

PERSONAL-SOCIAL ADJUSTMENT AND SOCIAL PARTICIPATION
OF TRANSPORTED AND NON-TRANSPORTED STUDENTS

CENTRE FOR NEWFOUNDLAND STUDIES

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PERSONAL-SOCIAL ADJUSTMENT AND SOCIAL
PARTICIPATION OF TRANSPORTED AND
NON-TRANSPORTED STUDENTS

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ABSTRACT

PERSONAL-SOCIAL ADJUSTMENT AND SOCIAL PARTICIPATION OF TRANSPORTED AND NON-TRANSPORTED STUDENTS

BY

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In 1954, the first central high school was opened in the Province of Newfoundland and Labrador. At that time, the extra-curricular activities programmes were cited as one of the major advantages of the new educational system. The purpose of the present study was to compare the transported and non-transported students in grades seven and eight attending central high schools with respect to personal-social adjustment and social participation. This led to the formation of the following research questions:

1. Is there any relationship between the personal-social adjustment scores and student participation in extra-curricular activities?

2. What is the pattern of selection and rejection of transported and non-transported students by their classmates?

3. What is the pattern of participation of transported and non-transported students in extra-curricular activities?

The sample consisted of one hundred and fourteen transported and two hundred and twelve non-transported students registered in grades seven and eight attending three central

high schools in the Province of Newfoundland and Labrador. All data was collected during April, 1972.

There were five instruments used to collect the data for the study. All teachers in the three schools completed the teacher rating scale dealing with the advantages of the central high school; the homeroom teachers of the classes surveyed rated individual students on behavioral practices and the students completed a three part semantic differential, a two part sociometric scale and a social participation questionnaire.

The data, statistically treated by a computer programme, yielded the means, median, standard deviation, F ratio, frequency distribution, correlations and Fisher z for the two groups of students included in the study.

The analysis of the data from the research resulted in the following findings. The teachers ranked the advantages of the central school associated directly with their working conditions in the first three positions and those regarded as being on the periphery of their jurisdiction were awarded lower rankings. In particular, lower rankings were given to extra-curricular activities programmes by the teachers.

By substantial margins, the non-transported students participated in more extra-curricular activities, received higher teacher ratings and scored slightly higher on the semantic differentials measuring the attitude towards school

and classmates than the transported students. However, by a slight margin, the latter had a higher average score than the former on the semantic differential measuring attitude toward self.

Both the transported and non-transported students selected more people from their own group on the sociometric scale. However, whereas the former rejected more members from their own set, the latter tended to reject students according to their proportional representation in the school or grade.

The social participation pattern of the transported students did not correlate significantly with any other variable, and, the non-transported students indicated a significant relationship only with the Semantic Differential (Self) and Teacher Rating.

The recommendations for the school officials included an evaluation of and possible restructuring of the programming of the central school; orientation programmes; change in scheduling; better liason with the feeder communities; hiring of special personnel; increased social activities in the elementary schools and more integrated teaching methods.

Recommendations were also made regarding follow up and extensions of this study so that particular aspects of the central high school could be given detailed examination. In particular, such factors as the composition and relationship

of school and community organizations; the reasons for choice selection and rejection; the effects on bursary students; the importance of the size of the school and the attitude of parents, teachers and students towards the central high school, should be studied.

ACKNOWLEDGEMENTS

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CHAPTER I

I. THE PURPOSE OF THE STUDY

The purpose of this study is to compare transported and non-transported students in grades seven and eight attending central high schools in Newfoundland with respect to personal-social adjustment, teacher ratings and participation in extra-curricular activities.

II. HISTORICAL BACKGROUND OF THE CENTRAL HIGH SCHOOL

Although the first central high school did not open at Foxtrap until 1954, the idea was conceived some ten years earlier. It resulted from a survey conducted by G. A. Frecker, the then Secretary of Education for the Commission of Government, in 1946 and 1947.¹

The Effects of Compulsory Education.

In 1943, the Commission of Government passed legislation making it compulsory for children between the ages of seven and fourteen to attend school. The increase in attendance caused such overcrowding that the Government had to provide extra facilities. At the Department of Education,

¹See summary of report in next chapter.

officials held discussions to determine the most advantageous system to cope with the overcrowded school situation. Consequently, the Secretary was appointed as a one man commission to investigate the various alternatives. The terms of reference for the study were an investigation

into the position regarding Regional High Schools in Canada, the United States, the United Kingdom and Scandinavia, as well as the general question of providing a more practical form of education for those who are not preparing to enter the professions.²

Recommendation from Study by Frecker.

During 1946 and 1947, Frecker visited the nine Canadian Provinces and six states of the United States of America. He interviewed personnel involved in the various aspects of education, especially those related to the centralization of schools.

In his report, submitted to the Commission of Government, Frecker recommended that a system of central high schools be established in Newfoundland. The principles underlying this programme would specify that

The schools be organized within the denominational structure but with all students in the area attending; a system of dormitories or bus transportation be set up: a more diversified programme involving university preparation courses and related to the primary resources

²G. A. Frecker, "Interim Report on Survey of Regional High Schools", Report to the Commissioner of Home Affairs and Education. Central Registry Files, 1948, Department of Education, St. John's, p. 1.

of the island be introduced.³

The two immediate problems envisaged by Frecker⁴ centred around the cost of implementation plus maintenance and the shortage of teachers. During the next two years, the Government deferred the plans because of the events surrounding the entry of Newfoundland into Confederation.

First Central High School Opened.

Although several inquiries were made between 1948 and 1951, no definite action occurred until 1953. In that year Fred Kirby,⁵ a Superintendent, submitted a proposal to build a central high school at Foxtrap for the students residing on the south side of Conception Bay.

On May 8, 1953, at the request of the Minister of Education, the superintendents submitted a detailed memorandum entitled "Policy Relating to the Establishment of Regional High Schools".⁶ The memorandum outlined procedures regarding the minimum number of students, the administration, the

³*Ibid.*, pp. 15-16.

⁴*Ibid.*, pp. 17-18.

⁵F. W. Kirby, "Memorandum Re Regional High School in Topsail-Seal Cove Area", Central Registry, Department of Education, St. John's, File 77/27, Vol. I.

⁶Memorandum to the Minister of Education, April 4, 1953, (in the Central Registry, Department of Education, St. John's) File 77/27, Vol. I.

transportation policies, the cost of construction, and the maintenance and staffing of the central high schools. It was approved in principle on June 28, 1953.

In September, 1954, the first central high schools were opened at Foxtrap and Corner Brook.

Significance and Extension of Central High Schools.

The Royal Commission on Education and Youth published its first report in 1967 and described the establishment of the central high schools.

A major change came in 1954 when centralization, particularly at the high school level, became a new concept in educational organization in Newfoundland. The new idea quickly spread throughout the Province and high schools are now common from Flower's Cove to Lamaline and from Cape St. George to Cape Spear.⁷

During the past year there were one hundred and nine central high schools in the Province as well as some centres which are served by Regional and Junior High Schools.⁸

III. SIGNIFICANCE OF THE STUDY

Related Literature Regarding the Need for Such a Study.

All institutions should be evaluated periodically to

⁷P. J. Warren, "Report of the Royal Commission on Education and Youth, Volume One", (Province of Newfoundland and Labrador, 1967). p. 91.

⁸The Newfoundland and Labrador Schools Directory, Classroom Teachers, Government of Newfoundland and Labrador, 1970-71.

ensure continuous progress towards stated objectives as well as an opportunity to ascertain the effects of new programmes on the people affected by them.

Cooper *et al.*, suggested a study to answer the following pertinent question about central schools:

Do children transported by bus participate in such so called activities as band, athletics, dramatics and club activities on an equal basis with children who are not transported?⁹

Hunka¹⁰ also suggested that further research is necessary to determine how bus transportation may be affecting the school adjustment patterns of pupils at various ages and grade levels.

Dunlop, Harper and Hunka¹¹ agree that it is important to carry out research to study adjustment, attitude and acceptance of transported pupils at various grade levels.

Bach,¹² conceding that few studies have been carried out in this particular area, attempted to investigate the

⁹Shirley Cooper *et al.*, "Needed Research in District Reorganization", Phi Delta Kappan, XXXII (April, 1951), p. 356.

¹⁰S. M. Hunka, "The Effects of Bus Transportation," (unpublished Master's Thesis, University of Alberta, 1958).

¹¹G. M. Dunlop, R. J. C. Harper and S. Hunka, "The Influence of Transporting Children to Centralized Schools upon Achievement and Attendance," Educational Administration and Supervision, XLIV (July 1958), pp. 3-9.

¹²Mary L. Bach, "Factors Related to Student Participation in Campus Social Organizations," Journal of Social Psychology, LIV (1961), pp. 337-48.

extent to which students participate in extra-curricular activities and whether teachers and students viewed the involvement as problematic.

Need for the Study in this Province.

In 1954, the Provincial Government of Newfoundland and Labrador provided for the establishment of central high schools to accommodate students living within designated areas. Before the end of the decade the programme had been extended to include the elementary schools. One of the reasons given for the implementation of the plan was the immense social benefits to be derived from attendance at the larger schools.

Many articles written at the time cited the advantages of the centralization of schools and emphasized the need for the social development of the child.¹³ However since its inception some eighteen years ago, the personal-social development of the students attending the central high school does not appear to have been evaluated. It is to partially fulfill this need that the present study is being undertaken.

Results of a Preliminary Study.

A preliminary study carried out in the Green Bay

¹³A summary of the articles can be read in the section "Advantages of the Central High School" of Chapter II, The Review of the Literature.

Integrated School Board District in November, 1971, indicated the need for the continuation of the project.¹⁴

During a fact finding visit to the area the writer interviewed the Superintendent, Supervisors, several Principals and teachers as well as transported and non-transported students. The writer recommended among other findings:

Either within a particular school in the Green Bay District, in some other areas or on a wider scale, a survey, to determine the philosophy, types, methods, extent and availability of extra-curricular activities for all students, needs to be carried out.¹⁵

Assistance of School Officials.

The findings and recommendations of this study should assist school officials, especially those responsible for the guidance and counselling programmes, in their organization of extra-curricular activities, orientation and public relations programmes, and, in particular, how these areas are affected by the transportation of pupils.

¹⁴Hollis Hiscock, "Report of preliminary visit to Green Bay Integrated School District," (submitted to Department of Educational Psychology, Memorial University of Newfoundland, St. John's, Newfoundland, November, 1971).

¹⁵Hiscock, *op. cit.*

IV. RESEARCH QUESTIONS

This study was designed to inquire into the following research questions:

1. Is there any relationship between the personal-social adjustment scores and student participation in extra-curricular activities?
2. What is the pattern of selection and rejection of transported and non-transported students by their classmates?
3. What is the pattern of participation of transported and non-transported students in extra-curricular activities?

V. DEFINITIONS

CENTRAL HIGH SCHOOL means a school, situated in a given community, to which students from surrounding communities are transported. All pupils between grades seven and eleven in that designated area must attend that school.

NON-TRANSPORTED STUDENT means any student living in the community where the central high school is located.

TRANSPORTED STUDENT means any student, not living in the community where the central high school is located, who is brought to the school and returned to his home community by a regularly scheduled school bus or other vehicle.

SOCIAL DEVELOPMENT ACTIVITIES means all non-credit school activities where membership is voluntary and the student

must be an active participant.

PERSONAL-SOCIAL ADJUSTMENT of a person means the degree to which the person is accepted by himself, his classmates and teacher.

VI. LIMITATIONS OF THE STUDY

1. This study is limited by the fact that only teachers and students have been included. Although, as shown by the preliminary study carried out in the Green Bay Integrated School Board District; the attitudes of the parents towards the centralizing of schools is an extremely important factor, it falls outside the scope of the present study.

2. The study is limited to the investigation of just three variables, namely, teacher ratings of the advantages of centralized schools, personal-social adjustment and participation in extra-curricular activities.

3. The study includes only regular classes of grades seven and eight attending three central high schools.

4. The study is limited in scope to include only three central high schools in the Province of Newfoundland and Labrador. Generalization to other central high schools is possible only when the systems are similar to those surveyed.

5. The sociometric scale is restricted to the students attending a particular classroom and present on the day of

testing.

6. All transported students are grouped in the same category with no consideration of community classifications.

7. The transported students were not classified according to different distances travelled per day.

VII. SUMMARY AND OUTLINE OF THESIS

This chapter dealt with the purpose and significance of the study; a brief history of the events leading up to the opening of the first central high school in the Province; the research questions; definition of terms and the limitations or scope of the study.

The remainder of the thesis will be organized along the following lines. Chapter two gives a review of related literature and studies; chapter three describes the procedure followed in the selection of samples, instrumentation, administration and analysis of the research; chapter four will present the findings of the analysis of the data; and chapter five lists the conclusions and recommendations emerging from the study.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter will be organized around five sub-headings; (1) Pupil Transportation; (2) Pupil Transportation and Social Participation; (3) Pupil transportation, Personal-Social Acceptance and Adjustment; (4) Advantages of the Central High School; and (5) Report of Preliminary Study.

1. PUPIL TRANSPORTATION

The advent of the central high school necessitated the transporting of students from their home communities to the town or village in which the school was located. Sometimes this required very little travel so that the students could be returned home for lunch. In most cases however, the students were bused to the central school early in the morning, remained there for the whole day and returned home in late afternoon. Since this caused a certain amount of disruption to the life style of the students, it may provide some information to explain why transported students have not been as active in extra-curricular activities as the non-transported students.

Longer School Day.

In a study conducted some thirty years ago, Lambert¹ reported that students transported to school experienced an appreciably longer school day than those walking. The average transported student actually spent over two hours in transit each day. He recommended a possible revision of the school curricula taking into consideration the conditions under which the transported students had to operate.

It would appear that in this Province, the time factor would be similar to the findings of this study, and any revision of the school curricula would have the social participation programme as part of the regular scheduled activities.

Effects of Transportation on Students.

The studies related to this particular aspect of pupil transportation have not proven whether the busing of students has either a positive or negative effect on the individuals involved.

Transportation not injurious to students. Some studies have shown that busing did not have any detrimental effect on the total development of the students.

¹A. C. Lambert, 'Length of School Day for Transported Pupils,' American School Board Journal, 99 (September, 1939), pp. 45-46.

Morgan² indicated that transported students in grade seven attending elementary and high schools in Cedartown, Georgia, were favoured in personal and social adjustment over their non-transported counterparts.

Dunlop, Harper and Hunka³ studied two hundred boys and girls in grades two, four and six and reported no significant differences in achievement at any of the three grade levels. They concluded that the transporting of students was not injurious to the achievement of these students.

Transportation injurious to students. Some other studies have reached conclusions stating that the busing of children was injurious to their total development. Lindstrom⁴ quoted a study carried out by Little and Tate some years earlier which showed that the further students resided from school and the more time spent in transit, the lower were their grade averages relative to their I.Q. and the more frequently they were absent from school.

²E. M. Morgan, "Tested Differences in Achievement, Personality, Intelligence and School Marks between Transported and Non-transported Pupils of Lyles Elementary School, Cedar Hill Elementary School and Cedar Hill High School, Cedartown, Georgia," (unpublished Master's thesis, Atlanta University, Georgia, 1962).

³Dunlop, Harper and Hunka, *op. cit.*

⁴David E. Lindstrom, "Danger Points in District Re-organization", The Phi Delta Kappan, XXXIII (March, 1951), pp. 329-330.

After studying three rural high schools in the county of Ponoka, Bodaruk⁵ concluded that there was an abrupt break in continuity and some readjustment was needed when the students leave one school to attend another. Although this did not directly involve the transportation of students, the study was significant since the plight of the daily transported students would be even more intensive.

The effects of bus transportation on grade two, four and six students were studied by Hunka⁶ who reported a significant relationship at the grade two level. The bus students did not achieve as much over a fourteen month period as the non-transported students. It should also be noted that students travelling a short distance by bus achieved more than those having to travel a long distance.

Lee⁷ reported similar results when he studied the relationship between the school journey and emotional-social adjustment of infant children attending fifty-seven primary rural schools in England. He submitted evidence indicating

⁵William Bodaruk, "A Comparative Study of Examination Results in Grades seven and twelve in one Town School District in Three Rural Centralized Schools in the County of Ponoka," (unpublished Master's thesis, University of Alberta, 1962).

⁶Hunka, *op. cit.*

⁷T. Lee, "On the Relation between School Journey and Social and Emotional Adjustment in Rural Infant Children," *British Journal of Educational Psychology*. XXVII (June, 1957), pp. 104-114.

that transported pupils showed a greater degree of maladjustment than did their peers who did not require transportation. He advanced the hypothesis that the observed maladjustment may have resulted from deprivation of maternal care due to the extended period of absence from their homes. However, whereas those walking to school were able to overcome their adjustment difficulties with age, it was found that the problem increased for the transported students.

Transportation made no difference. Several studies could support neither stance as assumed in the previous two sections, and, consequently, suggested that they could not determine whether busing had any effect whatsoever on the performance of students. One study completed with grade seven students in the Paulk and Mary Hayes Elementary Schools, Coffee County, Georgia by Stribling⁸ noted no significant differences in intelligence, achievement, personality and attendance between transported and non-transported students.

Similar results were reported by Straley⁹ when he compared six hundred and four seniors in five schools in West

⁸L. W. Stribling, "Tested Differences in Intelligence, Achievement, Personality and Attendance of Transported and Non-transported seventh grade pupils in the Paulk and Mary Hayes Elementary Schools, Coffee County, Georgia, 1958-59," (unpublished Master's thesis, University of Georgia, 1959).

⁹Henry Goff Straley, "A Comparative Study of the Academic Achievement and Social Adjustment of Transported and Non-Transported High School Seniors," Dissertation Abstracts, XVII (1957), 1495.

Virginia and found no differences with respect to social adjustment. However, when he matched the students by sex and I.Q. and compared academic achievement of the transported and non-transported students, he found a significant difference favoring non-transported boys.

Summary. The studies reviewed were inconclusive in showing that transportation would have deleterious effects on the adjustment of students although some evidence did suggest that the effects, if present, may be more serious for young children. Consequently, any generalizing to the Province of Newfoundland and Labrador would have to be with caution.

II. PUPIL TRANSPORTATION AND SOCIAL PARTICIPATION

Most of the studies reviewed centered around the relationship between achievement and pupil transportation. However, this study was more concerned with the effects of busing students on their participation in extra-curricular activities sponsored by the school. Only a limited number of studies dealt with this aspect of the central school.

Value of Social Participation.

Although the experience of being involved in extra-curricular activities may have been valuable, Fink¹⁰ reported

¹⁰ Joseph Fink, "Collecting and Quantifying Social Participation Information," Personnel and Guidance Journal, XXXVI (February, 1958), pp. 417-419.

that social participation either goes hand in hand with high scholarship, depressed scholarship or was totally unrelated to scholarship. There were one thousand two hundred and twenty-one college freshmen involved in his survey.

In contrast, Anderson, Smith and Ladd¹¹ surveyed twenty-five hundred Kansas High School graduates and found a significant percentage of the students affirmed the value of their participation in extra-curricular activities. Although the experience was classed as being useful and valuable, they found that participation was not affected by the size of the school.

A study, conducted by Bach¹² attempted to ascertain the relationship between social participation and the scores obtained on a social adjustment inventory. The results indicated that for the students, as the mean score increased participation in extra-curricular activities also increased. This meant that those who participated had a slightly better adjustment score than those who did not become involved.¹³ Since both Fink and Bach used college students in their sample, any generalizing of the findings to the high school situation would have to be with caution.

¹¹Anderson, Ladd and Smith, "A Study of 2500 Kansas High School Graduates," Kansas Studies in Education, (Kansas: University of Kansas, 1954).

¹²Bach, *op. cit.*

¹³Bach, *op. cit.*

From this information, Bach¹⁴ concluded that there was a positive relationship between social participation and certain measures of social adjustment. However, it should be noted that the relationship was marginal.

Consequently, although scholarship could not be regarded as a determinant for participation in extra-curricular activities, there appeared to be a slight relationship between the personal-social adjustment scores and social participation. One research question asked in the present study dealt with this particular relationship.

Extra-curricular Activities Not Available to All.

When the central high schools were established in this Province, its advocates¹⁵ stated that in the larger schools all students would be able to engage in a more enriched extra-curricular activities programme. However, this attitude was criticized by Anderson and Van Dyke¹⁶ who maintained that in the larger high school most students did not have the opportunity to participate in all school activities such as varsity athletics, dramatics, choirs, school paper and student

¹⁴Bach, *op. cit.*

¹⁵See the section of this chapter entitled, "Advantages of the Central High School for references."

¹⁶Lester W. Anderson and Lauren A. Van Dyke, Secondary School Administration (Boston: Houghton Mifflin Company, 1963), p. 94.

councils. This opinion was based on experience rather than any particular study.

Nevertheless, the opinion quoted above was supported by a study carried out some years earlier. Following an attempt to compare socio-economic status and other factors with participation in school activities, Smith¹⁷ concluded that school extra-curricular activities programmes failed to serve the social needs of a substantial portion of the student body. He surveyed one thousand seven hundred and fifty-one high school students and reported that pupils participating in extra-curricular activities showed a definite tendency to be superior on personal-social adjustment scores than non-participants and that those engaged in social participation tended to live closer to the school. The latter finding could be a partial explanation regarding lack of involvement by students who were transported to another community to attend school.

More Participation by Non-Transported Students.

The non-transported students studied by Smith appeared to participate more actively in extra-curricular activities

¹⁷Henry P. Smith, "A Study of the Selective Character of Secondary Education Participation in School Activities as Conditioned by Social-economic Status and other Factors," Journal of Educational Psychology, XXXVI (1945), pp. 229-246.

than the students brought to school by bus. No reported research could be found which supported the supposition that transported students participated more fully than those living in the community where the school was located. Part of the present study dealt with the social participation pattern of the transported and non-transported students.

In a comparative study of the academic achievement and social adjustment of transported and non-transported students, Straley¹⁸ reported that non-transported students participated more extensively in extra-curricular activities than transported pupils.

In a similar manner, Pauley¹⁹ investigated the effects of transportation on school activities, the number of offices held by an individual, academic achievement and the acceptability of leadership positions by students. He administered a chi-square test of significance on the data received from some five-hundred and ninety-six senior students and reported that the non-transported students had higher scores on all variables. In addition, there were more non-transported students with scores above the mean for the

¹⁸Straley, *op. cit.*

¹⁹Berthold G. Pauley, "The Effects of Transportation and Part-time Employment upon Participation in School Activities, School Offices Held, Acceptability for Leadership Positions and Grade Point Averages among High School Seniors", Journal of Educational Research, LII (September, 1958), pp. 3-9.

number of school activities and offices held than the transported students, and more of the latter scored below the mean.²⁰

Lerch²¹ also provided data to indicate the adverse effects of bus transportation on school activities and student participation. He suggested a revamping of either the school or bus scheduling. This idea was also put forward by Lambert²² some years earlier as a way to help the transported students to become more actively involved in the non-academic activities sponsored by the schools.

Size of and Distance from School.

Size of the school. Only one study was found in which the researcher attempted to relate social participation to the size of the school. In this connection, Larson²³ reported that a significantly higher percentage of high school seniors attending the larger high schools participated in fewer activities than those in the medium and smaller schools. The students in the larger schools said they experienced difficulty

²⁰*Ibid.*

²¹A. M. Lerch, "Activity Program and the Out of Town Student," School Activities, XXVII (1956), pp. 245-246.

²²Lambert, *op. cit.*

²³Carol M. Larson, "Size as a Factor in the Adjustment of High School Seniors," (Bulletin No. 511, Youth Services No. 6, State College of Washington, 1949), pp. 32-33.

in getting involved in the extra-curricular activities. In the present study, the schools would be classed as medium or small compared with the schools in the study by Larson.²⁴

Distance from school. It would appear from several studies that the distance travelled by students affected their personal-social adjustment scores and social participation pattern. Reference was made earlier to the findings of Smith²⁵ and Lee²⁶ to support this conclusion. In addition, Lindstrom²⁷ provided data which supported the assumption that the further the students were from school, the less well adjusted they seemed.

In collecting data from five thousand eight hundred and thirty-two students in Iowa, Morgan and Kurtzman attempted to answer the question:

Do students continue to participate in extra-curricular activities such as athletics, intramurals, band, student government and clubs even after the distance to school has been increased by the merging of school districts.²⁸

²⁴*Ibid.*

²⁵Smith, *op. cit.*

²⁶Lee, *op. cit.*

²⁷Lindstrom, *op. cit.*

²⁸Don L. Morgan and Joseph B. Kurtzman, "The Relationship of the Distance from Home to School upon Participation in school activities by Pupils in Iowa Secondary Schools," School Activities, (March, 1969), pp. 12-14.

The distances travelled by the students were classified into three categories, namely, up to one mile, one to ten miles and over ten miles. When the categories were compared with social participation, they concluded that there was a trend towards greater participation by those living within a mile of the school and a lesser degree of involvement by those who live over ten miles away; there was a consistent but weak negative relationship between participation in school activities and the distance travelled daily; and, the strength of the extra-curricular activities programme acted as a major factor in having students motivated to participate.²⁹

Summary.

The literature indicates that students living in the community where the school is located participate in more activities and assume greater leadership roles than those who are transported to school. The medium and small size school appeared to be more conducive for involvement than the larger institutions; also, the further a student lives from a school the less likely he is to participate in the extra-curricular activities programme. Finally there was an indication that the strength and nature of the extra-curricular programme may exert an important influence as well.

²⁹*Ibid.*

III. PUPIL TRANSPORTATION AND PERSONAL-SOCIAL ADJUSTMENT

The term 'personal-social adjustment' has such a multiphasic character that a concise or all encompassing definition cannot be put forward. In actuality, in researching the literature for the present study, none of the authors attempted to formulate such a definition. However, it appeared that the general assumptions underlying the personal-social adjustment of a person were related to the degree to which a person was able to cope with his inner needs and the external circumstances in which he had to operate. For the student involved in this study, in addition to adjusting to his usual tensions, frustrations, and conflicts, he had as well to be in harmony with the central high school situation.

The researchers quoted in the present study, rather than trying to define the concept, validated their instruments by comparing them with standardized forms for measuring personal-social adjustment. In this way, by establishing a positive relationship among the various scales, it can be shown that the Semantic Differential,³⁰ Teacher Rating³¹ and

³⁰The instruments used to collect the data for the study will be described in Chapter III.

³¹*Ibid.*

Sociometric Scale³² are valid instruments in measuring personal-social adjustment. The remainder of this section will examine studies related to showing the relationship among the three instruments.

Sociometric Scale and Personal-Social Adjustment.

A number of studies determined the relationship between the acceptance by peers and the scores obtained on a personal-social adjustment inventory. Oxford³³ surveyed one hundred and thirty students in Louisiana and found a significant relationship between all the components on the California Test of Personality,³⁴ a test to determine personal-social adjustment and acceptance by peers. There was a positive relationship between acceptance by peers and personal-social adjustment scores for both boys and girls.

Similar results were reported from a study carried out in England by Belfield.³⁵ He concluded that children

³²*Ibid.*

³³Lake C. Oxford, "A Study of Personal and Social Adjustment of Grade Seven Boys and Girls as Influenced by Physical Size, Athletic Ability, Acceptance by Peers and Acceptance of Peers," Dissertation Abstracts, XX (1960), 3634.

³⁴See L. P. Thorpe, W. W. Clarke, and E. W. Tiegs, The CTP Manual (Monterey, California: McGraw Hill Book Co., 1953).

³⁵D. J. Belfield, "The Social Adjustment of Most Accepted and Least Accepted Children in Junior Schools," British Journal of Educational Psychology, XXXIV (November, 1964), pp. 324-327.

with high sociometric status tended to exhibit high social adjustment whereas children of low sociometric status had low social adjustment scores. Thus the rating by peers and self rating were closely related.

In addition, Cheong³⁶ compared a rating scale of attitude towards school with the scores received on a sociometric scale. He reported a significant correlation between school attitude and sociometric status among fourth and sixth grade students. The students who were more positive in their attitudes towards school appeared to be more socially accepted by their peers than pupils who were less positive in their school attitude.

Consequently, there appeared to be some evidence to show a significant relationship between the scores received on a personal-social adjustment inventory and the sociometric status of a person.

Teacher Rating and Personal-Social Adjustment.

The rating of students by teachers has also been utilized by researchers to measure the personal-social adjustment of the individual. In several cases it showed a significant relationship between the rating by teachers and the scores of a standardized test or a self rating device.

³⁶George Cheong, "Relations Among Experimental Attitudes and Sociometric Status of Fourth and Sixth Grade Pupils," Journal of Teacher Education, XVIII (Summer, 1967), pp. 186-191.

Lahademe, Jackson and Happel³⁷ found that teachers could predict with greater than chance accuracy the attitude of students towards school when compared with the actual scores received by the students when they were asked to indicate their satisfaction or dissatisfaction with school.

In an extended study, some four hundred and eighty-three fifth grade children were surveyed in eighteen different classrooms. Semler³⁸ obtained data from the California Test of Personality,³⁹ teacher rating and information from the school files concerning intelligence, achievement, and occupation of father. The intercorrelation of the measures of adjustment yielded coefficients which ranged from .27 to .54. The rating by teachers showed the most agreement with the other variable, especially as it related to the personal-social adjustment scores.

Another study carried out to ascertain the reliability of teacher rating scales was performed by

³⁷H. Lahaderne, P. Jackson and L. Happel, "Visibility of Discontent: An Analysis of Teachers Perception of Students Attitudes," (Proceedings of the Annual Convention of the American Psychological Association, 1966), pp. 267-268.

³⁸Quoted by Barry P. Frost, "Some Conditions of Scholastic Achievement," Canadian Education and Research Digest, (December, 1965), 279.

³⁹Thorne, Clarke and Tiegs, *op. cit.*

Gronlund⁴⁰ who compared the ratings by teachers and peers. He found a medium correlation of .57 between the estimated sociometric rankings of the pupils made by teachers and the actual ranking from students. The correlations were not high enough to substitute for the sociometric test but they did show a substantial agreement between the teacher's judgement and pupil choice.

Lorber⁴¹ investigated nine classes of grade five and six students who were achieving below their grade level and living in a low socio-economic urban community. He attempted to establish a relationship, if any, between acceptance by peers and rating by teachers on general classroom behaviour when he compared the mean behaviour scores for high, medial and low social acceptance groups, he found the high social acceptance group to have somewhat better classroom behaviour ratings than the medial social acceptance group, and appreciably better classroom behaviour ratings than the low social acceptance group.

The rating by teachers correlates significantly with other instruments that measure personal-social adjustment. This means that, with the other two scales used to measure

⁴⁰Norman E. Gronlund, "The Accuracy of Teachers Judgement Concerning the Sociometric Status of Sixth Grade Pupils: Second Part," Sociometry, 13 (November, 1956) pp. 329-357.

⁴¹Neil M. Lorber, "Inadequate Social Acceptance and Disruptive Classroom Behaviour," Journal of Educational Research, LIX (April, 1966), 360.

personal-social adjustment, the teacher rating scale has been a valid judge for determining the degree of adjustment of the student, and should be useful in the present study.

Semantic Differential and Personal-Social Adjustment.

The Semantic Differential⁴² has been used to evaluate the attitude of a person towards a particular concept. The results obtained on the scale have been compared with other scales used to determine personal-social adjustment of the person. A comprehensive review of the relationship between the semantic differential and attitude scales was given by Osgood, Suci and Tannenbaum.⁴³ Following a listing of the various studies they claim, "it is apparent that the semantic differential may be used as a generalized attitude scale."⁴⁴

Although the semantic differential was not used, Williams and Cole⁴⁵ demonstrated that an individual may view his town, church or school in much the same light as he perceives himself. Thus they believed, the concept of a

⁴²The instrument will be further described in Chapter III.

⁴³Charles E. Osgood, George J. Suci and Percy H. Tannenbaum, The Measurement of Meaning (Chicago: University of Illinois Press, 1967), pp. 189-199.

⁴⁴*Ibid.*, p. 195.

⁴⁵Robert L. Williams and Spurgeon Cole, "Self-concept and School Adjustment," Personnel and Guidance Journal, (January, 1968), pp. 478-480.

school held by a child might be fundamentally an extension of his self concept. In order to support this hypothesis, they conducted a study among eighty sixth graders. They attempted to relate self-concept to several dimensions of the experience of the child that were deemed fundamental to effective adjustment. It was hypothesized that the concept of the school held by a child would be related to his concept of himself and thus might be construed as an extension of his self-concept.

The results⁴⁶ included a significant positive correlation ($r .05$) of .222 between measures of self concept and attitude towards school, social status at school and emotional adjustment. The relationship between self concept and personal-social adjustment was confirmed by a test of significance between the scores received on the Tennessee Self Concept Scale⁴⁷ and the California Test of Personality.⁴⁸ Thus it was concluded that self-concept was highly related to emotional adjustment and that the self appraisal of a student correlated significantly with the acceptance by the group.

A comparison of the results obtained on the Semantic

⁴⁶*Ibid.*

⁴⁷Oscar Krisen Buros (Ed.), Personality - Tests and Reviews (New Jersey: The Gryphon Press, 1970), pp. 147-148.

⁴⁸Thorpe, Clarke and Tiegs, *op. cit.*

Differential and a sociometric scale was carried out among grade seven and eight students in eighteen Junior High School classes in New England by Goslin.⁴⁹ Among other findings, he concluded that adolescents who perceive themselves differently from the rating they received from the group were likely to be accorded a low degree of acceptance by other people. Consequently the relationship between the various instruments may be indicative of their ability to measure personal-social adjustment.

Summary. Although the studies reviewed may not have provided conclusive proof that the semantic differential and teacher rating would be a valid measure of personal-social adjustment, nevertheless the positive intercorrelations of these instruments with other standardized measures of adjustment indicate a good degree of construct validity. In the present study, these instruments, together with the sociometric rating were used to study personal-social adjustment.

Patterns of Selection and Rejection.

Several research questions in the study dealt with the selection and rejection patterns of the transported and non-transported students attending the central high schools

⁴⁹David Goslin, "Accuracy of Self Perception and Social Acceptance," Sociometry, Vol. 25, No. 3 (September, 1962), pp. 283-296.

in the Province of Newfoundland and Labrador. In the studies reviewed, it was found that students usually selected other students having similar interests or concerns. In the case of central schools, the practice of busing students would seem to act as a common basis for selection or rejection. Thus, it might be predicted that the transported students would tend to select pupils from their own group and reject members of the community set. The same process would be followed by the non-transported students.

Although not directly applicable to the central high school, the conclusions reached by Peterson⁵⁰ did have some significance with regards to selection patterns. He attempted to investigate the relationship, if any, between the amount of work accomplished and the effort made to avoid working by the students. He divided students into four groups as follows, (a) high work and low work avoidance; (b) high work and high work avoidance; (c) low work and low work avoidance; and, (d) low work and high work avoidance. He found that students preferred and selected students who were in the same classification. In the present context, it would imply that selection patterns are affected by many factors, and that busing, as a primary influence, might be tempered by other important considerations.

⁵⁰Henry A. Peterson, "Teacher and Peer Acceptance of Four Student Behavioural Types," California Journal of Educational Psychology, XIX (January, 1968), pp. 16-27.

Munro⁵¹ completed a study dealing with peer group interaction among adolescents attending a high school in Alberta. He reported a lack of acceptance of transported students and that they in turn developed an out group orientation or were isolated from the community group. However, since only two transported students attended the particular school, the conclusion has to be treated with caution since the number involved could dictate such a finding.

After surveying three central high schools, Bonney⁵² reported that transported pupils were not accepted on the same terms of equality as the town students. This was due in part to differences in socio-economic and cultural backgrounds. However, the group members were paired equally with regards to their social and economic status, so that, by a process of elimination, the cultural differences appeared to be the major factor. He also felt that the non-acceptance resulted from the inability of the transported students, except on rare occasions, to mix with the town students after school,

⁵¹B. C. Munro, "The Structure and Motivation of an Adolescent Peer Group," (unpublished Master's thesis, University of Alberta, 1957).

⁵²M. E. Bonney, "A Sociometric Study of the Peer Acceptance of Rural Students in Three Consolidated High Schools," Educational Administration and Supervision, XXXIII (April, 1951), pp. 234-240.

and that this seriously handicapped their relationship.

Summary. Since students tended to select members who have similar interests and work philosophies, then it can be predicted that transported and non-transported students will select peers from their own group and reject those of the opposite set. However, it will be necessary to consider selections and rejections as a highly individual process, and so generalized effects of transportation on selection may be tempered by other factors which are individual in nature.

IV. ADVANTAGES OF CENTRAL HIGH SCHOOLS

Prior to the establishment of the first central high schools in this Province, several educators published articles dealing with the advantages of such a programme in the Province. Since these writings outlined the advantages of such schools, and eventually led to their being accepted, they are included in this section to provide the necessary background information used in establishing the objectives of centralization programmes.

An Interim Report on Central High Schools.

In the late forties G. A. Frecker acted as a one man commission to study the structure of the regional high school in Canada and the United States of America. In his interim report he outlined the following as reasons why the system

should be incorporated into the educational system of Newfoundland:

(1) It is designed to bring to rural children the educational and cultural benefits enjoyed by city children attending the best high schools.

(2) It is designed to give the rural boy and girl an education which enables them to prepare themselves for living happily and effectively in a rural agricultural set up, or if they choose it enables them to prepare themselves under the guidance of well qualified teachers for entrance into university.

(3) It is designed to ensure not only educational opportunities for rural boys and girls but also to see to it that primary industries will be developed by men and women who have received an education which fits them for the task.

(4) Domestic science is a universal feature and the programme of this course keeps the needs of the future homemakers well in the fore.

(5) The larger schools aim at maintaining a good guidance department.⁵³

Support from the Teachers.

The Newfoundland Teachers Association officially lent support to the introduction of the central high schools in the Province and listed five advantages in their Journal:⁵⁴

(a) The number of classes and the number in each class would be in keeping with what teachers could handle.

(b) An attraction for dropouts.

(c) It provides a smooth path for all pupils to gain access to high school education.

(d) It would attract competent, qualified teachers.

(e) A lessening of duplication.

⁵³Frecker, *loc. cit.*, pp. 5-6.

⁵⁴Newfoundland Teachers Association Journal, (April, 1955), pp. 10-11.

Viewpoint from a Superintendent.

Writing in the Department of Education Newsletter,⁵⁵ Fred Kirby quoted seven reasons for a more efficient and streamlined administrative unit within the School Board. The establishment of centralized schools would have the following effects:

- (1) Reducing the number of classrooms a School Board has to operate.
- (2) Reducing the amount of duplication in teaching.
- (3) Concentrating high school equipment in only one school rather than trying to provide a little equipment in many schools in the area.
- (4) Concentrating a large number of high school pupils in one school will make it possible to provide libraries, science rooms, scientific apparatus, auditoriums, sports equipment and other extra facilities, that could not be provided for a small number of high school pupils in every school.
- (5) Making it possible to secure the services of highly, qualified principals and specialist teachers.
- (6) Making it possible to provide courses that could not be given to a small number of students in many schools, but which can be offered if enough students are brought together to form a teaching group.
- (7) If the population of the larger education district is large enough, better facilities for administration can be provided. Large administrative units are financially able to employ a full time secretary, and operate a head office with its accompanying advantages at little extra cost to the individual parent or taxpayer.

⁵⁵Fred Kirby, Department of Education Newsletter, St. John's, (March, 1955), p. 4.

Opinion from the Department of Education.

In replying to the question, "How will a Regional High School benefit a community or a number of communities?" one writer advanced several reasons in the Department of Education Newsletter:⁵⁶

- (a) Retention of pupils.
- (b) There will be sufficient pupils in each grade to provide a teacher per grade.
- (c) The larger number of students will make it feasible to have a well equipped laboratory so that science can be taught.
- (d) Organized games can be played where there are large numbers of students.
- (e) Debates and dramatics can be performed more effectively.

The Deputy Minister of Education.

While congratulating the people at Foxtrap and Corner Brook for their initiative in introducing the first central high schools, the Deputy Minister of Education⁵⁷ outlined the advantages of the scheme in the hope that other school boards would follow the example. He stated:

- (1) Regional or central high schools will make possible a better and more comprehensive type of high school education for our boys and girls especially

⁵⁶Department of Education Newsletter, St. John's
(November, 1953), p. 4.

⁵⁷Department of Education Newsletter, St. John's
(November, 1954), p. 1.

those living in smaller settlements.

(2) They should make possible more competent teaching not only in English and social studies but also in languages, science and mathematics.

(3) The existence of these schools will make possible an enriched programme in the fields of dramatics, physical education, music, public speaking, and other cultural activities.

(4) With proper guidance regional high schools will give more attention to the natural resources of Newfoundland and the primary industries of the island than it is possible to give in the small schools.

(5) Regional high schools will give our potential leaders in all fields of endeavour a better opportunity to develop their God given abilities and enrich the life of the whole Province.

An Address by the Minister of Education.

The then Minister of Education, The Hon. J. R. Chalker, listed three advantages of the central high school when he addressed the Kiwanis Club during a speech supporting Education Week activities:⁵⁸

(a) There will be specialist teachers in such subjects as foreign languages and sciences.

(b) Such schools can have good facilities for athletics, dramatics, music and all the extra-curricular activities enjoyed in the best and largest communities in the Province.

(c) When the enrollment is large enough, commercial, domestic science and shop courses can be organized.

⁵⁸Department of Education Newsletter, St. John's,
(April, 1955), pp. 1-3.

Summary.

The articles and papers summarized in the previous pages listed the advantages of the central high school seen to be important by several writers. They can be further categorized into five general advantages of the school system; namely, increased capital grants to construct extra facilities, teachers specializing in their particular subject area, a more enriched extra-curricular activities programme, a reduction in the duplication of administrative services and a diversification of the academic programme. These five general advantages of the central high school formed the basis for the paired comparison rating scale administered to the staff members teaching in the schools included in the present study.

V. REPORT OF A PRELIMINARY STUDY⁵⁹

In November, 1971, a visit was made to the Green Bay Integrated School Board District to interview certain people concerned with the establishment of centralized schools in the area. Several factors and aspects of the central school system were informally investigated in the interviews. These included:

⁵⁹Excerpts from the report submitted by the author following a visit to the Green Bay Integrated School Board District in November, 1971.

(a) any difficulties, encountered by the students, in adjusting to the new environment;

(b) the value placed on social development by the school officials;

(c) the extent that extra-curricular activities were available for all students;

(d) the degree of participation in these activities by community, and bus students;

(e) the advantages and disadvantages of central schools;

(f) the orientation programme carried out by the sending and receiving schools.

The interviews were conducted with the District Superintendent, Supervisor, several Principals, Teachers and Guidance Counsellors. The students questioned included several transported and non-transported students attending the high schools in the area as well as some bursary students who were boarding away from home to attend school.

The interviews, dealing with the above questions, led to the following tentative conclusions.⁶⁰

Social Development.

Many of the people interviewed reiterated the

⁶⁰Hiscock, *op. cit.*

importance of social development as an objective for the school system. However, not all the personnel involved in the school setup appeared convinced that it should be part of the objectives or curriculum of the institution.

Importance of School Officials. The success of the social development and extra-curricular activities programmes depended largely on the attitude and drive of those administering the schools.

Students unable to Participate. Often when school functions were planned outside regular school hours bus students were deprived of the opportunity to participate. Several experiments were tried to alleviate the situation but with little success.

Social Development during School Hours. The academic schedule did not seem to have been fully utilized as a means for the development of social and interpersonal relationships.

The Effects of Transportation. The students who left their home communities daily to attend school several miles away faced many uncertainties. Some of them experienced a loss of identity. Some felt like intruders or visitors in the central high school, and, on occasion, encountered schools riddled with community cliques.

The students rarely developed the concept of seeing the school as their own. In the final analysis they all acted, in varying degrees, as deterrents to the social development

of the person.

Children Reflect the Attitudes of their Parents. In many cases the negative attitude of the students possibly reflected the attitude of the parents. The latter appeared to have had difficulty understanding the reasons for closing the school in their community. Little attempt, if any, seemed to have been made to explain the advantages of the system or to ensure a continuation and improvement of the programmes once they were initiated.

Adjustment Problems.

When a person moved from one social environment to another, difficulties of adjustment often occurred which could become extremely traumatic experiences. The receiving environment needed to have an atmosphere which was congenial to the student if the transfer was to be accomplished with the least amount of difficulty. The fifteen hours of taped interviews enunciated some of the area of adjustment encountered by the students as they entered the transitional period moving from the community to the central school.

Adjustment to a Larger Population. In many cases, incoming students have never learned the skills of interpersonal relationships. Unlike the feeder school, the central school has a much larger population. This meant that the person had to learn the fundamentals of living and communicating

in a more heterogeneous type of society.

Different Methods of Teaching. Such teaching methods as subject teaching, group discussions and team teaching had rarely been encountered in the feeder schools. Unless the person learned the basic principles of these techniques, he would not be able to participate fully nor receive the maximum benefits from the system. It should not be assumed, as was the case in many schools, that the students would pick up these principles by chance. It is essential that a planned orientation programme be part of the school scheduling.

Community Involvement. When students have had no previous experience in associations and clubs in the elementary schools or at the local community level, they did not seem to participate in the extra-curricular activities of the central school to any significant degree.

No Orientation Programme. There was no orientation programme at the grade six level to prepare the student for his transition to the high school or at the grade seven level to integrate him into the routine of the central high schools.

No Knowledge of Sports. Some bus students said they did not know the fundamental rules of sports and thus did not participate. In contrast the community children felt quite comfortable in these surroundings because they had had scheduled physical education sessions in the central high school since kindergarten. The elementary school children visited the high school for these classes.

Adjustment to New Life Style. The child who travelled to school by bus on a daily basis had to adjust to a new life style. His home, for five days per week, acted as no more than a dormitory. Except on weekends, he rarely interacted with friends who attended the feeder school. He had little time to participate in after school activities such as skating, hunting or fishing. Consequently, the child experienced difficulty establishing and maintaining any sense of security which appeared to be important at his stage in development.

Association with Parents. The parents seemed to have virtually lost all contact with the schools. Visitations to and from the teachers were at a minimum. Parent-Teacher Associations, if operating, often excluded the parents from the feeder school communities. The people did not identify with the central school because they had not developed the concept of the school being their school. In some instances, it created situations whereby the parents and the school were at odds and the students were caught between the two.

Formation of Cliques. In several schools, it was reported that students were forming their own restrictive groups. These cliques sometimes included only those from a particular community, but the increased tension generated by this phenomenon often erupted into prejudicial feelings or physical assault. When this existed in any form, the personal and social development of the students was probably retarded

because the institution never became a congenial centre for learning activities.

Summary. The report from the visit to the school district indicated some new areas of concerns but also reaffirmed findings reported by previous studies. In the present study, there was supportive evidence for some of the opinions expressed by the people interviewed. These will be pointed out in a later section.

VI. SUMMARY AND OUTLINE

Summary of Chapter Two

The studies quoted in the first three sections of this chapter dealt with the transportation of students and how this affected participation in extra-curricular activities, patterns of acceptance within peer groups and the personal-social adjustment of students. The fourth section listed the advantages of the central high school as contained in the literature published in the late forties and early fifties when the system was being introduced in the Province. The chapter ended with a resume of the report resulting from a preliminary visit by the writer to a particular school district in the Province.

Outline of Chapter Three

The next chapter will deal with the description of

the sample, the instrumentation, the method used in data collection, the research design and statistical treatment.

CHAPTER III

THE DESIGN OF THE STUDY

The purpose of this chapter is to describe the procedures which were followed in the study. It is organized under the following subheadings: I. The Sample, II. Instrumentation, III. Method of Data Collection, and IV. Research Design and Statistical Treatment.

I. THE SAMPLE

The sample consisted of six classes of grade seven students and six grade eight classes attending three central high schools in the Province of Newfoundland and Labrador. For identification purposes, these schools have been designated schools A, B, and C for the remainder of the study.

Description of School A. School A, situated in a mining and logging community of 2100 people, had a student enrollment of 425. Approximately 42% of the students resided in the community where the school was located. The remainder travelled distances of from five to thirty-one miles, twice each day, from eight different communities over an unpaved highway. The ten room school had a staff of nineteen teachers. In addition to the regular academic programme, students could

participate in a sports programme,¹ Allied Youth Club, Student Council, Glee Club, Newspaper, Drama Club and Yearbook Committee.

Description of School B. Approximately 25% of the 530 students who attended this school were transported from five outlying communities. The students were bused up to a radius of 15 miles along an unpaved road. This central high school had 16 classrooms and 22 teachers. The 2900 inhabitants living in the community where the school was located rely heavily for employment on the service industries established in the area. The extra-curricular activities available to the students were Student Council, Drama Club, Sports Programme, Newspaper, Allied Youth and Yearbook Committee.

Description of School C. School C had a student population of 246 of which 40% were transported daily from four other communities within a radius of fifteen miles. The ten classroom school had a teaching staff of thirteen. The majority of residents of the central community of 1100 people commute to work on construction projects in the larger centres. The school featured a Sports Programme, Glee Club, Newspaper, Junior Red Cross, Science Club and Yearbook Committee.

Some Comparisons. A comparison of the number of the

¹The sports programme for all schools included basketball, volleyball, badminton, hockey and soccer.

communities served by the three central high schools included in the study as well as the average distances travelled by the students attending the schools have been summarised in Table I.

TABLE I
NUMBER OF COMMUNITIES SERVED AND AVERAGE
DISTANCE TO THE CENTRAL HIGH SCHOOL

School	Number of communities served	Average distance
A	9	21.7
B	6	11.0
C	5	9.5

Selection of grades. The grades designated for the study represented the first two years of attendance in a central school. The grade seven students were being initiated into the system and the grade eight students had one year experience as members of such a school. The students were in their early adolescence, a critical stage in the process of socialization.

Selection of classes. Since school C had only two classes in each grade, all students in grades seven and eight were included in the study. In schools A and B, two of the three classes in each grade were selected for the survey. It

was decided to choose the classes having the greatest number of transported students. Of the two classes which were eliminated, one had only two transported students, whereas the other consisted solely of non-transported students. According to school officials, assignment of students to a particular class depended on grade point averages and subject selection. The classes selected were otherwise representative of the school population as they included students from all communities and included students from both the general and academic programmes.

Number of students surveyed. In each school, four classes were surveyed during the study. Table II provides a breakdown of the number of transported and non-transported students in grades seven and eight in each school. Schools A and B had approximately the same number of students, whereas about two thirds as many were included from school C. From a grand total of 326, 212 or 65% were non-transported students and 114 or 35% were transported to the school by bus on a daily schedule.

Permission for research. Several months prior to the study, the Superintendents of the School Boards and the Principals of the respective schools were contacted by letter requesting permission and assistance in collecting data in

their schools.² All officials complied with the request.

TABLE II
MAKE UP OF THE SAMPLE

School	Grade	Class	Transported students	Non-transported students	Total
A	7	G	19	11	30
		P	21	7	28
	8	R	6	24	30
		W	23	13	36
B	7	B	25	7	32
		C	25	9	34
	8	B	26	7	33
		C	15	7	22
C	7	A	23	3	26
		B	9	12	21
	8	A	14	7	21
		B	6	7	13
			212	114	326

II. INSTRUMENTATION

There were five instruments used to collect data for this study. The teachers utilized a rating scale to indicate the importance of the various advantages of the central school. A sociometric device and three semantic differentials, completed by each student, provided personal-social adjustment

²See Appendix A.

scores; the classroom teachers rated each student on a behavioural practice rating scale; and the students listed the extra-curricular activities in which they participated.

Paired Comparison Rating Scale

The forced choice or paired comparison rating scale enabled the evaluator to decide between two words, statements or phrases and rank them according to preference. This instrument has been described in the following manner:

the essence of the method is that sets of pairs of stimuli or items of different values on a single continuum or on two different continua or factors are presented to the subject with instruction to choose one member of each pair on the basis of some stated criterion.³

This particular method of evaluation has formed the basis for several standardized tests.⁴

Advantages and disadvantages. The advantages of the paired comparison rating scale has been enunciated by Kerlinger⁵ as simple and economical delivering a good deal of information from a limited amount of material. Although he argued that it was "still too soon to evaluate the forced choice

³Fred N. Kerlinger, Foundations of Behavioral Research (New York: Holt, Rinehart and Winston, Inc., 1964), p. 738.

⁴For example, A Study of Values and The Edwards Personal Preference Schedule.

⁵Kerlinger, *op. cit.*, p. 497.

method,"⁶ Kerlinger related several difficulties connected with it, as for example, a certain lack of independence among items. Additionally, subjects could resist the difficult choices and the items could be too complex.⁷

The present application. In the study, all teachers attending the schools included in the research were asked to rate the advantages of the central high school. The five advantages which were compared were selected based on those quoted by a number of writers⁸ in the early fifties and which were condensed to form the basis of the rating scale.⁹ The score for each advantage was the total number of times it was selected over the other four advantages. These ratings would enable the researcher to ascertain the ranking given to extra-curricular activities by the staff members teaching in the respective schools.

Teacher Rating of Students

The rating technique has been used extensively in research. The main purpose for such an instrument is, "a

⁶*Ibid.*, p. 497.

⁷*Ibid.*

⁸See Chapter II, Section IV, for a summary of the articles on which the rating scale was based.

⁹Appendix B.

psychological measuring instrument that requires the rater or observer to assign the rated object to categories or continua that have numerals assigned to them."¹⁰ In a similar vein it has been described as,

a special kind of checklist in which the items or characteristics checked must be rated quantitatively or qualitatively according to the degree or presence or absence of a trait, the degree of perfection of a skill or the degree of completion of a task.¹¹

Thus the rating scale can be used to measure the degree to which an object or person is being accepted within a situation.

Strengths and weaknesses. The merits of the rating scales seem to far outweigh its disadvantages. The advantages have been grouped by Guildford¹² to include such categories as time factor, their appeal, their wide range of application and their being multidimensional. In addition to these, Kerlinger¹³ included, their importance in observing behavioural practices and their adaptability to other objective instruments.

¹⁰Kerlinger, *op. cit.*, p. 514.

¹¹M. E. Bonney and R. S. Hampleman, Personal-Social Evaluation Techniques, (Washington: The Center for Applied Research in Education, 1962), p. 19.

¹²J. P. Guildford, Psychometric Methods, (New York: McGraw-Hill Book Company, 1954), p. 297.

¹³Kerlinger, *op. cit.*, p. 518.

However, Kerlinger¹⁴ also warned about two of the inherent weaknesses of the rating scale: first, they can be used indiscriminately because of easy construction; and, second, they are susceptible to the halo effect. The latter is the tendency of a person to rate an object in the same direction as the general impression of that person towards the object. For example, one might rate a person as being intelligent because he agrees with him.

Some writers have recommended remedies to ensure safeguards against this effect and other weaknesses of the scale.¹⁵ In this study, to counteract these effects, the students were rated on a specific behavioural practice. The homeroom teacher rated individuals on items which would indicate their sociability within the school structure.¹⁶ It measured the personal-social adjustment of the students with regards to class and social activities.

Reliability studies. The reliability of the rating scale has been proven in a number of studies as well as in a pilot project conducted by the researcher. Kowaltrakul¹⁷

¹⁴*Ibid.*, pp. 516-517.

¹⁵Guildford, *op. cit.*, p. 279.

¹⁶Appendix C.

¹⁷S. Kowatrakul, "Some Behaviours of Elementary School Children Related to Classroom Activities and Subject Areas," Journal of Educational Psychology, L (June, 1959), pp. 121-128.

reported a correlation coefficient of .90 or greater when six judges rated six kinds of student behavior and three types of classroom activities. Merrill¹⁸ had a mother and child rated by different observers and found a coefficient of .88 over a period of time.

As a means of establishing the reliability of the instrument used in the present study, the writer requested two teachers to rate the same fifteen students on two occasions. One teacher rated the students with a time lapse of two weeks, whereas the second rated them with a time interval of four weeks. By using the Pearson Product Moment Correlation, an average coefficient of .91 was found when all possible combinations of the scores were considered.

These studies even though only two teachers were included in the pilot project, indicated that the teacher rating scale was a reliable instrument for use in the research.

Validity of the scale. The validity of the rating scale could not be so readily verified as its reliability. An instrument is said to have validity when it provided the information for which it was constructed. The teacher rating scale relied heavily on content validity. The scale used in the present study, with only minor alternation, was patterned

¹⁸B. Merrill, "A measurement of Mother-Child Interaction," Journal of Abnormal and Social Psychology, XLI (1946), pp. 37-49.

on a scale administered to measure sociability and personal-social adjustment of students.¹⁹ Thus it has been utilized in a previous study for the same purpose. The content of the scale centred around the adjustment of the students to the central high school as well as their social involvement, attitude towards the school and their organizational ability with regards to their work and fellow students.

The validity of the rating scale can be further demonstrated through a comparison of other instruments used to measure personal-social adjustment. The findings by Lorber²⁰, Laharderne²¹ and Gronlund²² supported the claim that the rating scale can be a valid instrument of personal-social adjustment. Although, in these instances, the correlations were not high enough to substitute the teacher rating for the other devices, it did show that the instruments measured the same characteristics and that there was substantial agreement.

Summary. The reliability of the teacher rating

¹⁹Robert H. Coombs, "Socio-Psychological Adjustment in Collegiate Scholastic Success," Journal of Educational Research, LXI (December, 1967), pp. 186-189.

²⁰Lorber, *loc. cit.*

²¹Laharderne, *loc. cit.*

²²Gronlund, *loc. cit.*

scale has been verified by comparing the results obtained during several observation sessions with the same observer and by having a number of observers rate at the same instance. The validity relied mainly on content validity and the relationship between scores obtained on other measures of personal-social adjustment and the present scale.

The Sociometric Scale

The sociometric scale, as developed by Moreno,²³ has been used extensively in research to collect data regarding social acceptance and adjustment. It has been described as a means of "gathering and analyzing data on the choice communication and interaction patterns of people in groups."²⁴

The value of the test. The sociometric scale has been shown to be an effective and accurate measure of social choice or acceptance. Northway²⁵ referred to the method as a means of discovering the degree to which a person was accepted by the other members of the group. Bonney²⁶ also claimed that the test measured overt group adjustment and

²³J. L. Moreno, Who Shall Survive (Beacon: Beacon House, Inc., 1953), p. 763.

²⁴Kerlinger, *op. cit.*, p. 554.

²⁵M. L. Northway, A Primer of Sociology, (Toronto: University of Toronto Press, 1967), pp. 3-5.

²⁶Bonney, *op. cit.*, pp. 60-63.

acceptability as well as the personal value and social worth of the individual. Thus the scale appears to be a valid measure of personal-social adjustment.

The present sociometric scale. In this study the sociometric scale²⁷ was used to provide information about the personal-social adjustment from the classmates of the students. The test consisted simply of asking each child to list:

1. Which five students in your class do you like the most?
2. Which five students in your class do you like the least?

Reliability and validity. "The concepts of reliability and validity as traditionally used--and misused--by psychologists seem to have little direct meaning or application in the field of sociometry."²⁸ This claim was made because the actual characteristics being measured by a sociometric scale would naturally result in a change of emphasis over a period of time.

Reliability of the instrument. Even with the

²⁷Appendix D.

²⁸p. N. Pepinsky, "The Meaning of Reliability and Validity as applied to Sociometric Tests." Educational and Psychological Measurement, IX (Spring, 1949), pp. 39-49.

hypothesis stated above, some studies have reported fairly high correlation coefficients when the sociometric scale was used over an extended period of time. Bonney²⁹ found coefficients ranging from .56 to .76 on selection patterns by students over approximately twenty investigations. When Gronlund³⁰ asked students attending nine elementary classes to select work companions, he reported an average stability coefficient of .75 over a four month period. Thus these findings demonstrated that the sociometric scale was a reliable instrument in producing the same results over an extended period.

Validity of the instrument. The question of validity seemed somewhat more ambiguous since there did not appear to be any clear cut standard of reference with which to compare the results of the sociometric scale. Gronlund has claimed that validity is intrinsic to the sociometric scale since the "test results are choice behaviour and the test purposes to measure that choice behaviour."³¹ Similarly, Jennings³² affirmed that the sociometric scale has face validity since

²⁹Bonney, *loc. cit.*

³⁰Gronlund, *op. cit.*

³¹*Ibid.*, p. 41.

³²H. H. Jennings, Leadership in Isolation, (New York: Longman, Green and Company, 1950), p. 536.

it was a direct measure of the phenomenon under investigation. Also Kennedy³³, in a special validity assessment, appraised the instrument as a valid technique to measure personal-social adjustment.

Summary. Although the traditional stance on reliability and validity is difficult to apply to the results of the sociometric test, several studies have indicated that it probably is reliable and valid considering its purpose so that confidence can be placed in the results of the instrument.

Semantic Differential.

The semantic differential was developed by Osgood³⁴, as an instrument to measure the attitude of a person towards a particular concept. The scale has been referred to as, "a method of observing and measuring the psychological meaning of things."³⁵ Commenting on the procedure and makeup of the scale, Nottingham wrote that the "semantic differential consists of a number of bipolar adjectives, against which the subject is asked to judge a particular

³³Daniel A. Kennedy, "Sociometric Assessment: A Validity Study", Measurement and Evaluation in Guidance, IV (April, 1971), pp. 43-46.

³⁴Osgood, Suci and Tannenbaum, *op. cit.*

³⁵Kerlinger, *op. cit.*, p. 564.

concept or phrase."³⁶

Purpose of the scale in this study. The purpose of the semantic differential³⁷ was to measure the attitude of the students towards the central high school, his or her classmates and himself or herself. Each section consisted of twelve bipolar adjectives listed on the page under the concept to be measured. The adjectives were adapted from the list quoted by Osgood.³⁸ Also a five point rating scale was adopted since this type was recommended for children.³⁹

Reliability of the instrument. The reliability of the semantic differential has been established by a number of studies; in fact, Osgood, Suci and Tannenbaum⁴⁰ reiterated that the scores obtained on the scale were too consistent; he reported a correlation coefficient of .85 when one hundred subjects rated twenty concepts which appeared twice on a semantic differential. In a test-retest situation, a mean correlation coefficient was reported by Tannebaum⁴¹

³⁶B. Nottingham, "The Measurement of Pupils' Attitudes", Educational Research, XII (June, 1970), pp. 247-249.

³⁷Appendix E.

³⁸Osgood, Suci and Tannenbaum, *op. cit.*, p. 85.

³⁹*Ibid.*, p. 127.

⁴⁰*Ibid.*

⁴¹*Ibid.*, p. 192.

when 135 people rated six concepts on two occasions separated by a five week interval.

In a recent attempt to develop a semantic differential to measure attitude and change of attitude among secondary school and college students, Cassell⁴² asked 237 subjects to rate three concepts. They reported a correlation coefficient range of .92 to .96 overall.

Thus the results of the above studies confirm the reliability of the semantic differential as in measuring the attitude of a person towards a particular concept.

Validity of the instrument. Since the semantic differential measures the attitude of a person towards a concept, the validity of the instrument could be established by correlating it with some independent criterion of meaning. However, since such a standard did not exist, it prompted Osgood⁴³ to revert to the stance that the semantic differential has face validity.⁴⁴

Shortly before the actual dates of administration, the writer did a run through study with a grade seven class

⁴²Russell N. Cassell, "Development of a Semantic Differential to Assess The Attitude of Secondary School and College Students," Journal of Experimental Education, XXXIX (Winter, 1970), pp. 10-14.

⁴³Osgood, Suci and Tannenbaum, *op. cit.*

⁴⁴*Ibid.*, p. 141.

using the three semantic differentials. The students encountered no difficulties in understanding the procedure or the meanings of the adjectives.

Summary. The above consideration has been directed towards the reliability and validity of the semantic differential as well as a description of the instrument utilized in the research. It has been shown to be a valid and reliable method to ascertain the attitude of individuals towards particular concepts.

Social Participation Questionnaire.

A questionnaire can provide the researcher with information about the activities and practices of individuals. It is a term "used for almost any kind of instrument that has questions or items to which an individual responds".⁴⁵ In this particular research, the Social Participation Questionnaire⁴⁶ enabled the students to record the various activities in which they participated.

From the information obtained on the questionnaire, the degree of social participation of both transported and non-transported students could be ascertained. In the introduction, the students were reminded to include all

⁴⁵Kerlinger, *op. cit.*, p. 475.

⁴⁶Appendix F.

activities engaged in from the beginning of the academic year to the date of the data collection.⁴⁷ Also the different questions were explained to the classes at the time of administration and the students encountered no problems in completing the questionnaire.

III. METHOD OF DATA COLLECTION.

After securing permission of the Superintendents and Principals, a letter,⁴⁸ explaining the purpose of the research, was forwarded to the teachers in the three central high schools involved. Several days prior to the actual visit the Principals were again contacted.

All data was collected by the writer during a two week period in April, 1972.

Upon arrival of the writer at the school, all teachers received copies of the 'Rating of the Advantages of Central High Schools,'⁴⁹ and the homeroom teachers of the classes included in the study were provided with copies of the 'Teacher Rating of Students,'⁵⁰ in all cases, the teachers completed the forms before the writer returned from the

⁴⁷September 1971 to April 1972.

⁴⁸See Appendix A.

⁴⁹See Appendix B.

⁵⁰See Appendix C.

schools which eliminated any need of further contact regarding the collection of data.

The same procedure for data collection was carried out in all twelve classes. The students, after being assigned a number to ensure anonymity, received a packet containing the three questionnaires.⁵¹ Each instrument was explained in detail prior to being completed by the pupils. The average testing time was forty minutes. The students did not encounter any difficulty in understanding and completing the questionnaires. At the end of each session, the completed forms were collected and placed in sealed envelopes identified by the school, grade, class and student number. The scoring was done manually by the writer.

IV. RESEARCH DESIGN AND STATISTICAL TREATMENT.

In general, the study was to administer particular instruments to the transported and non-transported students from three central high schools and do some statistical comparisons.

The study involved the utilization of five instruments to collect the necessary data from the students and teachers. The rating of advantages was used by teachers to rate the advantages of the central high school on a ten point paired comparison rating scale. The teachers also

⁵¹See Appendix D, E, F.

evaluated each child on a rating scale according to his personal-social behaviour within the school situation. Each student was asked to rate himself, the school and his classmates using the semantic differential. He also selected five classmates he liked most and five he liked least, and listed the extra-curricular activities in which he participated. In the remainder of this section, the method of analysis will be considered.

Rating of Advantages by Teachers.

All teachers on the staff of the high schools surveyed ranked the five advantages of the central high school on a paired-comparison rating scale. The method allowed for a maximum score of four for each advantage and each teacher had a grand total of ten. Then the scores for each teacher, being the number of times he selected an advantage, were ranked from one to five in order of decreasing value, for example, the advantage chosen the most times by a teacher was assigned one, and the advantage selected least was given a five in the ranking order. The results of the ranking were subjected to analysis to ascertain the agreement among the teachers on the criterion used to rank the items. The Kendall coefficient of concordance (w)⁵² has been

⁵²Sidney Siegal, Nonparametric Statistics (New York: McGraw-Hill Book Company, 1956), pp. 229-238.

described as 'descriptive measure of the agreement or concordance between M sets'.⁵³ In the present context, since a number of teachers rated the advantages of the central high school, the computation determined whether there was agreement among the teachers regarding their judgement of the advantages. A w of one would indicate perfect agreement whereas if w equalled 0 it would mean no agreement among the teachers.

The procedure for the computation of the coefficient of concordance has been summarised by Siegel.⁵⁴ The significance of w was tested at the .05 level of confidence.

However as was pointed out by Siegel, even though the significant value is high, it does not guarantee that the, 'orderings observed are correct, in fact, they may be incorrect with respect to some exterior criterion.'⁵⁵ In order to alleviate the situation, Kendall suggested that, 'the best estimator of the true ranking of the N objects is provided, when w is significant, by the order of the various sums of ranks, R_j '.⁵⁶ The final priority list of the advantages

⁵³George A. Ferguson, Statistical Analysis in Psychology and Education (New York: McGraw-Hill Book Company, 1959), p. 225.

⁵⁴Siegel, *op. cit.*, p. 237.

⁵⁵*Ibid.*, p. 238.

⁵⁶*Ibid.*

of the central high school as ranked by the teachers was based on this criteria.

Personal-Social Adjustment Scores

The personal-social adjustment scores resulted from data collected by semantic differentials, sociometric scales and a teacher rating scale.

Sociometric Scale. The sociometric scale provided the information to determine the selection and rejection patterns of the transported and non-transported students. Although treated separately in the final report, the same statistical treatment was followed with both groups of students.

The first statistics accumulated for the sociometric devices were frequency distributions of the number of times transported students selected transported students. Since transported students could have also selected non-transported students, the expected proportion of selection of transported students was computed as follows:

$$P_{stxt} = \frac{N_t}{N_t + N_{nt}} \quad \text{where}$$

P_{st} is the proportion of transported students selected by transported students.

N_t is the number of transported students.

The total number of possible selections was 5 ($N_t + N_{nt}$) so that the ratio of the actual selections counted and the number of possible selections gave the proportion of actual selections of transported students by transported students.

The expected proportion of selection was then compared to the actual selections. Since there were five selections per student a formal test of significance of the proportions was not considered appropriate. Lacking a valid inferential statistic, inference about the significance of the difference of the actual and expected proportion were made subjectively. It was assumed that no differences would be observed in the absence of systematic factors differentiating the transported students from the non-transported students. It can be seen that since the total number of selections was fixed, the selection of non-transported students by transported students would be significantly different from the expected proportion if the above analysis led to a conclusion of significant differences for the selection of transported students by transported students.

A similar analysis was concluded with the selections of transported students and non-transported students by non-transported students. Following this, rejections were evaluated in a similar fashion. The procedure was conducted for the total group of students and by grade.

Teacher rating. The classroom teacher rated each student in his class on a ten point behavioural practice scale as related to personal-social adjustment. Each item was scored on a continuum of five to one with the positive attitude receiving the higher score. Thus each pupil could receive a score from the teacher rating ranging from ten to fifty.

A frequency polygon was constructed, the intervals being classes of five points each, showing the percentages of transported and non-transported students scoring at each level.

The correlation coefficient was computed between the teacher rating and the scores obtained on the semantic differential, social participation and the selection ratio of the sociometric scale. The correlation coefficient was computed by the Pearson Product Moment Correlation.⁵⁷

Semantic Differential. The students completed three semantic differentials in which they expressed their attitude towards themselves, the school and their classmates. Each person could receive a minimum score of twelve and a maximum of sixty on the twelve bipolar adjectives contained in the rating scale. The five point rating procedure provided a five to one continuum with the positive factor being accorded

⁵⁷Ferguson, *op. cit.*, pp. 110-112.

the highest value.

The scores received by the students were divided into intervals of five points and the percentage of students scoring at each level was tabulated in a frequency polygon. This was done in the case of the three semantic differentials separately. The students were divided into transported and non-transported groups and the differences in the distributions were noted. The mean difference between the two groups was tested at the .05 level of confidence using analysis of variance.

The relationship between the results for each group was determined by the Pearson Product Moment Correlation Coefficient which was computed in the same manner as described in the previous section.

Social Participation. On the Social Participation Questionnaire, the students listed the extra-curricular activities in which they participated. Each activity was credited with one point, an extra point was given for any office held in an association as well as for any student who actively campaigned to win a position on the student council. The total number of points acquired by the student became his social participation score.

A frequency distribution table and polygon were constructed containing the percentage of transported and

non-transported students engaged in no, one, two, or three, four or five, and six and more extra-curricular activities. The frequency distribution table indicated the number of students engaged at a particular level; the number of students from each group participating, the percentage of each group represented by that number; and the percentage of all students taking part in extra-curricular at each particular level. These graphs were constructed for each group as well as by the grades included in the study.

Tests of significance. The data was subjected to the chi-square test of independence to determine whether the results were significant. According to Roscoe, the chi-square tests of significance were, 'extremely useful statistical procedures for determining whether two nominal measures are related.'⁵⁸ The null hypothesis was rejected at the .05 level.

A test of significance was also administered between the correlation coefficients of the social participation scores and the other variables included in the study for the transported and non-transported students separately. The Fisher z transformation was appropriate since it determined whether any, 'two samples can be considered random samples

⁵⁸John T. Roscoe, Fundamental Research Statistics (New York: Holt, Rinehart and Winston, 1969), p. 196.

from a common population.⁵⁹

Computer programme. A computer programme was utilized to compute the mean, standard deviation, correlations, covariance matrix and F ratio for the different variables in the study. This programme was especially appropriate since it allowed for unequal number of students in each group. This programme was prepared by W. H. Spain. The facilities of the Newfoundland and Labrador Computer service were utilized to process the data.

V. SUMMARY AND OUTLINE.

In this chapter the various aspects of the design of the study were discussed, including a description of the sample, a consideration of the instruments used to collect the data, the method used to collect the data as well as an outline of the statistical analysis utilized in the study.

The next chapter will deal with the results of the analysis of data based on the information obtained from the students surveyed in the three central high schools.

⁵⁹Ferguson, *op. cit.* pp. 187-188.

CHAPTER IV

PRESENTATION OF DATA

The discussion in this chapter will centre around the analysis of the data collected in this study. The following topics will be considered:

(1) A consideration of the importance awarded to the advantages of the central high schools by teachers; (2) an analysis of the personal-social adjustment scores as determined by the semantic differentials, teachers' ratings and sociometric scales; (3) the pattern of participation of transported and non-transported students in extra curricular activities; and (4) the relationships among the variables.

I. TEACHER RATING OF THE ADVANTAGES OF THE CENTRAL HIGH SCHOOL

The five advantages of the central high school formed the basis for the paired comparison rating scale administered to the teachers in the participating schools. The construction of the scale was described in the preceding chapter. The scores were tabulated for each teacher, with each advantage being assigned a teacher ranking based on the score obtained for each advantage. A rank of one indicated the highest score while a rank of five indicated the lowest. The

ranks for each advantage were totalled for each school, and for all teachers in the study. The results are presented in Table III.

TABLE III

TOTAL RANKING AND VALUES OF $\tau(W)$ FOR THE ADVANTAGES
OF THE CENTRAL HIGH SCHOOL BY TEACHERS

School	N	F	O	C	T	A	Tau(W)
A	17	31.0	74.5	50.0	51.5	48.0	962.5*
B	20	53.0	86.5	54.0	48.5	58.0	923.5*
C	13	49.5	58.0	39.5	21.0	27.0	939.5*
All	50	133.5	219.0	143.5	121.0	133.0	6205.5*

* $p < .05$

F means extra Government grants to construct extra facilities.

O means a reduction in the duplication of administrative services.

C means an enriched extra-curricular activities programme.

T means teacher specialization.

A means a diversification of academic programmes.

The coefficient of concordance (W), developed by Kenall,¹ was used as a descriptive measure of agreement among the sets of ranks. Siegal maintains that, "a high or significant value of W may be interpreted as meaning that the observers or judges are applying essentially the same

¹Siegal, *op. cit.*, pp. 232-238.

standard in ranking N objects under study."² Table III also provides the value of $\text{TAU}(W)$ for teacher rankings in each school as well as for all teachers involved in the study.

In all cases the results of W were significant at the .05 level. It was concluded that there was a high degree of agreement among the teachers from whom the data was collected. Teachers in each school seemed to agree on the relative importance of the advantages of centralization; further, all the teachers in the study tended to agree as well.

However, this did not ensure a correct ranking since all the teachers could be wrong in their estimation. According to Kendall,³ the best estimate of the true ranking of a number of objects, assuming as in this instance that W was significant, can be obtained by observing the order of the various sums of the ranks being evaluated. In the present context it involved taking the data contained in Table III and ranking the advantages according to their importance. This information has been summarized in Table IV.

²*Ibid.*, p. 235.

³*Ibid.*, pp. 237-238.

TABLE IV
RANK ORDER OF THE ADVANTAGES OF THE
CENTRAL HIGH SCHOOL BY TEACHERS

Schools	F	O	C	T	A
A	1	5	3	4	2
B	2	5	3	1	4
C	4	5	3	1	2
All	3	5	4	1	2

Increased Government Grants to Construct
Extra Facilities (F).

This advantage of the central high school was given top priority by the teachers in schools A and B but ranked fourth in the estimation of those teaching in School C. When the rankings of the teachers were combined, it was rated third out of the five advantages included in the questionnaire.

A Reduction in the Duplication of
Administrative Services (O).

All three schools rated this advantage as the least important. It was also awarded the same position when the ratings by all the teachers were combined.

A More Enriched Extra-Curricular
Activities Programme (C).

The teachers in all three schools rated this advantage third in the order of priority. However, the overall combined

score by the teachers ranked it in the fourth position.

Teacher Specialization (T).

The overall view of the scores of the teachers ranked teacher specialization as the most important advantage of the central school. However, in the breakdown of the rankings by schools, schools A, B and C rated teacher specialization fourth, second and first respectively.

A Diversification of Academic Programmes (A).

Two schools, A and C, ranked the diversification of academic programmes as their second most important choice, while in school B, the teachers ranked it in the fourth position. When the scores of all the teachers in the study were considered it was ranked second in the order of priority.

Summary. In ranking the advantages of the central school, the teachers in each school tended to agree with one another. However, while this was the case as indicated by statistical analysis, when the combined scores were considered, an analysis of rankings among schools uncovered several points of disagreement. For example, each school assigned a different rank to teacher specialization; when two schools rated a diversification of academic programmes in the second position of being most important, the third group of teachers ranked it number four; and, increase in Government

grants to construct extra facilities was ranked fourth by one school and first by the teachers in the other two schools. In addition, a reduction in the duplication of administrative services and a more enriched extra-curricular activities programme were ranked in the same positions by teachers in all three schools.

II. DESCRIPTIVE STATISTICS

This section provides the mean and standard deviation (S.D.) for each group as well as the ANOVA test of differences of the means for the scores obtained by the transported and non-transported students. This information has been tabulated in Table V.

The legend for the variables has been placed here for convenience when considering the correlation coefficients, Fisher's z and other descriptive statistics tables in the present chapter.

- SDY = Semantic Differential (Self).
- SDS = Semantic Differential (School).
- SDC = Semantic Differential (Classmates).
- TR = Teacher Rating of students.
- SP = Social Participation.
- SONT = Selection of Non-Transported Students.
- RONT = Rejection of Non-Transported Students.
- SOT = Selection of Transported Students.

ROT = Rejection of Transported Students.

TABLE V
MEAN, S.D., AND ANALYSIS OF VARIANCE FOR
TRANSPORTED AND NON-TRANSPORTED STUDENTS

Variables	Transported		Non-transported		F.
	Mean	S.D.	Mean	S.D.	
SDY	45.623	5.9	45.425	6.1	0.078
SDS	41.044	8.2	42.170	8.7	1.268
SDC	43.544	7.4	45.212	6.7	4.195*
TR	34.140	9.7	41.066	8.2	45.957*
SP	1.860	2.7	4.014	3.3	34.215*
SONT	2.526	1.4	4.090	1.0	-
RONT	2.939	1.5	3.373	1.2	7.393*
SOT	2.474	1.4	.910	1.0	-
ROT	2.061	1.5	1.627	1.2	7.390*

* $p < .05$

Summary. The information contained in the above table has been presented here so that a cursory investigation can be carried out on the data collected in the research. There were statistically significant differences in the mean scores of several variables, including the attitude towards classmates, the teacher rating, the social participation scores and sociometric scores. These will be discussed later in the chapter.

III. RELATIONSHIP AMONG VARIABLES

The correlation coefficient indicated the relationship among the variables included in the study. The procedure of calculation has been described in the previous chapter. In this section of the paper the correlation coefficients for the different variables will be given for each group and the correlations between social participation scores and the scores obtained on the other variables will be analyzed for significance.

Correlation Coefficients for Transported Students

TABLE VI

RELATIONSHIPS NOTED FOR TRANSPORTED STUDENTS. N = 114.

	SDY	SDS	SDC	TR	SP	SONT	RONT	SOT
SDS	.276*							
SDC	.513*	.275*						
TR	.080	.158	.148					
SP	-.170	-.007	.023	.162				
SONT	-.059	.059	.027	.340*	.082			
RONT	-.039	.111	-.074	.191*	.083	.461*		
SOT	.059	-.059	-.027	-.340*	-.082	-.010	-.461	
ROT	.039	-.111	.074	-.191*	-.083	-.461*	-.991	.461*

* $p < .05$

Summary. A significant relationship was found among the three semantic differentials but no relationship was

discovered with any of the other variables included in the study.

The teacher ratings did not show any significant relationship with the three semantic differentials, or the social participation scores. However, significant relationships existed between the rating by teachers and the number of rejections and selections by the transported students. The relationship was positive in the case of the non-transported students selected or rejected by the transported students but negative with regard to the transported pupils selected.

The various scores on the sociometric scale were highly intercorrelated however, this showed at most that students tended to both select and reject from the same group. Because the students had to make five selections and rejections, the correlations were bound to be the same since the sum of selections and rejections for the two groups equalled five for each student.

The social participation scores for the transported group did not correlate with the semantic differentials, teacher ratings or the scores on the sociometric scale.

Correlation Coefficients for Non-Transported Students.

TABLE VII
RELATIONSHIPS NOTED FOR NON-TRANSPORTED
STUDENTS. N = 212.

	SDY	SDS	SDC	TR	SP	SONT	RONT	SOT
SDS	.341*							
SDC	.351*	.455*						
TR	.266*	.326*	.176*					
SP	.238*	.076	.081	.218*				
SONT	-.029	.004	.038	.140*	-.077			
RONT	-.025	-.117	-.006	-.020	-.087	.223*		
SOT	.029	-.004	-.033	-.140*	.077	-.100	-.223*	
ROT	.025	.117	.006	.020	.087	.223*	-.999*	.223*

* $p < .05$

Summary. An interrelationship existed among the three semantic differentials. In addition, the semantic differential (self) had a significant relationship with the teacher ratings and social participation but the situation was not similar for the other two semantic differentials.

The teacher ratings correlated significantly with the three semantic relationships, social participation and the selection of students but not with the rejection pattern.

The significant intercorrelations of sociometric scores also showed a tendency for non-transported students to select and reject from the same group of students.

The social participation scores correlated with the semantic differential (Self) and the teacher rating but not

with any of the other variables.

Significance of the Difference between
Correlation Coefficients

The significance of the difference between the correlation coefficients for the different variables included in the study has been determined by the computation of the Fisher z.⁴ This information has been tabulated in Table VIII.

TABLE VIII

FISHER Z FOR THE DIFFERENCE OF CORRELATIONS
COEFFICIENTS FOR TRANSPORTED AND
NON-TRANSPORTED STUDENTS

	SDY	SDS	SDC	TR	SP	SONT	RONT	SOT
SDS	.613							
SDC	1.720	1.780						
TR	1.635	1.524	.247					
SP	3.526*	.706	.494	.502				
SONT	.255	.468	.093	1.729	1.354			
RONT	.119	1.950	.579	1.814	1.448	2.308*		
SOT	.255	.468	.553	1.729	1.354	.000	6.175*	
ROT	.119	1.950	.579	1.814	1.448	6.175*	2.989*	2.308*

* $p < .05$

It can be readily seen from Table VIII that with the exception of the opposing aspects of the sociometric scale, the selections versus rejections, only one significant value was obtained on the Fisher z transportation. The correlation

⁴Ferguson, *op. cit.*, pp. 187-188.

coefficients between the semantic differential (self) and social participation for the groups involved were significant at the .05 level. Also, the correlation coefficient itself was significant for the non-transported students but not for the transported students. In all other comparisons, the differences between the correlation coefficients were not significant.

A plausible hypothesis to explain the results is that the differences between the correlation coefficients may have occurred as a result of sampling error. In which case, it could indicate that no true difference existed between the results obtained from the transported and non-transported students.

IV. PERSONAL-SOCIAL ADJUSTMENT SCORES

In this study, the personal-social adjustment of transported and non-transported students was determined by the scores obtained from the data collected by three instruments. The Semantic Differential ascertained the attitude of the students towards the concepts of self, school and classmates. The classroom teacher evaluated the degree to which the students seemed to be adjusted and involved in school activities. The sociometric scale measured the social acceptance and rejection of students by the other members in their class.

Results from the Semantic Differentials

The semantic differentials were used to determine the attitude of the transported and non-transported students towards the concepts of self, school and classmates. The percentage of students from each group scoring at intervals of five points has been tabulated in Tables III, IV and V respectively.

Attitude towards self. The distribution of the scores received by both groups has been illustrated in Figure 1. Figure I compares the relative score distributions of transported and non-transported students on the semantic differential measuring attitude towards self.

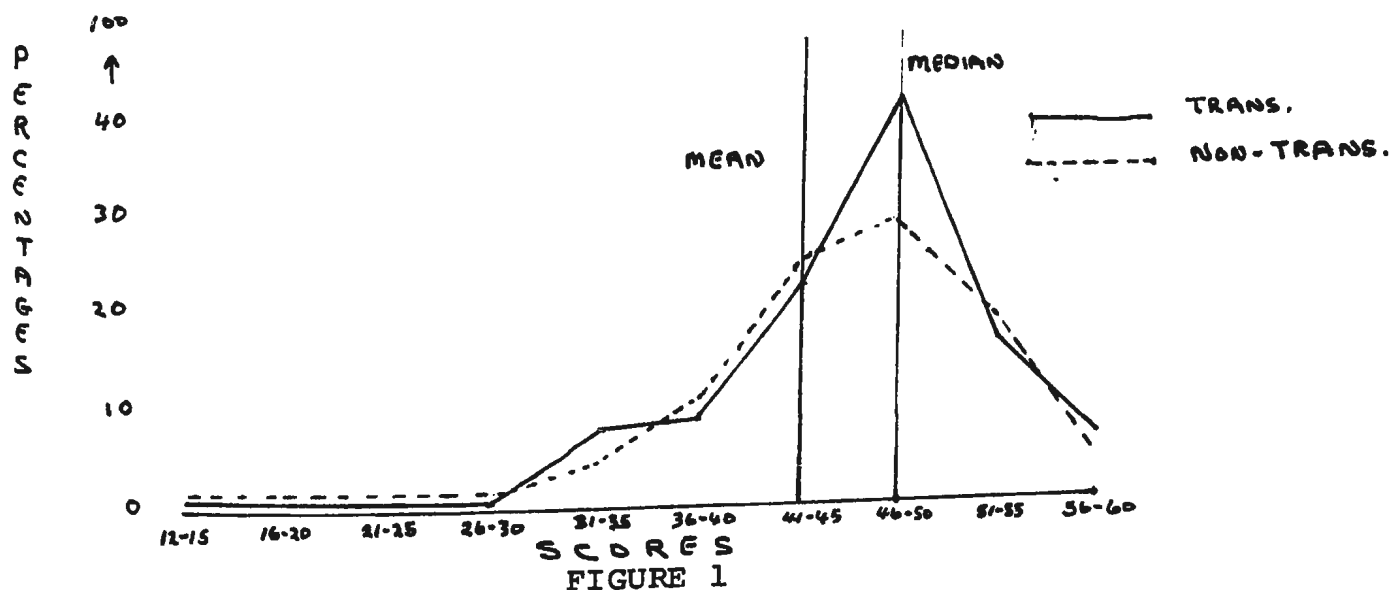


FIGURE 1
DISTRIBUTION OF SEMANTIC DIFFERENTIAL
ATTITUDE TOWARDS SELF

Generally the transported and non-transported students rated themselves equally with the former having a .2 margin on the mean scores. It should be noted that 43% of the transported students scored an average of 46-50 points whereas only 34% of the non-transported pupils were in that category; however, the overall margin was not considered large enough to be significant.

The median score, for the combined groups, was at the 46-50 level. 44.7% of the non-transported students scored below the median score of the transported group while 41.3% of the transported students obtained a score lower than the median of the non-transported group. In view of the extreme negative skew of the scores these observations are probably a better indication of the relative similarity of the two groups on this variable.

Correlation coefficients. The Semantic Differential (Self) correlated significantly with the other two semantic differentials scores for both groups of students. Also it indicated a significant relationship with the Teacher Rating and Social Participation for the non-transported but not the transported students. However, on the sociometric scale scores, there was no significant relationship. This information is contained in Table VI and Table VII.

Attitude towards the central school. The distribution of the scores from both groups of their attitude towards

school has been illustrated in Figure 2.

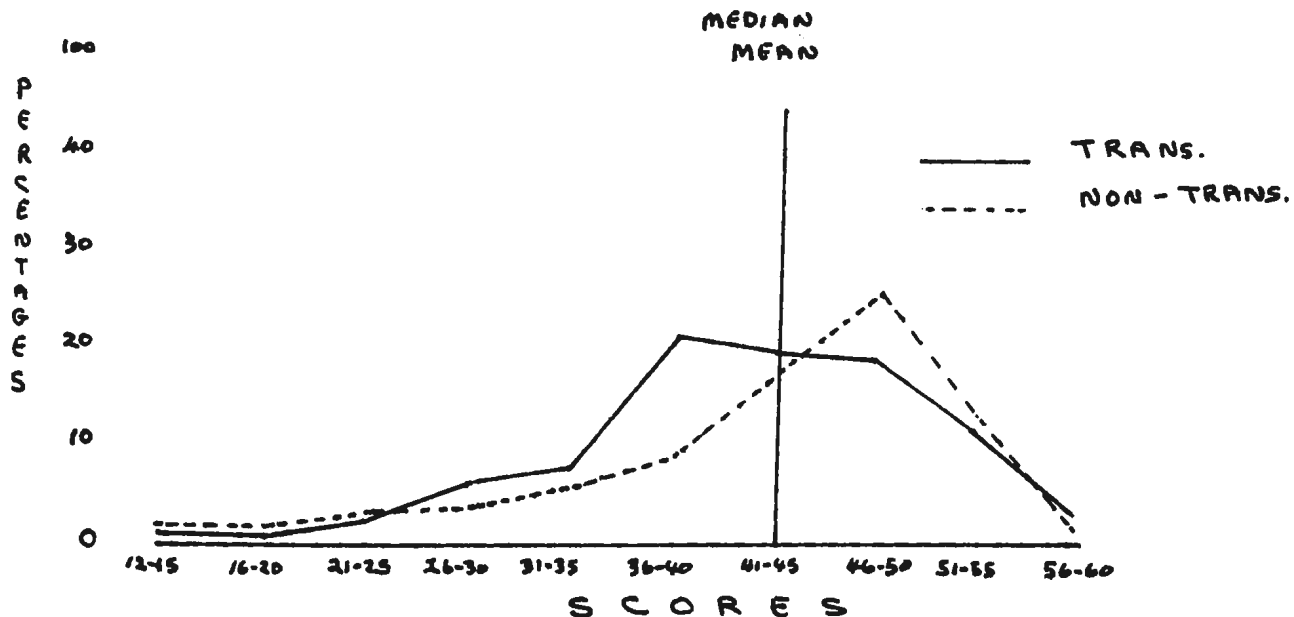


FIGURE 2

DISTRIBUTION OF SEMANTIC DIFFERENTIAL ATTITUDE TOWARDS SCHOOL

The mean score for the non-transported students in evaluating their attitude towards school was slightly higher than the transported students. The range of the scores was distributed throughout the possible choices. Also it should be noted that 30% of the non-transported and 20% of the transported students were included at the 46-50 level. And more transported students were included at the lower points on the scale than non-transported. There was a general tendency for non-transported students to indicate a more positive attitude toward their school than did the transported students.

The median score for each group was at the 41-45 point level, while 45.7% of the transported students scored below the median for the non-transported students, only 35.1% of the non-transported students scored below the median for the transported set.

Correlation coefficients. The semantic differential (school), for both groups, correlated significantly with the other two semantic differentials. It showed a significant relationship with the Teacher Rating only for the non-transported students, and, these were the only significant relationships reported for either group. Table VI and Table VII provide the basis for this comparison of the correlation coefficients.

Attitude towards classmates. The attitude of the students towards their classmates has been summarized in the figure given below.

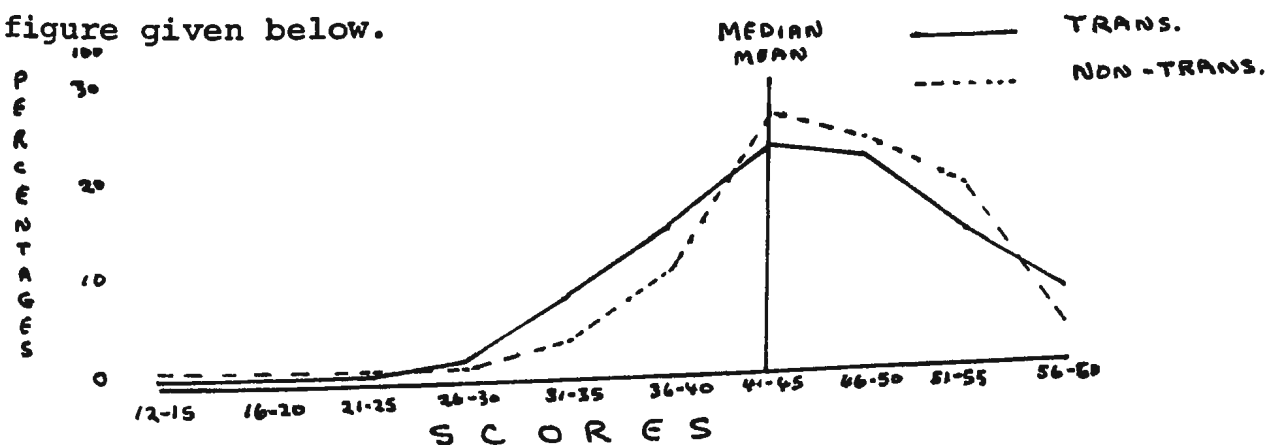


FIGURE 3

DISTRIBUTION OF SEMANTIC DIFFERENTIAL
ATTITUDE TOWARDS CLASSMATES

The difference in the mean scores for both groups was only 1.668 points favouring the non-transported students. However, ANOVA yielded an F significant at the .05 level. This can be seen in Table V. Again, from referring to the figure, it can be ascertained that more transported students scored at the lower intervals and the non-transported tended to place more students at the intervals towards the upper limit scores.

The median score the non-transported students was at the 46-50 level and at the 41-45 point level for the transported students. As a result, only 21.7% of the non-transported students scored below the median of the transported group compared with 59.6% of the transported students who scored below the median of the non-transported set.

Correlation coefficients. A comparison of the correlation coefficients reported for both groups in Tables VI and VII and showed that the Semantic Differential (Classmates) correlated significantly with the other two semantic differentials for the transported and non-transported students. However, it correlated significantly with the Teacher Rating for the latter but not the former group. These were the only significant relationships reported for this variable in either group.

Summary. A comparison was made of the non-transported

and transported students on the semantic differential scales measuring attitude toward self, school and classmates. In general, distributions of scores towards self and school did not show notable differences, although non-transported students seemed to have a somewhat more positive attitude towards school than did transported students.

Attitude toward classmates seemed to be more positive in non-transported students than in transported students. The mean scores were significantly higher and the relative number of both groups scoring above the median score was quite different.

Results from the Teacher Rating

The classroom teachers rated each student according to his adjustment to and involvement in the school programme. The maximum and minimum scores possible for each person were fifty and ten respectively. The average score for combined groups was 37.603 with the transported students receiving a mean of 34.140 and the non-transported 41.066. The difference was statistically significant at the .05 level as can be seen by reference to Table V, page 81. The frequency distribution, based on the percentage of students obtaining scores at intervals of five can be seen in Figure 4.

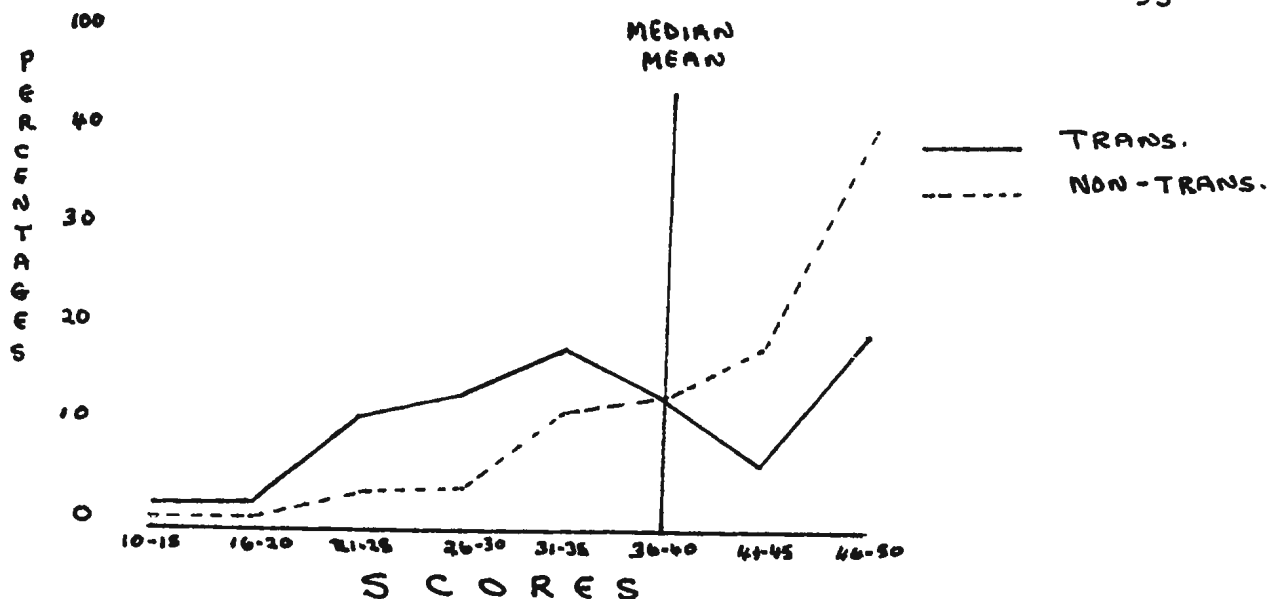


FIGURE 4

DISTRIBUTION OF TEACHERS' RATINGS OF TRANSPORTED AND NON-TRANSPORTED STUDENTS

The scores on the teacher ratings were distributed at each interval on the continuum. As can be seen teachers tended to rate the non-transported students much higher than the transported group. This can be readily seen when the means are compared by their placement on the above figure. In addition, approximately 43% of the non-transported students were rated at the 46-50 point interval whereas only 20% of the transported students received such scores. On the lower score intervals, more transported than non-transported students were placed by the teacher, however, the situation was reversed when the higher scores were considered.

The discrepancy between the average teacher rating for each group became even more apparent when the scores were

ranked for calculation of the median. The median for all the students was at the 36 - 40 point interval. 41.3% of the transported and 75.5% of the non-transported students scored at or above the median. In contrast 58.7% and 24.5% of transported and non-transported students respectively scored below the median. On a chi-square test of significance, for the number of transported and non-transported students scoring at and above or below the median interval, a chi-square value of 36.1 with one degree of freedom was obtained. This indicated that the results were significant at the .05 level of confidence and were very unlikely to have occurred by chance.

The median score for the transported group was at the 31 - 35 point interval and only 12.7% of the non-transported students scored below that figure. However, 73.6% of the transported students received scores below the median of the non-transported group. In the latter case, the median was at the 46 - 50 point interval.

Correlation coefficients. The Teacher Rating correlated significantly with all three semantic differentials, the selection pattern and the social participation scores for the non-transported students but not for the transported group. In fact, it did not show any significant correlation with any variable for the transported students, and, in the case of the non-transported group it did not correlate with

the rejection pattern. This information is contained in Table VI page 82 and Table VII page 84 .

Summary. Generally, teachers rated non-transported students much higher than their transported counterparts. This was supported by reference to the means and median for each group, as well as for the percentage of students from one group scoring below the median of the other.

Results from the Sociometric Scale.

In the study, all students were asked to complete a two part sociometric scale in which they had to list the five classmates they liked the most and the five they liked the least.

Selection pattern of transported students. There were one hundred and fourteen transported students included in the study providing a potential of five hundred and seventy selections for the group. On the sociometric scale, the transported students chose 288 non-transported students and 282 from their own group. On the surface it appeared as if the transported students selected equally from both groups. However, when examined relative to the proportions of transported and non-transported students represented in the research, it was obvious that transported students had selected more transported students than non-transported students. (Table IX).

TABLE IX

SELECTIONS BY TRANSPORTED STUDENTS BASED ON THE
PROPORTION OF STUDENTS IN THE SAMPLE

TOTAL	NON-TRANSPORTED (%)	TRANSPORTED (%)
570	50.5 (65) *	49.5 (35) *

* The percentage of selections expected, based on proportional representation is enclosed in parenthesis.

Selection pattern of transported students by grades.

An analysis by grades demonstrated a tendency for grades seven and eight transported students to select more from their own group than was expected according to the proportion of representation. The results for both grades have been tabulated in Table X.

TABLE X

SELECTIONS BY GRADE BY TRANSPORTED STUDENTS

GRADE	POSSIBLE SELECTIONS	NON-TRANSPORTED (%)	TRANSPORTED (%)
7	245	63.2 (70.6) *	36.8 (29.4) *
8	325	40.9 (58.2)	59.1 (41.8)

* the percentage of selections expected based on proportional representation is enclosed in parenthesis.

The selection pattern of transported students by school. A breakdown of the data on the selections of transported students with regard to schools indicated only a small difference in school B between the percentage of students represented in the school and the actual percentage selected by the transported students. In the other two schools the difference was much greater. However, in no case did the transported students choose as many non-transported students as were expected. The findings in school B could have been influenced by the fact that the proportion of transported students was smaller than in the other two schools. The information from all schools has been calculated in Table XI.

TABLE XI

SELECTIONS BY TRANSPORTED STUDENTS BY SCHOOLS

SCHOOLS	NON-TRANSPORTED (%)	TRANSPORTED (%)	DIFFERENCE (%)
A	38.5 (55.7) *	61.5 (44.3) *	17.2
B	72.7 (75.2)	27.3 (24.8)	2.5
C	50.3 (64.1)	49.7 (35.9)	13.8

* the percentage in the sample of each group for a particular school is enclosed in parenthesis.

Summary. Based on comparison of the proportions of the transported and non-transported students, the transported students tended to select more from their own group than from the non-transported set. In an overall comparison as well as a consideration by grades and by schools, the transported students preferred members of their own group.

Selection pattern of the non-transported students.

Since two hundred and twelve non-transported students were involved in the research, it meant the group had a total possible number of selections of one thousand and sixty. From that total they selected 193 transported and 867 non-transported students, thus they apparently favoured members from their own group.

When the total number of selections was subjected to analysis according to the percentage of students represented in each group, it supported the finding that transported students were not selected by non-transported students to the same degree as was expected. The difference has been tabulated in Table XII.

TABLE XII

SELECTIONS BY NON-TRANSPORTED STUDENTS BASED
ON THE PROPORTION OF STUDENTS IN THE SAMPLE

Possible Selections	Non-transported percent	Transported percent
1060	81.8 (65)*	18.2 (35)*

* The percentage of selections expected based on proportional representation is enclosed in parenthesis.

Selections of non-transported students by grades.

The non-transported students in both grades seven and eight selected more people from their own group than was expected when compared with the proportion represented in the research. Table XIII indicates the manner in which the non-transported students highly favoured members of their own group.

TABLE XIII

SELECTIONS BY GRADE BY NON-TRANSPORTED STUDENTS

Grade	Possible Selections	Non-transported (percent)	Transported (percent)
7	610	84.6 (71)*	15.4 (29)*
8	450	78 (58)	22 (42)

* the percentage of selections expected based on proportional representation is enclosed in parenthesis.

The selection pattern of non-transported students by schools. The data, when analyzed by schools again supported the original hypothesis that non-transported students selected non-transported students in greater numbers than they selected the bused students. The information related to these findings has been presented in Table XIV.

TABLE XIV
SELECTIONS BY NON-TRANSPORTED STUDENTS BY SCHOOLS

School	Non-transported (percent)	Transported (percent)	Difference (percent)
A	82.3 (55.7) *	17.7 (44.3) *	26.6
B	82.2 (75.2)	17.8 (24.8)	7.0
C	80.4 (64.1)	19.6 (35.9)	16.3

* the percentage in the sample for each group for a particular school is enclosed in parenthesis.

Similarly, the non-transported pupils chose primarily people from their own group when the students were considered within their schools. From the above table it can be seen that the difference between the percentage of a group represented in a school and the actual percentage of students selected by non-transported students was considerable in schools A and C which had differences of 26.6% and 16.3% respectively. In school B, the margin of 7% was somewhat smaller but indicated as well that non-transported students

selected more people from their own group. Once again, the fact that school B had a smaller proportion of transported students to select from probably reduced the differential.

Summary. When the data from the non-transported group regarding selections was treated from an overall viewpoint, in relation to proportional representation by grades and schools, the non-transported students preferred members of their own set to those belonging to the transported group by a substantial margin.

Rejection pattern of transported students. The one hundred and fourteen transported students had a total of five hundred and seventy rejection choices. Out of that total, they rejected 335 non-transported and 235 transported students. At a cursory glance this might indicate that transported students tended to reject more non-transported students than members of their own group.

However, since approximately 35% of the total sampling were transported students, the rejections needed to be viewed in relation to the proportional representation. When the expected number of rejections of both groups by transported students was compared according to their representation, the transported students rejected more members from their own group than from the non-transported set. This information has been contained in Table XV.

TABLE XV

REJECTIONS BY TRANSPORTED STUDENTS BASED ON
THE PROPORTION OF STUDENTS IN THE SAMPLE

Possible Rejections	Non-transported (percent)	Transported (percent)
570	58.8 (65) *	41.2 (35) *

* the percentage of rejections expected, based on proportion, is enclosed in parenthesis.

Rejection of transported students by grades. An analysis by grades indicated that whereas the grade seven students rejected members of each group in proportion to the number represented in the sample, the grade eight transported students rejected fewer non-transported, and consequently more transported, students than were expected. However, even in the latter instance the margin was slight. The data has been compiled in Table XVI.

TABLE XVI

REJECTIONS BY GRADE BY TRANSPORTED STUDENTS

Grades	Possible Rejections	Non- transported (percentage)	Transported (percentage)
7	245	71.4 (70.6) *	28.6 (29.4) *
8	325	49.2 (58.2)	50.8 (41.8)

* the percentage of rejections, based on proportional representation is enclosed in parenthesis.

The rejection pattern of transported students by school. In the breakdown of the rejection choices of transported students by schools, the percentage of each group represented in the school was compared with the actual percentage of rejection of the members of a particular group by the transported students. In school A, although there were 55.7% who were non-transported pupils, only 49.5% from that group were rejected by the transported students. This meant that the transported students did not reject as many community students as was expected according to their percentage of representation in the sample. The information for the other two schools as well has been calculated in Table XVII.

TABLE XVII
REJECTIONS BY TRANSPORTED STUDENTS BY SCHOOLS

Schools	Non-transported (percent)	Transported (percent)	Difference (percent)
A	49.5 (55.7) *	50.5 (44.3)	6.2
B	79.3 (75.2)	20.7 (24.8)	-4.1
C	55.2 (64.1)	44.8 (35.9)	8.9

* the percentage in the sample of each group for a particular school is enclosed in parenthesis.

In school B only did transported students reject more non-transported students than were expected. However, the difference between the percentages was marginal. The

transported students in schools A and C rejected more members of their own group than non-transported students by margins of 6.2% and 8.9% respectively.

Summary. The rejection pattern of the transported student was not rigidly defined, although generally the students rejected more of their own group than they rejected the non-transported students. Although in grade seven there seemed to be no differences between the numbers rejected in each group, in grade eight, the transported students rejected more from their own set. In two of the three schools they followed a similar practice but in the third school they rejected more non-transported students.

Rejection pattern of non-transported students. The 212 non-transported students who participated in the study had a potential rejection total of one thousand and sixty. From that total, they rejected 715 non-transported and 345 transported students. A more accurate picture can be obtained when the students were compared according to the proportion in which they were represented in the sample. Since non-transported students comprised 65% of the total, they were expected to reject 689 non-transported and 371 transported students. The actual numbers rejected have been tabulated in Table XVIII.

TABLE XVIII

REJECTIONS BY NON-TRANSPORTED STUDENTS BASED
ON THE PROPORTION OF STUDENTS IN THE SAMPLE

Possible Rejections	Non-transported (percent)	Transported (percent)
1060	67.5 (65)*	32.5 (35)*

* the percentage of rejections expected, based on proportional representation, is enclosed in parenthesis.

From the above table, it can be readily seen that the non-transported students rejected more students from their own set than from among the transported students. However, the margin was very slight.

Rejections by non-transported students by grades. An analysis by grades indicated that the rejection pattern of the non-transported students closely approximated the expected number of rejections based on proportional representation. In grade seven, the non-transported students were expected to reject 433 non-transported students but rejected 439 students and, in grade eight, although they were expected to reject 261 non-transported students, in reality, they rejected 276 students. The figures for both groups have been included in Table XIX.

TABLE XIX

REJECTIONS BY NON-TRANSPORTED STUDENTS BY GRADES

Grades	Possible Rejections	Non-transported (percent)	Transported (percent)
7	610	72 (71) *	28 (29) *
8	450	61.3 (58)	38.7 (42)

* the percentage of rejections expected, based on proportional representation, is enclosed in parenthesis.

Rejections by non-transported students by schools.

The rejection pattern by schools showed that non-transported students rejected members of each group in proportion to the percentage represented within the schools included in the study. Only in one school did the non-transported group reject fewer non-transported students than was anticipated. Table XX provides the data relevant to the rejections within the three schools.

TABLE XX

REJECTIONS BY NON-TRANSPORTED STUDENTS BY SCHOOLS

Schools	Non-transported (percent)	Transported (percent)	Difference (percent)
A	58.3 (55.7) *	41.7 (44.3)	2.6
B	76.9 (75.2)	23.1 (24.8)	1.7
C	63.1 (64.1)	36.9 (35.9)	-1.0

*the percentage in the sample for each group for a particular school is enclosed in parenthesis.

In school C only did the non-transported students reject fewer non-transported students than expected. However, that difference was extremely small, only 1%. The non-transported students in schools A and B rejected more of their members than expected with differences of 2.6% and 1.7% respectively. As a corollary, fewer transported students in schools A and B, and more in school C, were rejected by the non-transported students.

Correlation coefficients of selection and rejection patterns. The selection pattern of both groups correlated significantly with the Teacher Rating as well as indicating intercorrelations among the sociometric scale scores. However, as shown by comparing Table VI page 82 and Table VII page 84, it did not correlate with any other variable included in the study.

Except for the intercorrelations among the various factors reported in the sociometric scale, the rejection pattern of both groups did not correlate with any other variable. However, as can be seen from a comparison of Table VI page 82 and Table VII page 84 the transported students only reported a significant relationship between teacher rating and their rejection pattern.

Summary. The non-transported students rejected more people from their own group than from the transported set.

This was shown when the overall analysis of the data took place, as well as analysis by grades and schools. The students attending the central high school for the second year tended to reject a higher number of their own group than those in the first year but the margin was slight. In all instances, the differences were extremely small. A trend probably did exist, however, based on the consistency of the finding.

V. SOCIAL PARTICIPATION

The transported and non-transported students included in the study were asked to list the various extra-curricular activities in which they participated at the central high school. The instrument used to obtain this information has been described in the previous chapter. The results of the tabulation of these findings indicated a great discrepancy between the percentage of transported students taking part in extra-curricular activities and the social participation pattern of the non-transported group. At each of the assigned levels of involvement the latter students were more actively engaged than the former. The overall results have been summarised in Figure 5.

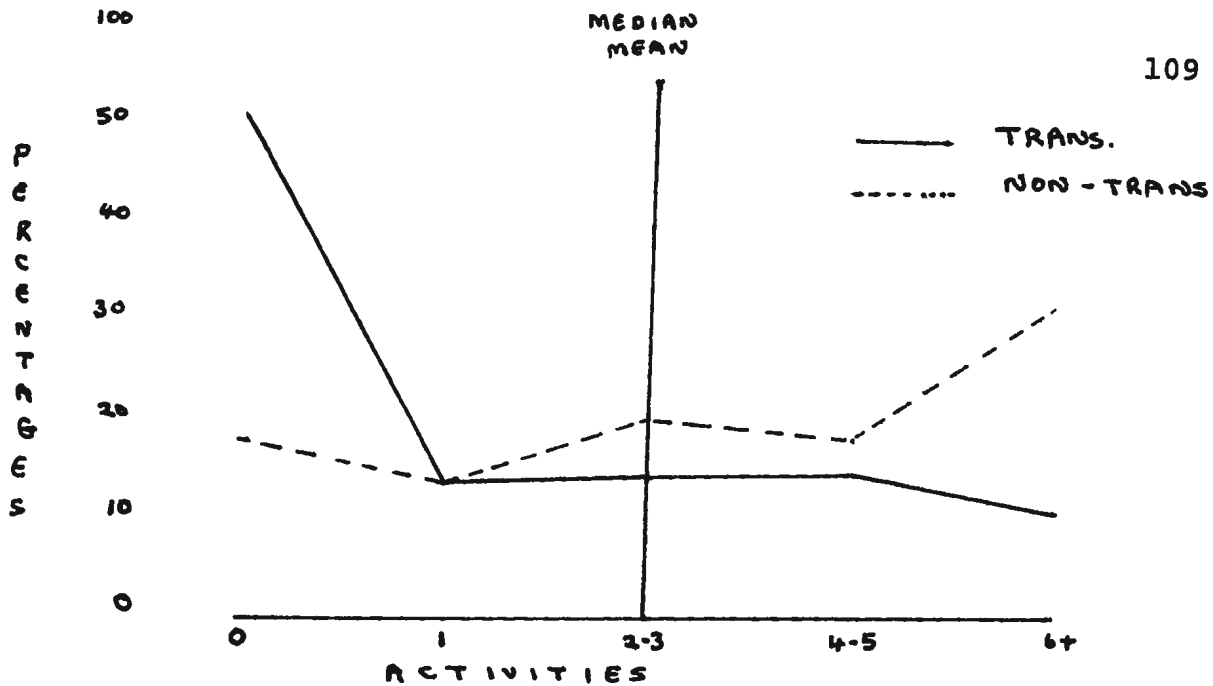


FIGURE 5

THE PERCENTAGE OF TRANSPORTED AND NON-TRANSPORTED STUDENTS PARTICIPATING IN EXTRA-CURRICULAR ACTIVITIES

The above figure showed that approximately three times as many transported as non-transported students did not take part in any extra-curricular activities; but, over three times as many non-transported students as transported participated in six or more activities. With the one exception, those involved in a single activity, more non-transported students were engaged in the various activities than transported students.

The median score for social participation for all students was two activities. From the 326 students surveyed, 190 had this many activities. This represented 58.3% of the sample. From the 190, there were 42 (or 36.8%) transported students and 148 (or 68.9%) non-transported students.

Approximately 41.7% or 136 students had one or fewer activities. From that number, 72 or 63.2% were from the transported group and 64 or 31.2% were living in the community where the school was located.

Social Participation of the Transported Students

There were 114 transported students included in the study and the results of their involvement in extra-curricular activities have been tabulated in Table XXI.

TABLE XXI

SOCIAL PARTICIPATION PATTERN OF TRANSPORTED STUDENTS N = 114

Number of activities	Number of students	Transported students	Percentage of students in category
0	96	58	60.4
1	40	14	35.0
2-3	57	15	26.3
4-5	53	15	28.3
6-more	80	12	15.0

*transported students comprised thirty-five percent of the sample.

The findings for all transported students showed that 58 or 50.9% did not take part in any extra-curricular activities. That number represented 60.4% of the 96 students from both groups who did not get involved in any activities outside the academic programme.

The percentage of transported students engaged in extra-curricular activities at the 1, 2-3 and 4-5 levels were low but approximately the same. In the category showing the number of students participating in six or more activities, only 12 out of 114 or 10.6% were involved. This meant out of 80 students engaged in six or more activities only 15% were transported students although transported students made up 35% of the sample.

Social Participation Pattern of the Non-transported Students

In contrast to the previous section, the non-transported students participated more fully at every level of involvement. The details have been tabulated in Table XXII.

TABLE XXII

SOCIAL PARTICIPATION PATTERN OF NON-TRANSPORTED STUDENTS N = 212

Number of activities	Number of students	Transported students	Percentage of all students
0	96	38	39.6
1	40	26	65.0
2-3	57	42	73.7
4-5	53	38	71.7
6-more	80	68	85.0

*non-transported students comprised 65% of the sample.

From the 212 non-transported students included in the

study, only 38 or 17.9% were not involved in any extra-curricular activities. It represented 39.6% of all students who were in that category.

Approximately 12.3% of the non-transported students took part in one extra-curricular activity and 19.8% and 17.9% were engaged in 2-3 and 4-5 activities respectively.

However, 32.1% of all non-transported students were actively participating in six or more extra-curricular activities. This meant that non-transported students comprised 85% of all students involved at that level.

Comparison of Transported and Non-transported Students

In comparing the transported and non-transported students, it should be noted that approximately three times as many students living in communities away from the central school did not take part in the extra-curricular activities programme. A comparison of both groups has been provided in Table XXIII.

TABLE XXIII

PERCENTAGE OF TRANSPORTED AND NON-TRANSPORTED
STUDENTS ENGAGED IN EXTRA-CURRICULAR
ACTIVITIES

NO. OF ACTIVITIES	PERCENTAGE OF TRANSPORTED	PERCENTAGE OF NON-TRANSPORTED
0	50.9	17.9
1	12.3	12.3
2 - 3	13.1	19.8
4 - 5	13.1	17.9
6 - more	10.6	32.1

* transported students = 35%; non-transported = 65% of sample.

The percentage, 12.3%, remained the same for both groups with respect to the one activity level. But for levels 2-3 and 4-5, there were more non-transported students than their counterparts included. At the 2-3 level, 13.1% compared with 19.8% and at the 4-5 interval 13.1% compared with 17.9% for the transported and non-transported students respectively.

Also more than three times as many non-transported as transported students took part in six or more extra-curricular activities. Approximately 32.1% of the former and 10.6% of the latter were included at this particular level.

Median test. The chi-square test of significance⁵ was used to ascertain if the differences between the groups on the median test were significant. The calculation based on the number of students scoring at or above and below the median produced a chi-square value of 31.9 with one degree of freedom which was greater than that required for significance at the .05 level.

Consequently, this meant a significant relationship existed between whether a person was transported and the number of activities in which he participated. It was quite unlikely that the results could have occurred by chance.

Summary. At every interval on the scale, with one exception, the non-transported students participated in more extra-curricular activities than the transported students. This was shown when the students were arranged according to the percentages at each level and the numbers scoring at and above or below the median.

Social Participation Pattern of grade Seven.

The grade seven students were experiencing their first year in attendance at the central high school. There were 49 transported and 122 non-transported students who participated in the study. Fewer grade seven transported

⁵ Siegel, *op. cit.*, pp. 111-115.

students and slightly more non-transported students did not take part in any extra-curricular activities when compared with the overall findings for all students. The results of the social participation of the grade seven students have been included in figure 6.

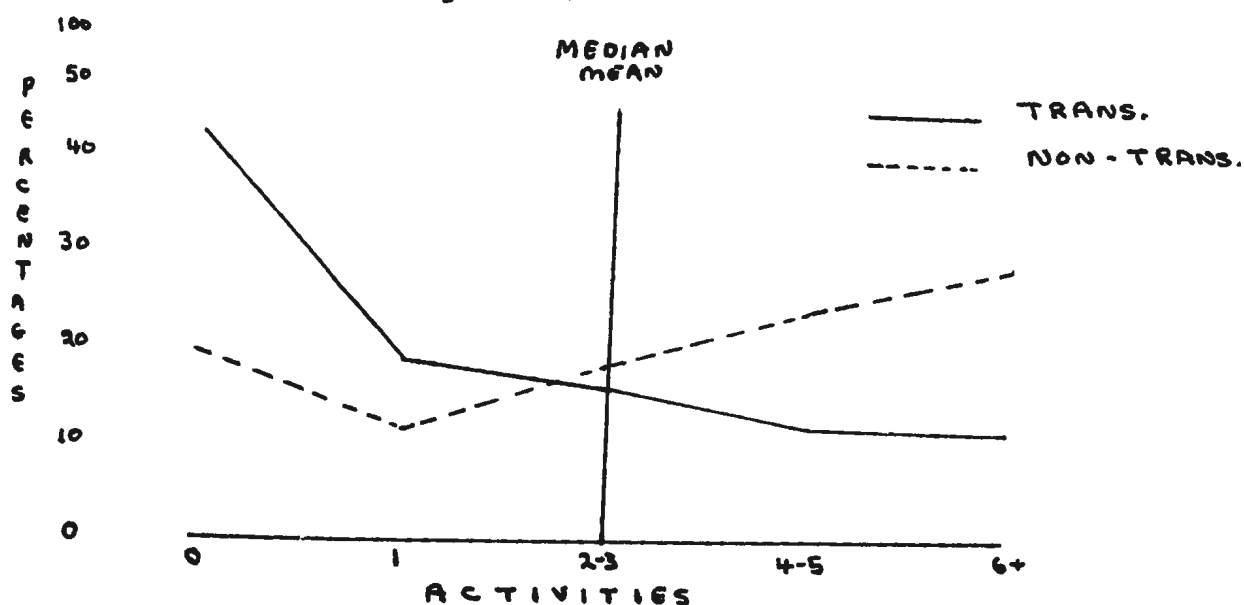


FIGURE 6

PERCENTAGE OF GRADE SEVEN STUDENTS ENGAGED IN EXTRA-CURRICULAR ACTIVITIES

Grade Seven transported students. The social participation pattern for the grade seven transported students indicated that 40.8% of the students did not engage in any extra-curricular activities. The remainder of the data has been calculated and demonstrated in table XXIV.

TABLE XXIV
SOCIAL PARTICIPATION PATTERN FOR GRADE
SEVEN TRANSPORTED STUDENTS N = 49

NO. OF ACTIVITIES	NO. OF STUDENTS	TRANSPORTED STUDENTS	PERCENTAGE OF STUDENTS IN THIS CATEGORY
0	44	20	45.5
1	24	9	37.5
2 - 3	29	8	27.6
4 - 5	33	6	18.2
6 - more	41	6	14.6

*transported students comprised 28.7% of all grade seven students.

From the above table it can readily be seen that out of a possible 49 transported students in grade seven, 20 people did not participate in any extra-curricular activities. This represented 45.5% of all grade seven students who did not become involved in activities other than the regular academic programmes. The number of students engaged at each level gradually decreased until only six or 12.2% were participating in six or more extra-curricular activities.

Grade seven non-transported students. The grade

seven non-transported students were more actively engaged in extra-curricular activities than their transported counterparts. Only 19.7% or 24 students out of a total of 122 failed to participate in any activities. The non-transported students comprised 85.4% of all students engaged in six or more extra-curricular activities. At all levels, except the single activity level, non-transported students had a higher percentage participating than was expected based on proportional representation. The data has been compiled in table XXV.

TABLE XXV

SOCIAL PARTICIPATION PATTERN FOR GRADE SEVEN
NON-TRANSPORTED STUDENTS N = 122

NO. OF ACTIVITIES	NO. OF STUDENTS	NON-TRANSPORTED STUDENTS	PERCENTAGE OF STUDENTS IN THIS CATEGORY
0	44	24	54.5
1	24	15	62.5
2 - 3	29	21	72.4
4 - 5	33	27	81.8
6 +	41	35	85.4

* non-transported students comprised 71.3% of all grade seven students.

Comparison of both groups in grade seven. As was indicated by the overall consideration of the social participation pattern for both groups the grade seven non-transported students were more actively involved in the extra-curricular activities programme than the transported students. The comparison of percentage at each interval of involvement can be made from Table XXVI.

TABLE XXVI

PERCENTAGE OF GRADE SEVEN TRANSPORTED AND
NON-TRANSPORTED STUDENTS ENGAGED IN
EXTRA-CURRICULAR ACTIVITIES

Number of activities	Percentage of transported	Percentage of non-transported
0	40.8	19.7
1	18.4	12.3
2-3	16.4	17.2
4-5	12.2	22.1
6 +	12.2	28.7

* transported students = 28.7% and non-transported students = 71.3% of grade seven students included in the sample.

Over twice as many transported students, compared with the non-transported students, were not engaged in any extra-curricular activities. The actual percentages involved were 19.7% for the latter and 40.8% for the former.

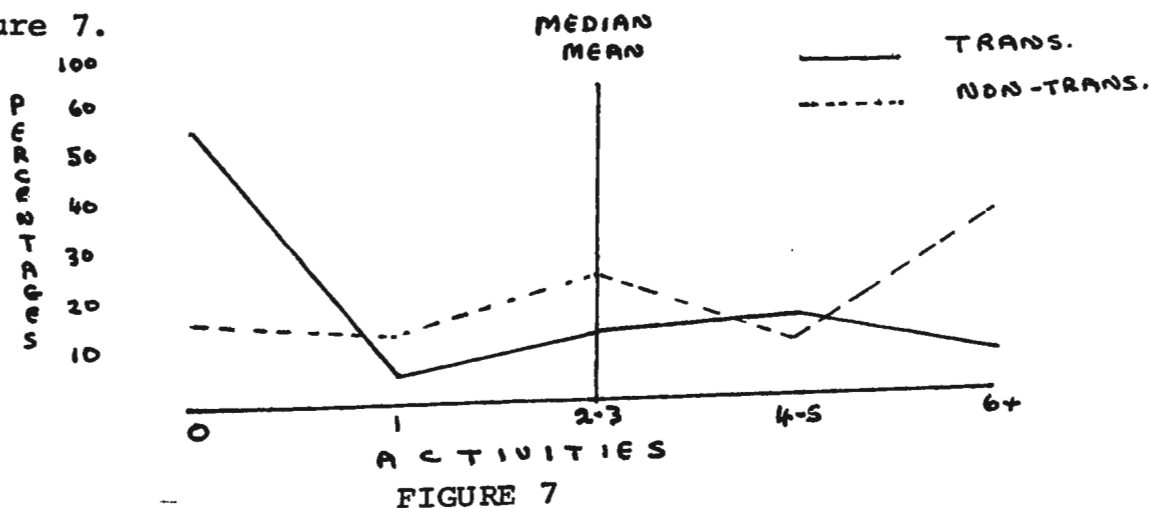
Summary. The non-transported students in grade seven

were involved in more extra-curricular activities than their transported counterparts. This was shown by comparison of the percentage from each group participating at the different activity levels as well as the number falling at or above and below the median for the group.

Social Participation Pattern of Grade Eight

Since the grade eight students were experiencing their second year in the central high school, they should have been more integrated into the regular programming of the school than the grade seven students. However, 50.8% of the transported and 15.6% of the non-transported students did not engage in any extra-curricular activities. At each of the other activity levels the non-transported students placed more students than the transported group. The social participation pattern of the grade eight students can be seen in

Figure 7.



PERCENTAGE OF GRADE EIGHT STUDENTS PARTICIPATING
IN EXTRA-CURRICULAR ACTIVITIES

Grade eight transported students. The grade eight transported students did not engage in as many activities as their grade seven counterparts. The information related to the pattern of social participation for this grade has been summarized in Table XXVII.

TABLE XXVII

SOCIAL PARTICIPATION PATTERN FOR GRADE
EIGHT TRANSPORTED STUDENTS N = 65

Number of activities	Number of students	Transported students	Percentage students in this category
0	52	38	73.1
1	16	5	31.3
2-3	28	7	25.0
4-5	20	9	45.0
6 +	39	6	15.4

* transported students = 41.9% of all grade eight students.

There were 65 transported students in grade eight and from that number 38 or 58.8% did not take part in any extra-curricular activities. This meant that 73.1% of all grade eight students who did not take part in any extra-curricular activities were transported. Only at the 4-5 level did transported students place more of their members than were expected according to their proportional representation. Likewise, only 15.4% of the students taking part in six or

more activities were transported.

Grade eight non-transported students. In contrast to the pattern reported in the previous section (Table XXVII), the grade eight non-transported students had an increase in the percentage of students participating at the various levels of involvement compared with the transported students. The resume of the social participation pattern of the grade eight non-transported students has been given in Table XXVIII.

TABLE XXVIII

SOCIAL PARTICIPATION PATTERN OF GRADE EIGHT
NON-TRANSPORTED STUDENTS N = 90

Number of activities	Number of students	Transported students	Percentage students in this category
0	52	14	26.9
1	16	11	68.7
2-3	28	21	75.0
4-5	20	11	55.0
6 +	39	33	84.6

*non-transported students comprised 58.1% of all grade eight students.

There were 90 non-transported students in grade eight attending the three central high schools in the study. Out of that total, only 14 or 15.6% did not take part in any extra-curricular activities. This meant that out of all grade eight students not participating in any activities only 26.9%

were non-transported. At each of the other intervals, the non-transported students placed more students than were expected according to their representation. The only exception was at the 4-5 level but the difference was marginal.

Comparison of both groups in grade eight. When compared with the grade eight transported students, the non-transported students showed a higher degree of involvement at every level except at the 4-5 level where the former had 13.8% of their students participating, compared with 12.2% for the latter. However, it should be noted that the difference was marginal. The comparative figures have been provided in Table XXIX.

TABLE XXIX

PERCENTAGE OF GRADE EIGHT TRANSPORTED
AND NON-TRANSPORTED STUDENTS ENGAGED
IN EXTRA-CURRICULAR ACTIVITIES

Number of activities	Percentage of transported	Percentage of non-transported
0	58.5	15.6
1	7.7	12.2
2-3	10.8	23.4
4-5	13.8	12.2
6 +	9.2	36.6

* transported students = 41.9%; non-transported students = 58.1%.

Approximately four times as many transported students

in grade eight, in relation to the non-transported students, did not engage in any form of extra-curricular activities. At levels 1, 2-3, and 6 or more, larger proportion of non-transported students were represented, the differences ranged from 4.5% to 27.4%.

Correlation coefficients. From Table VI and Table VII, it can be seen that the social participation scores did not indicate any significant relationship with any other variable for the transported students. However, for the non-transported students, it correlated significantly only with the semantic differential on which the students rated themselves and the Teacher Rating. No other significant relationships were reported for either group of students.

Tests of significance. The chi-square test of significance was employed to ascertain whether the number of activities in which each group of students participated was related to their being transported or non-transported students. A contingency table, showing the number of activities in which the students participated and the number of activities in which students from each group participated, was constructed.

A value of 13.28 at the .05 level of significance was needed to reject the null hypothesis which stated that the status of the students and number of activities were independent. With 326 subjects, and 4 degrees of freedom, the calculation

of the data produced a chi-square value of 42.04. The null hypothesis was rejected and the alternate hypothesis was accepted. This stated that there was a significant relationship between whether a student was transported to school by bus and the number of extra-curricular activities in which he engaged.

Summary. The grade eight non-transported students were more extensively engaged in the social participation programme than the transported students. On the comparison of percentages those students living in the communities where the schools were located were more actively involved than the students who were bused to school on a daily basis.

VI. SUMMARY AND OUTLINE

Summary of present chapter. This chapter has described the analysis of the data collected in the research. It began with a consideration of the attitude of teachers towards the advantages of the central high school, followed by the personal-social adjustment scores obtained on the three semantic differentials, teacher rating and the sociometric scale. The information obtained from the students dealing with their participation in extra-curricular activities was then analyzed. In addition the correlation coefficients or the relationships among the different variables were discussed.

Outline of chapter five. The final chapter will provide a discussion of the findings with conclusions and recommendations.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter will be organized under the three main headings as given in the chapter title. The first section will briefly summarize the purpose, procedure and treatment of the research. The next section will outline the findings and conclusions according to the research questions posed in the study; the chapter will conclude with recommendations for school officials as well as for further research.

I. SUMMARY

In 1954, the first central high school was opened in the Province of Newfoundland and Labrador. At that time, the extra-curricular activities programmes were cited as one of the major advantages of the new educational system. The purpose of the present study was to compare the transported and non-transported students in grades seven and eight attending central high schools with respect to personal-social adjustment and social participation. This led to the formation of the following research questions:

1. Is there any relationship between the personal-social adjustment scores and student participation in extra-curricular activities?

2. What is the pattern of selection and rejection of transported and non-transported students by their classmates?

3. What is the pattern of participation of transported and non-transported students in extra-curricular activities?

The sample consisted of one hundred and fourteen transported and two hundred and twelve non-transported students registered in grades seven and eight attending three central high schools in the Province of Newfoundland and Labrador. All data was collected during April, 1972.

There were five instruments used to collect the data for the study. All teachers in the three schools completed the teacher rating scale dealing with the advantages of the central high school; the homeroom teachers of the classes surveyed rated individual students on behavioural practices and the students completed a three part semantic differential, a two part sociometric scale and a social participation questionnaire.

The data, statistically treated by a computer programme, yielded the means, median, standard deviation, F ratio, frequency distributions, correlations and Fisher z for the two groups of students included in the study.

II. FINDINGS AND CONCLUSIONS

In the first part of this section the ranking of the advantages of the central high schools by the teachers will

be discussed. The remaining sections will consider the findings and conclusions resulting from the research questions posed in the study.

Advantages of the Central High School

It should be noted that no priority list was given when the advantages of the central school was being cited in the early fifties. As a result, there appeared to be no external standard with which to compare the ranking obtained from the teachers included in this study. Nevertheless, in the present survey, the combined scores of the teachers from the three schools ranked the advantages in the following order of importance: teacher specialization, a diversification of academic programmes, increased Government grants to construct extra facilities, a more enriched extra-curricular activities programme and a reduction in the duplication of administrative services.

It appeared that advantages associated directly with the academic aspect of the teachers' work were awarded top priority and the advantages regarded as being on the periphery of their jurisdiction were rated low in the ranking order.

Directly associated with working conditions. The opportunity for a teacher to restrict his services to the area of his specialty and the availability of several academic programmes were ranked first and second respectively by the

teachers. These can be considered as the core work of a teacher since, above all other activities, a teacher is hired to teach academic subjects. Thus, this ranking would be expected from this group because it appeared to reflect an expected philosophy of the professional educationalists. Also, the two advantages, are obviously highly interdependent, and should be extensions of each other.

Local needs dictated selections. Although ranked third by the combined scores of the teachers, a detailed analysis revealed that schools A and B rated an increase in Government grants to construct extra facilities as the most important advantage, whereas school C ranked it in the fourth position. In the former schools, an overcrowded school population existed or the school officials were negotiating or planning to extend the physical facilities of the institution, which would possibly explain their choice. In contrast, no crisis in accommodation was prevalent in the other school.

In addition, it should also be noted that facilities go hand in hand with academic programmes. Thus the ranking of this advantage immediately after the advantages related to teaching could be seen as a perception of the need to improve the facilities to improve academic programmes.

The academic services. The ranking of all the teachers,

as well as an analysis by schools, showed that a reduction in the duplication of administrative services was deemed as the least important advantage. The most plausible explanation for this would appear to be that the administration of the school was not viewed as the role of the teacher. Also, as the size of the school increased, specialization became more apparent as individuals were assigned to special tasks. However, perhaps a combination of the two provides a more appropriate hypothesis.

Extra activities for teachers. The teachers ranked a more enriched extra-curricular activities programme fourth before administrative efficiency but after the advantages related to working conditions. Since in most schools only a certain percentage of teachers become active in these activities, it can be considered as being outside the terms of employment for the group. Also, because they usually occur during the lunch break or after the regular school day, it usually involved spending extra time supervising student activities. Nevertheless, the question must be asked whether this representation of teacher attitudes towards extra-curricular activities is consistent with the priority of the planners of the central high school concept in the Province. The present research seems to indicate that there was a notable difference of emphasis between the two.

Implication for social participation. The teacher ranking of social participation activities did not indicate any clear lines for the assessment of teacher attitude on student participation in the various activities. A finding in the preliminary study reported in the review of the literature concluded that the success of the extra-curricular activities programme depended largely on the attitude and drive of the school officials.

In the present study the low priority given to the advantage by teachers indicates a need for study into their overall attitude toward and support for extra-curricular activities.

In the interest of clarity and to enhance the understanding of the findings presented in the study, research question three will be considered first, followed by deliberation of research questions two and one respectively.

Research Question Three

What is the pattern of participation of transported and non-transported students in extra-curricular activities?

As shown in the review of the literature, when the concept of the central high school was being introduced in this Province in the early fifties, it was said that the larger student population would provide for all pupils a more enriched extra-curricular activities programme. However, the

data collected for the present study did not endorse, rather it appeared to contradict, the hypothesis. The teachers ranked a more enriched extra-curricular activities programme fourth out of five advantages of the central school. The non-transported student participated in an average of 4.011 activities compared with 1.860 for the transported students. Approximately three times as many non-transported (32.1%) as transported students (10.6%) were active in six or more extra-curricular activities and nearly three times as many transported as non-transported students (50.9% compared with 17.9%) did not engage in any activities outside of the regular academic programme.

Hence, in addition to the low ranking given to social participation activities by the teachers in the central high schools, the transported students did not participate as extensively as the non-transported students in extra-curricular activities.

Grade seven students. Since the grade seven students were experiencing their first year at the central high schools, a degree of hesitancy in becoming involved in the social participation programmes might have been expected. However, this did not appear to be the situation because 59.2% of the transported and 80.3% of the non-transported students were active in social participation activities, which would seem to indicate a relatively high level of involvement.

In this study, when the grade seven pattern

of involvement was compared with the overall totals, the transported students had fewer and the non-transported students more students not participating. The same situation occurred at the level indicating participation in six or more extra-curricular activities. There the grade seven transported students had more, and the non-transported students fewer students participating when the results were compared with the overall pattern.

Grade eight students. Since the grade eight students were attending the central high school for the second year, they should have been more fully integrated into the total school programme and, possibly, more involved in the extra-curricular activities than the grade seven pupils. But, even though this appeared to be true of the non-transported students, the transported pupils did not become as actively involved in grade eight as in grade seven. Approximately 58.5% and 15.6% of the transported and non-transported respectively failed to participate in any social activities programmes. Also four times as many non-transported as transported students (36.6% compared with 9.2%) took part in six or more extra-curricular activities which showed an increase in the number of students participating for the former group and a decrease for the latter.

Comparison of the grades. While the transported

students had more members in grade seven than eight participating, the pattern was reversed for the non-transported students who had more grade eight students than seven engaged in extra-curricular activities. It could be that these differences are accidents of sampling: however, if such a trend exists it would mean that, whereas the non-transported students became more active as their years in the central high school increased, the transported students would tend to withdraw from participating in extra-curricular activities.

Summary. In the review of the literature Smith¹ and Anderson² as well as the preliminary study reported in the review of the literature, it was stated that extra-curricular activities did not serve a substantial proportion of the student population. In the present study, 68.8% of all students never engaged in any activities. This meant that less than one third of the school population were actually engaged in social participation programmes.

Likewise the findings of Morgan and Kurtzman,³ Straley⁴

¹Smith, *op. cit.*

²Anderson, *op. cit.*

³Morgan and Kurtzman, *op. cit.*

⁴Straley, *op. cit.*

and Pauley⁵ were substantiated in the present research. The preliminary study reported in the review of the literature indicated that the transported students did not participate as fully as the non-transported students and this was borne out in the research. Some reasons for the situation given in the report included a lack of knowledge about the various activities, very little supervision by the teachers, the need for an orientation programme, a greater familiarity and awareness of the facilities by the community students, and very little integration of the social participation programme into the regular scheduling of the school programme.

Research Question Two

What is the pattern of selection and rejection of transported and non-transported students by their classmates?

On the sociometric scale, all students listed the five classmates they liked the most and the five they liked the least. The results were tabulated to determine the selection and rejection patterns of the transported and non-transported students. In this section, the patterns will be discussed under separate headings.

The selection pattern. If the conclusions reported by Peterson⁶ could be assumed, then transported and

⁵Pauley, *op. cit.*

⁶Peterson, *op. cit.*

non-transported students would select only people from their own status group. However, the findings in the present study partially contradicted this particular hypothesis. For, in both instances, the students primarily made their selection choices from among members of their own group, but whereas the transported students tended to be moderate in their selections, the non-transported students highly favoured the students from their own set.

Transported students. When analyzed by proportional representation, the transported students favoured members from their own group even though the margin was minimal. In the preliminary study as reported in the review of the literature the school officials mentioned the formation of community cliques which may have accounted for the selection pattern. Since the transported students represented a large number of communities, the bus ride or the feeling of being visitors or intruders may have acted as a binding force to develop a community concept among the different transported groups. In fact, the bus ride itself represents a considerable portion of the socialization time available to the students in the central high schools.

The same selection pattern resulted when the transported students were analyzed by grades. Although they selected mostly from their own set the difference was not as marked among the grade seven as the grade eight students.

Possibly there may be a trend among transported students to select non-transported students in grade seven but turning more to their own group in grade eight. The importance of this trend, if it exists, would depend upon the reasons for it and upon its continuation into the next grades. Some possible explanations for such a trend would include the grade seven students being more susceptible in responding to new relationships and groupings. In addition, the reasons for the reversal in grade eight could range from having found the central high school environment to be incongenial to having no opportunity for social interaction with those outside the community group.

Even within the different schools, the transported students selected pupils from their own group. Although the difference in percentage was marginal in school B, it was substantial in the other two schools. An explanation for the differences in school B centered around the number of non-transported students represented in the school which was very high; therefore, while the tendency to select more non-transported than transported students could have been similar to schools A and C, the proportion of selections over expectation would have been smaller. In addition, it is possible that the findings may have occurred by chance.

Non-transported students. The non-transported students

included in the investigation highly favoured the members of their own group in exercising their choices on the sociometric scale. A similar pattern also emerged when the non-transported students were divided into their grade status. Therefore, if any integrating process occurred during the first two years of attendance at the central high school, it was not evident by the selection pattern demonstrated by the non-transported students included in this particular study. In fact, it reaffirmed the conclusion reached by Bonney⁷ and Lee.⁸

The selection pattern by school merely supported the original hypothesis that non-transported students generally chose members of their own set. As with the transported students, the difference between the percentage of non-transported students in school B and the actual selections made in that school, was extremely small while in the other two schools a substantial margin resulted. Again these findings probably resulted from the high proportion of non-transported students school B.

Summary. Although, not as great among the transported students, generally both groups selected students from among their own members. This pattern was reaffirmed by reference

⁷Bonney, *op. cit.*

⁸Lee, *op. cit.*

to the proportional representation as well as the breakdown of the sample by grade and school.

The rejection pattern. If it could be assumed that people usually rejected people who were not of similar interest groups⁹ then the findings from this particular investigation would partially contradict the hypothesis. Although the tendency was not as pronounced with the non-transported students as with the transported students, the data indicated that the transported and non-transported students rejected more members from their own set than from the other group.

Transported students. When analyzed according to the percentage of representation, the transported students rejected more from their own members than was expected. This may have resulted from a high degree of familiarity with their own group, an insular attitude to consider only people from their own status group or each set of students acting exclusively in selecting and rejecting and thus restricting their choices to their own members. Also, since the margin was small, the effect may have been spurious.

In grade seven the transported students rejected pupils in accordance with their proportional representation, but, in grade eight, more transported and few non-transported

⁹Peterson, *op. cit.*

students were rejected.

Even though the difference may be slight, it could be indicative of a trend similar to the selection pattern demonstrated by the transported students. During the first year in attendance at the central high school, they rejected equally from all groups but by the second year they tended to become more insular in nature directing most of their rejections towards their own group.

Basically, the transported students rejected members of both groups according to their representation within a particular school. Only in school B did they reject more non-transported students than were expected. Perhaps, this could be indicative of having the transported students in that school identified more with the largest group, since the small transported group was further comprised of students from several smaller communities.

Non-transported students. When analyzed by proportional representation, the non-transported students rejected more of their number and fewer transported students than were expected although the differences were quite small. The findings were similar when the non-transported students were compared by grade and by school.

Summary. Generally, the transported and non-transported students made their choice selections from among their

own groups. Although the margin was slight for the later, it seemed substantial for the former.

In reference to the rejection pattern for each group, the non-transported students rejected students according to their percentage of representation in the study, but the transported students rejected more students from their own group rather than from among the non-transported students.

Research Question One.

Is there any relationship between the personal-social adjustment scores and student participation in extra-curricular activities?

In the study, the semantic differentials, the teacher ratings and the sociometric scales determined the personal-social adjustment scores for the transported and non-transported students. The social participation score for each pupil was decided by the number of activities in which the person participated. The research question, therefore, attempted to ascertain the relationship between the personal-social adjustment scores and social participation.

Transported students. The social participation score for the transported students did not correlate significantly with any personal-social adjustment score. Although in two instances, namely the semantic differential (Self) and Teacher Rating, the values suggested a possible relationship.

In addition to the above, the number of extra-curricular activities in which transported students engaged did not have any significant relationship with the semantic differentials for the school and classmates or the selection and rejection pattern of the students by the transported group. The findings of Munro¹⁰ and the preliminary study reported in the literature concluded that students did not participate in extra-curricular activities because they felt rejected by the community students. Another explanation might be the attitude of the transported students that they never felt fully integrated into the central high school. Also it may be that the attitude towards the central high school and involvement in extra-curricular activities were not considered important for a positive self concept by the transported students, but were for the non-transported students. If this was the case then the criteria on which the students base their self concepts need to be examined. This was indicated from the results obtained from both groups of students and should form the basis for further study.

Since no significant relationship existed between the personal-social adjustment scores and social participation, other factors must have contributed to the lack of involvement by the transported students. Possibly, these would include

¹⁰Munro, *op. cit.*

a lack of interest displayed by these students, the actual hours when the activities were scheduled, the attitude of the teachers towards social participation, and the adverse effects of bus transportation on the student. All of these have been suggested either in the preliminary report or the studies reported in the review of the literature.

Non-transported students. The non-transported students reported significant correlations among several variables included in the study. For example, a significant relationship ($p < .05$) existed between the social participation score and the scores obtained on the semantic differential (Self) and Teacher Rating. However, as with the transported students, no significant relationships occurred with the attitude of the students towards the school, the classmates or with the selections and rejections of both groups by the non-transported students. This would indicate that maybe the self concept of the non-transported students was related to their involvement in social participation activities.

Comparison of both groups. The semantic differentials indicated an equally positive self concept in both groups; however, the differences in the correlations of the semantic differentials with social participation scores would indicate that the factors associated with positive self concepts are

different for each group. In particular, the non-transported group may be more influenced by the school and its organized social opportunities than the transported group.

One serious implication of this hypothesis is that if it is true, among transported students a positive self concept would probably not be related to other aspects of schooling. In fact, achievement motivation could very well not be a factor related to positive and quite adequate personal-social adjustment for the transported students.

Perhaps it is just for this reason that teachers rated non-transported students higher than transported students on personal-social adjustment. There is no reason to suspect that the differential is actually as great as indicated by the teachers even if it does exist. Probably, the teachers were applying school related criteria such as academic achievement and achievement motivation as well as a more general participation in the life of the school when they rated students. In general, the transported students would probably be lower in all aspects on these factors; but, quite possibly the fact that they are lower has little bearing on their general adjustment and feelings of well being; hence, a tendency not to become more involved as time passes in the school.

The social participation pattern of both groups did not correlate significantly with the attitude of the students towards the school and their classmates or with the selection

and rejection patterns of the students. Consequently, the former would contradict the findings of Bach¹¹ who investigated the relationship between social participation and certain measures of social adjustment.

Summary. When the results of the present research have been analyzed, the following conclusion can be put forward for consideration.

1. It seemed that the higher the teacher rating the more students tended to participate in extra-curricular activities, or the corollary, the students most actively involved in extra-curricular activities received the higher teacher ratings. In the present circumstances, the non-transported students were rated highly by the teachers and this may have resulted from greater contact with these students outside the regular school routine, especially during extra-curricular activities programmes. Also, the non-transported students may have been better academically or displayed more acceptable classroom demeanor and thus were rated higher than the transported students.¹²

2. Although acceptance by the peer group may have acted as an incentive for greater student participation in some

¹¹Bach, *op. cit.*

¹²Lorber, *op. cit.* Also discussion of the halo effect.

instances, there was no significant relationship between social participation scores and the selection and rejection patterns by the classmates of both groups.¹³

3. The attitude of both groups towards their classmates did not correlate highly with student participation in extra-curricular activities.

III. RECOMMENDATIONS

As a result of the findings of the present study, in conjunction with the results of the preliminary visit and the review of the literature for the study, the following recommendations are being made for consideration by school officials as well as some recommendations for further study.

Recommendations for School Officials

1. If the results of the present study are characteristic of the central high schools throughout the Province, then it would appear that serious consideration needs to be given to the emphasis placed on the academic and social participation programmes in these schools. Since the data indicated very little participation in extra-curricular activities, perhaps the central high schools could consider offering only academic programmes. If this should happen, then social development may be facilitated by having the social participation activities carried out in the community centres,

¹³Munro and Cheong, *op. cit.*

halls, elementary schools or some other such building in the feeder communities as well as in association with other community agencies.

In addition, the existing co-curricular activities programmes should be evaluated periodically, noting the kinds of projects available and the percentage of students participating. As well it may be necessary to revamp the social development programme to correspond with the concerns and interests of the students in particular grades and schools.

2. Since it seemed that some incoming students experienced difficulties adjusting to the situation, an orientation programme is necessary to integrate the students into the central high school environment. Some possible suggestions would include having a two phase orientation programme starting in grade six and extending into grade seven or longer. Maybe a refresher programme would be beneficial for the students beyond their first year in the central high school. In this way the student should become familiar with the facilities, programmes and personnel available in the school.

3. As a possible method of improving the percentage of students participating, the extra-curricular programme should be integrated into the regular scheduling of the central high school.

4. If co-curricular activities have to be scheduled outside the regular school hours, then the necessary

transportation should be available for the students in the feeder communities to participate.

5. As a means of reinstating proper liason between the central high school and the feeder communities, a possible method of improvement would be for the school boards to provide adequate housing for at least two of the teachers on the staff of the central high school in the feeder communities. If possible, the rent could be subsidized to make the plan more attractive. This would help to establish a continuous channel of communication as well as to enhance the image of the central school as being part of the other communities.

6. Since many of the problems confronting the students relate to the family or the community, it is often important to work out the difficulty in conjunction with the other institution. Some suggestions to relieve this dilemma would be to have Social Workers or Guidance-Social Workers attached to the central high schools whose responsibility would be to visit the parents and talk with them about school problems. Also the teaching staff should be making regular visits to the feeder communities to consult with parents possibly through prearranged interviews. In addition, a continuous public relations programme would not only provide a method of disseminating information but also value feedback from parents, students, and teachers.

7. If the social development of the student is a valuable

aspect of the learning process, then, the central high schools should have assigned staff members responsible for the co-curricular activities programmes and, if necessary, this should be incorporated into their conditions of employment.

8. A greater effort needs to be made by the school officials to ensure that social participation programmes are being established in the primary and elementary grades.

9. Whenever possible teachers should be encouraged to incorporate social development activities into their regular teaching programme.

Recommendations for Further Research

1. A follow up study to the present research including the pattern of adjustment and social participation for the same students in each year of attendance at the central high school.

2. An extension of the study to determine how the aims of the central high school in this Province are being achieved .

3. An extended study to ascertain the number and effectiveness of school organizations and to what extent they are available to all students in the school and who assumes the leadership and control of the co-curricular activities.

4. A study to determine the relationship between involvement in community social organizations and school adjustment.

5. A study to determine the effects of social problems on academic achievement of bus or bursary students.

6. A follow up study to determine the social influences among the transported students. This would investigate whether transported students tend to be regarded as one group or if they remain as different groups representing the different communities.

7. A comprehensive investigation to define the attitude of the parents, teachers and students towards the central high school. It would also decide how this affects the level of success, academically and socially, for that particular school system and how it relates to the aims of the school district.

8. A detailed study to determine the reasons for the patterns of selection and rejection of transported and non-transported students as discovered by this study.

9. A study of the effects of representative size on socialization in central high schools.

10. A study to determine the factors associated with the personal-social adjustment of the transported students.

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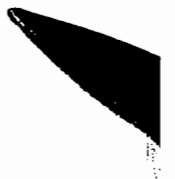
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APPENDIX



APPENDIX A.

February 29, 1972.

To Superintendents and Principals:

I am presently undertaking graduate studies in Educational Psychology (Guidance and Counselling) at Memorial University of Newfoundland. As you are no doubt aware, the requirements entail the completion of a thesis.

The topic of my thesis centres around the relationship between personal-social adjustment and participation in extra-curricular activities of grade seven and eight students attending central high schools in the Province of Newfoundland and Labrador.

I hope to be in a position to collect the necessary data early in April and am writing to obtain your permission to do the same in the Central High School at

The procedure will be to have questionnaires completed by the teachers and several classes of grade seven and eight students. I anticipate that the students should be able to complete the forms during a regular class period of forty minutes.

Since time is, as always, a pressing factor, your cooperation and permission will be greatly appreciated.

Thanking you in advance for your assistance.

Sincerely yours,

Hollis Hiscock.

APPENDIX A.

P. O. Box 9264,
St. John's, Nfld.

March 18, 1972.

To the teachers of central high schools:

At an earlier date I wrote to the Superintendent of the School Board in your area and the Principal of your school requesting permission to carry out research for my Master's Thesis in your school. They have kindly consented to my request.

Today I am writing you to advise you of my plans and to solicit your assistance in collecting the data as well as requesting your help in completing several questionnaires.

The topic of my thesis is the relationship, if any, between personal-social adjustment and social participation of transported and non-transported students in the central high school. I plan to use five short instruments to collect the necessary data.

A. A teachers' rating scale. Each teacher will be asked to rate the importance of the advantages of the central high school.

B. A rating of students by the homeroom teacher.

C. A sociometric scale for the students.

D. A semantic differential scale in which the students will be asked to rate themselves, their school and their classmates.

E. A listing of the extra-curricular activities by the various students.

The information is to be collected from two classes of grades seven and eight in your school.

I shall be visiting your school to collect the data during the first week after Easter holidays and will be in your particular school on . I trust that you have no objection and that I can depend on your cooperation during that time.

Thanking you in advance for your assistance.

Yours sincerely,

Hollis Hiscock.

APPENDIX B.

RATINGS BY TEACHERS

MALE _____ FEMALE _____ NUMBER OF YEARS TEACHING _____
 GRADES TAUGHT _____ SUBJECT TAUGHT _____

LISTED BELOW ARE SOME ADVANTAGES FOR THE ESTABLISHMENT OF
 CENTRAL HIGH SCHOOLS. SINCE THEY ARE ARRANGED IN PAIRS,
 WOULD YOU INDICATE WHICH OF THE TWO YOU CONSIDER MORE IMPORTANT.
 PLEASE MARK AN X IN THE APPROPRIATE BLOCK. FOR EXAMPLE:

[NOVELS, MAGAZINES, ☐ TELEVISION, MOVIES, ☒]
 [NEWSPAPERS. ☐ FILMS.]

THE X MEANS I CONSIDER THE LATTER TO BE MORE IMPORTANT.

INCREASED CAPITAL GRANTS TO CONSTRUCT EXTRA FACILITIES	<input type="checkbox"/>	A DIVERSIFICATION OF ACADEMIC PROGRAMMES.	<input type="checkbox"/>
TEACHERS SPECIALIZING IN THEIR SUBJECT AREAS.	<input type="checkbox"/>	A REDUCTION IN THE DUPLICATION OF AD- MINISTRATIVE SERVICES.	<input type="checkbox"/>
A MORE ENRICHED EXTRA- CURRICULAR ACTIVITIES PROGRAMME.	<input type="checkbox"/>	INCREASED CAPITAL GRANTS TO CONSTRUCT EXTRA FACILITIES.	<input type="checkbox"/>
A MORE ENRICHED EXTRA- CURRICULAR ACTIVITIES PROGRAMME.	<input type="checkbox"/>	TEACHERS SPECIALIZING IN THEIR OWN SUBJECT AREAS.	<input type="checkbox"/>
A REDUCTION IN THE DUP- PLICATION OF ADMINISTRATIVE SERVICES.	<input type="checkbox"/>	A DIVERSIFICATION OF ACADEMIC PROGRAMMES.	<input type="checkbox"/>
TEACHERS SPECIALIZING IN THEIR SUBJECT AREA.	<input type="checkbox"/>	INCREASED CAPITAL GRANTS TO CONSTRUCT EXTRA FACILITIES.	<input type="checkbox"/>
A REDUCTION IN THE DUP- PLICATION OF ADMINISTRATIVE SERVICES.	<input type="checkbox"/>	A MORE ENRICHED EXTRA- CURRICULAR ACTIVITIES PROGRAMME.	<input type="checkbox"/>

A DIVERSIFICATION OF
ACADEMIC PROGRAMMES.

☐

TEACHERS SPECIALIZING
IN THEIR SUBJECT AREAS. ☐

INCREASED CAPITAL
GRANTS TO CONSTRUCT
EXTRA FACILITIES.

☐

A REDUCTION IN THE
DUPLICATION OF ADMINIS-
TRATIVE SERVICES. ☐

A DIVERSIFICATION OF
ACADEMIC PROGRAMMES.

☐

A MORE ENRICHED EXTRA-
CURRICULAR ACTIVITIES
PROGRAMME. ☐

RATING OF STUDENT BY CLASSROOM TEACHER

SCHOOL _____ GRADE _____ BOY _____ GIRL _____

HOME ADDRESS OF STUDENT _____

BY COMPARING THIS STUDENT WITH OTHERS IN THE CLASS, HOW WOULD YOU RATE HIM OR HER ON THE FOLLOWING ITEMS. PLACE AN X IN THE APPROPRIATE BLOCK.

	MOST OF THE TIME	ABOUT $\frac{3}{4}$ THE TIME	ABOUT $\frac{1}{2}$ THE TIME	ABOUT $\frac{1}{4}$ THE TIME	ALMOST NEVER
IS A FRIENDLY, OUTGOING PERSON					
DOES NOT LISTEN WHILE OTHERS TALK					
TAKES PART IN EXTRA- CURRICULAR ACTIVITIES					
SHOWS A LACK OF CONFIDENCE					
SHARES HIS OR HER INTEREST WITH THE GROUP					
DOES NOT VOLUNTEER FOR SCHOOL OR CLASS PROJECTS					
IS POLITE AND CONSIDERATE OF OTHERS					
DISLIKES TAKING PART IN STUDENT GATHERINGS					
WORKS AS WELL AS HE OR SHE IS ABLE					
DOES NOT FIT WELL INTO GROUP ACTIVITIES					

SOCIOMETRIC SCALE

NAME OF SCHOOL _____ GRADE _____ CLASS _____
BOY _____ GIRL _____ HOME ADDRESS _____

INSTRUCTIONS: READ THE QUESTIONS AND WRITE YOUR ANSWERS
IN THE SPACE PROVIDED.

A. WHICH FIVE STUDENTS IN YOUR CLASS DO YOU LIKE THE MOST?

PLACE THE NAMES ON THESE LINES.

1.
2.
3.
4.
5.

B. WHICH FIVE STUDENTS IN YOUR CLASS DO YOU LIKE THE LEAST?

PLACE THE NAMES ON THESE LINES.

1.
2.
3.
4.
5.

LISTED BELOW ARE SOME WORDS WHICH CAN DESCRIBE HOW YOU FEEL ABOUT CERTAIN THINGS. AT THE TOP OF EACH SECTION YOU WILL SEE THE ITEM YOU HAVE TO CONSIDER YOURSELF, YOUR SCHOOL AND YOUR CLASSMATES.

GOOD BAD
IF YOU FEEL THAT YOUR SCHOOL IS REALLY GOOD THEN PLACE AN X
IN THE BLOCK NEAREST GOOD.

GOOD ☐ ☐ ☐ ☐ ☒ BAD
IF YOU FEEL YOUR SCHOOL IS MORE GOOD THAN BAD THEN PLACE AN
X IN THE SECOND BLOCK FROM GOOD.

GOOD ☐ ☐ ☐ ☒ ☐ BAD

IF YOU DO NOT KNOW HOW YOU FEEL ABOUT YOUR SCHOOL THEN YOU
PLACE AN X IN THE CENTRE BLOCK.

(DO THE SAME FOR ALL THE OTHER WORDS LISTED BELOW).

COLUMN A.	MOSTLY A.	MORE A THAN B	DO NOT KNOW	MORE B THAN A	MOSTLY B.	COLUMN B.
WEAK						STRONG
SOCIABLE						UNSOCIABLE
CRUEL						KIND
ACTIVE						PASSIVE
SAD						HAPPY

COLUMN A.	MOSTLY A.	MORE A THAN B	DO NOT KNOW	MORE B THAN A	MOSTLY B.	COLUMN B.
-----	-----	-----	-----	-----	-----	-----
BRAVE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	COWARDLY
TENSED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RELAXED
COMFORTABLE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNCOMFORTABLE
UNIMPORTANT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	IMPORTANT
HONEST	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DISHONEST
UGLY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BEAUTIFUL
FRIENDLY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNFRIENDLY.

PLACE AN X IN THE BLOCK SHOWING HOW YOU FEEL ABOUT YOUR SCHOOL.

COLUMN A.	MOSTLY A.	MORE A THAN B	DO NOT KNOW	MORE B THAN A	MOSTLY B.	COLUMN B.
-----	-----	-----	-----	-----	-----	-----
PLEASANT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNPLEASANT
PASSIVE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	ACTIVE
SMALL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	LARGE
TENSED	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	RELAXED
EASY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DIFFICULT
UNFRIENDLY	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	FRIENDLY
FAIR	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNFAIR
USELESS	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	USEFUL
GOOD	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BAD
AWFUL	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NICE
INTERESTING	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	BORING
COMFORTABLE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	UNCOMFORTABLE.

PLACE AN X IN THE BLOCK SHOWING HOW YOU FEEL ABOUT YOUR
CLASSMATES.

COLUMN A.	MOSTLY A.	MORE A THAN B	DO NOT KNOW	MORE B THAN A	MOSTLY B.	COLUMN B.
KIND	_____	_____	_____	_____	_____	CRUEL
LARGE	_____	_____	_____	_____	_____	SMALL
RELAXED	_____	_____	_____	_____	_____	TENSED
UNIMPORTANT	_____	_____	_____	_____	_____	IMPORTANT
COMFORTABLE	_____	_____	_____	_____	_____	UNCOMFORTABLE
DISHONEST	_____	_____	_____	_____	_____	HONEST
FRIENDLY	_____	_____	_____	_____	_____	UNFRIENDLY
PASSIVE	_____	_____	_____	_____	_____	ACTIVE
UNPLEASANT	_____	_____	_____	_____	_____	PLEASANT
STRONG	_____	_____	_____	_____	_____	WEAK
SAD	_____	_____	_____	_____	_____	HAPPY
UNSOCIABLE	_____	_____	_____	_____	_____	SOCIABLE.

SOCIAL PARTICIPATION QUESTIONNAIRE

NAME OF SCHOOL _____ GRADE _____ CLASS _____
 BOY _____ GIRL _____ HOME ADDRESS _____

1. NAME ALL SCHOOL ORGANIZATIONS, ASSOCIATIONS AND CLUBS OF WHICH YOU ARE A MEMBER.

A. _____ D. _____
 B. _____ E. _____
 C. _____ F. _____

2. DO YOU HOLD AN OFFICE IN ANY OF THESE? YES _____ NO _____
 IF YES, NAME THEM.

ORGANIZATION/ASSOCIATION

OFFICE HELD

3. DO YOU TAKE PART IN SCHOOL SPORTS, OTHER THAN DURING REGULAR GYM CLASSES? YES _____ NO _____
 IF YES, WHICH SPORTS

A. _____ D. _____
 B. _____ E. _____
 C. _____ F. _____

4. WERE YOU ELECTED THIS YEAR TO REPRESENT YOUR CLASS ON SOME COMMITTEE OR PROJECT? YES _____ NO _____
 IF YES, LIST THEM HERE

A. _____ C. _____
 B. _____ D. _____

5. DID YOU TRY TO GET ELECTED TO THE STUDENT COUNCIL THIS YEAR? YES _____ NO _____

6. ARE YOU A MEMBER OF THE STUDENT COUNCIL? YES _____ NO _____

7. IF YES TO NUMBER 6, DO YOU HOLD ANY OFFICE ON THE STUDENT COUNCIL? YES _____ NO _____ IF YES, WHICH OFFICES

A. _____ B. _____

8. DID YOU WORK ON THIS YEAR'S SCHOOL YEARBOOK? YES___ NO___
IF YES, WHAT WAS YOUR WORK _____
9. DO YOU HELP PUBLISH A SCHOOL NEWSPAPER? YES___ NO___
IF YES, WHAT WAS YOUR WORK _____
10. DO YOU ATTEND AFTER SCHOOL OR EVENING FUNCTIONS SPONSORED
BY THE SCHOOL? YES___ NO___
IF YES, WHICH SOCIAL EVENTS
- A. _____ C. _____
B. _____ D. _____
11. ARE YOU A MEMBER OF THE SCHOOL
- A. GLEE CLUB. YES___ NO___
B. BAND. YES___ NO___
12. DO YOU PLAY ON ANY SCHOOL SPORTS TEAM? YES___ NO___
IF YES, WHICH SPORTS
- A. _____ C. _____
B. _____ D. _____
13. IF YOU HAVE TAKEN PART IN ANY OTHER SCHOOL ACTIVITIES NOT
MENTIONED ABOVE, PLEASE LIST THEM HERE.

ACTIVITIES

OFFICES HELD (IF ANY)

FIGURE 10
MUSEUM CANADA

