

**VARIABLES ASSOCIATED WITH THE RELATIONAL VALUE-ORIENTATIONS
OF PUPILS AND TEACHERS IN URBAN NEWFOUNDLAND**

CENTRE FOR NEWFOUNDLAND STUDIES

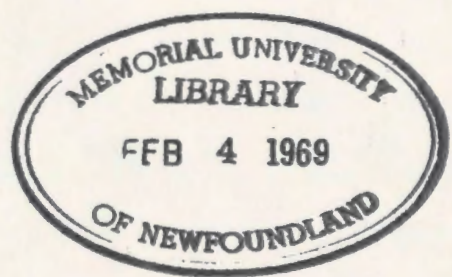
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VARIABLES ASSOCIATED WITH THE RELATIONAL VALUE-ORIENTATIONS
OF PUPILS AND TEACHERS IN URBAN NEWFOUNDLAND

by

CHARLES LESTER CLARKE

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The undersigned certify that they have read, and recommend to the Faculty of Education for acceptance, a thesis entitled "Variables Associated with the Relational Value-Orientations of Pupils and Teachers in Urban Newfoundland" submitted by Charles Lester Clarke in partial fulfilment of the requirements for the Degree of Master of Education.

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ABSTRACT

The study examined the Relational value-orientations of a selected group of teachers and pupils from urban Newfoundland. Data were collected by means of written responses to a Teacher's Questionnaire and to a Pupil's Questionnaire, by 292 teachers and 584 pupils. The participating teachers were all the homeroom teachers of grades VIII, IX, X and XI from the schools of St. John's and Corner Brook. The pupil-respondents consisted of two pupils chosen randomly from each of the homerooms of these schools.

Differences in Relational value-orientations of teachers and pupils were investigated, using as criterion variables, teachers' age, teachers' rural-outport background, pupil-involvement in the teenage culture and the socioeconomic status of pupils. Also investigated was the relationship between the degree of confidence which teachers expressed in their pupils and the difference between the Relational value-orientation scores of teachers and their pupils. The statistical procedures used to test the hypothesis included "t" tests, Pearson product-moment correlations and point biserial correlations.

The findings indicated that the respondents appeared generally to show no great preference for one value-orientation over another. Pupils showed a small but significant tendency to choose Collaterality over Individualism more often than did their teachers, and Individualism

over Lineality less often than did their teachers. Teachers' age was found to be inversely related to preference for Collaterality over Lineality. But for scores on Collaterality over Individualism, and for Individualism over Lineality there was no apparent relationship with teachers' age. No relationship was found between the Relational value-orientations of pupils and certain measures of their involvement in the teenage culture. However, when pupils were dichotomized into participants and non-participants, pupils who participated in playing sports were found to show a greater preference than non-participants for Collaterality over Individualism and for Collaterality over Lineality. Also, participants in watching sports were more Collateral and less Individualistic than non-participants. No relationship was found between the Relational value-orientations of pupils and their socioeconomic status. It was found that teachers with urban backgrounds did not differ in their Relational value-orientations from teachers with rural backgrounds. Also, there was no significant relationship found between Teachers' Confidence in Pupils and the extent of the congruence between the Relational value-orientation scores of the two groups.

The instrument was carefully examined for reliability. The results of the reliability tests suggest the need for thorough revision of the questionnaire before further use, especially in cross-cultural studies. The present study suggests also the difficulty of studying values of one culture with a standardized instrument designed for another although highly similar culture.

ACKNOWLEDGEMENTS

The writer thanks the many people who helped with the study. Appreciation is expressed to the boards of education and principals whose teachers and pupils participated in the investigation. The excellent co-operation which was received from those pupils and teachers is gratefully acknowledged. Special thanks is due to Dr. H. W. Kitchen for his guidance and advice on all matters pertaining to the planning, development and completion of the thesis, and to other members of the committee for their many helpful suggestions.

TABLE OF CONTENTS

CHAPTER	PAGE
I. THE PROBLEM	1
The Kluckhohn Framework	2
Assumptions, Delimitations and Limitations	7
Organization of the Study	9
II. THE HYPOTHESES AND THE LITERATURE SUPPORTING THEM	10
The Relational Value-Orientations of American Society . .	10
The Expected Relationship Between Relational Value- Orientations of Teachers and Pupils	19
The Expected Relationship Between the Age of Teachers and Their Relational Value-Orientations	20
The Expected Relationships Between the Involvement of Pupils in Teenage Culture and Their Relational Value- Orientations	22
The Expected Relationship Between Similarity of Teachers' and Pupils' Value-Orientations and Teachers' Confidence in Pupils	23
The Expected Relationships Between the Socioeconomic Status of Pupils and Their Relational Value-Orientations	24
The Expected Relationship Between the Birthplace of Teachers and Their Relational Value-Orientations	26

CHAPTER	PAGE
III. RESEARCH DESIGN	28
Instrument	28
The Pilot Study	30
The Sample	33
Collection of Data	34
Data Processing	37
IV. ANALYSIS OF THE DATA	38
Profiles	38
Differences Between Pupils and Teachers	41
Teachers' Age and Value-Orientations	43
Pupils' Involvement in Teenage Culture and Their Value- Orientations	46
Value-Orientations Congruence and Teachers' Confidence in Pupils	48
Pupils' Socioeconomic Status and Their Value- Orientations	52
Teachers' Birthplace and Their Value-Orientations	54
Summary	56
V. RELIABILITY	58
Total Scale Reliability	59
Item Analysis: Exact Probabilities	64
Reliability for Individual Subjects: Exact Probabilities	66
Summary	69

CHAPTER	PAGE
VI. SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	71
Summary	71
Conclusions	80
Recommendations for Research	81
BIBLIOGRAPHY	83
APPENDICES	86
A. Teacher's Questionnaire	87
B. Pupil's Questionnaire	95
C. Method of Transferring Information from Questionnaire to Computer Programme	103
D. Copy of Letter sent to Teachers	109
E. Letter of Permission from the Roman Catholic Board of Education for St. John's	110
F. The Schools and Their Principals, showing the Number of Teachers and Pupils who Participated in the Study . .	111

LIST OF TABLES

TABLE	PAGE
I. Five Basic Human Problems and the Value-Orientations Postulated as Possible for Each	3
II. Pattern of Relational Value-Orientations for Urban High School Pupils	39
III. Pattern of Relational Value-Orientations for Urban High School Teachers	40
IV. Statistical Significance of the Difference in Means of 292 Teachers and 584 Pupils	42
V. Correlation Coefficients Between the Relational Value- Orientations of Teachers and Their Ages	44
VI. Correlation Coefficients Between the Relational Value- Orientations of Pupils and the Degree of Their Involvement in Teenage Culture	47
VII. Statistical Significance of the Difference in Means of Pupils who participate in Teenage Culture and Those Who Do Not	49
VIII. Product-Moment Correlation Coefficients Between Teacher- Pupil Gaps in Scores on Value-Orientation Scales and Teacher Confidence in Pupils	51
IX. Point Biserial Correlation Coefficients Between Teacher- Pupil Gaps in Scores on Value-Orientation Scales and Higher or Lower Teacher Confidence in Pupils	52

TABLE	PAGE
X. Correlation Between the Relational Value-Orientation of Pupils and Their Socioeconomic Status	53
XI. Differences in Mean Value-Orientation Scores of Teachers Born in Urban Areas of Newfoundland and Those Born Elsewhere in Newfoundland	55
XII. Differences in Mean Value-Orientation Scores of Teachers Born in St. John's and Those Born in Newfoundland but Outside St. John's	56
XIII. Stability Coefficients from Previous Studies	59
XIV. Stability Coefficients for the Present Study	61
XV. Stability Coefficients for Items of the Present Study other than Value-Orientations	63
XVI. Coefficients of Internal Consistency for Random Samples of Teachers and Pupils, on Value-Orientation Scales .	64
XVII. Test-Retest Reliability of Each Item on the Value- Orientation Scales, for Pupils and for Teachers, Using Exact Probabilities	65
XVIII. Test-Retest Reliability for Each of 32 Pupils and 30 Teachers, on the Value-Orientations Scales, Using Exact Probabilities	68

CHAPTER I

THE PROBLEM

The purpose of the study reported here was to extend the work of Kluckhohn,¹ Kitchen,² Parry,³ and others, by probing in an educational setting, the variables underlying intercultural differences in "value-orientations", or operational philosophies of life. The study dealt with one aspect of Florence Kluckhohn's approach to value-orientations, namely with her "Relational problem", or the kind of inter-personal relationships that are valued. More specifically, the study investigated differences between the Relational Value-Orientations of pupils and those of their teachers, in urban Newfoundland. It explored differences among teachers by age and urban-outport background, and among pupils classified by involvement in teenage culture and by socioeconomic status. Also investigated was the question whether pupils, perceived by their teachers as more ideal, held value-orientations more like their teachers' than did pupils

¹ Florence Rockwood Kluckhohn and Fred L. Strodbeck, Variations in Value Orientations, (Evanston, Ill.: Row, Peterson and Company, 1961).

² Hubert William Kitchen, "Relationships between the Value-Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1966).

³ Robert S. Parry, "The Relational Value-Orientations of Grade X Students and of Their Fathers," (Unpublished Master's thesis, University of Calgary, 1967).

perceived as less ideal.

Such differences and relationships, if found reliable and sizeable, would perhaps suggest the need for considering value-orientations as an additional basis for teacher placement, and for the grouping procedures used in schools. They might suggest also the need for some adaptation in teaching methods, in curriculum, and in educational objectives.

I. THE KLUCKHOHN FRAMEWORK

This study is based on two contributions by Florence Kluckhohn to research into philosophies of life -- a taxonomy and a measuring instrument. Her taxonomy comprises five problems crucial to all human societies -- the relationship of man to man, the temporal focus of human life, the purpose of human activity, the relationship of man to nature, and the character of innate human nature. For each problem except the last she suggests three alternative choices, called value-orientations. Problems and value-orientations are shown in Table I. Her measuring instrument consists of several generalized real-life problematic situations for each of the problems in the taxonomy. For each situation there are three alternative solutions one representing each of the appropriate value-orientations. The subject ranks these three alternatives. His rankings for all problems provide a picture of his philosophy of life.¹

¹ Kluckhohn and Strodtbeck, op. cit., pp. 1-48.

TABLE I
FIVE BASIC HUMAN PROBLEMS AND THE VALUE-ORIENTATIONS
POSTULATED AS POSSIBLE FOR EACH^a

Problem		Value-Orientations Possible	
Relational	Lineality	Collaterality	Individualism
Time	Past	Present	Future
Activity	Being	Being-in-Becoming	Doing
Man-Nature	Subject-to-Nature	Harmony-with-Nature	Mastery-over-Nature
	Evil	Neutral or Mixture of Good and Evil	Good
Human Nature	-----		
	Mutable Immutable	Mutable Immutable	Mutable Immutable

^a This table is adapted from that appearing in Kitchen's Thesis.¹

Value-orientations are defined by Kluckhohn as:

Complex but definitely patterned (rank-ordered) principles resulting from the transactional interplay of three analytically distinguishable elements of the evaluative process -- the cognitive, the affective, and the directive elements -- which give order and direction to the ever flowing stream of human acts and thoughts as these relate to the solution of "common human" problems.²

The manner in which an individual ranks the different value-orientations is considered to be an indication of how he has organized his value system.

¹ Kitchen, op. cit., p. 7.

² Kluckhohn and Strodtbeck, op. cit., p. 4.

An individual's solution to a problem may reflect one or more of the logically possible alternatives, thus giving a value-orientation pattern for the individual. The sum of the individual patterns would constitute a pattern for the group.

Although one value-orientation may be dominant within an individual or group pattern there may be other value-orientations present as well. For example, in dealing with the Relational problem of man to man, an individual's pattern of value-orientations may be dominantly Individualistic but also present will be some Lineality and some Collaterality. An individual may hold a value-orientation which would be dominant in his behavior in a certain situation but not in another. For example, a pupil may exercise one value-orientation in the classroom in the presence of his teachers, but another in the gymnasium in the company of fellow students.

Kluckhohn and her associates applied several of the basic human problems and their postulated value-orientations to a study of five cultural groups of New Mexico.¹ Kitchen studied the world views of grade IX pupils in Newfoundland, using an instrument which was based on four of the problems from Kluckhohn's theory of dominant and variant value-orientations.² Parry used the Relational problem to look for differences between the value-orientations of grade X pupils in a high school in a city

¹ Ibid., pp. 175-399.

² Kitchen, op. cit., pp. 42-81.

of Alberta, and the value-orientations of their fathers.¹ As the present study is concerned with the Relational problem, the Kitchen study and the Parry study are of major significance and are referred to quite often.

The Relational Problem

The Relational problem probes man's relationship to other men. In relating man to other men there are three logically-possible alternatives which may be defined as follows:

Individualism. In accordance with the Individualistic principle, the individuals' goals are seen as having primacy over group goals. The individual is himself responsible for setting and achieving his own goals. Any group decisions are made by voting, since the group is looked upon as consisting of individuals, each acting for his own advantage.

Lineality. Under the Lineal principle, group rather than individuals' goals are considered primary. The selection and the achievement of goals, sometimes even including those for the individual, are usually decided and directed by those of the group who are older, more important or looked upon as 'bosses'. Thus, the parent, the oldest able person of the extended family, the chief, the members of the peerage, the patron, or others in status positions that are often inherited, and, in more formal organizations, those occupying superordinate positions have responsibility for the achievement of goals, the making of decisions affecting the group, and authority over activities of others in the group.

Collaterality. In the Collateral or cooperative relationship or principle, not individuals' goals, but, again, group welfare, and, especially, mutual aid are stressed. The structure is now lateral rather than lineal so that group members are of relatively equal status, somewhat similar to the biological prototype of sibling relationship. Group decisions and choices come about by unanimous or near-unanimous consent. If a boss happens to be needed for a particular activity the oldest able person need not be selected.²

¹ Parry, op. cit., p. 4.

² Kitchen, op. cit., pp. 11-12.

The Rank-Ordering of Value-Orientations

It has been noted that value-orientations may be rank-ordered. An individual or group in responding to any of the problematic situations of the measuring instrument may give first choice to one particular value-orientation and thus demonstrate it as dominant. For example, Individualism may be preferred to Lineality and Lineality to Collaterality, yet it cannot be assumed that the dominance of a particular value-orientation automatically excludes the other two.

By the use of initial letters it is possible to illustrate symbolically the rank-ordering of the value-orientations for the Relational problem. If Individualism is preferred to Lineality and Lineality to Collaterality, it can be shown graphically as

$$I > L > C$$

When the third variant is preferred just as often as the second, the symbols are

$$I > (L = C)$$

No dominant preference can be shown symbolically as

$$C = L = I$$

If two variants are preferred equally over the third, the symbols are written

$$(C = L) > I$$

The rank-ordering of constituent individuals can be summed to yield an overall group profile. Also, to give more detail, value-orientation profiles by behavior spheres or by specific problematic situations can be produced for individuals or for groups.

II. ASSUMPTIONS, DELIMITATIONS AND LIMITATIONS

Assumptions

1. It was assumed that the philosophy underlying behavior can be measured through a written questionnaire, and that value-orientations are sufficiently stable to assume that observed results will be valid for some considerable period of time.

2. It was also assumed that the instrument which was used possessed sufficient validity for the present study and that each problematic situation offered, to both teachers and pupils, unmistakable choices of Collaterality, Lineality and Individualism. Support for the validity of the instrument comes from previous research. Twelve of the twenty-four problematic situations comprising the instrument are based on Relational value-orientation items used in research by Kluckhohn¹ or by Kitchen². The remaining twelve items were devised by Parry, and after an acceptable validity test³ all twenty-four items were used to examine Relational value-orientations of grade X pupils and of their fathers in a Southern Alberta city. A pilot study, for the present research, showed that the Parry instrument appeared to offer no difficulties of interpretation and comprehension for the eighteen pupils and seven teachers who participated.⁴

¹ Kluckhohn and Strodtbeck, op. cit., pp. 175-399.

² Kitchen, op. cit., pp. 42-81.

³ Parry, op. cit., p. 39.

⁴ See Chapter III.

3. Another assumption was that a common questionnaire could be used to establish Relational value-orientation patterns for pupils and teachers, although there were wide variations in the educational backgrounds and ages of the respondents.

4. It was assumed that responses from questionnaires administered personally by the investigator, as in the present study, would be at least as valid as those obtained had the questionnaires been administered by school personnel, or had the responses to the questionnaires been elicited by mail.

Delimitations

1. The study was confined to schools of St. John's and Corner Brook.

2. The study was concerned only with a random sample (two pupils from each homeroom) of grades VIII, IX, X and XI pupils who had been living and attending school at St. John's or Corner Brook, for three consecutive years or more, immediately prior to the date when the questionnaire was administered.

3. The only teachers involved in the study were homeroom teachers.

4. Only the Relational problem of the Kluckhohn taxonomy of value-orientations was investigated by the study.

Limitations

1. The study is limited to two urban areas. Although, these areas are considered "urban" for the purpose of the study, it must be borne in mind that they are not especially urban when compared with such

cities as Toronto, New York, Chicago and London.

2. The information obtained for the study was solicited entirely by written responses to a printed questionnaire, which depended on the interpretation and reading comprehension abilities of individual respondents. The pilot study indicated that respondents could comprehend the questionnaire.

III. ORGANIZATION OF THE STUDY

The next chapter presents the hypotheses to be tested and the research literature supporting them. Chapter III describes the instrument, the samples, and the methods of collecting and processing the data. Chapter IV gives an account of the procedures used to analyse the data, presents the findings, and discusses their significance. Chapter V deals with the reliability of the instrument. Finally, Chapter VI presents a summary of the study, some general conclusions, and some recommendations for further research.

outports have undergone important changes. Today, Newfoundland has acquired many of the characteristics of the modern urban society of North America.¹

Individualism in American Society

The manner in which America was settled, especially the meeting and conquering of frontier conditions, suggests Individualism to be the traditionally dominant Relational value-orientation of North American society. The "frontier spirit", which demanded adaptability for survival, developed Individualism. Lerner points out that farming, the main occupation of the majority of the early settlers, encouraged isolationism and Individualism.² The typical American homestead was a quarter section comprising 160 acres of land. Thus, the farmer lived apart from his neighbours and his contacts with them were restricted. Today, many farmers are town dwellers, while improved transportation and communications have greatly reduced the isolation of those living on farms. One would expect today's farmers to be somewhat less Individualistic than previously.

Moreover, Lerner considers that an important change began in American society in 1933, which gave a new meaning to Individualism. He writes:

This was a period during which Americans transformed their family structure, population growth, suburbs, energy resources, mechanization, corporations, trade-unions, class structure, and

¹ For a detailed discussion of these changes, see Hubert William Kitchen, "Relationships between the Value-Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1966), pp. 142-144.

² Max Lerner, America as a Civilization (New York: Simon and Schuster, 1957), pp. 147-148.

mass media almost beyond recognition. ... Individualism the most vaunted and celebrated of American attitudes -- no longer exists in its classic economic form, but the individual's welfare remains for most the test of social striving.¹

Other writers regard the Individualism of American society in other ways. Williams sees Individualism as "a two-sided emphasis upon basic social rights and upon equality of opportunity".² Kluckhohn believes that it is the American middle class where Individualism is most dominant.³ Kitchen agrees, but considers that Individualism is becoming less dominant because of the importance of the new bureaucratic middle class in present-day American society.⁴

Lineality in American Society

In discussing the importance of Lineality in American society, Kitchen points out that Intergenerational Lineality, that is the authority by one generation over a succeeding one, for example father over adults or late-adolescent children, has never been of wide-spread significance. Nor has Inter-estate Lineality, the diffused authority of one class or caste over another. He contends that this can be attributed to the kind of society which the environment of the North American continent forced

¹ Ibid., p. 49.

² Robin M. Williams, Jr., American Society (Second edition; New York: Alfred A. Knopf, 1960), p. 443.

³ Florence Rockwood Kluckhohn and Fred L. Strodbeck, Variations in Value Orientations (Evanston, Ill.: Row, Peterson and Company, 1961), p. 27.

⁴ Kitchen, op. cit., p. 94.

upon the settlers. The class structure of Europe could not become a dominant part of the frontier way of life. Even if the immigrant had not been obliged to sever completely his ties with his extended family, he could learn little from the experiences of his elders to benefit him in the new land. Whatever his origin, adaptability was the key to success in his new environment. The later growth of industrial society presupposed a mobile nuclear family which also was not conducive to the development of either Intergenerational Lineality or Inter-estate Lineality.¹

Bureaucratic Lineality. Although the rejection of personal authority may still be considered an important characteristic of American society, the acceptance of the impersonal authority of bureaucracy appears to be an increasingly distinctive feature of present-day American life. Science, technology and specialization have brought important occupational changes to North America. The self-employed worker has almost disappeared, and the great majority of workers are employed by government or by large industrial organizations. Kitchen points out that big business, big unions, big schools, big government have all helped to foster a new kind of Lineality -- a Bureaucratic Lineality. He sees the "hierarchy of bureaucracy as tending to dominate not only work, but health, welfare, sport, academic thought".² This Bureaucratic Lineality is further strengthened and nurtured by the influence of the welfare state

¹ Ibid., pp. 68-74.

² Ibid., pp. 74-75.

on every aspect of society.

Many writers have noted the increasing influence of bureaucracy in American society. However, there appear to be differences of opinion about its impact on Relational value-orientations. Presthus sees the bureaucracy of big organizations as having a dysfunctional effect on its members, as organizational claims are set against ideas of free expression, individual worth and spontaneity.¹

Miller and Swanson consider bureaucracy not as a deadening conformity to routine, but as an opportunity whereby the worker can regard himself as belonging to a moral community in which he has a personal stake and to which he can make a personal contribution by his technical skills.²

Whyte condemns bureaucracy because it leads to conformity which he considers to be the dominant characteristic of present-day society. He deplores the desire to conform because it is destroying Individualism.³

Collaterality in American Society

The evidence suggests that Collaterality is widespread. Miller and Swanson contend that the acceptance of the equality of women in the work force is creating a new relationship in families as the talents of husband and wife are now complementing each other. Thus, a new type of

¹ Robert Presthus, The Organizational Society (New York: Vintage Books, 1962), pp. 16-17.

² Daniel R. Miller, and Guy E. Swanson, The Changing American Parent (New York: John Wiley and Sons, Inc., 1958), pp. 206-208.

³ W.H. Whyte, Jr., The Organization Man (New York: Simon and Schuster, 1956).

family, the colleague family, is emerging, which operates on the Collateral principle.¹ Kitchen regards the existence of many voluntary organizations which place chief emphasis on enjoyment and friendship, and to which most people belong, as an important stimulus to Collaterality.² Williams considers Collaterality as the distinctive feature of today's family substantially replacing the Lineal relationship between husband and wife, parent and child, between sibling and sibling. He also points out that Collaterality is becoming the dominant characteristic of the educational system.³

Riesman believes that the change in North American society is from the "inner-directed" person to that of the "other-directed" person. The "inner-directed" individual is described as having a built-in gyroscope which made it possible for him to achieve his goals with a minimum of concern for the opinion of others. By contrast, the "other-directed" person has a kind of built-in radar making him sensitive to the opinions of others. These opinions have considerable bearing on his course of action making Collaterality an important characteristic of the "other-directed" personality.⁴

¹ Miller and Swanson, op. cit., p. 20.

² Kitchen, op. cit., p. 79.

³ Williams, op. cit., p. 441.

⁴ David Riesman, Nathan Glazer and Reuel Denney, The Lonely Crowd (fifth printing; New Haven: Yale University Press, 1961), pp. 14-25.

The desire to conform suggests that Collaterality is of great importance to Whyte's "organization man".¹ And if, as Presthus states, bureaucracy is impeding individualism², then Collaterality as well as Lineality continues to increase.

Spindler's rationale classifies the values found in American society as traditional or emergent. He contends that the traditional values of thrift, self denial, success, individualism, achievement, and orientation towards the future are giving way to sociability, ultimate consideration for others, hedonism, and conformity to the group. His theoretical framework suggests that different groups which operate within society occupy different positions along a traditional-emergent value continuum.³ It is apparent that Collaterality is an important characteristic of the value-orientation of those who hold emergent views.

Coleman's research provides very strong evidence to support the suggestion that Collaterality may be the dominant Relational value-orientation of present-day youth. In the United States, Coleman sees the high schools as the chief centre of the adolescent sub-culture which he contends has created its own values upon which adolescents depend more than upon those of their parents or teachers. He writes:

¹ Whyte, op. cit., pp. 201-222.

² Presthus, loc. cit.

³ George D. Spindler, Education and Culture (New York: Holt, Rinehart and Winston, 1963), pp. 136-146.

In our modern world of mass communication and rapid diffusion of ideas and knowledge, it is hard to realize that separate subcultures can exist right under the very noses of adults -- subcultures with languages all their own, with special symbols, and, most importantly, with value systems that may differ from adults.¹

Coleman also points to the strong emphasis which today's youth place on athletics, parties and popularity rather than on scholastic achievement, which is further evidence of the desire of the teenager of the present day to be a member of the clique or crowd and to be accepted by his peer-group.²

The Dominant Relational Value-Orientation of Newfoundland

It has been pointed out that only during the past quarter-century has Newfoundland begun on a large-scale to become culturally integrated with the rest of North America. However, there is very little research on the changes in the value-orientations of Newfoundlanders. Szwed's study of the Codroy Valley suggests that in community affairs Lineality is the dominant value-orientation, although in recent years the leadership which was exercised there by the priest and the fish merchant is being replaced by leadership from a new entrepreneurial class exemplified by the garage owner, the tourist lodge operator and the cash merchant.³

¹ James S. Coleman, The Adolescent Society, (New York: The Free Press of Glencoe, 1961), p. 3..

² Ibid., pp. 11-57.

³ John F. Szwed, "Private Cultures and Public Imagery: Interpersonal Relations in a Newfoundland Peasant Society," (St. John's: Institute of Social and Economic Research, Memorial University of Newfoundland, 1966). (Mimeographed.)

Kitchen suggests that in most behavior areas the Lineal value-orientation was dominant in the traditional Newfoundland fishing village. In the emerging Newfoundland he sees the possibility that Individualism is increasing among those who are free from the fishing village. He suggests that Collaterality is perhaps remaining constant although Lineality is still very strong. His research with grade nine pupils in the Anglican schools of Newfoundland shows that, taken as an aggregate, these pupils were more Collateral than Lineal and more Lineal than Individualistic.¹

Summary

It would appear that because of variations in its complex and changing social structure, North American society can be labelled exclusively neither as Individualistic, Lineal or Collateral. The total behavior of any group is a composite of decisions and activity performed, some Individualistically, others Lineally and the rest Collaterally. However, it does seem that changes in value-orientations are away from the traditional Individualism, which many writers suggest is still of first-order importance to most Americans, towards an emerging Bureaucratic Lineality. Also, an increase in Collaterality seems to be taking place.

From the little research which is available on value-orientations of Newfoundland, it appears that the Lineality which may have been traditionally dominant is declining somewhat and that Individualism is increasing. Among adolescents Collaterality is the dominant value-orientation with Lineality second-order, and with Individualism the least-valued orientation.

¹ Kitchen, op. cit., p. 154.

II. THE EXPECTED RELATIONSHIP BETWEEN RELATIONAL VALUE-ORIENTATIONS OF TEACHERS AND PUPILS

The first hypothesis predicts that adolescents differ from their teachers in some of their Relational Value-orientations.

Hypothesis 1:

- (a) The mean C - I score of urban high school pupils in Newfoundland will exceed that of their teachers.
- (b) The mean C - L score of urban high school pupils in Newfoundland will exceed that of their teachers.
- (c) The mean I - L score of urban high school pupils in Newfoundland will not differ from that of their teachers.

Support for this hypothesis comes from the research literature. Parry, investigating in urban Alberta the Relational value-orientations of grade ten pupils and their fathers, found that the C - I and C - L scores of adolescents exceeded those of their fathers but that there were no statistically significant differences with respect to I - L scores.¹

Gue investigated in Northern Alberta the value-orientations of Indian high school pupils, their parents and their teachers. He found that the Relational value-orientation profile of teachers was $I > L > C$, that for pupils was $L > C > I$, and for parents $L > C \geq I$.² That pupils

¹ Robert S. Parry, "The Relational Value-Orientations of Grade X Students and of Their Fathers," (Unpublished Master's thesis, University of Calgary, 1967) p. 47.

² Leslie Robb Gue, "A Comparative Study of Value-Orientations in an Alberta Indian Community," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1967), p. 116.

were more Collateral less Individualistic than either parents or teachers supports section (a) of the present hypothesis. The tendency of teachers, representatives of the wider culture, to be more Individualistic and less Lineal than the local parents and pupils should also be noted.

The writings mentioned in the previous section particularly those of Coleman, Spindler and Riesman, suggest that the shift in values from Lineality and Individualism to Collaterality affects adolescents more than their elders.

III. THE EXPECTED RELATIONSHIPS BETWEEN THE AGE OF TEACHERS AND THEIR RELATIONAL VALUE-ORIENTATIONS

The second hypothesis predicts that for two of the three Relational value-orientations age is a related variable.

Hypothesis 2:

- (a) An inverse relationship exists between the age of teachers and their C - I scores.
- (b) An inverse relationship exists between the age of teachers and their C - L scores.
- (c) No relationship exists between the age of teachers and their I - L scores.

From his studies of American college students over a number of years Spindler predicted that the values of older teachers would be more traditional than those of younger teachers.¹ Prince devised the Differential Values Inventory (DVI), a paper-and-pencil forced-choice

¹ Spindler, op. cit., pp. 140-141.

test with scores indicating the subject's position along Spindler's traditional-emergent value continuum. Prince's findings for 100 teachers in twenty-two American high schools confirmed Spindler's hypothesis, in that older teachers made more traditional scores than younger teachers.¹ Lupini, using essentially the same instrument, found in his study of English Catholic schools in the Greater Montreal area that older female teachers were more traditional than younger female teachers. For male teachers there was no corresponding statistically significant difference.² It should be noted that these studies did not deal specifically with the Relational problem, and consequently have only general relevance to the present hypothesis. While Kluckhohn's New Mexico studies were not designed to detect intracultural differences, yet for the Navaho group it is reported that there seemed no relationship between the ages of the adults studied and their value-orientations.³

Hypothesis two is based on the notion that in American society, especially for the young, Collaterality is increasing at the expense of Individualism and perhaps of Lineality. However, the relevance for Newfoundland teachers of this trend is difficult to predict with any justifiable confidence.

¹ Richard Prince, "Individual Values and Administrative Effectiveness," Administrator's Notebook, VI (December, 1957).

² Dante Lupini, "A Study of the Relation of Differential Values to Social and Administrative Interactions," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1965).

³ Kluckhohn and Strodtbeck, op. cit., pp. 337-338.

IV. THE EXPECTED RELATIONSHIPS BETWEEN THE INVOLVEMENT OF PUPILS IN TEENAGE CULTURE AND THEIR RELATIONAL VALUE-ORIENTATIONS

The third hypothesis suggests that for two of the Relational value-orientations pupil scores are related to the extent of their involvement in the teenage culture.

Hypothesis 3:

- (a) A direct relationship exists between the involvement of pupils in teenage culture and their C - I scores.
- (b) A direct relationship exists between the involvement of pupils in teenage culture and their C - L scores.
- (c) No relationship exists between the involvement of pupils in teenage culture and their I - L scores.

Support for this hypothesis comes from Parry's study of urban Alberta teenagers. Parry found statistically significant differences on the C - I scale and the C - L scale, but not on the I - L scale, between pupils when grouped according to the number of hours spent on extra-curricular activities.¹ In Kitchen's study of Newfoundland high school pupils, the findings were rather complex. Pupils highly involved in organized youth groups had somewhat higher I - L scores than other pupils.

However, pupils attending very small schools, pupils who did not listen to teenage music, and pupils, especially boys, who did not go out in the evenings ... were less Collaterally-oriented than other pupils, indicating that, although there are exceptions, there does seem to be at least a weak relationship ... between I - C scores and involvement with other teenagers.²

¹ Parry, op. cit., p. 58.

² Kitchen, op. cit., p. 302.

Since the present study dealt exclusively with urban pupils, Parry's findings were used as the basis for the present hypothesis.

V. THE EXPECTED RELATIONSHIP BETWEEN SIMILARITY OF TEACHERS' AND PUPILS' VALUE-ORIENTATIONS AND TEACHERS' CONFIDENCE IN PUPILS

The fourth hypothesis predicts that teacher confidence in pupils is related to the congruence between the value-orientations of the teacher and those of the pupil.

Hypothesis 4:

- (a) An inverse relationship exists between teacher confidence in pupils and the gap between the scores of pupils and teachers on the C - I scale.
- (b) An inverse relationship exists between teacher confidence in pupils and the gap between the scores of pupils and teachers on the C - L scale.
- (c) An inverse relationship exists between teacher confidence in pupils and the gap between the scores of pupils and teachers on the I - L scale.

Support for this hypothesis comes from studies using the Differential Values Inventory. In the Midwestern United States, Prince found that Value-Congruence between teacher and principal was related significantly to teachers' rating of principal effectiveness and to teacher confidence in principal leadership, although not to principals' rating of teacher effectiveness.¹ Abbott, also in the Midwest, found that board members whose values on the DVI were most similar to those of their

¹ Prince, op. cit.

superintendents expressed slightly higher confidence in these superintendents than did board members whose values were least similar.¹ McPhee, using the DVI, investigated the influence of values on school-community relations in four Midwestern communities. His respondents consisted of school superintendents, school board members and representatives from local organizations. He found a positive relationship between the extent to which respondents agree with their superintendent on educational view points and the extent to which these respondents approved of the local schools.² Lupini found that value-congruence between principals and teachers in the Greater Montreal area was related to two of eight aspects of organizational climate, namely to Aloofness (inversely) and to Production Emphasis (directly), both being dimensions of the Organizational Climate Description Questionnaire (OCDQ).³

VI. THE EXPECTED RELATIONSHIPS BETWEEN THE SOCIOECONOMIC STATUS OF PUPILS AND THEIR RELATIONAL VALUE-ORIENTATIONS

Hypothesis 5:

- (a) No relationship exists between the socioeconomic status of pupils and their C - I scores.
- (b) No relationship exists between the socioeconomic status of pupils and their C - L scores.
- (c) No relationship exists between the socioeconomic status of pupils and their I - L scores.

¹ Max G. Abbott, "Values and Value-Perceptions in Superintendent School Board Relationships," Administrator's Notebook, IX (December, 1960).

² Roderick F. McPhee, "Individual Values, Educational Viewpoint, and Local School Approval," Administrator's Notebook, VII (April, 1959).

³ Lupini, op. cit., p. 170.

This hypothesis was set up in the null form because of the difficulty in predicting relationships between socioeconomic status and Relational value-orientations.

Kitchen's study indicated the complexity of the relationship. His survey of writings and research studies suggested that in American society generally the lower classes are perhaps more Collateral and less Individualistic than the middle classes, with upper classes perhaps the most Lineal.¹ His own research indicated that in Newfoundland lower class children did not simply have lower I - L scores, but rather higher preference than middle class children for Individualism over Inter-generational Lineality, lower preference for Individualism over Bureaucratic Lineality. The children of sharemen-fishermen had lowest scores on both aspects of the scale.² Parry's tables indicate no differences between white-collar and blue-collar adolescents or fathers on C - I, C - L, or I - L scales.³

A further complication is the bureaucratic or entrepreneurial nature of father's occupation. Kitchen's survey of the literature suggested that people working in large scale organizations tend perhaps to be less Individualistic than entrepreneurs.⁴ His Newfoundland study found children of fishermen entrepreneurs to have highest I - L and I - C

¹ Kitchen, op. cit., pp. 81-110.

² Ibid., pp. 319-323.

³ Parry, op. cit., p. 53.

⁴ Kitchen, op. cit., pp. 87-94.

scores, with children of blue-collar entrepreneurs next, and with children of other groups having lower scores.¹ Parry found that entrepreneurial fathers tended to have slightly higher I - L scores than bureaucratic fathers. This difference did not hold true for children, nor for the C - I or C - L scales.²

VII. THE EXPECTED RELATIONSHIP BETWEEN THE BIRTHPLACE OF TEACHERS AND THEIR RELATIONAL VALUE-ORIENTATIONS

The sixth hypothesis is designed to test the notion that teachers born (and presumably raised) in small communities may have different Relational value-orientations from teachers born in the city.

Hypothesis 6:

- (a) The mean C - I score of urban-born teachers will not differ from that of other teachers.
- (b) The mean C - L score of urban-born teachers will not differ from that of other teachers.
- (c) The mean I - L score of urban-born teachers will not differ from that of other teachers.

The question tested here is whether the Relational value-orientations of urban-born teachers differ from those born in smaller communities. Perhaps one might expect urban-born teachers to have Relational value-orientations more closely approximating urban pupils than do teachers born in smaller settlements. If so, they might have

¹ Ibid., pp. 319-323.

² Parry, op. cit., p. 55.

higher C - I and C - L scores and similar I - L scores. Kitchen found that St. John's pupils had higher I - L scores than other Newfoundland pupils, although not on the I - L_g sub-scale.¹ The paucity of direct research evidence suggests the use of the null hypothesis.

¹ Kitchen, op. cit., p. 195-196.

CHAPTER III

RESEARCH DESIGN

The following chapter deals with the procedures followed to carry out the study. Separate sections will deal with the instrument, the pilot study, the sample, collection of data, and data processing.

I. INSTRUMENT

Two questionnaires were used in the study: The Teacher's Questionnaire, given as Appendix A and the Pupil's Questionnaire, appearing as Appendix B. The questionnaires have a common section containing twenty-four questions dealing with the Relational value-orientation. Each of these questions is a problematic situation to which there are three alternative solutions -- an Individualistic choice, a Collateral choice and a Lineal choice, which the respondent must rank 1, 2 and 3 in order of preference. For example, problem 5 reads:

A man is at the start of his career and is considering ways in which he might choose to work for the rest of his working lifetime.

- ___ A. Working on his own and being his own boss. Whatever he does is by his own decisions and he gets ahead through his own efforts.
- ___ B. Working for an employer who makes most of the decisions and who has the main responsibility.
- ___ C. Working with a group of people who make most decisions together and where everyone's efforts help the group to succeed.

Alternative A of this problem gives an Individualistic choice, B a Lineal choice and C Collateral. If the respondent prefers C, the Collateral alternative, to A, the Individualistic alternative, his score on the C - I scale is 1, if not, 0. With twenty-four such choices his C - I score can range from 0 to 24. These same twenty-four situations yield a C - L score and an I - L score.

The problems which are contained in the instrument were devised by Parry¹ and are based largely on those used by Kluckhohn² and Kitchen³. For the present study, slight changes were made in the wording of alternatives A and B of problem 7, and A and B of problem 12, of Parry's instrument. It was felt that these changes were necessary to make the problems more relevant to situations in Newfoundland. Care was taken to preserve the original meanings. The front and back pages of both questionnaires were devised especially for the present study.

The front page of the Teacher's Questionnaire gives directions for completing the questionnaire. It also states that the respondent's name is not required and that responses to the questionnaire are to be

¹ Robert S. Parry, "The Relational Value-Orientations of Grade X Students and of Their Fathers," (Unpublished Master's thesis, University of Calgary, 1967), pp. 78-83.

² Florence Rockwood Kluckhohn and Fred L. Strodtbeck, Variations in Value Orientations, (Evanston, Ill.: Row, Peterson and Company, 1961).

³ Hubert William Kitchen, "Relationships between the Value-Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1966), pp. 351-360.

completely confidential. The back page requests that the respondent give his place of birth from one of five categories: St. John's, Grand Falls, Corner Brook, Elsewhere in Newfoundland, Outside of Newfoundland. This page also provides ten categories for the age of teacher, which range from "Under 20" years to "61-65" years. There is an interval of five years in each category, except in the first one. Space is also provided to enable the teacher to give an assessment of "Teacher's Confidence in Pupil", for each of the two pupils chosen randomly from the respondent's class.

The Pupil's Questionnaire gives on its front page the same directions for completing the questionnaire, as those which are contained on the Teacher's Questionnaire. On the back page of the Pupil's Questionnaire the respondent is to give: (1) his full name (2) his age, from one of thirteen categories (3) the name of his homeroom teacher (4) a specific description of the occupation of his father or guardian (5) the amount of time which he spends participating in school sports (playing and watching), in school clubs, and in listening to music which is popular with teenagers (6) his school grade, and (7) his sex.

II. THE PILOT STUDY

The Purpose

A pilot study was carried out to establish a plan of procedure for the main study, and, especially, to ascertain the following:

1. The maximum time required by pupils of grades VIII, IX, X and XI to complete the questionnaire satisfactorily.
2. Whether these pupils understand clearly the directions for completing the questionnaire.

3. Whether these pupils understand clearly the wording of all parts of the questionnaire and could understand all questions without difficulty.
4. The suitability of the Teacher's Questionnaire.

The Method of Sampling

The pupils for the pilot study were chosen by the following method:

1. A deck of numbered cards, which began with 1 and continued consecutively until there were as many cards in the deck as there were pupils in a particular class, was used.
2. After the cards were shuffled the number of the top card on the deck was matched with the same number which appeared on page 8 of the Register of Daily Attendance, which contained all the names of pupils in that class. If a pupil's name appeared opposite this number that name was recorded.
3. The cards were shuffled again and the top card drawn. This procedure was continued until four names were obtained from the Register of each class.
4. The first and second names, which were recorded, were the first choice for the sample. If, however, the first-named pupil were absent, the pupil in third place was then selected. If this pupil were absent another drawing had to be made, as the fourth name was used only if the pupil whose name appeared in second place were absent. That is, the pupil whose name was in third place could be used only in place of the first pupil and the fourth-named pupil could be used only to replace the pupil in second place.

5. In the event that two pupils were not available from the first four names which were recorded, the shuffling of the cards and the drawing of the top card, after each shuffle, were continued until two pupils were selected.

The teachers used were the homeroom teachers and subject-teachers of grades IX, X and XI, whose pupils participated in the pilot studies.

Administration

On April 6, 1967, the Pupil's Questionnaire was completed in one sitting by six pupils who were attending Queen Elizabeth Regional High School, Foxtrap, Conception Bay. These pupils were selected randomly, two from each of three separate classes of grades IX, X and XI. Six teachers from this school completed the Teacher's Questionnaire. They were the homeroom teachers, and three other teachers who taught subjects to either the grade IX, X or XI pupils, who participated in the pilot study. Two pupils from each class were assessed on "Teacher's Confidence in Pupil" by two teachers independently, but no teacher rated more than two pupils.

On April 6, 1967, the Pupil's Questionnaire was also administered in a second sitting to twelve of the fifteen grade eight pupils who were attending the Anglican school at Topsail, Conception Bay. The other three pupils were absent on that day. As the number of pupils in the class was small, it was decided to include the whole class for the study. However, two pupils were chosen randomly, on whom the homeroom teacher gave the "Teacher's Confidence in Pupil" assessment. On the same day the homeroom teacher of this class completed the Teacher's Questionnaire.

A total of eighteen pupils and seven teachers were involved in the pilot studies.

Conclusions

1. It was noted that grade eight pupils required from thirty to forty minutes to complete the questionnaire. Pupils of grades IX, X and XI took from twenty to thirty minutes to complete it. Therefore, it was decided that a maximum time of forty-five minutes would be sufficient for all pupils to deal with the questionnaire satisfactorily.
2. From information obtained from each pupil by individual interview, it appeared that none of the pupils experienced any difficulty with any part of the questionnaire. Thus, it was decided that no changes would be necessary in the format of the Pupil's Questionnaire.
3. All teachers' comments on the Teacher's Questionnaire were favorable. It presented no difficulties, and all felt that the questionnaire contained nothing that could be considered objectionable to teachers. They anticipated that full support and co-operation would be forth-coming from all of the participating teachers in the main study. No changes, therefore, were considered necessary for the Teacher's Questionnaire.

III. THE SAMPLE

The pupil-population was selected from all the grade VIII, IX, X and XI classes of the schools in St. John's and Corner Brook. Two pupils

were chosen randomly from each of these classes by the method which was used to obtain the sample for the pilot study. However, to be eligible for inclusion in the study, the pupils from St. John's had to be normally resident in that city and to be attending school there for the previous three years or more. Pupils who participated from Corner Brook were normally resident in that city and had attended school there for three years or more. The Cumulative Records of the schools were used to establish the qualifications of pupils "normally resident" of these cities.

According to the records of the Department of Education of the Province of Newfoundland, as of April 30, 1967, there were in St. John's 214 homerooms with grades VIII, IX, X and XI pupils. The same source showed that Corner Brook had 78 homerooms with grades VIII, IX, X and XI pupils. Thus, the teacher sample could total 292 and the pupil sample 584.

IV. COLLECTION OF DATA

During the months of May and June, 1967, the investigator visited all the schools in St. John's and Corner Brook which were involved in the study, personally administered the Pupil's Questionnaire, and made personal contact with the teachers who were to complete the Teacher's Questionnaire.

Procedures

In the St. John's area, preliminary visits were first made to the twenty-seven schools concerned with the study. During these visits the

principals were given general information on the nature of the study and permission was sought to use the schools. Usually, permission was readily given, and a mutually convenient time set aside to administer the Pupil's Questionnaire. If suggested by the principal, Boards of Education were also contacted for permission to use the schools for this project. A letter was obtained from the Roman Catholic Board of Education, St. John's, which served as an introduction, when visiting the several small schools operated by this board in the St. John's area. (See Appendix E.) At several schools the investigator attended regular or special staff meetings to explain the plan for conducting the study and to request the support and co-operation of the participating teachers.

As it was inconvenient to make preliminary visits to the schools of Corner Brook, permission and arrangements to use the schools there had to be made by letter and by telephone. In consultation with the educational authorities at Corner Brook, it was decided that the period between May 21st. and May 28th. was the most convenient time to administer the questionnaires in that area. On May 23rd., 24th., 25th., and 26th. the questionnaires were administered in the fourteen schools of Corner Brook containing grades VIII to XI.

The Administration of the Questionnaires

The Pupil's Questionnaire was administered during the regular teaching time of the school day. All pupils of the same school completed the questionnaire at the same time, and in a room which was used solely for that purpose. Careful supervision was exercised over the Pupil's

Questionnaire to ensure that all parts of the questionnaire were completed to the satisfaction of the investigator.

The Teacher's Questionnaire was distributed to homeroom teachers shortly after their pupils had completed their questionnaires. Before distribution, the names of the two pupils, from each teacher's class, were written in the spaces provided on the back page of the Teacher's Questionnaire for that purpose. The questionnaire was then placed in an envelope with a letter (See Appendix D) requesting that the questionnaire be completed, sealed in the envelope and returned to the office of the principal or vice-principal. Each envelope was marked in the bottom left-hand corner with the pupils' homeroom number and grade, to identify the homeroom teachers when the questionnaires were distributed to them. At the St. John's schools the completed questionnaires were held in the principal's or vice-principal's office until they were called for. From the Corner Brook schools, each envelope bore the home address of the investigator, and sufficient postage to mail the completed questionnaire.

Returns

More than eighty per cent of the questionnaires from teachers were completed satisfactorily and returned without delay. However, some difficulty was experienced from a small number of teachers, both in St. John's and Corner Brook, who failed either to complete the questionnaire, or to mail it, or to deliver it to the office of the principal or vice-principal. Seven questionnaires had to be returned to the respondents, because the information required from them was incomplete. Several

visits had to be made to five schools in St. John's to make personal contacts with teachers, who did not attend to their questionnaires. For three schools in Corner Brook this problem was attended to by telephone and by letter. However, with the cooperation of principals, vice-principals and teachers, by the closing date of schools (June 21st.) 290 Teacher's Questionnaire were received and had been completed satisfactorily. The remaining two Teacher's Questionnaire were not received until late in August, but in time to be included in the study. Thus, 100 per cent of the questionnaires both from teachers and pupils were available for use in the study.

V. DATA PROCESSING

All data from the questionnaires were transferred to intermediate sheets, coded, and punched on IBM cards. (See Appendix C.) The statistical procedures used to analyse the data and to test the hypotheses included computer programmes to perform "t" tests and to obtain Pearson product-moment correlation coefficients.¹ Point biserial correlations with corrections for attenuation were also used in the analysis. A detailed description of these statistical procedures as they were applied to the data is given in Chapter IV.

¹ The computer programmes were written by Arthur J. Robertson, Computer Centre, Memorial University of Newfoundland.

CHAPTER IV

ANALYSIS OF THE DATA

This chapter presents the findings of the study. Support was received for over half the hypothesized relationships. The detailed findings are presented and discussed below with a separate section for each hypothesis. A preliminary section contains the profiles of the scores obtained by pupils and teachers.

I. PROFILES

This section presents the Relational value-orientation profiles found to be held by high school pupils and their teachers, in urban Newfoundland.

Pupils

Table II sets forth for each of the three value-orientation scales the mean score made by the 584 pupils. Since, at the .05 level of significance, there is no preference between Collaterality and Individualism, but since both are preferred over Lineality, the dominant profile may be set down tentatively as

$$I = C > L$$

However, since differences between observed and expected frequencies were small and none attained the .01 or .001 levels of statistical significance,

these pupils have indicated no great preference for either value-orientation. This finding of no great preference is consistent with the findings of Parry¹ and Kitchen², although in their studies differences, while small, did attain higher levels of statistical significance.

TABLE II

PATTERN OF RELATIONAL VALUE-ORIENTATIONS FOR
URBAN HIGH SCHOOL PUPILS (N = 584)

Value-Orientation Scale	Observed Mean Score	Expected Mean Score	Standard Error of the Mean	^a t
C - I	12.05	12.00	.11	.15
C - L	12.56	12.00	.11	1.66
I - L	12.58	12.00	.12	1.65

^a For a one-tailed test a t of 1.65 is required for significance at the .05 level, 2.33 at the .01 level, and 3.09 at the .001 level. Since no t approaches significance at other than the .05 level, it seems as if pupils have no consistent preference for one alternative over another.

¹ Robert S. Parry, "The Relational Value-Orientations of Grade X Students and of Their Fathers," (Unpublished Master's thesis, University of Calgary, 1967), p. 44.

² Hubert William Kitchen, "Relationships between the Value-Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1966).

Teachers

Table III sets forth the mean scores made by the 292 teachers.

TABLE III
PATTERN OF RELATIONAL VALUE-ORIENTATIONS FOR
URBAN HIGH SCHOOL TEACHERS (N = 292)

Value-Orientation Scale	Observed Mean Score	Expected Mean Score	Standard Error of the Mean	t ^a
C - I	10.96	12.00	.15	2.72
C - L	12.53	12.00	.16	1.31
I - L	13.17	12.00	.17	2.86

^a For a one-tailed test a t of 1.65 is required for significance at the .05 level, 2.33 at the .01 level, and 3.09 at the .001 level.

Since Individualism is preferred statistically over both Collaterality and Lineality with no preference between Collaterality and Lineality, the dominant profile may be set down as

$$I > C = L$$

Differences between observed and expected frequencies are small (although not as small as for pupils), with none attaining significance at the .001 level. While the teachers do have statistically significant preferences, these preferences, like those for pupils, are not great.

Profiles and Reliability

The findings of no great preference may mean that respondents have no generalized preference for one Relational value-orientation over another or that the alternatives, equally, are of little meaning to the respondents. Related are the low reliabilities of the scales as detailed in Chapter V. For pupils, the lack of general preference for either Collaterality or Individualism is matched by the finding in Chapter V that the stability coefficients for the C - I scale is, at .26, not statistically significant. Similarly, that teachers showed no preference between C and L is matched by the finding that for teachers the stability coefficient of .24 on the C - L scale is not statistically significant.

II. DIFFERENCES BETWEEN PUPILS AND TEACHERS

Hypothesis 1 reads:

- (a) The mean C - I score of urban high school pupils in Newfoundland will exceed that of their teachers.
- (b) The mean C - L score of urban high school pupils in Newfoundland will exceed that of their teachers.
- (c) The mean I - L score of urban high school pupils in Newfoundland will not differ from that of their teachers.

Table IV sets forth the mean scores made by 584 pupils and their 292 teachers on each of the Relational value-orientation scales, together with the values of t obtained from the t - tests used to test the

significance of the difference between means in independent samples.¹

TABLE IV
STATISTICAL SIGNIFICANCE OF THE DIFFERENCE IN MEANS
OF 292 TEACHERS AND 584 PUPILS

Value- Orientation Scale	Mean Score of Pupils	Mean Score of Teachers	Sum of Squares of Deviations about the Means		Variance	t ^a
			Pupils	Teachers		
C - I	12.05	10.96	4385.30	1797.63	7.074	5.71 ***
C - L	12.56	12.53	4463.88	2284.76	7.722	.15
I - L	12.58	13.17	5162.16	2391.82	8.643	-2.80 **

^a Two asterisks indicate statistical significance at the .01 level, three at the .001 level.

As hypothesized, the mean C - I score of pupils was higher than that of their teachers with statistical significance being better than the .001 level. Actual differences were quite small in that the average pupil preferred the Collateral alternative to the Individualistic alternative on 1.09 problems more than the average teacher. Differences might well have been greater but for the pull toward the mean exerted by the low reliability for pupils on the C - I dimension (.26 and not statistically significant, as detailed in Chapter V). That pupil C - I scores exceed these of their teachers is consistent with the findings of Parry,

¹ George A. Ferguson, Statistical Analysis in Psychology and Education, (Second edition; New York: McGraw-Hill, 1966), pp. 167-169.

and Gue, as reported in Chapter II.

For the C - L scale, the hypothesis, based in part on Parry's father-pupil differences in Southern Alberta, was not supported. Pupils in the present study showed no greater tendency than their teachers to choose Collaterality over Lineality. Again, the low test-retest reliability of the C - L scale should be noted (.24 for teachers, .43 for pupils, as reported in Chapter V).

For the I - L scale, the predicted null hypothesis was not supported. Pupils showed less tendency than their teachers to choose Individualism over Lineality. This tendency was statistically significant at the .01 level. Parry's father-pupil differences in Calgary, while in the same direction were not statistically significant.

High school pupils in urban Newfoundland, more often than their teachers, reject Individualism in favor of Collaterality or Lineality, but do not show greater preference than teachers for Collaterality over Lineality. The lack of general dominance of one value-orientation over another, and the low reliability of some of the scales, suggest the tenuous nature of these findings.

III. TEACHERS' AGE AND VALUE-ORIENTATIONS

Hypothesis 2 reads:

- (a) An inverse relationship exists between the age of teachers and their C - I scores.
- (b) An inverse relationship exists between the age of teachers and their C - L scores.

- (c) No relationship exists between the age of teachers and their I - L scores.

The correlation coefficients obtained are reported in Table V. These are Pearson product-moment correlation coefficients calculated between teachers' scores on each of the value-orientation scales and the essentially five-year intervals, numbered 0 to 9, checked on the questionnaire by the teachers to indicate their ages.¹

TABLE V

CORRELATION COEFFICIENTS BETWEEN THE RELATIONAL
VALUE-ORIENTATIONS OF TEACHERS AND THEIR AGES

Relationship	Correlation Coefficient r	Level of Statistical Significance ^a
C - I	- .04	not significant
C - L	- .08	not significant
I - L	- .09	not significant

^a To be statistically significant at the .05 level with 100 or more degrees of freedom, r would have to reach .16.

None of the correlation coefficients reported in Table V is high enough to be statistically significant. However, when a formula was applied to correct for the attenuation caused by low reliabilities, the correlation coefficient between teachers' age and C - L scores was

¹ See Appendix A.

raised to .16, which just reaches statistical significance at the .05 level.¹ Corrections for attenuation failed to raise the other correlation coefficients enough to attain significance. Thus Hypothesis 2 (a) is rejected, Hypotheses 2 (b) and 2 (c) are accepted. While a small tendency was found for teachers' age to be inversely related to preference for Collaterality over Lineality, no statistically significant relationships were found between age and either C - I scores or I - L scores.

These findings suggest that the Independence-Group Conformity aspect of the Traditional-Emergent Continuum of Spindler and his followers may not be an especially relevant model for analyzing the values of teachers in urban Newfoundland. For comparative purposes it is unfortunate that researchers using the Differential Values Inventory to study the relationship between traditional-emergent values and teacher age did not report sub-scale relationships. It is possible, as the findings from the present study seem to suggest, that the greater traditionalism of older teachers reported by the Spindler group may have to do partly with a slightly greater preference for Lineality over Collaterality, but more probably with value dimensions other than Independence-Group Conformity or Individualism -- Collaterality -- Lineality.

¹ Ferguson, op. cit., pp. 382-383.

IV. PUPILS' INVOLVEMENT IN TEENAGE CULTURE AND THEIR VALUE-ORIENTATIONS

Hypothesis 3 reads:

- (a) A direct relationship exists between the involvement of high school pupils in teenage culture and their C - I scores.
- (b) A direct relationship exists between the involvement of high school pupils in teenage culture and their C - L scores.
- (c) No relationship exists between the involvement of high school pupils in teenage culture and their I - L scores.

Five measures of pupil involvement in teenage culture were used. Pupils had completed items on the Pupil's Questionnaire indicating the hours per week spent at each of four activities:

- (a) School Sports -- watching
- (b) School Sports -- playing
- (c) School Clubs -- not sports
- (d) Listening to music that is popular with your friends -- on records, radio and television.

The fifth measure used was the total for these four activities.

TABLE VI

CORRELATION COEFFICIENTS BETWEEN THE RELATIONAL VALUE-ORIENTATIONS OF PUPILS AND THE DEGREE OF THEIR INVOLVEMENT IN TEENAGE CULTURE ^a

Value-Orientation Scale	Sports Watching	Sports Playing	School Clubs	Music	Total
C - I	- .002	.043	.030	- .025	.045
C - L	- .016	- .027	.058	.003	.003
I - L	- .052	- .106	- .026	- .015	- .060

^a To be statistically significant at the .05 level with more than 100 degrees of freedom, r would have to reach .16. None of the above coefficients reach this level.

As shown in Table VI, none of the correlation coefficients between the measures of pupil involvement in the teenage culture and pupil scores on the Relational value-orientation scales was statistically significant. Corrections for attenuation due to unreliability of the underlying measures failed to raise the correlation coefficients to statistically significant levels.

For participation in extracurricular activities, the only significant differences that had been found by Parry were between those who did not participate at all, and those who participated. Differences were found for the C - I and C - L scales but not for the I - L scale.¹ Kitchen's findings, though not statistically significant had suggested the possibility of differences on the C - I and I - L scales between

¹ Parry, op. cit., p. 58.

those who listened not at all to teenage music and those who did.¹ Accordingly, it was decided to run t - tests of the differences in scores between participants in the teenage culture and non-participants. As shown in Table VII, the Parry differences were confirmed, in that pupils who participated in sports playing held C - I scores and C - L scores higher than those of non-participants. Similarly those who participated in sports watching held C - I scores higher than those of non-participants.

V. VALUE-ORIENTATION CONGRUENCE AND TEACHERS' CONFIDENCE IN PUPILS

Hypothesis 4 reads:

- (a) An inverse relationship exists between teacher confidence in pupils and the gap between the scores of pupils and teachers on the C - I scale.
- (b) An inverse relationship exists between teacher confidence in pupils and the gap between the scores of pupils and teachers on the C - L scale.
- (c) An inverse relationship exists between teacher confidence in pupils and the gap between the scores of pupils and teachers on the I - L scale.

Two distinct statistical procedures were used to test this hypothesis: (1) Pearson product-moment correlation coefficients were computed and their statistical significance calculated and (2) point biserial correlation coefficients were computed and their statistical significance calculated.

¹ Kitchen, op. cit., p. 301.

TABLE VII

STATISTICAL SIGNIFICANCE OF THE DIFFERENCE IN MEANS OF PUPILS
WHO PARTICIPATE IN TEENAGE CULTURE AND THOSE WHO DO NOT

	<u>Participants</u>		<u>Non-Participants</u>		a t
	N	Mean Score	N	Mean Score	
<u>Sports-Watching</u>					
C - I	440	12.19	144	11.63	2.12 *
C - L	440	12.47	144	12.59	.44
I - L	440	12.48	144	12.89	1.46
<u>Sports-Playing</u>					
C - I	357	12.25	227	11.72	2.28 *
C - L	357	12.80	227	12.18	2.66 **
I - L	357	12.54	227	12.64	.40
<u>School Clubs</u>					
C - I	220	11.86	364	12.16	.47
C - L	220	12.49	364	12.60	.47
I - L	220	12.60	364	12.57	.12
<u>Music</u>					
C - I	558	12.05	26	12.12	.13
C - L	558	12.52	26	13.46	1.71
I - L	558	12.59	26	12.42	.29
<u>Total</u>					
C - I	580	12.07	4	9.25	2.06 *
C - L	580	12.56	4	13.00	.31
I - L	580	12.57	4	14.25	1.13

^a One asterisk indicates statistical significance at the .05 level, two at the .01 level.

Pearson Product-Moment Correlation Coefficients

On the back page of the Teacher's Questionnaire (See Appendix A.) the respondent had been asked to give his or her assessment of the two pupils chosen randomly from the teacher's homeroom. The assessment of the pupils was done by rating each pupil separately along a line. The space between the extremity of the line, which is marked "about as far from the ideal as it is possible to get" and the point X on the line, as indicated by the respondent, was calculated in inches. For example, a space of three and four-tenths inches is coded as 3.4.

The gap between the Relational value-orientation of pupils and teachers refers to the difference between the score which a pupil has obtained on each of the three dimensions of the Relational value-orientation and the score obtained by the pupil's teacher on each of the three dimensions. For example, the gap between a pupil's score of 10 on the C - I dimension and a score of 16 for his teacher on the same dimension is 6.¹

Pearson product-moment correlation coefficients were then computed between the teacher-pupil gaps on scores on each of the three scales and the measures of teacher's confidence in pupils. As indicated in Table VIII none of the correlation coefficients is statistically significant. Moreover, corrections for attenuation could not raise the correlation coefficients to statistically significant levels.

¹ See Appendix C.

TABLE VIII

PRODUCT-MOMENT CORRELATION COEFFICIENTS BETWEEN TEACHER-
PUPIL GAPS IN SCORES ON VALUE-ORIENTATION SCALES AND
TEACHER CONFIDENCE IN PUPILS (N = 584)

Value- Orientation Scale	r	Level of Statistical Significance ^a
C - I	.00	not significant
C - L	.05	not significant
I - L	.02	not significant

^a To be statistically significant at the .05 level with 100 or more degrees of freedom, r would have to reach .16.

Point Biserial Correlation Coefficients

The probable use by teachers of differing frames of reference when indicating confidence in pupils casts doubt upon the interval nature of the data and, hence, upon the propriety of using product-moment correlation coefficients to test Hypothesis 4. Accordingly, it was decided to use also point biserial correlation coefficients to measure the capacity of the difference in gaps to discriminate between the two groups of pupils -- those whom their teachers had rated as closer to the ideal and those whom their teachers had rated as farther from the ideal.¹ The instances where teachers had rated both pupils equally were dropped from this analysis.

¹ Ferguson, op. cit., pp. 239-242.

TABLE IX

POINT BISERIAL CORRELATION COEFFICIENTS BETWEEN TEACHER-PUPIL
GAPS IN SCORES ON VALUE-ORIENTATION SCALES AND HIGHER
OR LOWER TEACHER CONFIDENCE IN PUPILS (N = 536)

Value- Orientation Scale	r pbi	Level of Statistical Significance ^a
C - I	.04	not significant
C - L	.00	not significant
I - L	.04	not significant

^a To be statistically significant at the .05 level with 534 degrees of freedom, r_{pbi} would have to reach .09.

As indicated in Table IX, the point biserial correlation coefficients also are not statistically different from zero. The absence of the predicted inverse relationship should be noted.

VI. PUPILS' SOCIOECONOMIC STATUS AND THEIR VALUE-ORIENTATIONS

Hypothesis 5 reads:

- (a) No relationship exists between the socioeconomic status of pupils and their C - I scores.
- (b) No relationship exists between the socioeconomic status of pupils and their C - L scores.
- (c) No relationship exists between the socioeconomic status of pupils and their I - L scores.

Descriptions of father's occupation were obtained from the pupils by means of the questionnaire. These descriptions were then quantified

by means of the Blishen Scale¹ and the correlation coefficients between these socioeconomic scores and the scores on the three value-orientations scales were obtained. As shown in Table X and as predicted, not one of the three correlation coefficients was statistically significant. Moreover, corrections for attenuation failed to raise them to statistically significant levels.

TABLE X
CORRELATION BETWEEN THE RELATIONAL VALUE-ORIENTATION OF
PUPILS AND THEIR SOCIOECONOMIC STATUS

Relationship	Correlation Coefficient r	Level of Statistical Significance ^a
C - I	.05	not significant
C - L	.10	not significant
I - L	.05	not significant

^a To be statistically significant at the .05 level, with 100 or more degrees of freedom, r would have to reach .16.

These findings suggest the lack of any clear relationship between socioeconomic status of urban Newfoundland pupils and their Relational value-orientations. However, the low reliability of the value-

¹ Bernard R. Blishen, "The construction and Use of an Occupational Class Scale," Canadian Society, Bernard R. Blishen, Frank E. Jones, Kaspar D. Naegle, and John Porter, editors (Toronto: The Macmillan Company of Canada Limited, 1961), pp. 477-485.

orientation scales would tend to obscure any relationship.¹

VII. TEACHERS' BIRTHPLACE AND THEIR VALUE-ORIENTATIONS

Hypothesis 6 reads:

- (a) The mean C - I score of urban-born teachers will not differ from that of other teachers.
- (b) The mean C - L score of urban-born teachers will not differ from that of other teachers.
- (c) The mean I - L score of urban-born teachers will not differ from that of other teachers.

The responses to the Teacher's Questionnaire ² indicated that seventy-six teachers were born in St. John's, twenty-four in either Corner Brook or Grand Falls, and 153 elsewhere in Newfoundland, a total of 253. The remaining thirty-nine teachers who were born outside the province were not used in testing the present hypothesis.

Table XI compares the mean scores of teachers born in either St. John's, Corner Brook and Grand Falls with those of teachers born elsewhere in Newfoundland. As hypothesized, there were no statistically significant differences. Neither were there statistically significant

¹ Similarly, the investigator had considerable difficulty in classifying occupations according to the somewhat obsolete Blishen Scale. This difficulty also would tend to mask any relationship between socio-economic status and value-orientations.

² See Appendix A.

TABLE XI

DIFFERENCES IN MEAN VALUE-ORIENTATION SCORES OF TEACHERS
BORN IN URBAN AREAS OF NEWFOUNDLAND (100) AND
THOSE BORN ELSEWHERE IN NEWFOUNDLAND (153)

Value- Orientation Scale	Mean Score of Teachers Urban	Mean Score of Teachers Elsewhere	Sum of Squares of Deviations about the Means		Variance	t ^a
			Urban	Elsewhere		
C - I	11.04	10.95	883.80	1491.24	9.46	.23
C - L	12.32	12.70	699.52	1287.67	7.92	-1.05
I - L	13.15	13.01	832.50	1248.46	8.29	.39

^a For statistical significance at the .05 level with 251 degrees of freedom, a t of 1.96 is required. Thus, none of these differences is statistically significant.

differences when the scores of teachers born in St. John's were compared with those of teachers born in Newfoundland but outside St. John's (Corner Brook, Grand Falls or Elsewhere in Newfoundland), as shown in Table XII. Also, although these data are not shown in a table, there were no statistically significant differences between those born in St. John's and those born elsewhere in Newfoundland but not in Grand Falls or Corner Brook.

For St. John's and Corner Brook, teachers born in Newfoundland urban areas and those born in the smaller settlements of the province have similar Relational value-orientations. It should be borne in mind however, that the Relational value-orientations of Newfoundlanders

presently teaching outside the cities were not studied. Also to be kept in mind is the low reliability of the instrument.

TABLE XII

DIFFERENCES IN MEAN VALUE-ORIENTATION SCORES OF TEACHERS BORN
IN ST. JOHN'S (76) AND THOSE BORN IN NEWFOUNDLAND
BUT OUTSIDE ST. JOHN'S (177)

Value- Orientation Scale	Mean Score of Teachers St. John's	Mean Score of Teachers Outside	Sum of Squares of Deviations <u>about the Means</u>		Variance	t ^a
			St. John's	Outside		
C - I	11.09	10.93	684.50	1699.47	9.50	.38
C - L	12.46	12.59	554.40	1737.86	9.13	-.31
I - L	13.34	13.00	668.24	1413.00	8.29	.86

^a For statistical significance at the .05 level with 251 degrees of freedom a t of 1.96 is required. Thus, none of these differences is statistically significant.

VIII. SUMMARY

In urban Newfoundland, high school pupils were found to have higher C - I scores and lower I - L scores than their teachers. Also, pupils who did not watch sports had lower C - I and C - L scores than those who watched. Those who did not play at sports had lower C - I scores than those who played. These differences, although statistically significant, were very small. No statistically significant differences were found between teachers and pupils on the C - L scale. No statistically

significant relationship was found between teachers' C - I and I - L scores and their ages, although an inverse and barely statistically significant relationship was found between age and C - L scores. There was no statistically significant difference in Relational value-orientations between city teachers born in urban Newfoundland and city teachers born in the smaller places of Newfoundland. No relationship was found between pupils' Relational value-orientation scores and their socioeconomic status nor (except as noted above) their involvement in teenage culture. Moreover, pupils in whom teachers expressed greater confidence held Relational value-orientation scores that were no more like those of their teachers than were the scores of pupils in whom teachers expressed less confidence.

These findings of little predictable variation in value-orientations suggest that there is little real variation in the Relational value-orientations of the group studied. There is the further possibility that the instrument and methodology of the study did not reveal the variations that may exist. This question is explored in the next chapter which deals with the reliability of the instrument.

CHAPTER V

RELIABILITY

The striking observation from the data presented in Chapter IV is the smallness of all the differences in Relational value-orientations, between teachers and pupils, among teachers when classified by age and birthplace, and among pupils when classified by socioeconomic status, by involvement in teenage culture and by the confidence held by their teachers in them. Even where differences are statistically significant, they are small, usually being less than one problem out of twenty-four. This phenomenon is remarkable, since the purpose for Parry's lengthening the Relational value-orientation scales from eight to twenty-four items was to produce an instrument that could the more easily pick up differences. Before concluding that some of the hypotheses of the present study are untenable or that there are few differences in the Relational value-orientations of the subjects of this study, it is necessary to explore carefully the reliability of the instrumentation, and of the data collection. Such is the purpose of the present chapter.

The first section of the chapter deals with analyses performed to check the reliability of the whole scales. Later sections comprise detailed examinations of the reliability of each item of the scales, and of variations in reliability among respondents.

I. TOTAL SCALE RELIABILITY

For purposes of comparison the reliabilities reported by Kitchen and by Parry are first presented and discussed. Next the stability coefficients and the coefficients of internal consistency will be reported for each of the three scales in the present study.

Reliability in Previous Studies

Table XIII indicates the test-retest reliability reported by Kitchen, using a Relational value-orientation scale of eight items. This was based on ninety-seven grade nine pupils in Newfoundland.¹

TABLE XIII
STABILITY COEFFICIENTS FROM PREVIOUS STUDIES

Value-Orientation Scales	The Kitchen Study (97 pupils, using 8-item scales)	The Parry Study (50 pupils, using 24-item scales)
C - I	.39	.58
C - L	.37	.74
I - L	.43	.64

Note: All the above correlation coefficients are statistically different from zero at the .001 level of confidence.

¹ Hubert William Kitchen, "Relationships between the Value-Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1966), pp. 179-184.

Coefficients, while not high are nevertheless statistically significant at the .001 level. Parry tripled the number of items on his Relational value-orientation scales, and reduced the length of some of the items.¹ Tripling the length, resulted, as one would expect, in the higher stability coefficients reported by Parry.²

Stability Coefficients for Present Study

Four months after the questionnaire was first administered, thirty-two pupils and thirty teachers completed the questionnaire a second time.³ Table XIV indicates the resulting stability coefficients. A comparison with Table XIII reveals lower reliability for pupils in the present study on the C - I scale and, especially, on the C - I scale, and for teachers on the C - I scale.

¹ Robert S. Parry, "The Relational Value-Orientations of Grade X Students and of Their Fathers," (Unpublished Master's thesis, University of Calgary, 1967), p. 40.

² Increasing the length of the test should, according to the Spearman-Brown formula, increase the C - I coefficient to .66, the C - I coefficient to .64, and the I - I coefficient to .69. See George A. Ferguson, Statistical Analysis in Psychology and Education, (Second edition; New York: McGraw-Hill, 1966), p. 381.

³ The thirty-two pupils were all those girls in one St. John's school who had been grade-ten respondents in May and who were still attending that school in September. Twenty-one of the thirty teachers were from the same school. They were those teachers who had completed the questionnaire in the spring and who were still teaching in that school in September. Two teachers were from a second large school in St. John's, two were from a small school in St. John's, while the remaining five were Memorial students in September who had been teacher-respondents in the previous spring, four in Corner Brook, one in a fourth St. John's school.

TABLE XIV
STABILITY COEFFICIENTS FOR THE PRESENT STUDY

Value- Orientation Scale	<u>The 24-item Scale</u>	
	32 Pupils	30 Teachers
C - I	.26	.58 ***
C - L	.43 *	.24
I - L	.68 ***	.53 **

Note: One asterisk indicates a correlation coefficient statistically different from zero at the .05 level of confidence, two indicates the .01 level of confidence, and three the .001 level.

Several possible explanations may be advanced. First the items added by Parry, and the changes in the original items made by him, while meaningful for his Southern Alberta pupils may be less meaningful to Newfoundland pupils and teachers. This would encourage random answering and hence lower reliability. It may be that for these items, forced choices between Collaterality and Lineality, and between Collaterality and Individualism may be less meaningful and less salient for urban Newfoundlanders. Also, the subject matter of the problematic situations may be less meaningful, less vivid, less salient for Newfoundland teachers and pupils than for pupils from a city of Southern Alberta. It should also be borne in mind that lower reliability than the Kitchen study may be due in part to a more homogeneous sample, since all pupils were urban residents. A further possibility, that of

unreliable administrative procedures, has to be ruled out since for the present study all questionnaires were administered by the investigator under standard conditions. Classroom teachers administered the questionnaire in the Parry study and in the Kitchen study. However, it is possible that reliabilities may be increased by the use of oral interview procedures rather than written questionnaire, although the resultant subjectivity may produce spuriously high stability coefficients.

It has been pointed out that the additional items on the questionnaire were prepared expressly for pupils in Southern Alberta. It appears then that those items, which may have been less meaningful for Newfoundland pupils than for Alberta pupils, resulted in a greater tendency towards random answering by Newfoundland pupils and consequently in the lower reliability. The questionnaire may not be tapping important aspects of the philosophy of life of Newfoundlanders. This seems to challenge the cross-cultural usefulness of the Kluckhohn rationale, particularly with respect to the Relational problem and especially for the items added by Parry. This challenge draws support from the high stability coefficients reported in Table XV for other items of the questionnaires. It appears that both teachers and pupils answer value-orientation questions more inconsistently than they do other questions.

TABLE XV

STABILITY COEFFICIENTS FOR ITEMS OF THE PRESENT STUDY
OTHER THAN VALUE-ORIENTATIONS

Item	Stability Coefficient
<u>Pupils</u>	
Sports Watching	.87
Sports Playing	.79
School Clubs	.94
Music	.85
Total	.94
<u>Teachers</u>	
Teacher Confidence in Pupil	.90

Note: All the above correlation coefficients are statistically different from zero at the .001 level of confidence.

Coefficients of Internal Consistency

As a further check on reliability, random samples of thirty teachers and thirty pupils were drawn from the original returns and product-moment correlation coefficients computed for each value-orientation scale between scores on the odd-numbered items and the even-numbered items. Table XVI reports these coefficients, adjusted by means of the Spearman-Brown formula.¹ Except for teachers on the I - L scale,

¹ Ferguson, op. cit., p. 381.

there seems to be little tendency for consistent preferences by respondents for one value-orientation over another in a variety of problematic situations.

TABLE XVI
COEFFICIENTS OF INTERNAL CONSISTENCY FOR RANDOM SAMPLES
OF TEACHERS AND PUPILS, ON VALUE-ORIENTATION SCALES

Value- Orientation Scale	r 30 Pupils	r 30 Teachers
C - I	.29	.33
C - L	.37 *	.30
I - L	.21	.64 ***

Note: One asterisk indicates an r statistically different from zero at the .05 level of confidence, three at the .001 level.

II. ITEM ANALYSIS: EXACT PROBABILITIES

Using the thirty-two pupils and the thirty teachers who had completed questionnaires a second time, the test-retest reliabilities, for each of the twenty-four problematic situations underlying the value-orientations scales, were examined by tests of exact probabilities. The number of pupils or teachers indicating the same preference for one value-orientation over another on retest as on the original test was counted and the probability of a chance occurrence

calculated.¹ From Table XVII, which reports these probabilities, a number of observations seem pertinent.

TABLE XVII

TEST-RETEST RELIABILITY OF EACH ITEM ON THE VALUE-ORIENTATIONS SCALES, FOR PUPILS AND FOR TEACHERS, USING EXACT PROBABILITIES

Item	C - I		C - L		I - L	
	Pupils	Teachers	Pupils	Teachers	Pupils	Teachers
1	.189	.181	.189	.021	.813	.049
2	.010	.008	.000	.001	.000	.008
3	.025	.000	.001	.000	.004	.021
4	.000	.000	.010	.049	.000	.000
5	.055	.008	.000	.008	.025	.008
6	.055	.000	.055	.049	.004	.021
7	.000	.021	.571	.181	.431	.001
8	.000	.008	.000	.001	.055	.292
9	.055	.001	.000	.000	.010	.001
10	.000	.000	.004	.000	.001	.003
11	.189	.001	.299	.021	.055	.000
12	.000	.100	.571	.808	.000	.001
13	.025	.008	.189	.049	.189	.100
14	.000	.000	.000	.000	.055	.003
15	.001	.000	.000	.003	.001	.000
16	.000	.000	.055	.164	.001	.000
17	.055	.021	.010	.000	.010	.000
18	.025	.100	.000	.000	.004	.100
19	.055	.000	.000	.000	.000	.000
20	.108	.001	.001	.008	.055	.292
21	.055	.003	.000	.008	.004	.049
22	.010	.100	.004	.049	.108	.049
23	.055	.000	.004	.021	.055	.021
24	.055	.003	.189	.100	.000	.021

¹ Suppose that on problem 1, 19 of the 32 pupils indicate on retest the same preference for Individualism over Collaterality as they did originally. The probability of 19 or more identical choices is .189. The situation is analogous to that of obtaining 19 or more heads when 32 coins are tossed. See Ferguson, *op. cit.*, pp. 89-90.

1. Some of the items are fairly reliable. Taking the .01 level of probability as a criterion of suitable reliability, three items (2, 10 and 15) are satisfactory for both pupils and teachers on all scales. However, four others (4, 9, 14 and 19) are reaching the .01 level on five scales and .049 or .055 on the sixth seem reasonably satisfactory, as, perhaps are four others (3, 5, 17 and 21) on reaching the .01 level on four scales and the .055 level or better on the remaining two.
2. The reliabilities of most of the items are unsatisfactory. Item 1 is worst in failing to achieve the .05 level on four scales. Five other items (7, 11, 13, 20 and 24) fail to achieve the .05 level on three scales and five others (8, 12, 16, 18 and 23) fail to achieve the .05 level on two scales. The remaining two items (6 and 23) are somewhat better in that they attain the .05 level on all but two scales on which the .055 level is attained.
3. The items are somewhat more reliable for teachers than for pupils. For teachers 20 items on the C - I scale attained the .05 level, 21 on the C - L scale and 20 on the I - L scale (61 in all), whereas for pupils the corresponding figures are 13, 16 and 15 (44 in all). For pupils the items were especially unreliable on the C - I scale.

III. RELIABILITY FOR INDIVIDUAL SUBJECTS: EXACT PROBABILITIES

Test-retest reliabilities were obtained for each pupil and teacher who had completed the questionnaire a second time. The number of items

W. C. IV. LINDVALL

on which the pupil or teacher had indicated the same preference for one value-orientation over another on retest as on the original test was counted and the probabilities of a chance occurrence calculated. Table XVIII indicates the reliabilities for each pupil and teacher, on each of the value-orientation scales. Several observations seem pertinent.

1. The questionnaire is unreliable for most respondents. Twenty-two pupils and fifteen teachers failed to repeat their answers at the .05 level of probability on three scales. Two pupils (14 and 15) failed to attain the .05 level on either scale, while seven pupils and five teachers attained it on only one scale.
2. The questionnaire is reliable for some respondents. Six teachers and three pupils tended to repeat their answers on all three scales in a manner that could be attributable to chance only beyond the .01 level. For two pupils (7 and 13) and three teachers (3, 4 and 27) significance was beyond the .001 level. At the .05 level all three scales were significant for ten of the thirty-two pupils and fifteen of the thirty teachers.
3. The scales are somewhat more reliable for more teachers than pupils. At the .05 level, the scales were reliable for fifteen of the thirty teachers but only for ten of the thirty-two pupils, at the .01 level for six teachers but only three pupils, at the .001 level for three teachers and two pupils. Similarly, two pupils but no teachers were unreliable at the .05 level on all three scales, seven pupils and five teachers unreliable on two scales, and thirteen pupils and ten teachers on one scale.

TABLE XVIII

TEST-RETEST RELIABILITY FOR EACH OF 32 PUPILS AND 30 TEACHERS, ON
THE VALUE-ORIENTATIONS SCALES, USING EXACT PROBABILITIES

Pupil Number	Reliability for each Pupil			Teacher Number	Reliability for each Teacher		
	C - I	C - L	I - L		C - I	C - L	I - L
1	.003	.077	.033	1	.001	.011	.155
2	.011	.003	.001	2	.003	.001	.011
3	.077	.003	.033	3	.001	.001	.000
4	.155	.001	.011	4	.000	.000	.000
5	.077	.011	.033	5	.011	.000	.000
6	.000	.011	.003	6	.155	.155	.033
7	.001	.001	.000	7	.033	.001	.033
8	.730	.003	.033	8	.077	.011	.003
9	.003	.003	.011	9	.003	.011	.001
10	.001	.000	.155	10	.001	.001	.011
11	.077	.001	.001	11	.077	.271	.033
12	.011	.271	.077	12	.000	.000	.003
13	.001	.000	.001	13	.011	.001	.011
14	.581	.271	.271	14	.011	.155	.011
15	.155	.155	.271	15	.011	.017	.001
16	.271	.033	.155	16	.003	.155	.033
17	.011	.271	.077	17	.077	.155	.033
18	.001	.003	.001	18	.011	.011	.001
19	.077	.011	.271	19	.011	.011	.011
20	.033	.003	.003	20	.000	.420	.033
21	.155	.003	.155	21	.000	.077	.000
22	.011	.033	.155	22	.001	.000	.000
23	.001	.011	.420	23	.033	.155	.581
24	.011	.077	.001	24	.003	.001	.003
25	.420	.011	.033	25	.077	.000	.033
26	.033	.077	.155	26	.003	.033	.271
27	.033	.003	.001	27	.000	.011	.077
28	.033	.155	.271	28	.077	.001	.033
29	.000	.001	.033	29	.001	.003	.001
30	.001	.155	.003	30	.011	.077	.077
31	.001	.155	.001				
32	.003	.011	.003				

4. The C - L scale seems less reliable for teachers than the C - I or I - L scales. At the .05 level, twenty-one teachers attained reliability on the C - L scale compared to twenty-four and twenty-five on the C - I and I - L scales. For pupils there seemed to be little difference.

IV. SUMMARY

The present chapter has examined the reliability of the instrument. Using the data of the test-retest for thirty teachers and thirty-two pupils, the statistical procedures used included stability coefficients for the total test, together with exact probabilities for individual items and for individual respondents. Coefficients of internal consistency were also computed between the scores of the odd-numbered items and the scores of the even-numbered items, on each of the Relational value-orientation scales, for thirty Pupil's Questionnaire and thirty Teacher's Questionnaire drawn randomly from the original returns.

Unlike previous studies, the stability coefficients showed that at the .001 level of confidence for Relational value-orientation items, the instrument proved unreliable on the C - I and C - L scales for pupils and on the C - L and I - L scales for teachers. Similarly, the coefficients of internal consistency indicated that at the .001 level of confidence, except for teachers on the I - L scale, there seemed to be little tendency for consistent preference by respondents for one

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value-orientation over another. Exact probabilities, which were calculated for each of the twenty-four items on each of the three Relational value-orientation scales, indicated, taking .05 as the criterion for reliability, sixty-one of the seventy-two probabilities were reliable for teachers and forty-four for pupils. This finding -- that the instrument was more reliable for teachers than for pupils -- was supported by the stability coefficients. An analysis of exact probabilities for the responses of individuals indicated that the instrument was unreliable for most but not all respondents.

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CHAPTER VI

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY

The Problem

This study was designed to determine the dominant and variant Relational value-orientations of a selected group of pupils and their teachers from urban Newfoundland. The Relational value-orientations of the two groups were investigated, using as criterion variables -- the birthplace and ages of teachers, the socioeconomic status of the pupils, the degree of pupil involvement in the teenage culture, and teacher-confidence in pupil. Six hypotheses were set up to examine the preference of both groups for the Individualistic, Collateral or Lineal Relational value-orientations. Hypothesis 1 predicted that pupils would more often than their teachers show preference for Collaterality over Individualism, for Collaterality over Lineality but would show similar preference for Individualism over Lineality. Hypothesis 2 predicted that teachers' preference for Collaterality over Individualism and Lineality would have an inverse relationship with their age. There would be no relationship between age and preference for Individualism over Lineality. In Hypothesis 3, the connection between the Relational value-orientations of pupils, and their involvement in

the teenage culture was explored. It was hypothesized that the more they were involved in the teenage culture the stronger would be their preference for Collaterality over Individualism and Lineality. However, there would be no relationship with preference of Individualism over Lineality. Hypothesis 4 predicted an inverse relationship with teacher's confidence in pupil and the gap between the Relational value-orientations of teachers and pupils. Hypothesis 5 predicted that the socioeconomic status of parents or guardians would not be related to the Relational value-orientations of their offsprings. In Hypothesis 6, it was predicted that urban teachers born (and presumably raised) in rural communities would not differ in their Relational value-orientations from the Relational value-orientations held by teachers coming from urban communities.

Related Research

This study was formulated primarily around the findings from research carried out by Kitchen and by Parry. Kitchen studied the value-orientations of grade nine pupils in schools of Newfoundland. Parry investigated the Relational value-orientations of grade ten pupils and their fathers in a city of Western Canada. Parry's instrument, devised partly from the work of Kluckhohn and Kitchen was used in the present study to examine Relational value-orientations. Thus, these two pieces of research had important implications for this study and were referred to frequently.

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Instrumentation

The instrument consisted of two questionnaires -- a Teacher's Questionnaire and a Pupil's Questionnaire, whose first and last pages differed. They contained in common twenty-four problematic situations, which requested a ranking of an Individualistic, a Collateral and a Lineal choice for each. The last page of the Pupil's Questionnaire requested the respondent to give his or her name, age, sex, the occupation of his or her parent or guardian, the amount of his or her involvement in the teenage culture, and the name of his or her homeroom teacher. The last page of the Teacher's Questionnaire requested of the respondent his or her place of birth, age, sex, and an assessment of the two pupils, who were chosen from the respondent's homeroom.

The Sample

The teacher-sample consisted of the 292 homeroom teachers of grade VIII, IX, X and XI in St. John's and Corner Brook. The pupil-sample consisted of 584 pupils, two chosen randomly from each homeroom used in the study.

Collection of Data

The data from the pupils were collected by the investigator who personally administered the Pupil's Questionnaire, during May and June, 1967. The Teacher's Questionnaire was distributed to the teachers by the investigator and explanations on the questionnaire were made at the time of distribution. From the schools of St. John's, the teachers' completed questionnaires were returned to the principals' offices in

in sealed envelopes, from where they were collected. The teachers' questionnaires from Corner Brook were returned by mail. All questionnaires were completed satisfactorily and were available for use in the study.

Statistical Treatment

The data relevant to the study, were extracted from the questionnaires, coded (see Appendix C), and punched on IBM cards. Mean scores for pupils and teachers were calculated, with the aid of the computer, on each of the Relational value-orientation scales -- Collaterality over Individualism, Collaterality over Lineality and Individualism over Lineality. Also obtained were mean scores, on each scale, for teachers with rural background and for teachers with urban background. T - tests were used to test the significance of the difference between means. For other analyses, Pearson product-moment correlation coefficients were used with appropriate corrections for attenuation. In analyzing the relationship of teacher confidence in pupil with the gap between teacher-scores and pupil-scores on each of the Relational value-orientation scales, point biserial correlation coefficients and Pearson product-moment correlation coefficients were used.

The Findings

Relational value-orientations of teachers and pupils. When teachers and pupils were grouped and their Relational value-orientations investigated, it was found that pupils preferred Collaterality to

Individualism more often than did their teachers. For Collaterality over Lineality, the difference between the scores of teachers and of pupils was not statistically significant. The prediction, that pupils would not differ from their teachers in their preference for Individualism over Lineality, was not supported. On the contrary, it was observed that teachers showed a tendency to choose Individualism over Lineality more often than did their pupils. Thus pupils were more Collateral, more Lineal, but less Individualistic than their teachers.

Teachers' age and their Relational value-orientations. A small but statistically significant tendency was found for teachers' age to be inversely related to preferences for Collaterality over Lineality. But for Collaterality over Individualism and for Individualism over Lineality, there was no statistical significant relationship with teachers' age. Hypothesis 2 was formulated on the basis that with age teachers would be more traditional in their value-orientations, in that the younger the teacher the greater the preference for Collaterality over Individualism and Lineality. However, the findings indicate little relationship between teachers' age and their Relational value-orientations, other than the tendency of lower C - L scores to be associated with age.

Relational value-orientations and pupil involvement in the teenage culture. Hypothesis 3 predicted relationships between the values held by adolescents and the degree of their involvement in the adolescent sub-culture. Taking different aspects of the teenage activities -- sports watching, sports playing, school clubs and teenage

music -- it was found that the amount of time which pupils participated in these activities had no significant relationship with their Relational value-orientations. However, when the Relational value-orientations of participants and non-participants in the teenage culture were investigated, it was found that participants, in sports watching, showed a greater preference for Collaterality over Individualism than did the non-participants. Also for sports playing, participants had higher scores for Collaterality over Individualism, and Collaterality over Lineality, than non-participants. Thus, although the null hypothesis was generally supported, small but statistically significant differences were found between participants and non-participants in three instances.

Relational value-orientations congruence and teacher confidence in pupil. It was predicted that there would be an inverse relationship between teacher confidence in pupils and the gap between teacher-scores and pupil-scores on each of the Relational value-orientation scales. However, the findings indicated that there was no statistical support for this prediction. It was shown that the degree of confidence expressed by teachers in their pupils had no significant relationship with the difference between teacher-scores and pupil-scores on either of the Relational value-orientation scales. The findings seem to suggest that the measure of teacher confidence in pupils has no significant relationship with the congruence between their Relational value-orientations and those of their pupils.

Relational value-orientations and socioeconomic status. In order to investigate the idea that there might be a relationship between socioeconomic status and Relational value-orientations a null hypothesis was formulated and tested. The findings supported the hypothesis as none of the correlation coefficients was of statistical significance. The findings suggest that there is no apparent relationship between the Relational value-orientations of urban Newfoundland pupils and their socioeconomic status. One should bear in mind however the inadequacies of the Blishen Scale and the low reliabilities of the value-orientation scales.

Relational value-orientations and teachers' birthplace. Hypothesis 6 was designed to determine if there were a relationship between the Relational value-orientations of teachers with urban background and of teachers with rural background. The Relational value-orientations of teachers, born in St. John's, Corner Brook and Grand Falls, were examined as a group, as were the Relational value-orientations of teachers born elsewhere in Newfoundland. It was found, as hypothesized, that there was no significant difference between the Relational value-orientations of the two groups. Also, there was no significant difference between the Relational value-orientations of teachers born in St. John's and those of teachers born elsewhere in Newfoundland, excluding Corner Brook and Grand Falls. Similarly, it was found that the Relational value-orientations of teachers born outside of St. John's, and including teachers born in Corner Brook and Grand Falls, did not differ from those of teachers born in St. John's.

As all the findings supported the null hypothesis, it must be concluded that the present study provides no evidence to suggest that there is any basic difference in the Relational value-orientations of urban teachers born (and presumably raised) in urban areas from those of urban teachers born (and presumably raised) in rural areas.

Reliability

The reliability of the instrument was investigated in depth for two reasons (a) to see whether low reliability might underlie the scarcity of statistically significant relationships, and (b) to guide subsequent attempts to improve the questionnaire. To deal with this question of reliability a number of statistical operations were performed.

Stability coefficients. Thirty-two pupils and thirty teachers completed the questionnaire a second time, four months after the questionnaire was first administered to them. It was found that unlike those of the Kitchen¹ and Parry² studies, the stability coefficients of the present study were not reliable at the .001 level of confidence for pupils on the C - I and C - L scales nor for teachers on the C - I and I - L scales. However, for items other than value-orientations all the stability coefficients did reach the .001 level of significance.

¹ Hubert William Kitchen, "Relationships between the Value-Orientations of Grade Nine Pupils in Newfoundland and the Characteristics of their Primary and Secondary Groups," (Unpublished Ph.D. thesis, University of Alberta, Edmonton, 1966), pp. 178-184.

² Robert S. Parry, "The Relational Value-Orientations of Grade X Students and of Their Fathers," (Unpublished Master's thesis, University of Calgary, 1967), p. 40.

Coefficients of internal consistency. Using the data from thirty teachers and thirty pupils drawn randomly from the original returns, product-moment correlation coefficients were computed for each Relational value-orientation scale, between scores on the even-numbered items and those on the odd-numbered items. No consistent preference at the .001 level of confidence, except by teachers on the I - L scale, was shown by respondents for one value-orientation over another.

Item analysis. Using the thirty-two pupils and the thirty teachers of the test-retest, exact probabilities were computed for the twenty-four problematic situations on each of the Relational value-orientation scales (72 items). It was found that sixty-one items were reliable for teachers and forty-four items were reliable for pupils at the .05 level of probability. Certain items were identified as being statistically unreliable. Also, it was concluded that on the whole the items were more reliable for teachers than they were for pupils.

Analysis of the responses of Individuals. Exact probabilities were calculated for the number of items on which a particular teacher or pupil indicated the same preference on the retest as on the original test. Fifteen teachers and ten pupils attained reliability at the .05 level of confidence on all three scales. At the .01 level six teachers and three pupils reached reliability, and at the .001 level three teachers and two pupils attained reliability. It was also noted that at the .05 level of probability two pupils could not attain reliability on either of the three scales, seven pupils and five teachers could

attain reliability on only one scale, and thirteen pupils and ten teachers on two scales. Hence, it appears from the analysis of the individual responses that the instrument is unreliable for many respondents, especially pupil-respondents.

II. CONCLUSIONS

A major conclusion is that the twenty-four item instrument for measuring Relational value-orientations seems too unreliable for further use in different cultural environments. Most of the items need thorough revision.

Despite the unreliability of the Relational value-orientations instrument, several conclusions concerning the substance of the study are noteworthy. There seems to be little difference in Relational value-orientations among urban high school pupils in Newfoundland when classified either by socioeconomic status or by involvement in teenage culture. Neither do there seem to be noteworthy differences among teachers when classified by age or by rural-urban background. Pupil-teacher differences though sometimes statistically significant are not large. There seems to be no tendency for teachers to consider more ideal those pupils whose Relational value-orientations are more like their own. However, the subjects of the present study were all residents of two cities in Newfoundland and were undoubtedly more homogeneous in value-orientations than either pupils or teachers in the province as a whole, in different provinces, or in different social or ethnic groups.

III. RECOMMENDATIONS FOR RESEARCH

Several suggestions can be made concerning further research on Relational value-orientations.

1. Further studies should make comparisons in more heterogeneous situations. Since differences found by the present investigator, by Parry and by Kitchen, were not great, it does not seem fruitful to continue studying variations among pupils of the same culture in the same city. It might be more productive to carry out research into value-differences among provinces or ethnic groups, or to make comparisons between rural areas and large cities.
2. Research should be conducted into differences among adults, including students in various post-secondary institutions, rather than among high-school pupils. Part of the unreliability of the present study may be attributable to the lack of stability in the philosophies of life of adolescents.
3. The quest for an instrument suitable for the cross-cultural study of value-orientations should be continued. The items of the instrument should be so constructed that they have similar saliency and meaning to people in different physical, economic and social environments. For greater realism, it should be not just a written questionnaire nor a personal interview, but perhaps simultaneously oral and written and perhaps pictorial.

4. Other methods of scoring should perhaps be tried. In the present study and in the studies of Kitchen and Parry, an individual's score on the C - I scale, for example, consisted of the number of times out of twenty-four that he preferred Collaterality to Individualism, regardless of the position of Lineality. An alternative method would be to produce a Collaterality score, an Individualism score and a Lineality score. The Collaterality score, for example, would be the total number of times, out of twenty-four items, that Collaterality was ranked 1 as the more preferred of the three alternatives. Such scores, in that they ignore less salient choices, might prove more reliable than those produced by the present method.

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APPENDICES

APPENDIX A

MEMORIAL UNIVERSITY
ST. JOHN'S, NEWFOUNDLAND

TEACHER'S QUESTIONNAIRE

The following questionnaire forms part of a research project, which is being conducted by the Division of Graduate Studies, in Educational Administration, at Memorial University of Newfoundland. It is not necessary to sign your name. Please be assured that this questionnaire will be completely anonymous.

On the following pages twenty-four different situations are presented to you. Some of the situations you may have faced or may face in the future. Some you may think are never likely to occur. As the questionnaire has neither right nor wrong answers, please give your own carefully considered opinion. Look at the three alternatives offered and mark 1 in front of the alternative (A, B or C) which you believe is best for the situation mentioned. Then, mark 2 in front of the alternative you believe is second best.

1. In pioneer days when a community had to get water, there were different ways they could decide on where to put the well and on how the work could be done.

___A. The recognized leaders, usually from the important families make the plans. Everyone would accept what was said without much discussion since these leaders were the ones used to deciding things and the ones with most experience.

___B. Everyone could have a hand in making plans. There would be lots of talk, but nothing would be done until almost everybody was agreed.

___C. The different suggestions could be discussed and the matter could be settled by a show of hands, even though there was still a large minority group who disagreed with the decision.

2. A man gave up his usual job and became a farmer. When his first crop failed, things looked bad for him and his family.

___A. He could turn for help to his brothers and sisters or other relatives.

___B. He could go to someone he knew was used to managing things well and follow his advice.

___C. He could go on as he had started, on his own, independent, determined to succeed by his own efforts.

3. There are people on farms in all parts of the country. Sometimes families who are related live near each other.

___A. Each separate family (father, mother, children) should look after its own affairs.

___B. Each family should work with the others, making important decisions after discussion and agreement.

___C. Each family should work with the others, letting the family which had proved most successful give advice and give direction to their efforts.

4. A group in your area may be getting ready to send someone to city council to lay a petition before them. How should this person be chosen?

___A. A meeting should be called and everybody should discuss things until almost everybody is agreed on the same person.

___B. At a meeting there should be nominations made for the job and then a decision arrived at by voting.

___C. The oldest persons present should take the main responsibility for deciding who shall represent the area since they are the ones who have most experience in such matters.

5. A man is at the start of his career and is considering ways in which he might choose to work for the rest of his working lifetime.
- ___A. Working on his own and being his own boss. Whatever he does is by his own decisions and he gets ahead through his own efforts.
 - ___B. Working for an employer, who makes most of the decisions and who has the main responsibility.
 - ___C. Working with a group of people who make most decisions together and where everyone's efforts help the group to succeed.
6. Some brother and sisters had been left a business by a near relative. It had been well-run and was profitable. What should happen?
- ___A. The business should be sold and the money shared out for each brother and sister to make use of as he or she wished.
 - ___B. All of them should arrange to run the business as a group for mutual profit and benefit.
 - ___C. The most able one should take charge, run the business and share the profits evenly among the brothers and sisters.
7. A young man has decided to make his living at fishing and the following opportunities are open to him.
- ___A. He can start up his own fishing operation and work at it, as he likes, to make it a success.
 - ___B. He can organize a group with friends who are interested in commercial fishing, and they can all work together to build up a successful operation with members agreeing on how things should be run.
 - ___C. He can get steady employment and regular wages with a large, successful fishing company.
8. During one weekend there were certain things a high school student had a choice of doing.
- ___A. He could go with his friends, who are all members of the same youth organization, on a two-day trip.
 - ___B. He could go with his parents to visit his grandmother for a very special birthday celebration.
 - ___C. He could stay at home to work on his favorite hobby because he had some new ideas he wanted to work on and he might not get such a good chance again for some time.

9. A young woman was thinking over different kinds of work situations.
- ___ A. A job which is interesting but where decisions are left to others most of the time and one need only carry out orders to the best of one's ability.
 - ___ B. A job which gives the opportunity of cooperating in interesting work with a group of people who make decisions together.
 - ___ C. A job which offers the opportunity for advancement to a responsible, interesting position, but which involves many problems and the worry of making many decisions.
10. A high school student could think of the advantages of going to university.
- ___ A. He could think of it as a chance to prepare himself for a good job.
 - ___ B. He could think of it as a chance to benefit from instruction.
 - ___ C. He could think of it as a fine chance to meet other people.
11. A youth group had been given a large sum of money.
- ___ A. The group could talk over a number of suggestions and keep on discussing until they are nearly all agreed on which suggestion is best.
 - ___ B. The group could let the usual leaders decide what to do with the money, since they are responsible for the way the group is run.
 - ___ C. The group could discuss what to do with the money and could vote on several suggestions, even though the final decision might not be acceptable to some members.
12. Here are three ways of raising money for an important community project that everyone agrees is necessary and important.
- ___ A. The people could all meet together and all agree on a way to raise money, perhaps have a social or something.
 - ___ B. The community leaders could get together and figure out a way to raise money, perhaps have a social or something.
 - ___ C. Each family might be held responsible for paying its own fair share.

13. In beginning a hobby or leisure activity, a person could have different ideas of what was best.

- ___A. A person could take part with someone who knew about such things and learn about the hobby from him.
- ___B. A person could get together with others and take up a common interest.
- ___C. A person could take up a hobby or activity in which success depended on his own efforts.

14. Someone was thinking about hanging a picture.

- ___A. The person should rely largely on advice received from someone who knew about such matters.
- ___B. The person should rely on his own careful thinking in this matter.
- ___C. The person should rely on the advice of a number of people and try to suit as many as possible.

15. A party far away in the mountains for a day's skiing hear on a transistor radio carried by one of them, a warning of a serious snow storm approaching. What shall they do?

- ___A. Discuss the matter and agree on a common plan of action.
- ___B. Discuss the matter and follow the plan suggested by the most experienced person in the party.
- ___C. Discuss the matter and allow each person to decide for himself to follow the plan of action he thinks best.

16. Three religious persons were discussing their ideas of right and wrong.

- ___A. One said: "What the minister says is the best guide".
- ___B. One said: "The individual will find the best guide in his own conscience".
- ___C. One said: "The best guide is to be found among the opinions of other church members".

17. In your opinion, the best chance of rising in the world is through:

- ___A. Working hard and depending on yourself.
- ___B. Working hard and getting along well with equals.
- ___C. Working hard and pleasing the boss.

18. Discussing plans to raise money for a worthy cause, three high school students were putting forward their ideas.

- ___A. One thought that each homeroom should be left to decide for itself its own project.
- ___B. One thought that one representative should be sent from each homeroom to help develop ideas.
- ___C. One thought that the matter should be left in the hands of students' council to come up with a plan.

19. A teenager is leaving high school to start working for a living and there are several promising job opportunities, but he can't make up his mind.

- ___A. It would be best to ask for and follow the advice of an experienced person.
- ___B. It would be best to discuss things with close friends and get their ideas.
- ___C. It would be best to decide for himself which job to take, while being willing to quit if things don't work out.

20. A man was thinking about various ways in which the world could be run.

- ___A. Each country could run its own affairs.
- ___B. Each country could join a world organization where things were decided only when nearly every country was agreed.
- ___C. Each country could seek help where it could, even if that meant giving up some independence.

21. A young man, beginning his career, took on a job which meant he had to leave his home town and go to live in a town some distance away. There were three possible approaches to the problem of deciding where he would stay.

- ___A. He should move in with young men of the same age group.
- ___B. He should take the chance to live with an uncle and aunt whom he liked.
- ___C. He should live by himself where he could have most time and opportunity to work for his own advancement.

22. When one is a teenager and is wondering about ways of behaving, probably the best way to learn is:

- ___A. By learning from grown-ups and from those who are a little bit older how they behave.
- ___B. By learning in the company of other young people of equal age how they behave.
- ___C. By learning from your own experiences as you try out various ways of behaving.

23. Three young children were planning a party.

- ___A. One said "Let's plan this one on our own".
- ___B. One said "Let's each do something different".
- ___C. One said "Let's ask mother what to do. She helped us last time".

24. Given a free choice on how to acquire more knowledge, how would you place these?

- ___A. Step by step instruction with careful supervision and help.
- ___B. Some instruction and help, plus dependence on your own efforts.
- ___C. Some instruction and help, plus dependence on working with your equals.

The following personal questions are asked for statistical purposes only.

A. 1. Your Place of Birth: Please mark with X.

St. John's	<input type="checkbox"/>	Elsewhere in Newfoundland	<input type="checkbox"/>
Corner Brook	<input type="checkbox"/>	Outside of Newfoundland	<input type="checkbox"/>
Grand Falls	<input type="checkbox"/>	If outside of Newfoundland please specify	

2. Your Age: - Please mark the appropriate block with X.

Under 20	<input type="checkbox"/>	41 - 45	<input type="checkbox"/>
20 - 25	<input type="checkbox"/>	46 - 50	<input type="checkbox"/>
26 - 30	<input type="checkbox"/>	51 - 55	<input type="checkbox"/>
31 - 35	<input type="checkbox"/>	56 - 60	<input type="checkbox"/>
36 - 40	<input type="checkbox"/>	61 - 65	<input type="checkbox"/>

3. Male ☐ Female ☐ (Mark with X whichever one applies to you)

B. Consider your pupils _____ and _____
(A) (B)

1. Mark X anywhere on the line to sum up your assessment of A as a pupil.

←-----→
An ideal pupil About as far from the ideal as is possible to get

2. Mark X anywhere on the line below to sum up your assessment of B as a pupil.

←-----→
An ideal pupil About as far from the ideal as is possible to get

APPENDIX B

MEMORIAL UNIVERSITY
ST. JOHN'S, NEWFOUNDLAND

PUPIL'S QUESTIONNAIRE

The following questionnaire forms part of a research project, which is being conducted by the Division of Graduate Studies in Educational Administration at Memorial University of Newfoundland.

On the following pages twenty-four different situations are presented to you. Some of the situations you may have faced or may face in the future. Some you may think are never likely to occur. As the questionnaire has neither right nor wrong answers, please give your own carefully considered opinion. Look at the three alternatives offered and mark 1 in front of the alternative (A, B or C), which you believe is best for the situation mentioned. Then, mark 2 in front of the alternative you believe is second best.

1. In pioneer days when a community had to get water, there were different ways they could decide on where to put the well and on how the work could be done.

___A. The recognized leaders, usually from the important families make the plans. Everyone would accept what was said without much discussion since these leaders were the ones used to deciding things and the ones with most experience.

___B. Everyone could have a hand in making plans. There would be lots of talk, but nothing would be done until almost everybody was agreed.

___C. The different suggestions could be discussed and the matter could be settled by a show of hands, even though there was still a large minority group who disagreed with the decision.

2. A man gave up his usual job and became a farmer. When his first crop failed, things looked bad for him and his family.

___A. He could turn for help to his brothers and sisters or other relatives.

___B. He could go to someone he knew was used to managing things well and follow his advice.

___C. He could go on as he had started, on his own, independent, determined to succeed by his own efforts.

3. There are people on farms in all parts of the country. Sometimes families who are related live near each other.

___A. Each separate family (father, mother, children) should look after its own affairs.

___B. Each family should work with the others, making important decisions after discussion and agreement.

___C. Each family should work with the others, letting the family which had proved most successful give advice and give direction to their efforts.

4. A group in your area may be getting ready to send someone to city council to lay a petition before them. How should this person be chosen?

___A. A meeting should be called and everybody should discuss things until almost everybody is agreed on the same person.

___B. At a meeting there should be nominations made for the job and then a decision arrived at by voting.

___C. The oldest persons present should take the main responsibility for deciding who shall represent the area since they are the ones who have most experience in such matters.

5. A man is at the start of his career and is considering ways in which he might choose to work for the rest of his working lifetime.

___ A. Working on his own and being his own boss. Whatever he does is by his own decisions and he gets ahead through his own efforts.

___ B. Working for an employer, who makes most of the decisions and who has the main responsibility.

___ C. Working with a group of people who make most decisions together and where everyone's efforts help the group to succeed.

6. Some brothers and sisters had been left a business by a near relative. It had been well-run and was profitable. What should happen?

___ A. The business should be sold and the money shared out for each brother and sister to make use of as he or she wished.

___ B. All of them should arrange to run the business as a group for mutual profit and benefit.

___ C. The most able one should take charge, run the business and share the profits evenly among the brothers and sisters.

7. A young man has decided to make his living at fishing and the following opportunities are open to him.

___ A. He can start up his own fishing operation and work at it, as he likes, to make it a success.

___ B. He can organize a group with friends who are interested in commercial fishing, and they can all work together to build up a successful operation with members agreeing on how things should be run.

___ C. He can get steady employment and regular wages with a large, successful fishing company.

8. During one weekend there were certain things a high school student had a choice of doing.

___ A. He could go with his friends, who are all members of the same youth organization, on a two-day trip.

___ B. He could go with his parents to visit his grandmother for a very special birthday celebration.

___ C. He could stay at home to work on his favorite hobby because he had some new ideas he wanted to work on and he might not get such a good chance again for some time.

9. A young woman was thinking over different kinds of work situations.
- ___A. A job which is interesting but where decisions are left to others most of the time and one need only carry out orders to the best of one's ability.
 - ___B. A job which gives the opportunity of cooperating in interesting work with a group of people who make decisions together.
 - ___C. A job which offers the opportunity for advancement to a responsible, interesting position, but which involves many problems and the worry of making many decisions.
10. A high school student could think of the advantages of going to university.
- ___A. He could think of it as a chance to prepare himself for a good job.
 - ___B. He could think of it as a chance to benefit from instruction.
 - ___C. He could think of it as a fine chance to meet other people.
11. A youth group had been given a large sum of money.
- ___A. The group could talk over a number of suggestions and keep on discussing until they are nearly all agreed on which suggestion is best.
 - ___B. The group could let the usual leaders decide what to do with the money, since they are responsible for the way the group is run.
 - ___C. The group could discuss what to do with the money and could vote on several suggestions, even though the final decision might not be acceptable to some members.
12. Here are three ways of raising money for an important community project that everyone agrees is necessary and important.
- ___A. The people could all meet together and all agree on a way to raise money, perhaps have a social or something.
 - ___B. The community leaders could get together and figure out a way to raise money, perhaps have a social or something.
 - ___C. Each family might be held responsible for paying its own fair share.

13. In beginning a hobby or leisure activity, a person could have different ideas of what was best.

- ___A. A person could take part with someone who knew about such things and learn about the hobby from him.
- ___B. A person could get together with others and take up a common interest.
- ___C. A person could take up a hobby or activity in which success depended on his own efforts.

14. Someone was thinking about hanging a picture.

- ___A. The person should rely largely on advice received from someone who knew about such matters.
- ___B. The person should rely on his own careful thinking in this matter.
- ___C. The person should rely on the advice of a number of people and try to suit as many as possible.

15. A party far away in the mountains for a day's skiing hear on a transistor radio carried by one of them, a warning of a serious snow storm approaching. What shall they do?

- ___A. Discuss the matter and agree on a common plan of action.
- ___B. Discuss the matter and follow the plan suggested by the most experienced person in the party.
- ___C. Discuss the matter and allow each person to decide for himself to follow the plan of action he thinks best.

16. Three religious persons were discussing their ideas of right and wrong.

- ___A. One said: "What the minister says is the best guide".
- ___B. One said: "The individual will find the best guide in his own conscience".
- ___C. One said: "The best guide is to be found among the opinions of other church members".

17. In your opinion, the best chance of rising in the world is through:

___ A. Working hard and depending on yourself.

___ B. Working hard and getting along well with equals.

___ C. Working hard and pleasing the boss.

18. Discussing plans to raise money for a worthy cause, three high school students were putting forward their ideas.

___ A. One thought that each homeroom should be left to decide for itself its own project.

___ B. One thought that one representative should be sent from each homeroom to help develop ideas.

___ C. One thought that the matter should be left in the hands of students' council to come up with a plan.

19. A teenager is leaving high school to start working for a living and there are several promising job opportunities, but he can't make up his mind.

___ A. It would be best to ask for and follow the advice of an experienced person.

___ B. It would be best to discuss things with close friends and get their ideas.

___ C. It would be best to decide for himself which job to take, while being willing to quit if things don't work out.

20. A man was thinking about various ways in which the world could be run.

___ A. Each country could run its own affairs.

___ B. Each country could join a world organization where things were decided only when nearly every country was agreed.

___ C. Each country could seek help where it could, even if that meant giving up some independence.

21. A young man, beginning his career, took on a job which meant he had to leave his home town and go to live in a town some distance away. There were three possible approaches to the problem of deciding where he would stay.

___ A. He should move in with young men of the same age group.

___ B. He should take the chance to live with an uncle and aunt whom he liked.

___ C. He should live by himself where he could have most time and opportunity to work for his own advancement.

22. When one is a teenager and is wondering about ways of behaving, probably the best way to learn is:

___ A. By learning from grown-ups and from those who are a little bit older how they behave.

___ B. By learning in the company of other young people of equal age how they behave.

___ C. By learning from your own experiences as you try out various ways of behaving.

23. Three young children were planning a party.

___ A. One said "Let's plan this one on our own".

___ B. One said "Let's each do something different".

___ C. One said "Let's ask mother what to do. She helped us last time".

24. Given a free choice on how to acquire more knowledge, how would you place these?

___ A. Step by step instruction with careful supervision and help.

___ B. Some instruction and help, plus dependence on your own efforts.

___ C. Some instruction and help, plus dependence on working with your equals.

10	11	12	13	14	15	16	17	18	19	20
21	22									

Please give the usual occupation of your father or guardian. (Please be specific. For example, a man may work as a sailor and may be a captain, an engineer, or a cook on a boat. Thus the term sailor would not be sufficient.) Use the following space to describe your father's or guardian's occupation.

1.	a. SCHOOL SPORTS - Watching (hours)	0	1	2	3	4	5	6	7
		8	9	10	11	12	13	14	15
	b. SCHOOL SPORTS - Playing (hours)	0	1	2	3	4	5	6	7
		8	9	10	11	12	13	14	15
	c. SCHOOL CLUBS - Not Sports (hours)	0	1	2	3	4	5	6	7
		8	9	10	11	12	13	14	15

0 11 2 3 4 5 6 7 8 9 10 15 20 25

2. My present school grade is VIII IX X XI

3. Male _____ Female _____ (Mark with X whichever one applies to you.)

APPENDIX C

METHOD OF TRANSFERRING INFORMATION FROM
QUESTIONNAIRES TO COMPUTER PROGRAMME

I. PROCEDURE

For statistical purposes, it was necessary to identify the participating schools, teachers and pupils. The identification was made by arranging the schools, by name, in alphabetical order. Then a questionnaire of a homeroom teacher from the first school on the alphabetical list was numbered 0010. A second Teacher's Questionnaire from the same school was numbered 0020. Thus, the numbering of the teachers' questionnaires was continued consecutively, following the alphabetical list of schools until the last Teacher's Questionnaire (the two-hundred and ninety-second) was included, and was numbered 2920.

The questionnaires of the participating pupils were numbered to correspond with the numbers on the questionnaires of their homeroom teachers. For example, the two Pupil's Questionnaire, for Teacher's Questionnaire number 0010, were numbered 0011 and 0012. Likewise, the two Pupil's Questionnaire for Teacher's Questionnaire number 2920 were numbered 2921 and 2922.

An Intermediate Sheet (Appendix C. III) was prepared for each respondent, which bore the same number as that on the respondent's questionnaire. The first, second and third choices of each respondent

to the twenty-four problematic situations for the Relational value-orientation scales, were entered in the appropriate spaces (Section A), of the intermediate sheet. Counts were made of the number of times each respondent chose Collaterality over Individualism (the C - I score), of Collaterality over Lineality (the C - L score), and of Individualism over Lineality (the I - L score). These counts were also placed on the intermediate sheet as was the information which was given by each respondent on page eight of the questionnaire. All data was transferred to Section B of the intermediate sheet according to Directions for Coding Data (Appendix C.II). The IBM cards were punched from Section B of the intermediate sheet.

II. DIRECTIONS FOR CODING DATA

<u>Column Number</u>	<u>Information Contained Therein</u>
6 - 7	C - I score with tens in column 6 and units in column 7. Unanswered and spoiled in hole A of IBM card.
8 - 9	C - L score with tens in column 8 and units in column 9. Unanswered and spoiled in hole A of the IBM card.
10 - 11	I - L score with tens in column 10 and units in column 11. Unanswered and spoiled in hole A of IBM card.
12	Teacher's age --
	hole 0 under 20 years
	hole 1 20 -- 25 years
	hole 2 26 -- 30 years
	hole 3 31 -- 35 years
	hole 4 36 -- 40 years
	hole 5 41 -- 45 years
	hole 6 46 -- 50 years
	hole 7 51 -- 55 years
	hole 8 56 -- 60 years
	hole 9 61 -- 65 years
	hole A unanswered or spoiled

<u>Column Number</u>	<u>Information Contained Therein</u>
13 - 14	School sports (watching) -- tens in column 13, units in column 14. Unanswered and spoiled in hole A of IBM card.
15 - 16	School sports (playing) -- tens in column 15, units in column 16. Unanswered and spoiled in hole A of IBM card.
17 - 18	School clubs -- tens in column 17, units in column 18. Unanswered and spoiled in hole A of IBM card.
19 - 20	Teenage music -- tens in column 19, units in column 20. Unanswered and spoiled in hole A of IBM card.
21 - 22	Total -- sports (watching and playing), school clubs and teenage music. Tens in column 21, units in column 22. Unanswered and spoiled in hole A of IBM card.
23 - 24	Teacher's confidence in pupil A -- units in column 23, tenths in column 24. Unanswered and spoiled in hole A of IBM card.
25 - 26	Gap between teacher's C - I and pupil A's C - I scores -- tens in column 25, units in column 26. Unanswered and spoiled in hole A of IBM card.
27 - 28	Gap between teacher's C - L and pupil A's C - L scores -- tens in column 27, units in column 28. Unanswered and spoiled in hole A of IBM card.
29 - 30	Gap between teacher's I - L and pupil A's I - L scores -- tens in column 29, units in column 30. Unanswered and spoiled in hole A of IBM card.
31 - 32	Teacher's confidence in pupil B -- units in column 31, tenths in column 32. Unanswered and spoiled in hole A of IBM card.
33 - 34	Gap between teacher's C - I and pupil B's C - I scores -- tens in column 33, units in column 34. Unanswered and spoiled in hole A of IBM card.

<u>Column Number</u>	<u>Information Contained Therein</u>
35 - 36	Gap between teacher's C - L and pupil B's C - L scores -- tens in column 35, units in column 36. Unanswered and spoiled in hole A of IBM card.
37 - 38	Gap between teacher's I - L and pupil B's I - L scores -- tens in column 37, units in column 38. Unanswered and spoiled in hole A of IBM card.
39 - 41	Occupations of father or guardian classified according to the Blishen Scale -- tens in column 39, units in column 40 and tenths in column 41. Unanswered and spoiled in hole A of IBM card.
42	Teacher's birthplace (Method A) -- hole <u>one</u> city (St. John's, Corner Brook, Grand Falls) hole <u>two</u> elsewhere in Newfoundland hole <u>three</u> foreign hole <u>A</u> unanswered or spoiled.
43	Teacher's birthplace (Method B) -- hole <u>one</u> St. John's hole <u>two</u> elsewhere in Newfoundland hole <u>three</u> foreign hole <u>A</u> unanswered or spoiled.
44 - 45	Pupil's age -- tens in column 44, units in column 45. Unanswered and spoiled in hole A of IBM card.
46	Pupil's grade -- hole <u>one</u> grade 8 hole <u>two</u> grade 9 hole <u>three</u> grade 10 hole <u>four</u> grade 11 hole <u>A</u> unanswered or spoiled.
47	Sex -- hole <u>one</u> male hole <u>two</u> female hole <u>A</u> unanswered or spoiled.

III. FACSIMILE OF TEACHER'S INTERMEDIATE SHEET

Section A

1	L	1	C	2	I	3
2	C	1	L	3	I	2
3	I	3	C	1	L	2
4	C	2	I	1	L	3
5	I	1	L	2	C	3
6	I	3	C	2	L	1
7	I	3	C	2	L	1
8	C	2	L	3	I	1
9	L	2	C	1	I	3
10	I	1	L	2	C	3
11	C	2	L	3	I	1
12	C	1	L	2	I	3
13	L	3	C	2	I	1
14	L	2	I	1	C	3
15	C	1	L	3	I	2
16	L	2	I	1	C	3
17	I	1	C	3	L	2
18	I	1	C	2	L	3
19	L	2	C	3	I	1
20	I	3	C	1	L	2
21	C	1	L	2	I	3
22	L	2	C	3	I	1
23	C	1	I	3	L	2
24	L	3	I	1	C	2

No 0020C - I 11C - L 14I - L 15

Section B

1	2	3	4	5	6	7	8	9	10
					1	1	1	4	1
11	12	13	14	15	16	17	18	19	20
5	1								
21	22	23	24	25	26	27	28	29	30
		5	0	0	2	0	6	0	1
31	32	33	34	35	36	37	38	39	40
1	6	0	5	0	1	0	4		
41	42	43	44	45	46	47	48	49	50
	2	2				1			
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
						0	0	2	0

III. FACSIMILE OF PUPIL'S INTERMEDIATE SHEET

Section A

No 0021

1	L	3	C	2	I	1
2	C	3	L	2	I	1
3	I	3	C	1	L	2
4	C	3	I	1	L	2
5	I	2	L	3	C	1
6	I	2	C	1	L	3
7	I	3	C	1	L	2
8	C	2	L	3	I	1
9	L	2	C	1	I	3
10	I	1	L	2	C	3
11	C	2	L	3	I	1
12	C	2	L	1	I	3
13	L	3	C	2	I	1
14	L	3	I	2	C	1
15	C	1	L	3	I	2
16	L	3	I	1	C	2
17	I	1	C	2	L	3
18	I	3	C	1	L	2
19	L	2	C	1	I	3
20	I	3	C	1	L	2
21	C	1	L	3	I	2
22	L	3	C	2	I	1
23	C	1	I	3	L	2
24	L	3	I	1	C	2

C - I 13C - L 20I - L 16

Section B

1	2	3	4	5	6	7	8	9	10
					1	3	2	0	1
11	12	13	14	15	16	17	18	19	20
6		0	1	0	2	0	0	0	8
21	22	23	24	25	26	27	28	29	30
1	1								
31	32	33	34	35	36	37	38	39	40
								6	0
41	42	43	44	45	46	47	48	49	50
1			1	4	1	2			
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
						0	0	2	1

APPENDIX D

COPY OF LETTER SENT TO TEACHERS

Memorial University
of Newfoundland
St. John's
June, 1967

Dear Teacher,

I wish to take this opportunity to thank you for the assistance and co-operation, which I received during my recent visit to your school, when I administered a questionnaire to pupils from your class.


Perhaps I should mention, for those with whom I am not yet acquainted, that I have taught for several years in elementary and high schools in various parts of Newfoundland. From 1955 to 1966, I was teaching on Bell Island. During the academic year 1966-67, I have been attending Memorial University and am studying the programme in Educational Administration for the Master of Education degree. As a partial requirement for this degree, I must prepare a thesis. My thesis proposal is based on a questionnaire, which involves a number of pupils from grades VIII, IX, X and XI from the schools of St. John's and Corner Brook and the homeroom teachers of these pupils.

I shall be grateful if you will kindly accept the enclosed questionnaire, and at your earliest convenience (it will take about one-half hour of your time) attend to the request which is given on the front page of the questionnaire. Please note that on its back page I am asking some personal questions, for statistical purposes only, as well as a rating on the two pupils which were selected randomly from your class. When you have completed the questionnaire please place it in the envelope and seal it, then give it to your principal or vice-principal.

As the completion of the requirements, for my Master of Education degree, depends entirely on my obtaining the information which is solicited by this questionnaire, I believe that I shall receive your utmost co-operation and help with it. And in anticipation may I express my gratitude to you and to wish you and your pupils a most successful year.

Yours sincerely,

Lester Clarke



APPENDIX E

LETTER OF PERMISSION FROM THE ROMAN CATHOLIC
BOARD OF EDUCATION FOR ST. JOHN'S

Office

Holy Heart of Mary Regional High School

Bonaventure Avenue

St. John's, Newfoundland

TO WHOM IT MAY CONCERN:

This will introduce Mr. Lester Clarke who is preparing a thesis for a Master of Education Degree at Memorial University of Newfoundland.

Mr. Clarke has due permission from the school board to interview teachers and pupils from grade VIII to grade XI in schools under the board's jurisdiction in order to obtain material for his thesis.

Mr. Clarke is deserving of every kindness and consideration and any courtesy shown him will be deeply appreciated by the undersigned.

Daniel P. Morrissey

Secretary-Treasurer.

April 26, 1967

APPENDIX F

THE SCHOOLS AND THEIR PRINCIPALS, SHOWING THE NUMBER OF TEACHERS AND PUPILS WHO PARTICIPATED IN THE STUDY

School	Principal	Number of Home-rooms by Grades				Total Pupils	Number of Homeroom Teachers
		VIII	IX	X	XI		
<u>St. John's</u>							
Bishop Abraham	Mr. W. Hamilton	4	4	-	-	16	8
Bishops College	Mr. C. Grant	-	-	9	7	32	16
Bishop Feild	Mr. R. Pepper	2	1	-	-	6	3
Bishop Spencer	Mrs. H. Cramm	2	1	-	-	6	3
Booth Memorial	Mr. G. Compton	-	2	3	3	16	8
Brother Rice	Rev. Br. Bellows	-	7	7	6	40	20
Dawson	Mr. E. Cluett	1	-	-	-	2	1
Gonzaga	Rev. Fr. McKenna	-	6	7	4	34	17
Holy Cross	Rev. Br. Brennan	3	3	3	2	22	11
Holy Heart of Mary	Rev. Sister Nano		16	14	12	84	42
Macpherson	Mr. C. Andrew	5	5	-	-	20	10
Mary Queen of Peace	Rev. Sister Thomasine	2	-	-	-	4	2
Mary Queen of the World	Rev. Sister Jean Marie	1	-	-	-	2	1
Mercy Convent	Rev. Sister Josephine	4	-	-	-	8	4
Morris Academy (Mount Pearl)	Mr. R. Clarke	2	2	-	-	8	4
Mount Cashel	Rev. Br. Slattery	1	-	-	-	2	1
Our Lady of Lourdes	Rev. Sister Mary Pia	1	-	-	-	2	1
Presentation Convent	Rev. Sister Teresita	4	-	-	-	8	4
Prince of Wales Collegiate	Mr. B. March	-	-	11	10	42	21
St. Augustine's	Rev. Sister Mary Paschal	1	-	-	-	2	1
St. Bonaventure's	Rev. Br. McHugh	3	-	-	-	6	3

School	Principal	Number of Home-rooms by Grades				Total Pupils	Number of Homeroom Teachers
		VIII	IX	X	XI		
<u>St. John's</u>							
St. John Bosco	Rev. Sister Pauline	1	-	-	-	2	1
St. Joseph's (East)	Rev. Sister Mary Benedict	2	-	-	-	4	2
St. Joseph's (West)	Rev. Sister M. Damien	1	-	-	-	2	1
St. Patrick's Convent	Rev. Sister Luke	3	-	-	-	6	3
St. Patrick's Hall	Rev. Br. French	5	-	-	-	10	5
St. Theresa's	Rev. Sister Josepha	3	-	-	-	6	3
Samson Memorial	Mr. M. George	4	4	-	-	16	8
United Junior High	Mr. C. Button	5	5	-	-	20	10
<u>Corner Brook</u>							
Anglican Memorial (Curling)	Mr. W. Tibbo	2	-	-	-	4	2
G. A. Mercer	Mr. G. Pike	2	13	-	-	30	15
Herdman Collegiate	Mr. W. C. Robbins	-	-	11	8	38	19
Presentation	Rev. Sister M. Gertrude	3	3	3	3	24	12
Regina	Rev. Br. MacKenzie	4	4	3	3	28	14
Sacred Heart	Rev. Sister Francesca	4	-	-	-	8	4
Salvation Army (Humbermouth)	Mr. C. White	1	-	-	-	2	1
S. D. Cook	Mr. S. Legrow	5	-	-	-	10	5
St. Matthew's	Mr. J. Bungay	1	-	-	-	2	1
St. Mark's	Mr. R. Neil	1	-	-	-	2	1
St. Michael's	Mr. N. Simms	1	-	-	-	2	1
United Church (Humbermouth)	Mr. E. Vincent	1	-	-	-	2	1
United Church (Humbermouth)	Mr. D. Feltham	1	-	-	-	2	1
United Church (Curling)	Mr. H. Moore	1	-	-	-	2	1
Totals		87	76	71	58	584	292



