economic	205	31.02
Middle	105	15.89			
Low-middle	115	17.40	Low Socio-		
Low	236	35.70	Economic	351	53.10
<u>*PROGRAM</u>					
Academic	516	78.06			
Non-Academic	145	21.94			
<u>CHURCH</u>					
Weekly	208	31.47	Frequent	279	42.21
Monthly	71	10.74			
Yearly	155	23.45	Non-		
Never	227	34.34	Frequent	382	57.79

\* The reason for the large discrepancy in the size of the groups is that in Grade 9, very few students have begun to branch into a non-academic program, therefore, the majority are still considered academic.

700 students in Grades 9 and 11 at three different schools. An information sheet, as shown in the Appendix, was also given to each student to complete. This sheet requested the following information: sex, grade, age, father's occupation, if the mother worked, number of older and younger brothers and sisters, school program and church attendance. Of the three schools the students attended, two were public schools within a large city school district, one was a private religious school in a rural community. The two city schools differed in that one came from a high socio-economic area of the city, the other from a lower socio-economic area. These schools were specifically chosen for their socio-economic location and religious affiliation to provide data directly related to the hypotheses to be tested.

In each case, the questionnaire was administered by the investigator in a classroom situation. After completion of the information sheet, the instructions for the D.V.I. were read aloud with the class, then students were asked to respond to each item on a score sheet. No time limit was given, but students were allowed to proceed at their own pace. Following completion of the D.V.I., the Occupational Values Rating Scale was administered. Each of the ten items was typed on a separate slip of paper and the students were asked to rank them from most important to least important to them in selecting a vocation. (This is known as the Q-sort technique.) Once again, no time restriction was given, but in each case the students completed the whole assignment in one hour.

## CHAPTER IV

### RESULTS

Precise analysis of the data from the two instruments used was difficult because of the fact that all the variables in each survey are dependent. For this reason, no factor analysis techniques could be used. On the D.V.I., it was decided to use t-tests and Hotelling  $T^2$  statistics on the data. The Hotelling routine is used in problems of multiple comparisons to test the null hypothesis that two groups come from populations with the same means on a given set of variables.

As discussed by Morrison (1967), this test involves the mean vector of responses as drawn from a multivariate normal distribution and constructs confidence intervals for the mean vectors to provide for acceptance or rejection of the null hypothesis. A  $T^2$  statistic and an F value tested at the .05 level of significance were computed with this test and it is on the basis of the F value that the null hypothesis of equal mean vectors in each group is accepted or rejected.

Univariate t-test statistics were also performed. The results are cited, not to produce conclusive evidence for significance, but because of the verification they give to the Hotelling  $T^2$  test results. The t-test, dealing with the individual mean differences, is limited in its ability to reject a null hypothesis in this type of study using dependent variables by two main factors. One is the effect of possible positive correlations among the subtests, particularly where the data is so interdependent.



Secondly, is the tendency for the individual differences to be significant merely by chance particularly where the size of sample and thus the size of the variate vectors is so large.

The Hotelling  $T^2$  test also produces within-group covariance matrices. These are produced in table form in the Appendix. Profiles of the mean scores of the variables for each group using the D.V.I. scores are also in the Appendix.

The data from the O.V.R.S. was analyzed using a mean rank correlation for each group. Both intergroup and intragroup comparisons were made of the rankings.

#### I. RESULTS OBTAINED FROM EACH OF THE INSTRUMENTS USED

In this section, the results for each of the two instruments used will be cited separately. The results using the D.V.I. will be discussed first; each hypothesis will be dealt with individually. At the end of this chapter, there will be a section discussing the data where the results of the two questionnaires were correlated.

##### Differential Values Inventory

Table II reveals the general results of the Hotelling  $T^2$  test. The null hypotheses are accepted or rejected on the basis of the F values indicated. From this table, it is evident that all but one of the groups produced mean vectors which, at the .05 level of significance appear to come from differing populations. The scores would suggest that at a .05 level of significance when the mean traditional values within each group, namely sex (male, female), church (attenders, non-attenders),

TABLE II  
HOTELLING T<sup>2</sup> SCORES AND F VALUES FOR TRADITIONAL AND  
EMERGENT VALUES IN EACH TESTING GROUP

Group	Hotelling T <sup>2</sup>	F value	Significance Level
Sex - Traditional	34.092	8.484	0.001
- Emergent	84.997	21.152	0.001
Church - Traditional	75.074	18.683	0.001
- Emergent	83.539	20.789	0.001
Socio-Economic - Traditional	27.075	6.732	0.001
- Emergent	6.829	1.698	(not significant)
Program - Traditional	15.350	3.829	0.0046
- Emergent	11.861	2.952	0.0195
Grade - Traditional	27.458	6.833	0.001
- Emergent	21.575	5.369	0.001

socio-economic status (high, low), school program (academic, non-academic), and Grade (9, 11), were compared, they were found to be from different populations. When the mean emergent value scores were tested, all were found to be from differing populations but the high and low socio-economic groups.

The tables following refer to the results of the variables defined in the D.V.I. The first four variables are the traditional values. The latter four are the emergent values. They will be referred to by the abbreviations as listed below:

Traditional	Puritan Morality	P.M.
	Individualism	ind.
	Work Success	W.S.
	Future Time Orientation	F.T.O.
Emergent	Sociability	soc.
	Conformity	con.
	Moral Relativism	M.R.
	Present Time Orientation	P.T.O.

Total 1 is the traditional total score =  $T_1$ ; total 2 is the emergent total score =  $T_2$ . These scores represent a perfect negative correlation.

Values abbreviated, with their defined dichotomies are:

P.R.	-----	M.R.
Ind.	-----	Con.
W.S.	-----	Soc.
F.T.O.	-----	P.T.O.

Hypothesis 1: There will be no significant difference in the values between students of low and high socio-economic levels.

Table III on the following page shows the mean scores from the Hotelling  $T^2$  test for the high and low socio-economic groups for each of the eight D.V.I. variables. It also gives the difference between the scores and the upper and lower confidence intervals established for the F values indicated. The significant variable is determined by the confidence limits given. The result is significant if the area between the left and right limit does not include 0.

For this group, it was found that there was a significant difference in the traditional values that the students hold, but not in the emergent values. This significant difference in the traditional values is most pronounced in the work success orientation where the lower socio-economic group scored a higher mean value for this variable, 7.177 as compared to 6.292 for the high socio-economic group. Differences in the means of the emergent values are quite small indicating that students, in the values that this instrument classifies as emergent, see these as being similar in importance. The greatest difference was in the variable of moral relativism --0.486. It should also be noted that the mean values of the high socio-economic group in the emergent variables were higher in all categories compared to the low socio-economic group, thus high socio-economics could be considered to be slightly more emergent.

A significant difference between total traditional and emergent scores was also detected in a correlational test done with the socio-economic group. Table IV, page 45, indicates these results. Significance level at .05 was 0.0764, thus 3 variables in the traditional area were significant, but none of the emergent values was significant. However, the  $T_2$  score was found to

TABLE III

UPPER AND LOWER LIMITS, MEAN SCORES AND MEAN DIFFERENCES IN THE SOCIO-ECONOMIC CATEGORIES FOR TRADITIONAL AND EMERGENT VARIABLES

Variables	Means		Differences	Limits	
	High	Low		Left	Right
P.M.	5.515	6.194	-0.679	-1.388	0.029
Ind.	8.837	8.403	0.434	-0.188	1.056
W.S.	6.292	7.177	-0.885*	-1.708	-0.062
F.T.O.	7.257	7.571	-0.314	-1.067	0.439
Soc.	9.545	9.191	0.353	-0.308	1.014
Con.	6.693	6.549	0.144	-0.609	0.898
M.R.	9.738	9.251	0.486	-0.232	1.204
P.T.O.	10.124	9.663	0.461	-0.269	1.191

\* Significant at .05  $\alpha$  level

TABLE IV  
CORRELATION SCORES FOR CHURCH ATTENDANCE AND SOCIO-ECONOMIC  
GROUPS WITH VARIABLES FROM THE D.V.I.

Variables	Church	Socio-Economic Level
P.M.	-0.3486*	-0.1226*
Ind.	-0.0507	0.0986*
W.S.	-0.1062*	-0.1314*
F.T.O.	-0.2185*	-0.0387
Soc.	0.0223	0.0603
Con.	0.1191*	0.0272
M.R.	0.3123*	0.0751
P.T.O.	0.2825*	0.0693
T <sub>1</sub>	-0.2632*	-0.0813*
T <sub>2</sub>	0.2632*	0.0813*

\*  $\alpha$  level = .0764

be significant in this test as well.

Of the 3 that are significant, the one with the strongest correlation is work success. This is a negative correlation, suggesting that the higher the work success score, the lower the socio-economic status. This verifies the results of the Hotelling  $T^2$  test.

Significant results were also indicated in two other traditional variables: those of puritan morality and individualism. The first suggests a positive relationship between puritan morality and low socio-economic status, i.e. the lower the socio-economic group, the stronger the adherence to a value of puritan morality. Table III (page 44) supports this finding. The latter indicates a positive relationship between individualism and high socio-economic status or the higher the socio-economic group, the stronger the value of individualism. These are, however, only trends, not conclusive statements.

Similar results are indicated by the t-test results in Table V (page 47). These results, however, should not be considered conclusive or significant because of the limitations discussed at the beginning of this chapter.

However, the trend indicated in the previous two tests is also suggested in the t-tests performed. The same three, puritan morality, individualism, and work success, were significantly different in the traditional values area. While one variable, that of moral relativism was found significant, at a .05 level indicating that high and low socio-economic students vary slightly on their value of moral relativism. As suggested earlier, this finding in the traditional area is in agreement with the Hotelling  $T^2$  test, thus a possible trend could be inferred.

TABLE V.

T-TEST SCORES OF THE TESTING GROUPS FOR D.V.I. VARIABLES,  
AND TRADITIONAL AND EMERGENT TOTALS

Variables	Academic Non-Academic	Female Male	Grade 9 & 11	High-Low Socio-Economic	Frequent-Non- Frequent Church
P.M.	0.547	0.024*	0.199	0.002*	0.000*
Ind.	0.000*	0.001*	0.000*	0.021*	0.313
W.S.	0.263	0.004*	0.342	0.001*	0.113*
F.T.O.	0.130	0.655	0.044*	0.212	0.000*
Soc.	0.596	0.000*	0.435	0.077	0.680
Con.	0.001*	0.000*	0.004*	0.611	0.016*
M.R.	0.208	0.158	0.008*	0.035*	0.000*
P.T.O.	0.136	0.012*	0.513	0.062	0.000*
T <sub>1</sub>	0.012*	0.619*	0.721	0.025*	0.000*
T <sub>2</sub>	0.012*	0.619*	0.721	0.025*	0.000*

\* Significant at .05 $\alpha$  level



Hypothesis 2: There will be no significant difference in values between frequent and non-frequent church attenders.

Hotelling  $T^2$  test results for frequent and non-frequent church attenders indicate that there is a significant difference in both the traditional and the emergent values which these two groups hold. The  $T^2$  value and the F value, as recorded in Table II on page 41 are both significant at a level less than 0.001.

From Table VI on the following page, it is evident that two variables in each area produce this significance. These are the value groups which are considered dichotomous as the values were defined prior to the test construction. Both puritan morality and future time orientation significantly differentiated the two groups in the traditional area with mean differences of 1.640 and 0.966 respectively, while moral relativism and present time orientation created a significant difference in the emergent area with mean difference scores of 1.521 and 1.243. Looking at the mean value scores, frequent church attenders scored unanimously highest in the traditional values and non-frequent church attenders scored unanimously highest in the emergent values. Overall, total scores for non-frequent church attenders in emergent were the highest means attained in the Hotelling  $T^2$  tests.

The correlational scores, as recorded in Table IV on page 45, reveal a similar trend. Because of the scoring used for tabulating results--a high score identifies a non-frequent church attender--the correlation scores are interpreted as a positive correlation exists between church

TABLE VI

UPPER AND LOWER LIMITS, MEAN SCORES AND MEAN DIFFERENCES IN  
CHURCH CATEGORIES FOR TRADITIONAL AND EMERGENT VARIABLES

Variables	Means		Differences	Limits	
	Freq.	Non-Freq.		Left	Right
P.M.	6.817	5.177	-1.640	-2.249	-1.030*
Ind.	8.676	8.499	-0.178	-0.734	0.379
W.S.	7.230	6.657	-0.573	-1.318	0.172
F.T.O.	8.050	7.084	-0.966	-1.642	-0.290*
Soc.	9.219	9.298	0.079	-0.523	0.680
Con.	6.288	6.802	0.514	-0.163	1.192
M.R.	8.561	10.082	1.521	0.913	2.129*
P.T.O.	9.158	10.401	1.243	0.595	1.891*

\* Significant at .05  $\alpha$  level

attenders and negative values, while positive values and non-church attenders are correlated. All the scores were significant at the .05 level except the traditional score of 0.0507 for individualism and the emergent score of 0.0223 for sociability. These two variables did not significantly differentiate between the two groups. Church attenders scored significantly higher on the traditional values of puritan morality, work success, and future time orientation, and significantly lower on the emergent values of conformity, moral relativism, and present time orientation.

Table V, page 47, indicates that the t-test results record the same variables as being significant. However, no indication is given of direction of the significance. In all three tests, the significant difference in values held by frequent and non-frequent church attenders appears to be the greatest.

Hypothesis 3: There will be no significant difference in values between the sexes.

Once again, according to Table II on page 41, the Hotelling  $T^2$  test has revealed that the traditional and emergent values held by males are significantly different than those held by females. The level of significance for rejection of the null hypothesis is less than .001 for both areas. This significance, cited in Table VII on the following page and noted by the limits recorded which do not include a 0, is most dominant in the variable of individualism in the traditional values and in conformity and sociability in the emergent values. Considering these three values, females scored higher in individualism and sociability with mean scores of 8.868 and 9.719 compared to the male means of 8.254 and 8.771

TABLE VII

UPPER AND LOWER LIMITS, MEAN SCORES, AND MEAN DIFFERENCES IN  
SEX CATEGORIES FOR TRADITIONAL AND EMERGENT VARIABLES

Variables	MEANS		Differences	LIMITS	
	Male	Female		Left	Right
P.M.	5.638	6.085	0.447	-0.186	1.079
Ind.	8.254	8.868	0.614	0.069	1.160*
W.S.	7.251	6.576	-0.675	-1.410	0.061
F.T.O.	7.549	7.442	-0.108	-0.787	0.571
Soc.	8.771	9.719	0.948	0.365	1.531*
Con.	7.092	6.117	-0.975	-1.637	-0.313*
M.R.	9.295	9.570	0.275	-0.353	0.903
P.T.O.	10.149	9.623	-0.526	-1.182	0.129

\* Significant at .05  $\alpha$  level

respectively. While males with a score of 7.092 were higher than females who scored 6.117 in the variable of conformity. Trends of significant differences in these three variables were also evident in the t-test performed as recorded in Table V on page 47. Differences were also detected, at the .05 level of significance in the variables of puritan morality, work success, and present time orientation, as well as in the variables of individualism, conformity, and sociability. However, because the Hotelling  $T^2$  is a more conservative test than the t-test, these former three variables were not distinguished as being significant.

Hypothesis 4: There will be no significant difference in values between students on an academic program and a non-academic program.

F value results in Table II, page 41, indicate a significant difference between the values of academic and non-academic students. The traditional appear to be more significantly differentiating between the groups than the emergent values. Two specific values, one in each, appear to be most influential in determining this significance. The dichotomous values of individualism and conformity reflect the significance. Academic students value individualism, with mean scores of 8.746 to 7.951, while the non-academic students value conformity with mean scores of 7.246 to 6.402. (Table VIII)

It is also of interest to note that the academic mean scores are all higher in the traditional values, while the non-academic mean scores are all higher in the emergent values. The only other time this occurred where the results were significant was in the testing category of church attendance.

T-test results for school program groups emphasize these results. They indicate, as shown in Table V on page 47, a significant difference in the

TABLE VIII

UPPER AND LOWER LIMITS, MEAN SCORES AND MEAN DIFFERENCES IN  
SCHOOL PROGRAM CATEGORIES FOR TRADITIONAL  
AND EMERGENT VARIABLES

Variables	MEANS		Differences	LIMITS	
	Academic	Non-Academic		Left	Right
P.M.	5.897	5.775	-0.122	-0.893	0.648
Ind.	8.746	7.951	-0.795	-1.456	-0.134*
W.S.	6.975	6.627	-0.348	-1.245	0.549
F.T.O.	7.569	7.218	-0.351	-1.174	0.472
Soc.	9.245	9.338	0.093	-0.628	0.815
Con.	6.402	7.246	0.845	0.034	1.655*
M.R.	9.371	9.683	0.312	-0.450	1.075
P.T.O.	9.796	10.162	0.366	-0.432	1.164

\* Significant at .05  $\alpha$  level

total traditional and emergent scores obtained but only two variables were significantly different at the .05 level. These were the same two values as found significant in the Hotelling  $T^2$  test--individualism and conformity.

Hypothesis 5: There will be no significant difference in values between students in Grades 9 and 11.

Table II on page 41 shows a significant F test for both the traditional and the emergent values in the grade categories. However, as indicated in Table IX on the following page, none of the variables in the emergent area is significant by itself. All the constructed confidence intervals contain a 0. However, it is possible to have a significant total without significant variables evident as any two linear combinations of means in this area could be responsible for the significance. In the traditional area, the value of individualism is held significantly different. Grade 11's favor individualism greater than do the Grade 9's. Some general trends appear evident upon closer examination of Table IX. Except for the one traditional value cited, Grade 9 mean scores were higher in this area, while in the emergent area, even though none of the variable values was significant, in all but one value--that of conformity--the Grade 11's scored higher. Individualism and conformity, the two value variables that produced these results, were considered dichotomous in the test construction.

T-test scores also indicate a significant difference between individualism and conformity, however, they also suggest a trend towards a difference in the values of future time orientation and moral relativism. From Table V

TABLE IX

UPPER AND LOWER LIMITS, MEAN SCORES AND MEAN DIFFERENCES IN  
GRADE CATEGORIES FOR TRADITIONAL AND EMERGENT VARIABLES

Variables	MEANS			LIMITS	
	Grade 9	Grade 11	Differences	Left	Right
P.M.	5.991	5.741	-0.250	-0.884	0.384
Ind.	8.224	8.950	0.726	0.183	1.269*
W.S.	7.012	6.779	-0.233	-0.972	0.507
F.T.O.	7.694	7.278	-0.417	-1.093	0.260
Soc.	9.188	9.347	0.159	-0.436	0.753
Con.	6.891	6.256	-0.636	-1.304	0.033
M.R.	9.185	9.710	0.524	-0.101	1.150
P.T.O.	9.815	9.940	0.125	-0.533	0.783

\* Significant at the .05  $\alpha$  level



(page 47) and Table IX (page 55), it would appear that the Grade 9's value future time orientation more, while the Grade 11's value moral relativism more. Total traditional and emergent scores, when analyzed by the t-test, showed the least significant results of any of the testing groups, as indicated by Table V on page 47.

### Schools

Table X on the following page and Figure 1 on page 58 represent a comparison of the mean variable scores from the D.V.I. for the 3 schools used in the study. School 1 is in a high socio-economic area, school 2 is in a low socio-economic area but within a city. These are both public schools. School 3 is a private religious school in a rural community. Considering the  $T_1$  and  $T_2$  values, schools 1 and 2 are similar, however school 3 has decidedly stronger traditional values and weaker emergent values. It is the only result, of any tested group, where the traditional value total was higher than the emergent value total. The two variables concerning morals provided the greatest differences in the mean values between school 1, 2, and 3--those of puritan morality and moral relativism. A minimum of 2.0 points separated school 3 from either school 1 or 2. Distinct differences were also evident in the values of present time and future time orientations, with school 3 scoring 8.316 which was 1.00 points higher than either school 1 or 2 in future time and 8.504 compared to scores of 10.195 and 10.137, 1.5 points different, than the other schools in present time orientation.

Variable 2, individualism and sociability, provided extremes for schools 1 and 2. School 2, generally of a low socio-economic status

TABLE X

COMPARISON OF THE MEAN SCORES OF THE D.V.I. VARIABLES AS OBTAINED  
FOR THE THREE SCHOOLS USED

<u>Variables</u>	<u>Schools</u>		
	1 n=328	2 n=212	3 n=117
P.M.	5.454	5.571	7.581
Ind.	8.747	8.255	8.666
W.S.	6.415	7.273	7.581
F.T.O.	7.302	7.335	8.316
Soc.	9.442	9.000	9.248
Con.	6.619	6.627	6.410
M.R.	9.826	9.802	7.692
P.T.O.	10.195	10.137	8.504
$T_1$	27.918	28.434	32.145
$T_2$	36.082	35.566	31.855

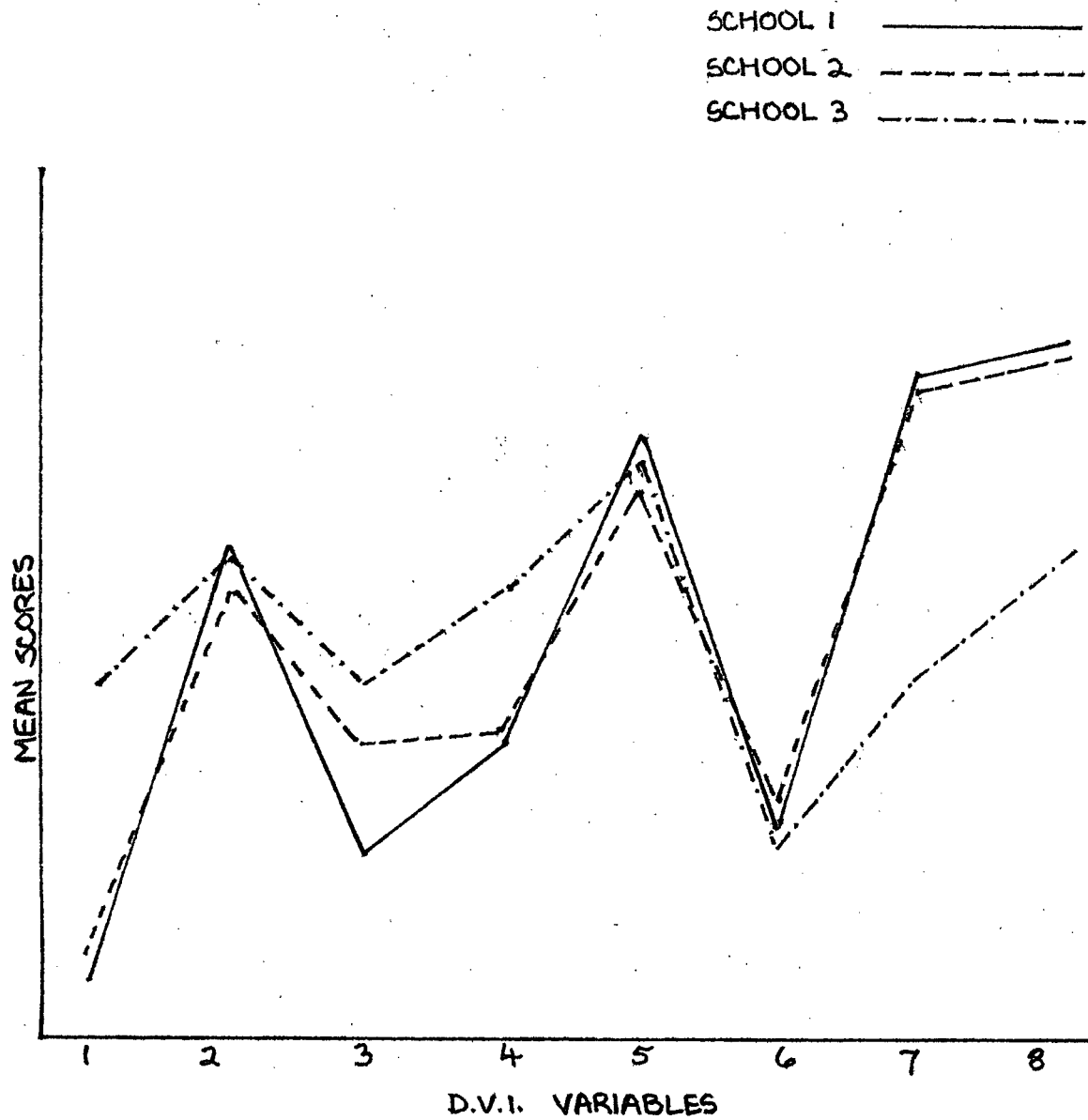


Figure 1: Profile Showing the Comparison of the Mean Scores of the D.V.I. Variables Obtained by the Three Schools

structure, ranked the traditional value of individualism at 8.255, the lowest of any of the schools, and the emergent value of sociability at 9.000, also the lowest of any school. School 1, in the high socio-economic area, ranked these two variables highest with scores of 8.747 for individualism and 9.442 for sociability. These two variables provided the only discrepancies from school 3 ranking all traditional values as highest and emergent values as lowest. No level of significance was determined; therefore these findings cannot be considered conclusive for hypotheses testing.

#### Occupational Values Rating Scale

Rankings of the occupational values detected very little difference between any of the categories selected for testing. For this reason, correlational coefficient tests were not performed. Table XI on the following page lists the mean rank orders given value statements by each of the testing groups. Table XII, on page 61, lists the actual mean scores recorded by each group. From this, a consistent pattern of ranking was apparent. The first ranked value, in every group, was "an interesting job." The 2nd ranked value was a job where self-expression was permitted. Also, without exception, those job values of having power (being boss) or gaining fame ranked in the least two important areas.

The most variation occurred in the values of security, profit, social service and independence.

The occupational value statements have been abbreviated for ease of handling in this section. Readers are referred to the appendix for an

TABLE XI

MEAN RANK ORDERING OF OCCUPATIONAL VALUE RATING SCALE STATEMENTS FOR TESTING CATEGORIES  
FROM MOST IMPORTANT (#1) TO LEAST IMPORTANT (#10)

Testing Categories	Leader	Interesting	Esteem	Power	Security	Self Expression	Profit	Fame	Social Service	Independence
Total Sample	8	1	7	10	5	2	4	9	3	6
Grade 9	8	1	7	10	5	2	4	9	3	6
Grade 11	8	1	7	10	5	2	4	9	3	6
Male	8	1	7	9	4	2	3	10	5	6
Female	8	1	7	10	4	2	5	9	3	6
High Socio- Economic	8	1	7	10	4	2	5	9	3	6
Low Socio- Economic	8	1	7	10	5	2	4	9	3	6
Academic	8	1	7	10	5	2	4	9	3	6
Non-Academic	8	1	7	10	4	2	3	9	6	5
Frequent Church Attendance	8	1	6	10	4	2	5	9	3	7
Non-frequent Church Attendance	8	1	7	10	5	2	3	9	4	6

TABLE XII

MEAN RANKING SCORES OF OCCUPATIONAL VALUES RATING SCALE  
STATEMENTS FOR TESTING CATEGORIES

Testing Categories	Leader	Interesting	Esteem	Power	Security	Self Expression	Profit	Fame	Social Service	Independence
Total Sample	7.098	2.764	6.264	7.635	5.162	3.546	4.729	7.267	4.496	5.938
Grade 9	7.127	2.819	6.392	7.636	4.929	3.676	4.552	7.354	4.460	6.023
Grade 11	7.066	2.704	6.127	7.634	5.411	3.410	4.918	7.325	4.535	5.878
Male	6.587	3.035	6.371	6.755	5.096	4.134	4.142	6.901	5.871	6.114
Female	7.563	2.512	6.170	8.446	5.222	3.009	5.273	7.741	3.254	5.798
High Socio-Ec.	7.015	2.591	6.324	7.764	5.160	3.240	5.168	7.493	4.342	5.903
Low Socio-Ec.	7.108	2.933	6.221	7.640	5.123	3.672	4.546	7.334	4.483	5.924
Academic	7.072	2.638	6.320	7.732	5.224	3.291	4.876	7.420	4.357	6.065
Non-Academic	7.076	3.178	6.488	7.362	4.750	4.138	4.399	7.186	5.250	5.106
Frequent Church	7.342	2.569	6.102	8.059	4.392	3.344	4.958	7.649	3.865	6.223
Non-Frequent Church	7.039	3.368	6.230	7.448	5.388	3.697	4.551	7.187	4.831	5.762

accurate interpretation of each abbreviated statement.

Hypothesis 1: There will be no significant difference in the values between students of low and high socio-economic levels.

The rankings were almost identical between these two groups, with only two values interchanged. High socio-economic students ranked having a secure job slightly higher than making money, while the low socio-economic students valued money over security.

Table XIII on the following page shows the comparison ranking of the statements by each group, i.e. how each group ranked each statement compared to each of the other groups considering the mean rank score obtained. It will be referred to only to show trends; it is not a statistically accurate table.

Comparatively, the socio-economic group ranked the value statements for jobs in an average position. They did not obtain any really extreme scores when compared with the other groups as shown in Table XIII. High socio-economic students tended, however, to emphasize leadership and self-expression, and de-emphasize money in considering a job.

Hypothesis 2: There will be no significant difference in values between frequent and non-frequent church attenders.

The greatest variation in rank orders is apparent in this category. Frequent church attenders valued being looked up to by fellow employees, job security and social service occupations more than non-frequent church attenders as evidenced by Table XI, page 60. The latter valued making money, and independence more than frequent church attenders.

TABLE XIII  
COMPARISON RANKING ORDER OF GROUPS FOR EACH  
OCCUPATIONAL VALUE

Testing Categories	Leader	Interesting	Esteem	Power	Security	Self Expression	Profit	Fame	Social Service	Independence
Grade 9	8	6	9	5	3	7	5	6	5	7
Grade 11	3	5	2	4	10	5	7	4	7	4
Male	1	8	8	1	4	9	1	1	10	9
Female	10	1	3	10	7	1	10	10	1	3
High Socio- Economic	2	3	7	8	6	2	9	8	3	5
Low Socio- Economic	7	7	4	6	5	6	3	5	6	6
Academic	5	4	6	7	8	3	6	7	4	8
Non-Academic	6	9	10	2	2	10	2	2	9	1
Frequent Church Attenders	9	2	1	9	1	4	8	9	2	10
Non-frequent Church Attenders	4	10	5	3	9	8	4	3	8	2

#1 - ranked value most important of any group

#10- ranked value least important of any group



Considering the overall mean score comparison rankings for each group, as given in Table XIII, page 63, frequent church attenders ranked many of the values near highest or lowest in comparison to the mean values of the other categories. They ranked the values of esteem, security, interesting and social service higher than most other groups and independence, fame, power, and leadership lower than all other groups but one. Non-frequent church attenders ranked independence comparatively high and interesting and security comparatively low. For these two groups, the occupational value variables of interesting, security and independence begin to show trends towards dichotomization.

Hypothesis 3: There will be no significant difference in values between the sexes.

A trend is evident, in Table XI on page 60, in the values which males and females apply to profit and social service in choosing a vocation. These two are ranked interchangeably by the two groups. The rank value of social service by males of 5 deviates noticeably from the average ranking of the value by the total group, namely 3. This, with the exception of only one other rank, was the only occupational value which was ranked more than one level away from the ranking assigned the value by the group as a whole.

Referring to Table XIII, page 63, several of the values were ranked almost dichotomously by these two groups when compared to the other mean group rankings of the values. Males ranked first in the values of leadership, power, profit and fame and 9th or 10th on self-expression, social service, and independence. Females ranked comparatively with other groups, first for interesting, self-expression and social service and last on

leadership, power, profit and fame. Thus extremes of value priority are evident in the occupational values of leadership, power, self-expression, profit, fame and social service for males and females.

Hypothesis 4: There will be no significant difference in values between students on an academic program and a non-academic program.

Value similarities for occupations are prevalent among these two groups with the exception of social service. Academics rank it higher than non-academics, 3 for academics, 6 for non-academics. Compared to the average for the total sample, non-academics rank it considerably lower. The average for the total sample was 3, while the average for the non-academics was 6. This was the greatest discrepancy from the total sample ranking of any one value in any group.

Hypothesis 5: There will be no significant difference in values between students in Grades 9 and 11.

Without exception, according to Table IX, page 55, Grade 9 and 11's rank ordered the occupational values identically. It was also evident that their ranking was identical to that of the total group average ranking.

Compared to the other groups ranking, Table XIII, page 63, only two values showed any trace of extreme priority. The value of esteem was top rated by the Grade 11's and bottom rated by the Grade 9's. Security was valued very little compared to the other tested groups by the Grade 11's and valued #3 by the Grade 9's when compared to the other testing groups.

For the Occupational Values Rating Scale, comparing the mean rankings

of the statements for each school, as shown in Table XIV on the following page, near identical scores were obtained. This Table lists the rankings each school gave each occupational value statement and the actual mean score obtained.

The statements interesting and self-expression were ranked 1st and 2nd for each school. The bottom ranking statements were power, fame, and leadership. These results concur with those of the testing groups.

School 3, the private religious school, ranked fame in 10th place, while school 2, the low socio-economic school, ranked it 8th. Two ranking points also distinguish the schools in the statement profit. It is 3rd in importance to school #2 and 5th in importance to school #3. Making money is valued more highly by students in a low socio-economic area than by students in a rural community with a strong religious affiliation.

Table XV, on page 68, shows the comparative ranking of each occupational value statement within the schools. It suggests that differing views are held by the religious school compared to the public schools, as each of their mean comparison ranking orders were either 1 or 3. Of the three schools, they ranked leadership, interesting, security, self expression and social service most important, and independence, fame, profit, power and esteem least important compared to the other two schools. The low socio-economic school ranked esteem, power, profit and fame more important than the other two schools and social service, self expression, interesting and leadership comparatively least important. School #1, the high socio-economic school was only top ranking in independence and bottom ranking in security. Security was least important to the students from the high

TABLE XIV

MEAN VALUE RANKING SCORES AND RANKING ORDER OF THE OCCUPATIONAL VALUE  
STATEMENTS BY THE THREE SCHOOLS

School	Leader	Interesting	Esteem	Power	Security	Self	Profit	Fame	Social	Independence
						Expression			Service	
School 1	8	1	7	10	5	2	4	9	3	6
	7.104	2.616	6.293	7.628	5.332	3.436	4.881	7.460	4.430	5.820
School 2	9	1	7	10	5	2	3	8	4	6
	7.251	3.119	6.106	7.540	5.104	3.900	4.272	6.858	4.885	7.933
School 3	8	1	7	9	4	2	5	10	3	6
	6.802	2.538	6.470	7.828	4.286	3.222	5.138	7.879	3.983	6.352

TABLE XV  
INTER SCHOOL COMPARISON OF MEAN RANKING ORDER FOR EACH  
OCCUPATIONAL VALUE

School	Leader	Interesting	Esteem	Power	Security	Self Expression	Profit	Fame	Social Service	Independence
School 1	2	2	2	2	3	2	2	2	2	1
School 2	3	3	1	1	2	3	1	1	3	2
School 3	1	1	3	3	1	1	3	3	1	3

#1 - ranked first among the three schools

#3 - ranked third among the three schools

socio-economic background in choosing a job.

#### Interrelationship of the Results from the Two Instruments.

The relationship between the two instruments used in this study is shown in Table XVI on the following page. Top traditional and emergent groups were not selected for comparison because of the statistical problem of regression towards the mean which would cause inaccuracies in the results. Instead, it was decided to use a straight correlational test between the traditional scores of the total sample used and the mean ranking scores for the total sample of the 10 occupational value statements. The level chosen for significance was .05 as for the other tests that were done. It must be realized, however, that this will not accurately cancel the chance factor of the relationships occurring. This must not be considered to be a very conservative test.

A profile analysis, Figure 2, is shown on page 71.

From both the table and the graph, it is evident that little significant correlation occurs between the two instruments. Only three of the O.V.R.S. statements are significant among the D.V.I. traditionalists or emergentists. A strong negative correlation occurs between the occupational value of leadership and traditional scores. This indicates that the more emergent the student's score becomes, the more he values leadership as a job value.

The other two significant correlations are both positive in nature. A very strong relationship occurs between traditional values and the value of interest as a feature for a job--the more traditional the student, the more he values an interesting job. A less salient positive relationship

TABLE XVI

CORRELATION RELATING TRADITIONAL SCORES ON THE D.V.I.  
AND MEAN RANKING SCORES ON THE O.V.R.S.

O.V.R.S. Variables	Traditional Scores
leadership	-0.1041*
interesting	0.1299*
esteem	0.0050
power	-0.0070
security	-0.0147
self expression	-0.0170
profit	0.0953*
fame	-0.0378
social service	-0.0517
independence	0.0093

\* Significant at 0.05  $\alpha$  level of significance = 0.0766

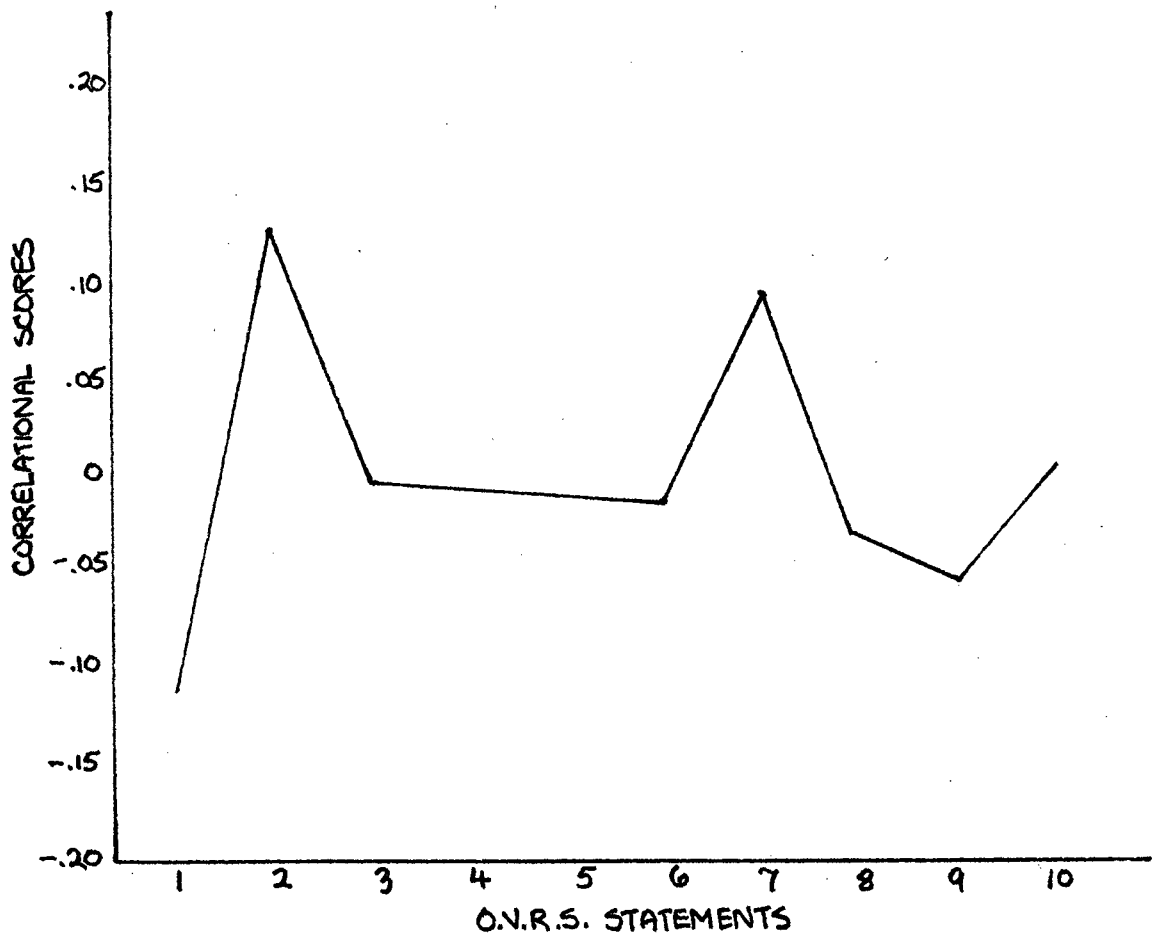


Figure 2: The relationship between the traditional scores as achieved on the D.V.I. and the mean ranking scores for each statement in the O.V.R.S.



exists between profit and traditionalists, however, once again it shows that the more traditionalist the student, the more he values a high paying job.

Six of the occupational values produced negative correlations. These were leadership, power, security, self expression, fame and social service. While only one of these produced significant results, the others could suggest trends such as the more traditionalist the student, the less he values those occupational traits. The reverse trend of the more traditionalist the student the more importance he places on the occupational values of interesting, esteem, profit and independence could also be suggested.

## CHAPTER V

### DISCUSSION AND APPLICATION OF THE RESULTS

In this chapter, an attempt will be made to suggest possible reasons for the results and then to help make practical application of the findings for the counsellor in particular and the school as a whole. The importance will not be just in the validity of accepting or rejecting the hypotheses, but also in trends which appear evident from the findings. Consideration must also be given to the limitations of this study as discussed in Chapter I.

Each hypothesis will be discussed separately.

Hypothesis 1: There will be no significant difference in the values between students of low and high socio-economic levels.

On the basis of the Hotelling  $T^2$  test, it would appear that because both value areas, traditional and emergent, were not found to be from significantly different populations, the null hypothesis as stated above can be accepted. Some differences in values were detected, but values of high and low socio-economic students, on the whole, would be considered similar. Acceptance of the null hypothesis would also be supported by the evidence of the O.V.R.S. results. However, some trends indicating specific areas where their values appear to differ are evident and probably assumed by many people.

Generally, the results concur with those of Lehmann (1962)--the low socio-economic group achieved higher traditional scores. The emergentists were the high socio-economic students. These results contradict the findings

of the test constructor, Prince (1957).

Considering the area of morals, society generally believes puritan morality is ascribed to by those of a high socio-economic background, while those in the "low" areas are very "loose." These results contradict this assumption. However, there are probably specific reasons for this finding. The low socio-economic group, because of the sample used, was comprised of some Orientals who attend school #2 and many students from school #3 whose parents are mainly orthodox Christians and whose father's occupations are in the farming category. Because of these observations, it shows the biased nature of the low socio-economic sample, however, it also suggests the danger of generalizing. Such an assumption as "I'm in a school in a low socio-economic area; values here are very low!" as is made or thought by too many educators, is a very restricting assumption to make and could provide barriers to many otherwise helpful counselling rapport situations.

The one significant variable in the D.V.I. was that of work success--the low socio-economic students placed more value on working to get ahead. This, it is assumed by society, is a very strong feature of the Oriental nature; to strive very hard to succeed. Also, the rural students come mainly from a German background whose parents had to labour very hard to stay alive. The results, therefore, could be attributed to the presence of these two ethnic groups.

This idea supports the view of Bidwell (1963) as he was quoted on page 26, that the real shift in values is not a result of the socio-economic status, but of the cultural system to which an individual is committed.

This would be supported because of the strong cultural backgrounds of the Orientals and the Dutch Mennonites whose numbers dominate the low socio-economic group. Therefore, it could probably be generalized that it is not the low socio-economic background but other factors such as race and culture which have a greater impact on an individual's value structure. This question of culture or socio-economic influence could provide the basis for a study in itself.

The results of future time orientation being valued more strongly by the low socio-economic students, and present time orientation valued more strongly by the high socio-economic students can be readily justified by the economic situations involved. People in a poor financial situation generally are considered to be more conservative in their use of material resources; the insecurity of the future creates this value. While those who do not have materialistic problems have instilled in them the attitude that they can spend and enjoy in the present without a worry for the future. They definitely can afford to be more present time oriented than the low socio-economic students.

If the low socio-economic sample had not contained an abundance of religious and Oriental students, perhaps this finding would not have been suggested for this is one of the value shifts which appears evident in society today. Young people are living more for the present; fewer seem to value foresight for the future. This is probably the most radical change as seen by the older generation. Particularly in the homes of high socio-economic parents, students are openly rejecting their parents' values of "strive to get ahead" and "save for the future"--this assumption is supported by this study. This was also suggested very recently by an

informal study done by some social work students in the Vancouver area who found that the majority of young people receiving welfare were from middle or high class homes.

The trend of a positive correlation between individualism and high socio-economic status, as detected by both the correlational and the t-test is also understandable. A student with financial security can more afford to be an individual, to take risks and not worry about the support of others. Whereas a student from a lower status home needs a group security where materialistic security is lacking, thereby he can risk less stepping out as an individual.

Self concept is also closely related to the cause of this finding. Students from lower class homes are generally conceived as holding poorer self concepts as compared to students from higher socio-economic homes. Therefore, higher socio-economic students would have more internal security to advance as an individual. It is generally recognized, however, that every student wants to be an individual and does not like to be seen as a "conformist." This is an undesirable value among today's youth.

Closely linked to the power to be an individual is that of the feasibility of independence. Once again, because of home and materialistic security, independence and thus the increased opportunity for individualism is more readily attainable by students from high socio-economic background than by those students from low socio-economic backgrounds.

Considering the O.V.R.S., no real differences were found in their rankings. Compared also to the group sample rankings, no differences were evident. Of the three values cited by Centers (1949) as differentiating

between the groups, only security produced any noticeable difference and that was only 1 ranking level in the opposing direction. Low socio-economics ranked it 5th; the high socio-economics ranked it 4th. The difference between the 4th and 5th rankings for the "high" group was only .008, therefore the significant difference between the rankings is virtually nil. Also due to the highly dependent nature of the data, where the rank of each statement was solely dependent on the rank of the others, the low socioeconomic student apparently valued a job with interest, self expression, money and the opportunity to help others more than security. However, on the overall basis of these findings, the conclusions as stated by Centers in Chapter II could be definitely disputed. Perhaps as Hilton & Korn (1964) suggested, social mobility has definitely influenced the results. Or perhaps the values representative of a youth culture are becoming more dominant than those representative of family background in detecting the values of adolescents.

Hypothesis 2: There will be no significant difference in values between frequent and non-frequent church attenders.

In contrast to the first hypothesis, on the basis of the results from both the D.V.I. and the O.V.R.S., this null hypothesis must be rejected. Significant results for both instruments were found. From the Hotelling  $T^2$  test, four variables were shown to be most significant: the dichotomous values in the area of morals and time orientation.

Deeply ingrained in the causal factors of these results would be the "ought" factor which would have a marked effect on the values of a church

attender. More than probably any other of the testing groups, those people committed to a Christian background or to any religious teaching, would feel the impact of the preferred value as taught by their faith. Each statement, as symbolic of a value, probably created more conflict for the church attender than for the non church attender. It would be in these results that such factors as the attitude and mood of the respondent could create great discrepancies in the desire to respond to the "preferable" value.

Other influences in considering the accuracy of these results are firstly, does the student attend church on his own volition or because he is forced to go? Secondly, to which church does the student go--an evangelical where the teaching is conservative or to a non-evangelical church where the teaching is likely to be more liberal?

With these considerations in mind, in the area of morals it is expected because of the Christian teachings that frequent church attenders would ascribe to a puritan ethic, while non-church attenders, because they frequently have not strong foundations to base their moral ethics on, would be committed to an attitude where absolutes are disputed and a standard of "situation ethics" prevails. This is the generally accepted attitude in the youth society of today. Unless a person has a strong internal personal commitment to base his absolutes on, most will conform to the values of their peers. Moral relativism cannot be justified or disputed on the basis of external reasons, validity for absolutes must come from internalized values. As this is so, it would seem appropriate that conformity, although not **significantly** so, was valued stronger by the non-frequent church

attenders.

The other significant dichotomy of time orientation was probably influenced by the low socio-economic background traits of many of the frequent church attenders. It would probably be expected that future time orientation be valued more by frequent church attenders than present time orientation, however neither variable would be strongly supported by Christian teaching. Christ taught his followers to prepare for the future, but not to store up material treasures on earth; to live each day as it comes knowing their needs would be met. This philosophy encompasses the characteristics of both time orientations. Therefore, the reasons for these results would likely rest more with the economic and cultural structure of the testing groups than with their church attendance. As indicated earlier, many of the frequent church attenders were also from families considered in this study to be low socio-economic, thus the emphasized value on the future. This was discussed in the previous section.

Although church attenders scored higher in all traditional variables, and lower on all emergent variables, there was little difference between the mean scores of individualism and sociability. In the t-test and correlational test, all variables except these two were found significant. To both church attenders and non church attenders alike, being seen as an individual and not just as going along with the crowd was important. Also being sociable, enjoying people and making friends was seen as equally desirable by both groups.

In the occupational rankings, interpretation of the results once again must consider the religious teachings of the church attenders as well as the socio-economic and ethnic backgrounds. Being looked upon highly



is important to many people, however Christian teaching, because of the stress of living an exemplary life would focus on the need to value self esteem as was indicated in the results. The traits producing social service characteristics, namely love and concern for one's neighbour, are also emphatically taught by Christ. Job security suggests the importance of being self supporting. This would be valued by church attenders, however it should not be a prime value. Christ taught that the only real security was in heaven, therefore the high value placed on security by church attenders would indicate a strong influence by many of their low socio-economic and ethnic backgrounds. This is not to suggest that low socio-economic status and church attendance are positively correlated (even though that might be so!), but it is a fact of the biased sample which was used in this study. A correlation of 0.0459, significant at the .05 level of 0.0764, existed positively between church attendance and low socio-economic level.

Compared to church attenders, non-frequent church attenders valued money and independence more. Once again, making money is not a prime objective of a Christian, therefore church attenders would be expected to rank it lower than non church attenders. Independence would be more strongly valued by non church attenders because it is assumed to be inbred into the general culture of youth, while as a group frequent church attenders ranked it comparatively lower than the other groups. Independence, as well as power and fame, are not idealized by church attenders. These findings are verified by both studies by Thompson (1965, 1958).

Hypothesis 3: There will be no significant difference in values between the sexes.

There appears to be a significant difference in the values held by males and females, thus the hypothesis, as stated, should be rejected. Much of the cause of the differences is likely due to the stronger needs of the males as contrasted with the earlier maturing, less achievement-oriented females.

Two of the significant variables, individualism and sociability, both show females obtaining the higher scores, while boys placed higher value on conforming. It would appear these results would concur with the psychological assumptions regarding the natural human tendency differences of the sexes. By nature, girls are considered to be more sociable; this would be supported by the data. Boys, it is assumed, need the support of others and although they may talk more of being an individual, psychologists would suggest a strong need by males for group approval and support. However, girls appear to have more internal security and thus can risk valuing individualism.

Further trends of possible differences were detected in the variables of puritan morality, work success and present time orientation. These results concur exactly with those of Thompson (1968) when he tested the California students.

In the area of morals, there seems to be a discrepancy because females scored highest in both puritan morality and moral relativism. This is probably indicative of the chaos which exists in the area of morals in society today. It would suggest that sex alone is a poor factor on which to generalize values to a group, especially of adolescents. Neither of the

differences in these variables were significant in the Hotelling  $T^2$  test.

Males scoring higher on work success would probably have been anticipated. The need for achievement seems to create a stronger drive for the males than for the females. It would appear that males scoring higher on present time orientation as well is a contradiction, however it could be indicative of the conflict which adolescent males experience. The impact of the parental values of "work and you'll get ahead" and of the peer values of "hedonism" is generally strong and conflicting in the adolescent years for boys.

In the area of occupational values, males obviously devalued social service. The male image--one of self centeredness--becomes a predominant force here. Helping others is frequently considered "sissy" in many male teenage "gangs." Of any groups, females ranked social service as an important value. This can best be explained in terms of human nature and is indicative of their strong feelings toward humanitarianism. When comparatively, males ranked "self expression" last (although it was still an important value to them), it was indicative of their strong need to conform as against a female need to be an individual and to be allowed to self express and create. Males, on the other hand as a group, comparatively valued highly power, profit and fame. These all represent values of external security which fulfill the strong psychological need among adolescent males for belonging and acceptance. Once again, the O.V.R.S. results concur with those of Thompson's (1968) in California. This would suggest that the causes must be inherent within the male or female, thus supporting the cause as being psychological. Humans are the same, with the same basic needs all over the world and are fulfilled by the values to which they become

committed. This fact is very relevant to a counselling relationship.

Hypothesis 4: There will be no significant difference in values between students on an academic program and a non-academic program.

At a .05 level of significance, the rejection of this null hypothesis is indicated. The major reason for this involves the values of individualism and conformity.

Reflecting on causes for differences, the school system as it now exists must be considered as being very influential. Without hesitation, although with regret, it is suggested that non-academic students are degraded in the eyes of teachers, counsellors and administrators. Hopefully some corrective trends are now becoming evident. This attitude has forced non-academic students to seek need fulfillment, not from the school where it should be obtainable, but from their friends. The school has had the effect of creating a need for conformity among these students for their own psychological stability.

In the area of work success where it would be assumed the non-academics might excel, in effect they scored lower than academics. They should be valuing working and succeeding not as an end in itself, but as a means to fulfill some of their needs. However, it would appear that their attempts and seemingly inevitable failures have created an attitude of fear towards work. The non-academics as a result do not highly value work success. It must be realized that this fact is not all bad especially if success involves using people, but a prevailing attitude of failure among the non-academic students should cause concern.

Generally, the trend of academics being traditionalists and non-academics being emergentists is supported by other research in the area. Academic students in order to achieve success in their program, need to value working. This value implies a need to sometimes disregard the feelings and desires of others. This attitude is too frequently fostered by schools, particularly in their evaluation methods, in the encouragement of overcompetitiveness among students on the academic program. These students also need to be future oriented because the rewards which they are seeking are not usually attained for several years. If living for present fulfillment was of prime importance, success of this nature would be more difficult to attain.

It is for this value of present time orientation that many otherwise capable students switch to a non-academic program. In counselling this type of situation, the motive for a student's change in programs must be realized by the student himself. If the program switch is because of a change to a value of present time orientation, the consequences should be discussed before a final decision is made. Care must be taken however not to moralize on the correctness of either a present time or a future time orientation.

Surprisingly similar results were obtained for the two groups in the occupational value rankings. However, as with the sex groups, a distinct difference is obtained in the value of social service. Non-academics rank it three levels lower than either academics or the total sample. When the term "non-academic" is used, generally an image of hard, defensive students arises. This is borne out by their ranking of social service. They will not expend energy helping anyone else--that is their image.

Perhaps the feeling of "oughtness" is very strong with these people. Linked with their high value rating of conformity as seen in the D.V.I. results, these students feel a need to conform to others like them and to their image. Of all the groups tested, these students ranked independence in a job as the most valued trait to them. This finding suggests a feeling of pressure is felt by non-academic students from forces all around them. A consistent pattern of allegiance to their group, but not to society as a whole, has become evident through the two instruments used. Unfortunately, the school is largely responsible for this attitude which is probably not a healthy attitude for either the schools or society to breed or to cope with. This is perhaps the one area where the counselor could be very involved and become very beneficial to all individuals and groups concerned.

Hypothesis 5: There will be no significant difference in values between students in Grades 9 and 11.

Both Grade 9 and 11 results produced significant differences according to the Hotelling  $T^2$  test. However, the trend to significance appeared weak because only in the traditional area was a significant variable detected. No difference was found in the occupational values adhered to by the different grades.

A general trend of Grade 9's being more traditional and Grade 11's more emergent was evident. This contradicts the findings cited in Chapter II by Anderson (1961). He suggested traditional value orientations increased as grade increased. Over the decade, it is conceivable that this change has occurred as the value shift in society occurs. Society's

values appear to be changing towards predominantly emergent values. As the impact of peers and environment on individuals increases with age, the impact of the family lessens. This change occurs as the process of value internalization begins. At the time of confusion, peers probably yield the greatest influence, because of psychological need fulfillment. As society is dominated by emergent values, as adolescents grow and values change, emergent values become dominant until the stability and internalization of a coping hierarchy of values can be formulated by each individual. Grade 11, or age 16-17, is probably the year before congruence of internal values occurs for most adolescents.

The change between Grade 9 and 11 regarding their time orientation is perhaps of most significance to counsellors. During Grade 9, students are more idealistic, less influenced by outside forces and still value a good education and a good job--all of which require deferred gratification to achieve. However, it would appear that with age, impatience increases and students become less willing to postpone their goals and immediate attainment of pleasure and satisfaction becomes valued. The desirability of this change is not suggested, but a value change such as this can greatly affect attitudes towards school and home. If education becomes less valued, marks frequently will fall. This inevitably causes the parents to become upset and communication barriers are erected. At this point, as family break-ups appear imminent, or hopefully maybe before, the counsellor may become involved. If counsellors could be made aware of the possibility of this shift in values perhaps such a crisis, although not necessarily the value change, could be avoided.

No significant trends are evident in the O.V.R.S. results.

Much of the influence of values is determined from school and from peers. Many of these peers are found within the school itself, therefore some possible valuable trends could be detected from a comparison of the schools.

Generally, as indicated by Table X, page 57, the schools from the differing socio-economic backgrounds, 1 and 2, adhere to similar value patterns. They oppose each other on the values of individualism and sociability. These two traits are least valued by the "east end" school, and most valued by the "west end" school. This could be attributed to their economic structures as the previous data would suggest.

School 3, the religious, rural school, provided data which showed very strong traditional value scores compared to the emergent scores. As would be expected, the issue of morals provided the greatest discrepancy, suggesting the strong moral teaching in this school. The students receive daily Christian teaching as well as daily morning chapel.

Some interesting trends appear when the O.V.R.S. data in Table XIV, page 67, are examined. School 2 ranks social service lower than either of the other two schools. This does not concur with the findings of the socio-economic results, but supports the results of the non-academic students. This would suggest that the influence of the school program is greater than the student's economic background on the values adopted by the student. Non-academics more than low socio-economic students would possess an attitude of "every man for himself."

Both fame and making money are valued noticeably more by School 2



than by School 3. The combined attitude of a non-academic, low socio-economic student is probably responsible for this data. Value is strongly created for those things that we don't possess or that are difficult to achieve, and what we need creates value. This explanation would readily justify these results.

Leadership was valued less by school 2; this could be indicative of their intense fear of failing, of being held up as an example, or of being conspicuous. This would also be suggested by their ranking of individualism in the D.V.I. variables the lowest of any of the three schools. Table XVI, page 70, correlating the data from the two instruments, also suggests this finding that the more emergent the student, the more at ease he is in seeking positions of leadership.

Referring to Table XV, page 68, of the three schools, the high socio-economic school considered independence to be of greatest value to them in an occupation and security the least important value. These results become evident in the attitude of the students at the school. They oppose authority and rules, feeling secure that they will "make out" satisfactorily because of the economic situation of Dad! This attitude in a counselling situation becomes very dominant and frequently can cause destruction of rapport unless it is recognized and the situation is approached with awareness on the part of the counsellor.

For School 2, Table XV on page 68 reflects values that would be strongly influential in a counselling relationship, although care must be taken not to generalize without consideration of the uniqueness of the individual. Comparatively, esteem, power, profit and fame are the values which students

in this school are seeking in their future occupation. With these characteristics in mind, perhaps understanding and thus rapport can be more quickly established and the effectiveness of the counsellor in his role can be improved.

Consideration of the interrelationships of the two instruments, as cited in Table XVI, page 70, if a counsellor was aware of the strength of the traditionalist or emergentist values of the student, he could have an idea of which occupational values might be most valued by the student. A significant positive relationship is evident for students with high traditionalist values, and jobs which are interesting to them, while a positive trend is apparent between traditionalists and money. Positive relationships would likely occur between emergent students and the occupational values of leadership, security, self expression, fame and social service. However, only the first two values listed produced a significant relationship.

## CHAPTER VI

### CONCLUSIONS AND AREAS FOR FURTHER RESEARCH

The findings of this study must not be considered absolutely binding but considered as empirical data, for a counsellor must see each student as unique, not as a predetermined pattern. Only then, with these results suggesting possible trends in the lives of the students he works with, can the effectiveness of the counsellor be improved with the awareness this data can give.

The factors which significantly determine students' value systems are most dominantly those of church attendance, school program and sex. Grade level does not significantly affect the value system, however the results suggested that environmental factors had a greater influence on older students than on younger students and the influence of the family appeared to decrease as grade level increased. The influence of socio-economic background was found to be less than is probably assumed by society. Once again this would suggest a lessening influence by the family on the value systems adhered to by students.

Church attendance distinguished the strongest between any of the testing groups with two values, those of morality and time orientations, dividing the group. Present time orientation and moral relativism are characteristic values of non-frequent church attenders while frequent church attenders valued future time orientations and puritan morality as defined by the instrument. The occupational values of esteem, security and social service are most highly valued by church attenders; money and

independence are characteristic of the non frequent church attenders. Distinctions were also provided by the factors of sex and school program. Males and females differed most greatly on the D.V.I. values of individualism and sociability, and on the occupational values of leadership, power, self expression, profit, fame and social service. Academic students placed their values on occupations involving social service and on the personal values of traditionalistic nature, especially individualism. Non academics value interest, self expression, money and security in a job and the personal values of emergentists nature, especially conformity.

Of the values tested, high socio-economic students indicated that individualism was of most importance to them in either personal or occupational values. Low socio-economic students placed greatest importance on work success, puritan ethics and money.

Grade had little effect on the two groups tested although the Hotelling  $T^2$  test suggested that the two populations were different. Only slight trends of Grade 11's valuing individualism and Grade 9's valuing conformity were evident. There was no difference detected in their occupational value rankings.

It is hoped that the trends suggested here might be of some value in suggesting some of the areas of greatest influence in the lives of high school students. These areas of potential influence can be used to the benefit or hindrance of the growth of the student. It is up to the counselor to use these influences for the constructive growth of the student. This growth can effectively occur during a counsellor-client relationship, especially where the counsellor is aware of the values possibly adhered to by the

student and the factors which could have an impact on commitment by the student. It is realizations like these that can help the counsellor to more effectively meet the needs of his students and thus help them to realize their full potential.

#### 1. AREAS OF FURTHER RESEARCH

It is hoped that a study such as this does not solely provide empirical data for the reader, but also provokes interest into further research attempts.

Each of the hypotheses, as stated, could be investigated as a separate study. For instance, a deeper investigation of the values of students in different school programs could be studied. And possible reasons for these values could be investigated, particularly where it is found that these values might be detrimental to the development of a "self actualized" student. Answers to such questions as: "Which came first, a differing value system or a change in program?" and "How can maximum self concept development be achieved with students with degrading value hierarchies?" could be attempted. A complete investigation of the value influences which occur at differing times in the lives of the student could also be done. Related to this, a study of the ethnic and socio-economic influences could be most beneficial to those concerned with understanding and aiding the development of students.

No mention was made in this study of parental values. The relationships between parent-student values opens up another area of research. Such questions as: "Do children reflect the values of their parents?", "What type of students reject the values of their parents?", "Do students involved

in great value conflicts come from specific types of parents?", "Are values different if a student is from a one-parent home?", all could be studied with some benefit to society as a whole.

The relationship between the school and the student could also be studied in the realm of values. Much concern is being voiced over the emergent-valued student in a traditionalist school, but what about the traditionalist student in an emergent school? What conflicts does it produce for this type of student? Or does this situation ever exist in the present age?

Conflicts produced between teacher and student in respect to their particular value structure could also be studied. Perhaps further research in this area might help facilitate better learning conditions for the student and more pleasant teaching experiences for the instructor.

This study could also form the basis of part of a Guidance curriculum. A course or opportunity for self and society life style examination would have two definite positive benefits for both students and society. Firstly, it would help give congruence within the individual to presently conflicting value systems, especially for adolescents in the high school years. Secondly, because values form the basis of decision making, if the schools could help equip students with the capacity to examine value differences rationally, students might then synonomously develop the rationale for intelligent decision making and ultimately for giving stability and meaning to their life.

The possibilities are numerous, the need is urgent and the potential is exciting.

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## APPENDIX A

INFORMATION SHEET

Please fill in or check the appropriate response:

1. Age \_\_\_\_\_
2. Grade \_\_\_\_\_
3. Male \_\_\_\_\_ Female \_\_\_\_\_
4. Describe, in detail, your father's (or the main breadwinner in your family) occupation: \_\_\_\_\_  
\_\_\_\_\_
5. Does your mother work: part time \_\_\_\_\_  
full time \_\_\_\_\_
6. How many brothers do you have:  
\_\_\_\_\_ older than yourself \_\_\_\_\_  
\_\_\_\_\_ younger than yourself \_\_\_\_\_
7. How many sisters do you have:  
\_\_\_\_\_ older than yourself \_\_\_\_\_  
\_\_\_\_\_ younger than yourself \_\_\_\_\_
8. Which program are you on, or will you likely be on next year if you are likely to change:  
\_\_\_\_\_ Academic-Technical \_\_\_\_\_  
\_\_\_\_\_ Commercial \_\_\_\_\_  
\_\_\_\_\_ Industrial \_\_\_\_\_  
\_\_\_\_\_ Community Services \_\_\_\_\_  
\_\_\_\_\_ Visual and Performing Arts \_\_\_\_\_  
\_\_\_\_\_ Trade Preparation \_\_\_\_\_
9. How frequently do you attend church?  
\_\_\_\_\_ at least once a week  
\_\_\_\_\_ at least once a month  
\_\_\_\_\_ once or twice a year  
\_\_\_\_\_ never

### SPINDLER'S VALUE DEFINITIONS

#### TRADITIONAL VALUES

*Puritan morality* (Respectability, thrift, self-denial, sexual constraint; a puritan is someone who can have anything he wants, as long as he doesn't enjoy it!)

*Work-Success ethic* (Successful people worked hard to become so. Anyone can get to the top if he tries hard enough. So people who are not successful are lazy, or stupid, or both. People must work desperately and continuously to convince themselves of their worth.)

*Individualism* (The individual is sacred, and always more important than the group. In one extreme form, the value sanctions egocentricity, expediency, and disregard for other people's rights. In its healthier form the value sanctions independence and originality.)

*Future-time orientation* (The future, not the past, or even the present, is most important. There is a "pot of gold at the end of the rainbow." Time is valuable, and cannot be wasted. Present needs must be denied for satisfactions to be gained in the future.)

#### EMERGENT VALUES

*Sociability* (As described above. One should like people and get along well with them. Suspicion of solitary activities is characteristic.)

*Relativistic moral attitude* (Absolutes in right and wrong are questionable. Morality is what the group thinks is right. Shame, rather than guilt-oriented personality is appropriate.)

*Hedonistic, present-time orientation* (No one can tell what the future will hold, therefore one should enjoy the present--but within the limits of the well-rounded, balanced personality and group.)

*Conformity to the group* (Implied in the other emergent values. Everything is relative to the group. Group harmony is the ultimate goal. Leadership consists of group-machinery lubrication.)

OCCUPATIONAL VALUES RATING SCALE

In the envelope you have 10 statements giving characteristics of jobs. You are asked to sort these statements so when you are finished the most important characteristics to you in considering a vocation is number 1, the least important characteristic to you is ranked number 10. Please write your answers, in the order you ranked them, on the answer sheet provided.

- A job where you could be a leader
- A very interesting job
- A job where you would be looked upon very highly by your fellowmen
- A job where you could be boss
- A job which you were absolutely sure of keeping
- A job where you could express your feelings, ideas, talents or skill
- A very highly paid job
- A job where you could make a name for yourself--or become famous
- A job where you could help other people
- A job where you could work more or less on your own



INSTRUCTIONS

You are being requested to participate in a research study conducted by the University of B.C. The information you provide will be seen only by the research personnel at the University.

This booklet contains statements which you may think you should or should not do. This is not a test. There are no right or wrong answers. Each person will choose different statements. How you really feel about each statement is what is important. If some choices are difficult to make, choose the statement which seems the closest to what you believe.

1. The statements are arranged in pairs as in the following example:

1. A) Be reliable.  
B) Be friendly.

Read each set of statements carefully. As you read the statements to yourself, begin each statement with the words "I ought to . . ."

2. Select the statement which is the more important to you. Do not mark your answers in the booklet.
3. Make your choice by filling in between the dotted lines marked "A" or "B" for each question. Do not write anywhere else on the answer card.
4. Do not skip any items.
5. Continue until you have answered all the questions.

Coded  
answers

1. I ought to:

- |                                  |  |
|----------------------------------|--|
| T <sub>3</sub><br>E <sub>2</sub> | 1. (a) Work harder than most of those in my class.<br>(b) Work at least as hard as most of those in my class.  |
| E <sub>2</sub><br>T <sub>2</sub> | 2. (a) Do things which most other people do.<br>(b) Do things which are out-of-the-ordinary.   |
| E <sub>2</sub><br>E <sub>2</sub> | 3. (a) Have my own ideas about politics and religion.<br>(b) Try to agree with others on these matters.  |
| E <sub>1</sub><br>T <sub>2</sub> | 4. (a) Enjoy myself doing things with others.<br>(b) Enjoy myself doing many things alone.   |
| T <sub>3</sub><br>E <sub>4</sub> | 5. (a) Attain a higher economic position than my father or mother attained.<br>(b) Enjoy more of the good things of life than my father or mother enjoyed.           |
| E <sub>4</sub><br>T <sub>4</sub> | 6. (a) Feel that the future is uncertain and unpredictable.<br>(b) Feel that the future is full of opportunities for me.   |
| E <sub>4</sub>                   | 7. (a) Feel that happiness is the most important thing in life to me.<br>(b) Feel that enduring suffering and pain is important for me in the long run.              |
| E <sub>1</sub><br>T <sub>2</sub> | 8. (a) Rely on the advice of others in making decisions.<br>(b) Be independent of others in making decisions.  |
| T <sub>4</sub><br>E <sub>4</sub> | 9. (a) Feel it is my duty to save as much money as I can.<br>(b) Feel that saving is good but not to the extent that I must deprive myself of all present enjoyment. |
| T <sub>4</sub><br>E <sub>4</sub> | 10. (a) Put all of the ten dollar bill I have in the bank.<br>(b) Spend five of the ten dollars enjoying myself with my friends.                                     |
| E <sub>2</sub><br>T <sub>4</sub> | 11. (a) Spend enough on clothes to dress as well as my friends.<br>(b) Spend only enough on clothes to look presentable and save the rest for future needs.          |
| T <sub>3</sub><br>E <sub>3</sub> | 12. (a) Put in long hours of work without interruption.<br>(b) Feel that I can't work long hours without stopping but I'll get the job done anyway.                  |

Coded  
Answers

I ought to:

- |                                      |   |
|--------------------------------------|---|
| T <sub>4</sub><br>E <sub>4</sub>     | 13. (a) Feel that it is most important to live for the future.<br>(b) Feel that today is important and I should live each day to the fullest.   |
| E <sub>3</sub><br>T <sub>1</sub>     | 14. (a) Feel that "right" and "wrong" are relative terms.<br>(b) Feel that I should have strong convictions about what is right or wrong.   |
| T <sub>3</sub><br>E <sub>3</sub>     | 15. (a) Work hard to do most things better than others.<br>(b) Work hard at some things and leave others to those who are more qualified than I.  |
| E <sub>3</sub><br><br>T <sub>1</sub> | 16. (a) Feel that everyone misbehaves once in a while but the important thing is not to make the same mistake over again.<br>(b) Feel that the most important thing in life is to strive for eternal peace. |
| T <sub>1</sub><br>E <sub>4</sub>     | 17. (a) Feel that work is important, fun is not important.<br>(b) Feel that all work and no play is not good for me.  |
| E <sub>2</sub><br>T <sub>2</sub>     | 18. (a) Feel that what others think about right and wrong should influence my thinking.<br>(b) Feel that my own convictions about right and wrong are most important.                                       |
| T <sub>2</sub><br>E <sub>3</sub>     | 19. (a) Defend my ideas about right and wrong.<br>(b) Be willing to be convinced on matters of right and wrong because "right" and "wrong" have different meanings for <u>different people</u> .            |
| E <sub>1</sub><br>T <sub>1</sub>     | 20. (a) Make as many social contacts as possible.<br>(b) Be willing to sacrifice myself for the sake of a better world.   |
| E <sub>3</sub><br>T <sub>2</sub>     | 21. (a) Get all my work done on my own.<br>(b) Get my work done with the help of others when necessary.   |
| E <sub>2</sub><br>T <sub>2</sub>     | 22. (a) Wear clothes similar to those of my friends.<br>(b) Dress moderately even though this makes me different from my friends.   |
| E <sub>4</sub><br>T <sub>2</sub>     | 23. (a) Work hard only if I am paid for it.<br>(b) Work hard at doing something creative regardless of pay.   |
| E <sub>4</sub><br>T <sub>3</sub>     | 24. (a) Get a job which will allow me to enjoy some of the luxuries of life.<br>(b) Get a job which will make me a success in life.   |

Coded  
Answers

I ought to:

- T<sub>3</sub>  
E<sub>3</sub>      25. (a) Be able to solve difficult problems and puzzles.  
          (b) Feel that difficult problems and puzzles are good for some people but are not for everybody.
- E<sub>2</sub>  
T<sub>1</sub>      26. (a) Feel that style is more important than quality in clothes.  
          (b) Feel that quality is more important than style in clothes.
- T<sub>2</sub>  
E<sub>1</sub>      27. (a) Say what I think is right about things.  
          (b) Think of the effect on others before I speak.
- E<sub>2</sub>  
T<sub>2</sub>      28. (a) Feel comfortable getting the same grades as most of the people in my class.  
          (b) Feel comfortable near the head of the class.
- T<sub>2</sub>  
E<sub>2</sub>      29. (a) Have my own firm ideas about correct behavior.  
          (b) Look to others for the kind of behavior which is approved by the group.
- T<sub>1</sub>  
E<sub>1</sub>      30. (a) Feel that discipline in the modern school is not as strict as it should be.  
          (b) Feel that the change from strict discipline in the modern school is a good one.
- T<sub>4</sub>  
E<sub>1</sub>      31. (a) Feel that the most important thing in school is to gain knowledge useful to me in the future.  
          (b) Feel that the most important thing in school is to learn to get along well with people.
- T<sub>2</sub>  
E<sub>4</sub>      32. (a) Do things without regard to what others may think.  
          (b) Do things which allow me to have fun and be happy.
- E<sub>3</sub>  
T<sub>4</sub>      33. (a) Take classes which are interesting to me whether or not they will do me some good in the future.  
          (b) Register for a class which is uninteresting to me but which will do me some good in the future.
- E<sub>1</sub>  
T<sub>1</sub>      34. (a) Go to a school affair to enjoy myself being with people.  
          (b) Go to a school affair because it is my duty to be loyal to my school.
- T<sub>4</sub>  
E<sub>3</sub>      35. (a) Feel it is right to spend less for clothes in order to save for the future.  
          (b) Feel that whether one wants to spend more for clothes and save less or vice versa is a matter of opinion.
- T<sub>2</sub>  
E<sub>1</sub>      36. (a) Do things very few others can do.  
          (b) Do things co-operatively with others.

Coded  
Answers

I ought to:

- E<sub>2</sub> 37. (a) Use the same expressions my friends use so that they won't think I'm odd.  
T<sub>1</sub> (b) Speak in the most proper manner.
- T<sub>4</sub> 38. (a) Feel that it is right to save for the future.  
E<sub>3</sub> (b) Feel that whether or not it is right to save for the future is up to the individual.
- T<sub>4</sub> 39. (a) Choose a job with opportunities for advancement even though the starting pay isn't as high as I would like it to be.  
E<sub>1</sub> (b) Choose a job in which I can work with many interesting people.
- E<sub>4</sub> 40. (a) Mix a little pleasure with my work so I don't get bored.  
T<sub>3</sub> (b) Keep at a job until it is finished.
- E<sub>4</sub> 41. (a) Get as much pleasure as I can out of life now.  
(b) Stand by my convictions.
- E<sub>3</sub> 42. (a) Feel that everybody misbehaves once in a while but the important thing is not to make the same mistake twice.  
T<sub>1</sub> (b) Feel guilty when I misbehave and expect to be punished.
- T<sub>1</sub> 43. (a) Have less freedom in the classroom.  
E<sub>1</sub> (b) Have more freedom in the classroom.
- T<sub>3</sub> 44. (a) Be very ambitious.  
E<sub>1</sub> (b) Be very sociable.
- E<sub>2</sub> 45. (a) Choose a job in which I'll earn as much as most of my friends.  
T<sub>4</sub> (b) Choose a job with plenty of opportunities for advancement even though the pay isn't as high as my friends receive.
- E<sub>1</sub> 46. (a) Get the kind of job which will bring me in contact with many interesting people.  
T<sub>3</sub> (b) Get the kind of job which will make me a success in life.
- E<sub>3</sub> 47. (a) Feel that whether or not it is right to plan and save for the future is a matter of opinion.  
T<sub>4</sub> (b) Feel that it is right to plan and save for the future.
- T<sub>1</sub> 48. (a) Be willing to sacrifice myself for a better world.  
E<sub>2</sub> (b) Feel it is important to behave like most other people do.

Coded  
Answers

I ought to:

- |                                  |   |
|----------------------------------|---|
| T <sub>3</sub><br>E <sub>3</sub> | 61. (a) Feel that it is right to be very ambitious.<br>(b) Feel that it may or may not be right to be very ambitious depending on the individual. |
| E <sub>1</sub><br>T <sub>3</sub> | 62. (a) Choose to work with people I like in a job I don't like.<br>(b) Choose to work with people I don't like in a job which I like.            |
| T <sub>3</sub><br>E <sub>4</sub> | 63. (a) Work as hard as I can in order to be successful.<br>(b) Work as hard as I can in order to enjoy some of the luxuries of life.             |
| T <sub>3</sub><br>E <sub>2</sub> | 64. (a) Strive to be an expert in at least one thing.<br>(b) Do many things quite well but not necessarily be an expert in anything.              |

HAVE YOU COMPLETED EACH ITEM?

CHECK TO BE SURE YOU HAVE NOT MISSED ONE.

Coded  
Answers

I ought to:

- T<sub>4</sub> 49. (a) Deny myself enjoyment for the present for better things in the future.  
E<sub>1</sub> (b) Have fun attending parties and being with people.
- E<sub>2</sub> 50. (a) Be satisfied to do as well in life as my father did.  
T<sub>3</sub> (b) Attain a higher position in life than my father did.
- T<sub>4</sub> 51. (a) Feel that it will be good for me later if I endure some unpleasant things now.  
E<sub>3</sub> (b) Feel that whether or not I should be willing to endure unpleasant things now because it will be good for me later is a matter of opinion.
- E<sub>2</sub> 52. (a) Be able to have most of the things my friends have.  
T<sub>4</sub> (b) Be able to have enough money to lay away for future needs.
- E<sub>4</sub> 53. (a) Feel that happiness is the most important thing in life.  
T<sub>1</sub> (b) Feel that being respected is the most important thing in life.
- T<sub>1</sub> 54. (a) Feel that more physical punishment is needed by children today.  
E<sub>3</sub> (b) Feel that physical punishment does the child more harm than good.
- T<sub>3</sub> 55. (a) Exert every effort to be more successful this year than I was last year.  
E<sub>2</sub> (b) Be content with a reasonable amount of success and live longer.
- T<sub>1</sub> 56. (a) Try very hard to overcome my emotions.  
E<sub>4</sub> (b) Get as much pleasure as I can out of life now.
- T<sub>3</sub> 57. (a) Feel it is important to be more successful this year than last year.  
E<sub>1</sub> (b) Feel it is important to get along well with others.
- E<sub>3</sub> 58. (a) Feel that children are born good.  
T<sub>1</sub> (b) Feel that children are born sinful.
- T<sub>2</sub> 59. (a) Spend as much time as I can working independently.  
E<sub>4</sub> (b) Spend as much time as I can in having fun.
- T<sub>4</sub> 60. (a) Deny myself enjoyment for the present for better things in the future.  
E<sub>1</sub> (b) Be able to have as much enjoyment as my friends have.

## APPENDIX B



TABLE XVII

CORRELATIONAL SCORES WITHIN SOCIO-ECONOMIC GROUP  
CATEGORIES FROM THE HOTELLING T<sup>2</sup> TEST

Variables:	High n=202	Low n=350
P.M. vs Ind.	0.247	0.228
P.M. vs W.S.	0.327	0.325
P.M. vs F.T.O.	0.356	0.425
Ind. vs W.S.	0.135	0.223
Ind. vs F.T.O.	0.234	0.120
W.S. vs F.T.O.	0.321	0.477
Soc. vs Con.	0.156	0.371
Soc. vs M.R.	0.303	0.298
Soc. vs P.T.O.	0.328	0.329
Con. vs M.R.	0.095	0.256
Con. vs P.T.O.	0.400	0.373
M.R. vs P.T.O.	0.323	0.460
.05 $\alpha$ level	= 0.105	0.137

TABLE XVIII  
CORRELATIONAL SCORES WITHIN CHURCH ATTENDANCE GROUP  
CATEGORIES FROM THE HOTELLING  $T^2$  TEST

Variables:	Frequent n=278	Non-Frequent n=379
P.M. vs Ind.	0.212	0.247
P.M. vs W.S.	0.312	0.318
P.M. vs F.T.O.	0.394	0.354
Ind. vs W.S.	0.179	0.210
Ind. vs F.T.O.	0.185	0.152
W.S. vs F.T.O.	0.434	0.452
Soc. vs Con.	0.313	0.309
Soc. vs M.R.	0.265	0.380
Soc. vs P.T.O.	0.330	0.379
Con. vs M.R.	0.258	0.129
Con. vs P.T.O.	0.395	0.383
M.R. vs P.T.O.	0.420	0.349
.05 $\alpha$ level	= 0.118	0.101

TABLE XIX  
CORRELATIONAL SCORES WITHIN SEX GROUP CATEGORIES  
FROM THE HOTELLING  $T^2$  TEST

Variables	Male n=315	Female n=343
P.M. vs Ind.	0.254	0.190
P.M. vs W.S.	0.328	0.347
P.M. vs F.T.O.	0.389	0.421
Ind. vs W.S.	0.275	0.165
Ind. vs F.T.O.	0.203	0.145
W.S. vs F.T.O.	0.446	0.459
Soc. vs Cons.	0.367	0.349
Soc. vs M.R.	0.277	0.355
Soc. vs P.T.O.	0.386	0.378
Con. vs M.R.	0.193	0.240
Con. vs F.T.O.	0.397	0.378
M.R. vs P.T.O.	0.414	0.443
.05 $\alpha$ level	= 0.109	0.106

TABLE XX

CORRELATIONAL SCORES WITHIN SCHOOL PROGRAM GROUP  
CATEGORIES FROM THE HOTELLING  $T^2$  TEST

Variables	Academic n=515	Non-Academic n=142
P.M. vs Ind.	0.247	0.164
P.M. vs W.S.	0.329	0.304
P.M. vs F.T.O.	0.385	0.480
Ind. vs W.S.	0.233	0.056
Ind. vs F.T.O.	0.172	0.129
W.S. vs F.T.O.	0.452	0.443
Soc. vs Cons.	0.321	0.271
Soc. vs M.R.	0.313	0.351
Soc. vs P.T.O.	0.365	0.302
Con. vs M.R.	0.215	0.131
Con. vs P.T.O.	0.416	0.307
M.R. vs P.T.O.	0.429	0.375
.05 $\alpha$ level	= 0.087	0.164

TABLE XXI  
CORRELATIONAL SCORES WITHIN GRADE GROUP CATEGORIES  
FROM THE HOTELLING  $T^2$  TEST

Variables	9 n=340	11 n=317
P.M. vs Ind.	0.127	0.377
P.M. vs W.S.	0.333	0.314
P.M. vs F.T.O.	0.385	0.417
Ind. vs W.S.	0.178	0.245
Ind. vs F.T.O.	0.088	0.294
W.S. vs F.T.O.	0.424	0.478
Soc. vs Con.	0.283	0.354
Soc. vs M.R.	0.279	0.361
Soc. vs P.T.O.	0.270	0.436
Con. vs M.R.	0.198	0.238
Con. vs P.T.O.	0.390	0.417
M.R. vs P.T.O.	0.387	0.453
.05 $\alpha$ level	= 0.106	0.109

## APPENDIX C

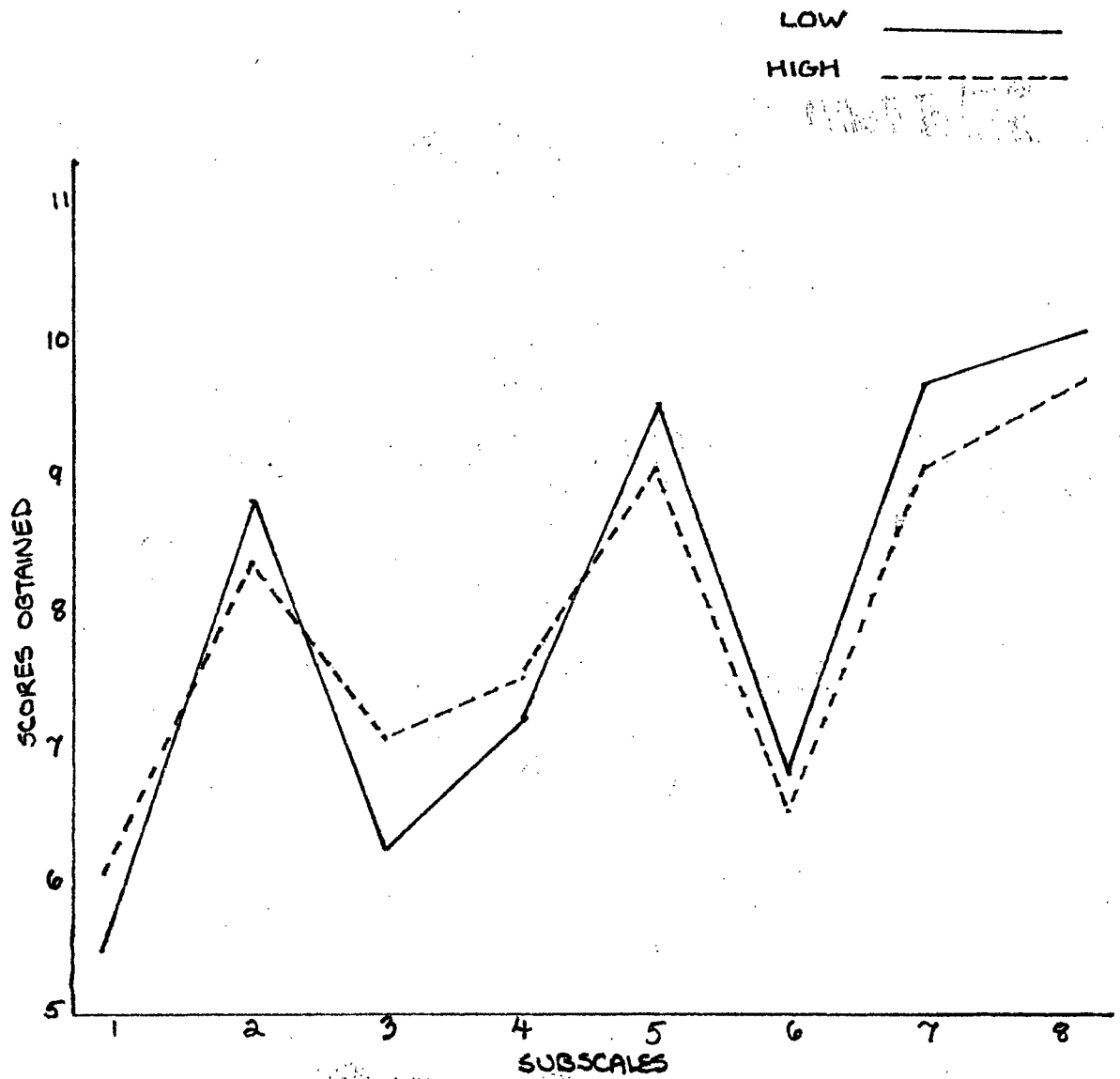


Figure 3: Comparative Value Profiles of High and Low Socio-Economic Groups for the D.V.I. Variables

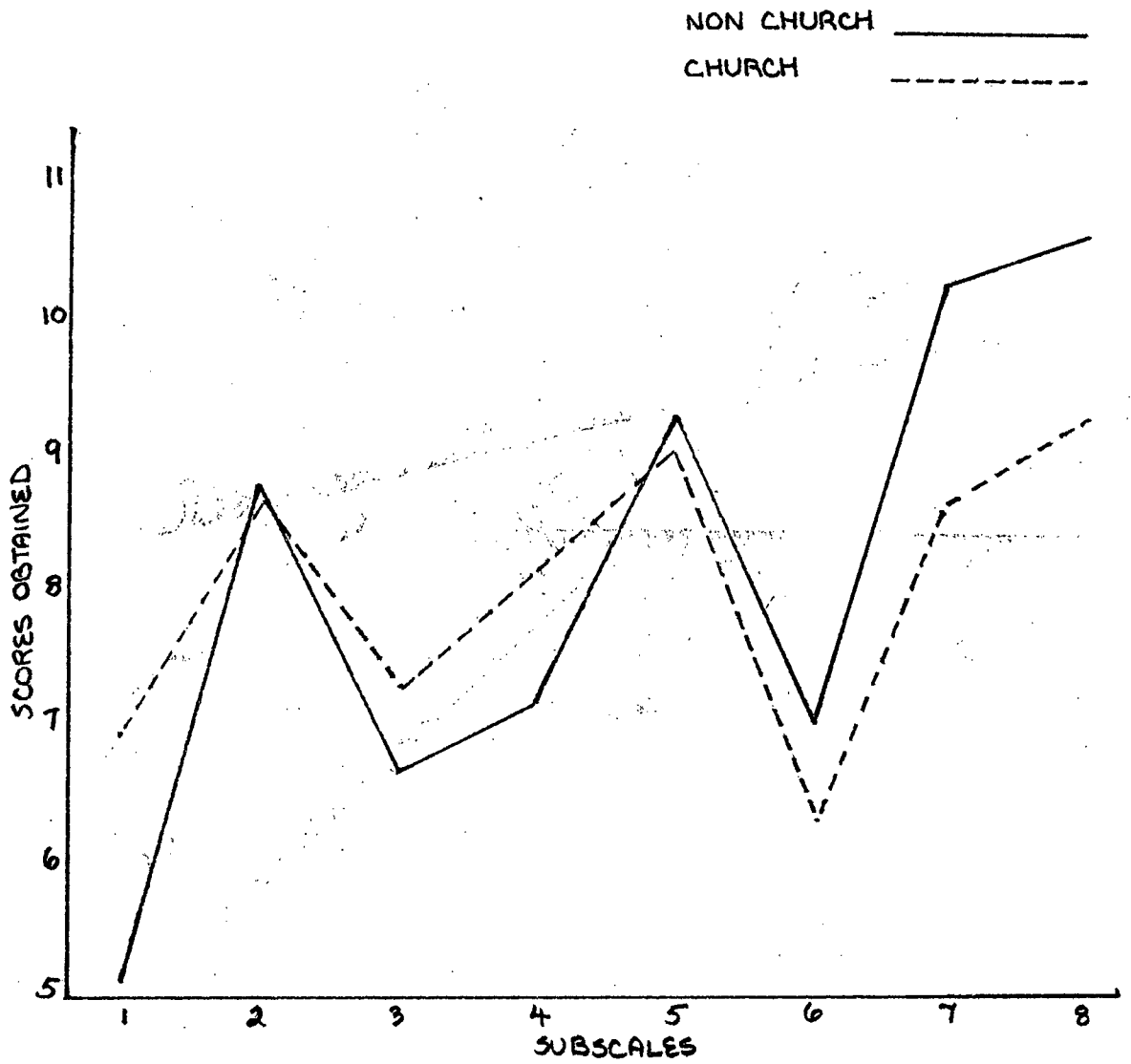


Figure 4: Comparative Value Profiles of Church and Non-Church Attenders for the D.V.I. Variables



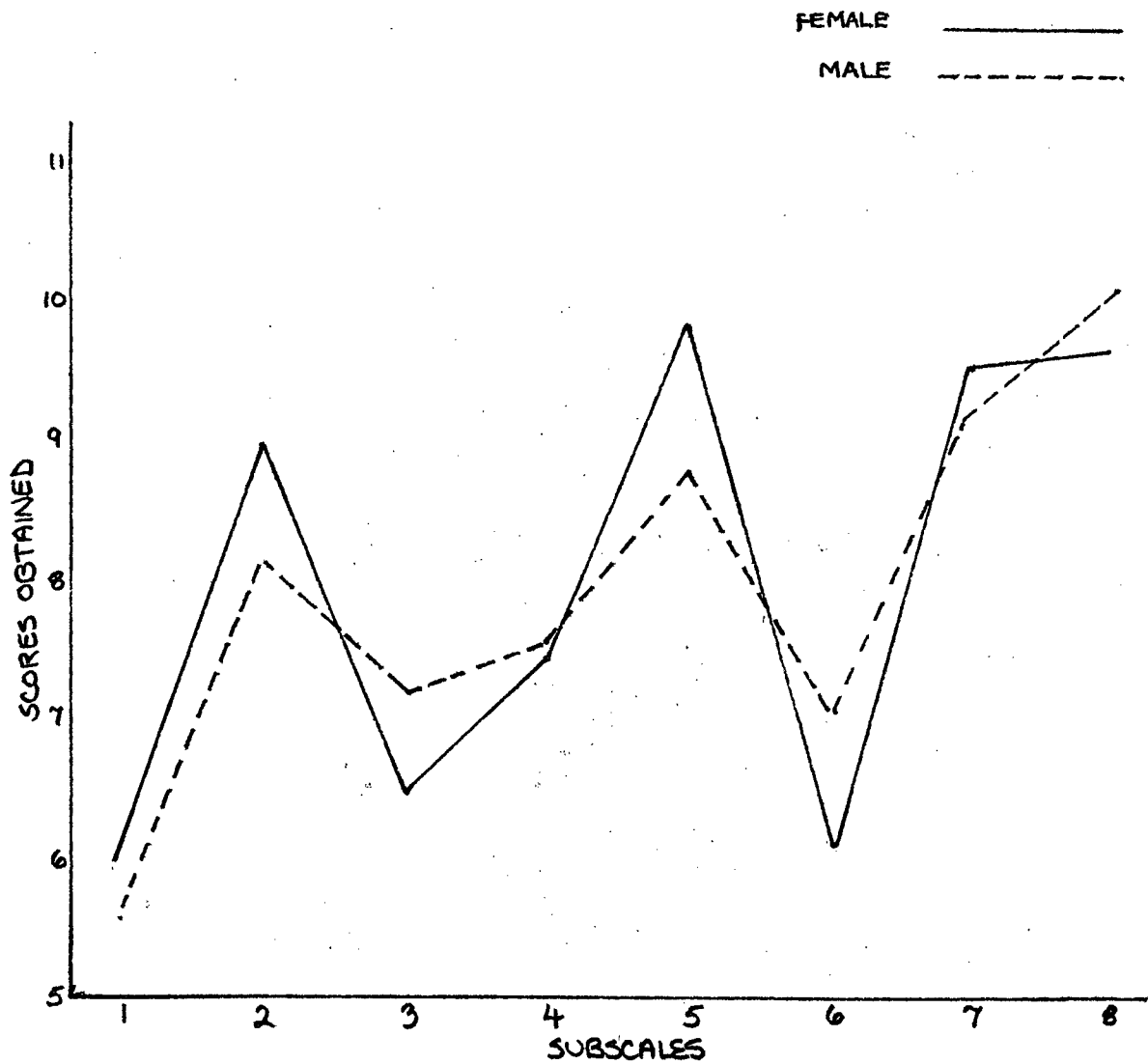


Figure 5: Comparative Value Profiles for Male and Female Students for the D.V.I. Variables

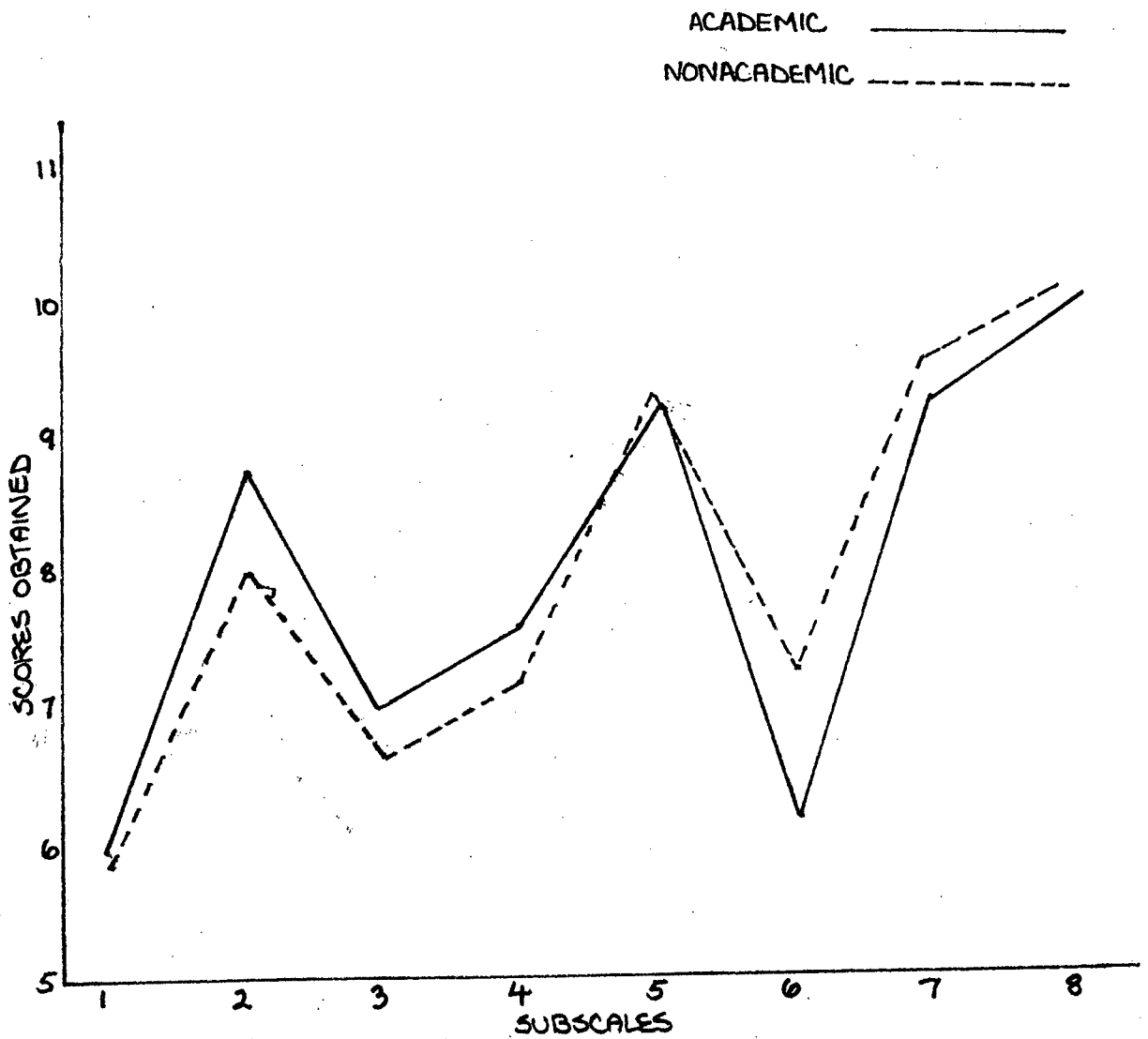


Figure 6: Comparative Value Profiles for Academic and Non-Academic Students for the D.V.I. Variables

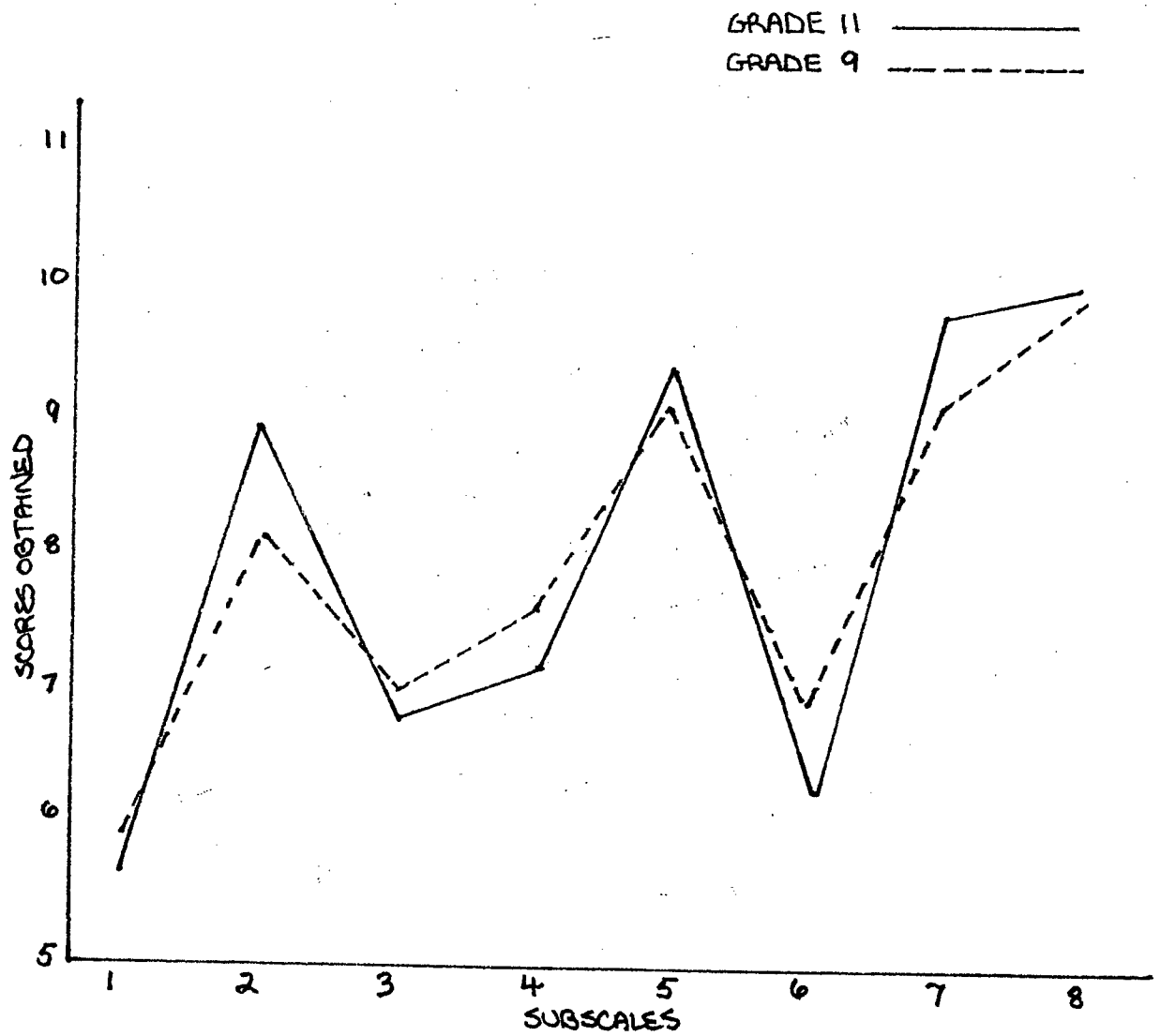


Figure 7; Comparative Value Profiles for Grade 9 and 11 Students for the D.V.I. Variables