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PRESTIGE IN FORM VII : A COMPARATIVE FIELD STUDY

By

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for the degree of Master of Social Sciences, in the  
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# C O N T E N T S

	<u>Page</u>
List of Tables	i
List of Figures	i
 CHAPTER I            Introduction	 1
II            The Empirical Study of High School Youth	15
III           Four Social Systems: a comparison of Form VII in each of four high schools	36
The Academy (p.36)	
The Towers (p.48)	
Riverlea (p.58)	
Waterview (p.67)	
Summary of the Findings (p.74)	
IV            That Which Characterizes a LEAD	79
V            The Affect of (A) Type of School and (B) Sex	85
VI            Discussion - methods and findings	93
 REFERENCES	 109
 APPENDIX A            Brief Research Design	 112
B- i            Students' Questionnaire	113
B- ii           Teachers' Questionnaire	123
C- I            Frequencies of Students' Responses to Items	126
C- II           Introductory note; Key; Chi-square Values and their Significance Level of 36 <u>Critical</u> Items	135
C-III           Chi-square Values and their Significance Level: All LEADS cf. all REST	142
D- I            The Computation of Chi-square Values set down in Appendix C- I and Appendix C-II	143 169



	Page
APPENDIX D-II    The Kendall Coefficient of Concordance:W showing for responses to Items 47 & 48	
(i) the degree of association in the judgment of the four Form VII groups,     and	171
(ii) the differences between males and females in co-educational Form VII groups, in their rankings of des- criptive comments applicable to their peers	173



### List of Tables

<u>Table</u>	<u>Page(s)</u>
II - 1 Administration of Questionnaires in 1971	22
II - 2 Thirty-six <u>Critical</u> Responses	34 - 35
III - 1 Comparisons: frequency of responses to 36 Items	37 - 38
III - 2 The Academy Responses	40
III - 3 The Towers Responses	49
III - 4 Riverlea Responses	59
III - 5 Waterview Responses	68
III - 6 The Conformity of Leads with their Form VII group	76 - 77
IV - 1 Frequency of Responses, combined LEADS cf. REST	84
V - 1 Differences between State co-educational and Independent Schools	85
V - 2 Differences between the Sexes	88
V - 3 Differences between Girls in State co-educational schools and those in Independent schools	89
V - 4 Differences between Boys in State co-educational schools and those in Independent schools	91

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### List of Figures

<u>Figure</u>	
III - i SOCIOGRAMS : Academy	43
III - ii Towers	54
III - iii Riverlea	62
III - iv Waterview	71
III - v Four Association Networks	78
IV - i Television Viewing, LEADS cf. REST	81



## CHAPTER I

### Introduction

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Form VII is a unique phenomenon in the school system since it is the final year for students who have successfully passed all the formal requirements of the secondary education system. Form VII students have qualified for University Entrance but elect to continue their studies for an additional year at school. They are the senior students of the high school!

The Form VII year is also a year of transition. From about the age of five they have been subject to the supervision of teachers acting in loco parentis but since Form VII students will move on, at the end of the year, and most will become university students, this final year is one where they must add to their maturity and must develop their ability to study independently. Consequently, the nature of the relationship between these students and their teachers and school administrators changes from what it was earlier. Their relationship with the many high school students who are their juniors, also changes.

The larger the secondary school, the more likely it is that these senior students who are now classified by the school as a unit, Form VII, will have been brought together from a variety of different working groups. At the Form VI level, a student's selection of academic subjects and his past academic record, usually determine the group in which he will study. There may be many sixth forms; some emphasizing Science and Mathematics, others Commerce or Foreign Languages or Social Studies, while others, again, may be General.



For the post sixth form year, Form VII, only a few sixth form students will return to school. These few will be regarded as a group, a very select group. Form VII members define themselves as a group. They interact face-to-face and form a distinct impression of each other (Hopkins 1959: 28 - 30); whatever their past socialization may be, they are influenced now by these concurrent face-to-face relations and expectations of behaviour.

However, their expectations and behaviour in Form VII constitute only a part of their life. They will enjoy Form VII status for one year only and their submission to such values as members of the group may impose, is the more pronounced because of the emotional importance of Form VII membership.

The Form VII member modifies his behaviour as he grasps the attitudes of others towards the Form VII membership - others, such as his teachers, his juniors, his peers; and in turn he responds to them. He and his peers bring to the group facets of their past experience of interaction with others; that is, they bring the value standards they have developed - in the family, in the neighbourhood, among the wider kin group, in each school attended and in each sub-group within it to which they have belonged; they also bring their experience in the religious or political or recreational groups to which they have been affiliated. The attitudes of the Form VII peer group are influenced by the values held by those who constitute the group.

Collectively Form VII members face the task of achieving good academic standards, usually measured in terms of external examinations regarded as the culminations of secondary schooling; frequently the results of these examinations determine what further educational opportunities remain open to students. The Form VII members, as a group, must manage to keep the demands of the school



authorities to limits which the group membership considers tolerable. The goals imposed on the group by the school authorities, and the means legitimized for their achievement, are usually not confined to the more or less explicit aims of academic learning and ordered behaviour. The richness of life at school depends much on the contribution made to the school by its Form VII membership. But the Form VII group must find rewarding the way they pass their time at school!

The achievement of their common tasks and the communication of Form VII members one with the other, brings about solidarity, one of the attributes of being a group (Bales, 1951: 73, 78-80). This solidarity is marked by each member of the group perceiving himself as part of a larger whole, sharing common problems, accepting the rights and obligations of belonging to that larger whole. Within the group, "small groups" of a few members, may exist as sub-groups. Members of the Form VII group are socially interdependent (see footnote, Bott, 1964: 88) since the institutional arrangements mean that members must live and work together much of the time. So, much of the behaviour of members affects other members and is affected by them.

The individual Form VII member is sensitized to the environment in which he is interacting and his full repertoire of behaviour is never exhibited in any one environment. At school the Form VII student's behaviour will be geared to meet both the pressures of the institution and the pressures of the Form VII peer group. In other words, students are subject to the pressures of the external system and of the internal system (Homans, 1951: 150 - 151). The pressures exerted by the peer group will, in part, be a collective response by Form VII students to the pressures originating in the organization of the school. The following may be noted: the



4.

particular authority structure, the degree of bureaucratization, the size of the student roll and the Form VII roll, the size of the teaching staff, the way authority is organized and the extent to which departure from the formalized rules is considered legitimate, the extent to which the organization's demands can be met by the individual, without the collective effort of Form VII members, the flow of information, the amount of informal teacher-student contact, the official "job specifications" for Form VII students, the range of courses available - these may be so broad that the Form VII group, as a whole, may seldom find itself in the same classroom.

Such institutional arrangements, along with the Form VII members' perceptions of valuable, rewarding behaviour, will affect the allocation of prestige and in turn influence who will be elite members of Form VII. The external system will affect the behaviour the members engage in and the opinions and sentiments they express. In other words, the external system affects those observable activities which each member "feed(s) in to form the group's consensus" (Hopkins, 1959: 36).

The group needs to reach a consensus in order to achieve the tasks which face the Form collectively. As Factor Analysis has shown, the two chief components of consensus are agreement and satisfaction (Mills & Rosenberg, 1970: 146). By consensus the Form membership establishes the code of behaviour that ought to occur in given circumstances (Homans, 1951: 127). The group establishes these behavioural norms in relation to external objects, in relation to its expectations of extra-group objects. It adjusts to its environment, to the external system of the particular high school in which it is located. The norms of behaviour are established because this is the kind of behaviour Form VII members "find valuable for the actual behaviour of themselves and others (such as the school principal,



the subject teacher, the Form III student) to conform to" (Homans, 1961: 116).

Form VII groups will differ (i) in their external systems as a result of differences in what is expected of staff and students, and also because of differences in the type of school, e.g. single sex or co-educational; Independent (and requiring payment of fees) or State (and supported by the taxpayer). They will differ (ii) in their internal systems, because of differences in the life-styles of members' families and consequent differences in their early socialization, and because of differences in the political and religious ideas they have embraced, and the length of time most members have been associated. Also (iii) they will differ because of the personal attributes of the individuals who make up the group membership.

Thus, the behaviour which one Form VII finds valuable may be different from that valued in another Form VII. In one, a high value may be placed on personal integrity, while in another, being liked by other members, may be of paramount value. Individual members, each being unique, will differ in their personal values, but the interaction of the Form VII members will produce a group consensus on values and it is this consensus which helps to determine the group's norms of behaviour. So it is that, apart from the pressures which derive directly from the external system, there are the pressures which arise from the code of behaviour which the Form VII membership develops by consensus. In a study of the allocation of prestige in a Form VII group, it is essential then to gain an understanding of the internal system, and in particular, of its norms and values since these will determine which members stand out in prestige and influence.

Although in any group there is "the tendency to make generalized social status, that is, prestige, contingent only upon



solidarity and loyalty to group norms - (a tendency to feel) nobody is better than anybody else..." (Bales, 1950: 174) yet it is the experience of all students at school that there are leaders and followers in most activities and that those who lead in one activity very often lead in a number of others also. Schools are, to a greater or lesser extent, bureaucratic and the methods of a bureaucracy, designating areas of responsibility to particular persons, penetrate the classroom organization, extra-curricula organization, and even the informal social system of the students. There are different expectations of the behaviour of those who lead, as distinct from those who follow. In other words, there is "a working order of social positions" (Sebald, 1968: 207) and the notion develops that "those who do the more important jobs should receive more recognition" (Bales, op.cit. 174). But, as Jackson (1968: 229 - 30) points out "It is possible for different people within the same structure to maintain, reasonably, quite different images of the whole."

When Form VII members do evaluate themselves and others "in comparative social terms" (Hammond, 1954: 276) they are likely to judge on the basis of rank orders in some or all of a variety of states and activities, such as team sports, popularity, physical attributes and clothing styles, academic performance, innovatory ideas, parents' life style, ability to organize or stir up excitement or raise a laugh or help achieve group cohesion, and so forth. It may be recalled that Talcott Parsons (1970: 55) stressed the diffuse basis of prestige, while acknowledging that it is partly acquired by "highly specific capacities and achievement". If we accept, and to date this assumption has gone unchallenged, that prestige is a rare resource allocated to the few by the many, then it follows that those Form VII members ranking high over all will



be the recipients of most prestige, and enjoy generalized social status, to use Bales' term, superior to that of the generality of Form VII members.

Each member of Form VII, either as recipient or donor, will "experience power and prestige" (Bott, 1964: 163) in the social relationships within the group. The top ranking members will exercise a degree of control over the rest of the Form and they will be highly regarded because they are in some ways important in achieving the collective tasks of the group. The members not ranking high, not accorded prestige, will either accept control by the top ranking members or they will experience the social punishment, meet the social cost, of behaving in a way that contravenes the norms of the group. There will be symbols of prestige whose meaning is known to all members. For example, top ranking members may sit in a particular spot to eat their lunch and the rest will leave that spot free for them to occupy.

Since there is a diffuse basis to prestige, if top ranking in the school's external system is not also associated with top ranking in the Form VII's internal system, then "normative and factual" prestige ranking will differ (Vellekoop, 1966: 45) and the group's behaviour will have characteristics which reflect this. School authorities usually recognize this fact and avoid the possibility of giving school rank, e.g. in the prefect system, without first making strenuous efforts to ensure that the students whom the authorities wish to rank high are also students with top ranking in Form VII's internal social system, and in the wider informal social system of the school. Some of the power exercised by leading students in the school's external system (e.g. school prefects), is delegated to them and their access to resources



depends to some extent on the authorities' permission or acquiescence but 'the consent of the governed' is essential both for the smooth functioning of Form VII's internal social system and of the school's informal social system.

The term, system, implies a patterning of behaviour, as between group members (Parsons, 1954: 215). Hickman (1971: 61) links the patterning of behaviour with group members' mutual expectations and shared collective goals. It seems sensible to view the Form VII group as a social system - though Homans (1951: 289) speaks of some groups becoming social systems more fully than others - at least until empirical research establishes the absence of any patterning of behaviour.

The terms 'prestige' and 'esteem' are equated in much of the literature (Parsons 1954: 397 & 414)(Bales 1950: 77)(Homans 1961: 158). The term 'prestige', used alongside the terms, 'wealth' and 'power', to designate the rewards the wider society may dispense to members, seems satisfactory in the context of a study concerned with the behaviour of leaders and followers in Form VII groups, even though the word 'prestige' cannot be associated with 'wealth and power' in Form VII as it can in the wider society; but apart from this limitation it is a useful concept to describe the Form VII phenomenon. Because the receipt of prestige distinguishes the top stratum from those below, it must be linked with the concept of status, of rank within a social system. Coleman (1961: 143) saw recognition and respect as "the elements of which status is composed", while, for Homans (1961: 149), esteem was the "expressed social approval" conferred on a member by others in the group. Hopkins (1959: 99) when noting that prestige ranking was "based on general evaluations" stipulated that 'liking' need not equate with esteeming; high ranking on popularity could, however, contribute



to ranking high on prestige.

Behaviour of which the group approves i.e. behaviour it judges to be valuable, will be rewarded, then, by prestige (or, in other words, recognition and respect, or esteem) and those whose behaviour is so rewarded will enjoy high status in the group; they belong to the elite, the many remain part of the generality. Gordon (1957: 2) saw achievement of elite status in terms of "a complex of patterns of social expectations" and noted that those patterns varied in prestige value. He operationalized the concept of status by measuring the individual member's rank in three categories: (i) Grade Achievement; (ii) Participation in Student Organizations; and (iii) Sociometric Position. However, by attempting to provide a prestige scale on this basis, he sets limits rather too rigid to be compatible with the diffuse nature of prestige.

In this study about to be reported, it is assumed that prestige assessment is based on all the roles of the Form VII members which are known to the other members of the group (Haller, 1970: 476). This can cover the situation where some roles of members are known only to members of the internal system and are not known, or even suspected, by those involved only in the external system. Prestige is a central concept because it is the one dimension by which social positions are differentially marked (Davis & Moore, 1945: 242) and so prestige affects the "customary way an individual interacts with members of the group" (Whyte, 1943: 262 - 263) i.e. top ranking Form VII students will be treated as top ranking - by their equals in status, as by those whose status is inferior. Customary interaction "communicates to all participants what the general worth of each is" (Haller, op.cit. 470).

Lopreato and Lewis (1963<sup>(a)</sup>: 309) consider that values determine what behaviour a group will reward and, consequently, "prestige depends on value standards". This being so, prestige ranking of



Form VII members results from consensus regarding norms, and the values which generate them. Since consenses may change, a researcher engaged in a study of prestige in Form VII should heed Parson's reminder (1970: 69) that "Because of the trend of modern societies toward a high level of institutionalization of freedoms (the location of particular units on a prestige scale required that that scale) be highly fluid." But first a researcher must establish what the patterns of behaviour are at some point in time and only later may he attend to the variations and modifications which develop.

The indicators of prestive selected for the present research are: (1) reciprocated friendship and association and interaction patterns i.e. Hopkin's concept of 'centrality', operationally defined as "the number of overt behaviours that come from or are directed toward a member" (Hopkins, 1959: 77). The recipients of prestige, who will in future be referred to as the LEADS, would be expected to rank high on centrality as compared with the generality of members, in future referred to as the REST. (2) 'observability', another concept used by Hopkins. Merton (1957: 350) defined observability in terms of providing "occasion (i.e. opportunity) to perceive the norms ... and the character of the role-performance" of members of a group. Hopkins views observability in terms of members' "actual knowledge of consensus" but the respective emphases are not significant in the study of a highly organized institutional arrangement such as a school. LEADS would be expected to be high in 'observability' while the REST would not be. (3) The LEADS would be expected to receive deference from the REST e.g. LEADS' time and attention would be sought by the REST and regarded by them as rewards for acceptable behaviour; LEADS would interact much with other LEADS (Homans 1951: 184) so that stratification (at least in terms of leaders and followers) would be



experienced by group members in the social relationships of their Form.

If it is correct as Lopreato and Lewis (op.cit. 309) argue, that the allocation of prestige is associated with a prior determination, by Form VII members, of common value standards, then it should be possible to establish the criteria used in that group for the allocation of prestige.

It is hardly possible to consider prestige without also considering the concept of influence. Members who are rewarded with prestige will tend to be regarded as influential. Influence may be just a matter of the influential person's attitude correlating highly with those of the group as a whole i.e. the LEAD is "typically the embodiment of group norms" (Klapper, 1967: 306) and clearly adheres to group values. But influence may be a matter of the LEAD'S "ability to make things happen in social groups according to (his) wishes (Barton, 1961: 52). Such influence may be equated with power in terms of the "control over sanctions" referred to by Barton (op.cit. 33), though in a study of prestige in Form VII it would be apposite to limit the concept of influence to that of the exerting of influence without using power, for 'power' tends to be the prerogative of the institutional authority. In the school, institutional arrangements, as well as the values held by the group, are likely to account for differences in the way influence is distributed over a Form VII group's membership.

If by empirical study the researcher can (1) gain insight into the behaviour that is valued by each Form VII group in a random sample drawn from a universe such as all the Form VII groups in a particular city in the same year, and (2) discover how the values held by one group differ from those of other groups in the sample, then, if prestige is allocated in terms of value standards - he should gain knowledge of the criteria used by each Form VII



for the allocating of prestige within the group. The researcher would also need to recognise that differences in value standards among the respective Form VII groups, might derive in part from the sex of the Form VII members, or from the fact that the Form was in a co-educational or in a single-sex school, or again, from its being in a State or in an Independent school.

Because values are influenced by the time and place in which a group exists and its social systems operate, the researcher would expect to find similarities between one group and another, as well as differences, and although a total random sample of Form VII groups could not be considered as a social system (while the discrete groups may be so considered) yet the aggregating of information from all the groups in the sample will afford knowledge of the values and behaviour that are common to the age group and to the locality as far as senior school students, of that year, are concerned. Similarly, if the characteristics common to all Form VII LEADS and all comprising the REST are identified over one city then the researcher should be able to conclude that these are characteristics which distinguish from the generality of their fellows, those final year high school students who are accorded prestige by their peers.

The basic problem of the research about to be reported was to discover what kind of behaviour each of four particular Form VII groups found valuable because it helped the attainment of the goals the group wished to reach. (See Bales 1950: 77). Since those goals were not stated explicitly, knowledge of each group's goals - the goals of its internal system - could only be arrived at through knowledge of its members' social acts, especially those acts by which the group rewarded its LEADS - the members whose behaviour was most important in achieving the goals of the group. A study



focusing on the behaviour of the most esteemed members of the group, of the Form VII internal system, was expected to lead to an understanding of the group's goals and the means it approved to reach them i.e. its behavioural norms. Because the group existed in a school environment, the external system of the school required study since it affected, and was affected by, the internal system.

The study was designed to clarify the following specific questions:

- I. Can differences in value standards be measured, as between one high school Form VII and another? If they can, does any instrument used for measurement discriminate adequately between Form Sevens in various types of school - State and Independent, Co-educational and single-sex?
- II. What is the relationship between the perceived value standards of the most esteemed students, the LEADS, and the value standards of the group in which they occupy high general social status i.e. prestige?
- III. To what extent if at all, and in what circumstances does the actual observed behaviour of the LEADS differ from the group's behavioural norms?
- IV. How does high status as students (i.e. in the external system - in the school's institutional arrangements) affect prestige in the Form VII students' internal social system and how does that internal system affect the functioning of the external system?

To this end, the report deals in Chapter II with previous empirical studies of high school youth and with the experimental design of the present research. Chapter III deals with the



results of this empirical study examining, school by school, the Form VII social system - the internal system. Chapter IV is concerned with the characteristics of LEADS and Chapter V with the affect on values of (a) type of school and (b) sex. In the final chapter the researcher attempts a critical appraisal of the study and its findings. To supplement the text of the report a number of appendices have been added:

Appendix A p.112 - "Brief Research Design" as submitted to the high school principals

Appendix B i p.113 - Facsimile of the Form VII Students' Questionnaire; B ii typed copy of the Teachers' Questionnaire

Appendix C-I p.126 - The Frequency of Responses to Items: 4 Form VII groups compared

Appendix C-II p.135 - Introductory note, KEY, and Table of Chi-square values and their significance level for critical options selected or rejected by particular categories of students

Appendix C-III p.142 - Table of Chi-square values and their significance level: All LEADS cf. all REST

Appendix D-I p.143 - The Computation of Chi-square values set down in Tables C-II and C-III

Appendix D-II p.171 - The Kendall Coefficient of Concordance: W, computed for responses to Items 47 and 48 of the Students' Questionnaire.



## CHAPTER II

### The Empirical Study of High School Youth

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#### A The Limited Literature

Whereas there is a vast body of literature relating to the concepts implicit in any study of prestige in Form VII, there have been very few reported studies of high school youth. Coleman in 1961 (vii) noted that such research had not been extensive, and commented on the difficulty of examining a social system, even a small one, in action. Hollingshead had in 1949 published a study in which he explored the relationship between the behaviour and social ranking of high school students and the socio-economic ranking of their parents. Then some eight years after the publication of Elmstown's Youth and four years before Coleman's publication, Wayne C. Gordon's study, based on empirical research in one high school, was published. Gordon attempted to establish a relationship between the way students behaved among their fellows and the general status ranking they were accorded in the school's social system.

Coleman was responsible for a study in 1957 of the values held by high school students in ten United States midwestern high schools. Coleman's findings were based on questionnaire responses of pupils, parents and teachers; he also gained additional data from official school records. The study was published in 1961. He found boys valued achievement in athletics and the 'leading crowd' valued it even more than the other students though the correlation between athletic interest and membership in the 'leading crowd' varied from school to school. Girls in the 'leading crowd', like all girls in the study, valued participation in social activities, but even more so than other students. Coleman (1961: 5) like Parsons (1942: 607)



concluded that high school youth had its own values and its own culture, distinct from those of the wider society. Coleman reasoned that the kinds of values the 'leading crowd' held, were evidence that a youth sub-culture existed. The concept of a youth culture had already been challenged by F.Elkin and W.A.Westley on the basis of a piece of small scale research (1955: 680 - 684). More recently, Hickman (1971: 61) has expressed doubts about the existence of a youth culture. At the same time he admits that "modern society has created greater opportunities for adolescents to develop relatively isolated social systems in a limited sphere". Sebald (1968) assumed - as part of his 'world-taken-for-granted' - that within the broad American middle class, a teen-age culture existed and was evidenced by the behaviour of youth both in adolescent-adult interaction and in adolescent peer group interaction. This concept of a youth sub-culture appears to this researcher to be of little use in understanding the behaviour of Form VII high school students in New Zealand. It should be noted that when Callahan and Robin (1969) partially replicated Coleman's work in order to study the characteristics of leaders they found no use for the youth culture concept when they set about interpreting their data.

The concept of an elite, akin to the concept of LEAD used in the present study, has been employed in all the published studies of high school youth. As an example, Havighurst (1962: 174 - 175) operationalized this concept using methods developed by Warren and his associates in their community studies. Havighurst found that "children who ranked high on leadership, or the social effectiveness factor, were clearly identified". Jennings in his 1930's Hudson school study, as reported by Homans (1961: 160) tested the proposition that members held in high esteem measure up in high degree to the norms of their group (see also Chapter I p.4 of this report). The elite concept is closely linked with the concepts of prestige



and status and, because past empirical work has indicated the usefulness of this cluster of concepts, the present study employs them as the conceptual basis on which it is constructed.

## B The General Experimental Design

The concepts dealt with in Chapter I facilitated the generation of the following seven hypotheses:

- H.1 that each Form VII studied would show a characteristic pattern of norms and values different from that of other Form Sevens.
- H.2 that in each Form VII the LEADS (i.e. those members accorded most prestige) would show to a greater degree than the REST those differences in values which distinguish the Form VII, to which they belong, from other Form Sevens.

It may be noted in passing that Homans (1951: 147) observed that "conformity to the norms carried with it high social evaluation..." but he modified this concept of conformity to group values and limited it to "the most valued norms" of the group (1961: 339). Hopkins (1959: 147) asserted "the higher (the member's) rank, the greater his conformity" but he was speaking of the 'small group' (see Chapter I, p.3) whereas this second hypothesis is in terms of the group, the Form VII group.

- H.3 that in interaction within the Form VII group, the LEADS would have (a) more centrality and (b) more observability (see Chapter I, p.10).

The observability of LEADS is assumed to be consequent on visibility as high ranking members in some or all of the spheres in which members evaluate one another "a study by Borgatta and Bales (1956) reports that high ratings on leadership by group members tends to be associated with high rates of interaction initiation" (Kirscht et al. 1959: 406). Several studies have reported the relationship between leadership and



the rate of participation. Homans (1961: 180 & 352) speaks of 'innovatory behaviour', rather than just any kind of interaction initiation, as being a characteristic of leaders and he claims that leaders will receive more interaction from other members of the group (op.cit. 203). The importance of "all the roles of the Form VII members which are known to other members" (see Chapter I, p.9) must be stressed in connection with the concept of 'observability' as an attribute of LEADS.

H.4 that the LEADS in all Form Sevens would exhibit certain common characteristics which distinguish them from the REST. Because LEADS frequently interact with LEADS (see Homans, 1951: 184) they may be expected to develop common characteristics.

H.5 that those members of Form VII who comprise the REST will reward with most prestige those Form VII members whose parents' status is high in the wider society. This does not imply that Form VII perceive that LEAD status may be in part ascribed rather than achieved. Coleman (1961: 86) found a high correlation between social background and doing well in school. A student's academic achievement can contribute to high ranking overall but this very achievement may be largely ascribed to his family background.

H.6 that the norms and values of Form VII students in co-educational State high schools would differ from those of students attending single-sex Independent schools.

H.7 that the norms and values of Form VII students would differ (i) according to the students' sex and (ii) according to the type of school (i.e. State co-educational or Independent single-sex) students attended.

Whereas Coleman dealt separately with girls and boys and arbitrarily split the social structure along sex lines, this researcher treated each Form VII as a social system. In



co-educational Form Sevens boys and girls were members of the group and collectively the members faced their common tasks, male and female contributing what was acceptable to the group.

Data against which these hypotheses could be tested would be derived both from records of systematic observation of the interaction of Form VII members, carried on throughout the school year, and from responses to a questionnaire presented about mid-way in the academic year "when the kinds of behaviour any one member gives to any other tend(ed) to repeat themselves time and time again" (Homans 1961: 336). A questionnaire (based on the five questionnaires developed for Dr Coleman's research on the social systems of ten midwestern high schools in 1957) was given to students in Form VII in four schools selected by stratified random sample from the universe comprised of Form VII in each of ten high schools situated within a ten mile radius of one New Zealand university. The universe was stratified by type of school into (a) co-educational, (b) single-sex girls' and (c) single-sex boys' schools. Each Form VII in the co-educational stratum had a 2 in 4 chance of selection; each Form VII in the single-sex girls' stratum and in the single-sex boys' stratum had a 1 in 3 chance of selection. The schools in each stratum were allotted a number and then a table of random numbers (Gourevitch, 1965: 300) was used. Every attempt was made to ensure that all information provided by staff and students would remain confidential to the researcher who was an official and regular visitor to the high schools participating in the study.

After randomly selecting the sample, the researcher asked for the co-operation of the four schools: the Academy, the Towers, Riverlea and Waterview (as the schools will be labelled for the



purpose of reporting the research). The four schools agreed to co-operate in the research project: a study of the criteria for allocating prestige in each school's Form VII. Arrangements were made for the researcher to be an observer in each Form VII, for one and a half to two hours weekly, when the form met as a whole.

The four Form Sevens in the sample varied in many ways; the Academy (n=17) was an Independent girls' school with a small boarding establishment where modest fees were charged and where students remaining at school for a Form VII year tended to come from the more well-to-do homes of the Parish supporting the school or come as boarders from homes in outlying rural areas; the Towers (n=28), an Independent boys' school with large boarding establishments, charged substantial fees and drew its students from all parts of the North Island as well as taking a minority of day boys from the City; Riverlea State co-educational high school (n=24; 9 girls and 15 boys) was a day school with pupils from state housing areas and group housing areas of low or moderately priced homes, whose parents usually had much less formal education than their children, but some students came from homes of professional parents; the fourth school, Waterview (n=23; 11 girls and 12 boys) was also a State co-educational high school, drawing its students from an area rather like that described for Riverlea.

The four Form VII groups had a combined total of 92 students of whom 37 were girls and 55 were boys. The ratio of girls to boys in the sample was similar to the ratio of two girls to three boys in Form VII in the fifty-one secondary schools in the University District but in the ten schools within a ten mile radius of the university, girls made up only 38% of the total number of Form VII students. However, this difference is not significant.

Observation at the Academy and the Towers was duly arranged but timetables prevented the possibility of observation at both



Waterview and Riverlea since the researcher could not be present at both schools at one and the same time. This was the first major upset to the Research Design. (See Appendix A, p.112 ) The researcher decided to concentrate the observation part of the study on Form VII in three schools - the Academy, the Towers and Riverlea, and to rely on Questionnaire responses, teachers' questionnaire responses and some informal interviews with staff and with students in the case of the fourth school, Waterview. Necessity now made an interesting development possible: the researcher at the end of the study could make some evaluation of the differences between studying a social system mainly on the responses to questionnaire items as compared with a study based on responses to questionnaire items together with sustained and systematic observation. The researcher was given access to all relevant school records and data from them were used in the study.

#### C The Experimental Design Timetable

- (a) February 1971. Selection by stratified random sample of four high schools with a Form VII.
- (b) Copies of a brief research design (see Appendix A, page 112) were submitted to the principals of high schools drawn in the random sample.
- (c) 1971 secondary school year - weekly observation of the Form Sevens in three of the four schools in the sample.
- (d) Late Term I or Term II administration of questionnaire to staff and interviews and discussion with them. (See Appendix B,ii,p.123.)



Table II - 1

Administration of Questionnaires in 1971

Name of school	Form VII Staff & Principal	FVII students
Academy	April 29	May 4
Towers	June 22	May 6
Waterview	June 29	June 29
Riverlea	August 9	August 9

(e) Late Term I or Term II administration of questionnaires to students in each Form VII after pretests in the summer vacation and early Term I. (See Table II -1)

(f) Term III 1971; collection of information: School Certificate aggregate marks, University Entrance results, school records and reports, school magazines.

(g) December/January 1971/72: Coding of data for electronic data processing (E.D.P.)

D (a) Systematic Observation and (b) the Questionnaire

(a) The researcher was concerned to observe systematically the interaction of the seventh form members in their school setting. The social behaviour of members would indicate the value standards of the Form VII group and the nature of the relationships between LEADS and the REST. Observation of a Form VII was confined to class periods where the whole group was usually present. At the Academy the observation took place during Religious Studies, at the Towers during Religious Studies, and at Riverlea during Liberal Studies. In addition the researcher was present to observe both before and after the class period, and on some occasions joined in the informal meetings in the Form VII common room or class room.



Observation went on throughout the 1971 school year. Behavioural events were systematically recorded using Robert F. Bales' Interaction Process Analysis (I.P.A.) technique (Bales 1950), which was, regrettably, with only one observer inexperienced in the use of I.P.A., imperfectly applied. A record was made of which student initiated the interaction and which student(s) responded and in what way. An attempt was made to classify behaviour according to whether it showed solidarity or antagonism, created tension or achieved tension release, indicated agreement or disagreement, whether the member made a suggestion or asked for one, gave an opinion or asked for one, gave orientation or asked for it.

The observer recorded in sociogram form the network of communication and association. Figure III - v, page 78 shows, in the form of sociograms, the pattern into which reciprocated friendships in each Form VII had settled, about the time each group responded to the questionnaire items.

(b) By means of responses to questionnaire items, the researcher sought to obtain Form VII members' self descriptions and their descriptions of how others were behaving (Barton, 1961: 53). Well prepared questionnaire items could also evoke responses which would give the researcher a deeper and greater understanding of the values held by members of a Form VII. This researcher would have preferred to interview in depth all the students participating in the study but, since this was impracticable, a questionnaire was used.

The resources required to develop a satisfactory questionnaire daunted even an enthusiastic researcher and yet such an instrument was essential for an empirical study of the prestige systems in the four Form Sevens. The researcher, in 1970, had begun building up a number of test items and interviewing young people in Form Sevens,



in many parts of New Zealand. A record was kept of the questions which seemed most fruitful in revealing the norms and values of New Zealand Form VII students. Though this pre-testing heightened the researcher's interest in the problem of studying the allocation of prestige in Form VII, the rate of collecting suitable questionnaire items was extremely slow and the researcher was increasingly conscious of the need for expertise, not only in Sociology, but also in Educational Psychology in particular, and in related disciplines in general. At that stage, the researcher looked again, and very closely, at the very full questionnaires Dr J.S.Coleman and his team of experts had developed over three years for use in the 1957 study of ten midwestern high schools in the U.S.A.

Distances, both in time and place, meant that the questionnaires in the exact form used by Coleman were inappropriate for use in the 1971 New Zealand study but Dr Coleman generously allowed this researcher to adapt, omit, add to, modify and use, as seemed fit, the questionnaire items he and his team had developed.

The experience of adapting the questionnaire was an exciting one and focused the researcher's attention on differences in norms and values that occur over time and over distances.

The pilot interviews had revealed that New Zealand Form VII students usually denied the possibility of a Form VII status system in which the few enjoyed prestige and the rest did not. But they conceded that stratification might exist in the, to them, reprehensible wider society. Most perceived individuals as unique and largely uninfluenced by the group to which they belonged. (See Chapter I, pages 5 & 6 concerning the two notions of 'prestige'.)

The researcher concluded from the wide literature on stratification that those most likely to be accorded a high measure of prestige by their fellows, (the LEADS,) were the least likely to



admit that this was a resource allocated to some and denied to others. It was extremely difficult to find the right words to focus respondents' attention on the members of their group who received most prestige, on those whom they esteemed (in comparison with those whom they merely 'liked'), on those who influenced their behaviour. Although paraphrasing was used in the questionnaire presented to the 1971 New Zealand Form Sevens in this study, the researcher on occasion could do no better than use Coleman's term 'the leading crowd' though this language did not effectively convey the researcher's meaning to Form VII members.

Pre-testing showed that Form VII students resented a forced-choice when they wanted to react against the values of the larger society as they saw them revealed in questions dealing with material things such as cars, clothes and commercialized Pop. Intimate information on their own earnings was freely given; they were equally frank in responding to questions about the honour they would most like to gain at secondary school. They resented questions about manipulating other people. However, the researcher decided to include in the questionnaire some of the types of items resented by students interviewed during pre-testing.

#### E Data Collection

The researcher was interested to discover whether the prestige system differed from one school to the next and to discover whether there were significant differences between the norms and values of one Form VII as distinct from others.

The study was designed to discover the personal values of the Form VII members of each school in the stratified random sample and by aggregating for each Form VII the frequencies of responses to



questionnaire items, the researcher sought to discover the consensus of values and the behavioural norms in each group. The differences which characterized each Form VII could then be compared. The criterion variable was the particular Form VII and the specific values and norms which differentiated any one Form VII were treated as dependent variables. In three of the four Form sevens the researcher was able to weigh the finding, based on data generated by the questionnaire, in terms of the interaction process analysis data obtained by observation in the classroom setting. Perceived and actual values do not always coincide (Barton 1961:44).

The researcher was concerned to discover Form VII members' valuation of family, approval by peers, approval by teachers, prestige and recognition, immediate pleasure, friendship, money, independence, rules, education at both secondary and tertiary level, helping others, responsibility, honesty, creativity, personal integrity, the indulgence of independent judgment, having others agree with one's opinion. The central concern was to locate within each Form VII the members enjoying most prestige - a social reward evidenced by the behaviour of the members of each Form VII.

One problem of methodology was to select valid indicators of prestige; this was a problem when preparing the questionnaire but the problem receded when observing the allocation of prestige as part of the social processes going on in the classroom setting.

A serious methodological problem was associated with the time dimension. In the course of the social processes operating over the Form VII year, there were changes in group structure, structure being a product of the group's adjustment to their environment, their habitat, their life conditions. Some members withdrew from school. There were signs of changes in behavioural norms and value standards as the year passed. The researcher in reporting the research has had to crystallize each Form VII



internal system at one point in time, the time the students' questionnaire was administered.

The research focused on the recipients of prestige, their characteristics and the characteristics of the Form VII group which accorded it, and, peripherally, on how, and in what manner, prestige was accorded to these LEADS. The research, therefore, was not primarily concerned with changes in the on-going Form VII society once the stratification into LEADS and the REST had taken place.

Another problem was that concerning the influences on the Form VII society from age-group peers outside the Form. For example, at the Towers the clique of three LEADS were in close communication with a class member who had withdrawn very early in Term I but whose influence did not recede until Term III. Within the limits of the research design this ghost-like LEAD had to be disregarded. At Riverlea two of the LEADS did not see the Form VII year out and a study of the on-going social processes at work in Form VII would have required a detailed account of the effects of their withdrawal whereas the prestige system was stable for the greater part of the academic year and, therefore, in this research design and report of the findings the on-going social processes have been disregarded.

The questionnaire was administered in the classroom when the stratification into LEADS and the REST was apparent to the observer and when this stratification had existed for at least half a term (five or six weeks). Interviewing of teachers of Form VII took place near the time the questionnaire was administered to the Form VII. It was hoped to discover teachers' perception of the prestige system and association network in Form VII (1971) and to learn which values the school sought to foster and what behaviour it encouraged.



## F Data Analysis

Form VII was the basic social unit\* under study and Form VII members were the parts. The 136 items of the self administered (single instrument) Students' Questionnaire which could be subjected to a frequency count provided the material for a data matrix arranged in tripartite form to show: Form VII member, Questionnaire Item, Response selected.

In the questionnaire form handed to the student there were no coding instructions (in order to maintain the personal nature of the 'structured interview'). When the forms had been filled out, the appropriate code number was inserted by the researcher and IBM coding forms were completed (see Appendix B, pages 113-122 for the facsimile of the questionnaire to which code numbers have now been added). On the IBM coding form and punch cards the row represented the responses of a single student while the column represented the questionnaire item. Each student was identified by a two-digit code number (the same number is used in the Sociograms). Two IBM punch cards were needed to process the 136 items for which the researcher required a frequency count. The computer print-out also provided details of the percentage of students who had chosen a particular option.

In order to gain the maximum co-operation from each respondent, the researcher felt obliged to invite students to refuse to answer a particular item if they so wished. The result, as expected, was that 'Don't Know' and 'No Answer' are found randomly scattered in

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\* As J.S.Coleman (1961:183) remarks in a footnote "the development of methods of quantitatively studying (association) structures as more than aggregates of individuals seems one of the most promising and yet most difficult, methodological and theoretical tasks awaiting sociologists"



the data matrix. The solution to the problem this presented is dealt with later in this section.

Although the researcher was primarily interested in making a comparative study of the four Form VII groups and their LEADS, the hypotheses required that 'sex' and 'type of school' be considered also. The total of 92 Form VII members was, therefore, subdivided into various categories:- Academy/Towers/Riverlea/Waterview; LEAD/REST for each Form VII and for the combined Form Sevens; male/female; single-sex/co-educational. In the data analysis the responses to questions were grouped usually to allow construction of 2 x 2 contingency tables (see Appendix C-1, pages 127 - 134, and Appendix D-1, pages 143 - 168).

Having in mind the advice, "statistical standards should be used, for nothing should be called 'different' unless it is statistically significant - this (being) a necessary if not sufficient condition for difference in a more theoretical sense" (Galtung 1969: 238), the Chi-square test was applied to each of the contingency tables in turn and where the test gave a Not Significant result at the .10 level, that questionnaire item was put to one side and attention was focused on those items where the value of Chi-square indicated statistical significance at the .10 level or better. The sample was a random one and the use of the Chi-square test on this classificatory, nominal scale data in discrete categories, was appropriate to determine whether the differences, in the frequency of responses to particular questions, were large enough to occur by chance one or less than one in ten observations.

By collapsing the frequency tables (except for Questions 9, 10, and 36(a) - the first-choice comparisons) to form 2 x 2 contingency tables the problem of 'Don't Know' and 'Did not answer' responses to items was overcome and attention was focused on the



proportionate size of student selection of the particular alternative that the researcher judged to be important in indicating the norms and values of the Form VII group.

The collapsing of the frequency tables is such an important aspect of the method that it warrants detailing one example:

Item five of the Students' Questionnaire asked how the student would use an extra hour in school. They could select their answer from:

- ( ) chosen subject
- ( ) club or activity
- ( ) study period to study
- ( ) study period to do something else
- ( ) sport

or they could refuse to answer.

The researcher felt that the choice of 'study period to do something else' might be indicative of not valuing learning, of not accepting the academic goals set by the school authorities, of not being keen to participate in scheduled school activities.

At the Academy, three girls selected 'chosen subject', three selected 'club or activity', six selected 'study period to study', two selected 'study period to do something else' and three selected 'sport'.

These frequencies of selection of particular responses were collapsed into a 2 x 2 contingency table by contrasting the two girls who chose the critical response 'study period to do something else' with the fifteen girls who chose one of the other responses. (See page 127 for the frequency count of the students' selections of an answer to questionnaire item 5)

It was then possible to compare, for example, the combined responses of the Independent school students at the Academy (A) and the Towers (B) with the combined responses of the State school students at Riverlea (C) and Waterview (D) (see Appendix D-1, page 146).

	'study period to do something else'	other- wise	Totals
Independent Schools (A & B)	6	39	45
State Schools (C & D)	16	31	47
Totals	22	70	92

$$\text{Chi-square} = 4.47, p < .05$$



Data from Item 23 of the students' questionnaire were not processed electronically because large numbers of students refused to answer, or answered carelessly. They later explained, they resented these questions about their families. Item 11 responses were not processed since inspection showed most students claimed there were 'no rules'; the rules had in fact been internalized. Steady dating was the practice of only 25% and manual processing showed no patterns of length of steady dating. Item 36(f) was processed manually: the thirteen respondents not planning to go to university all indicated that 'they did not need a university education' but their parents 'would feel happy and encourage them' if they should decide to go to university.

Responses from Questions 12, 13, 14, 16, 19, 22(b), 31, 34, 36(b-f), 45, 55, 57, 58, 59, 60, 64 and 66 were not computer processed and were referred to for the purpose of filling out the picture or seeking rebuttal or confirmation of the observer's interpretation of the meaning of behaviour.

The data from the Questionnaire Item 47, which asked students to indicate which descriptive comments suited their fellows in the form, and Item 48, their teachers, were subjected to the Kendall coefficient of Concordance test to establish the degree of association in the judgment of the four groups.

A different instrument, again a self-administered questionnaire, (followed by discussion with the respondents,) was used to obtain information on teachers' attitudes, values and perceptions and these data, too, were referred to when the researcher was analysing the data on each Form VII group.



G The Selection of Data

When the students' responses to the 136 items of the questionnaire which could be suitably processed by computer and analysed for the frequency of responses to options and when the critical option (or combination of options) had been decided by the researcher, it was possible to prepare the data in a form for testing the statistical significance of different response rates for each of the four Form Sevens, for the girls and boys, and for the State and Independent schools. Chi-square values were computed and 35 items met the test for significant differences at the .10 level; a further item, Question 29 where the responses were divided according to their negative or positive reaction to 'being alone', did not quite reach significance at the .10 level but was included because of its importance in the pattern of responses. Table II-2, pages 34 - 35, sets out the 'critical' options. Frequency of selection of these items distinguished between the four Form VII groups and helped to establish the values, norms and behaviour patterns of each group. (See the Summary, Table III-6, pages 76 - 77). For the 36 items selected, the responses of the LEADS in each Form VII were compared with the responses of the REST of their Form.

The identifying of the LEADS in each Form VII - and the discovering of the association and communication networks - was done (except at Waterview) by systematically observing behaviour at school and analysing it by Bales' I.P.A. method. The correct identification of the LEADS was confirmed and the researcher's confidence increased when data from the questionnaire responses had been analysed and found to supplement, or merely coincide with, the data obtained from observation. Items 19, 59, 64, 68 and 69 of the Students' Questionnaire produced the most useful responses for identifying the LEADS in a particular Form. On the other hand,



Items 16, 34, 45, and 55 were ineffective in this respect. In using the data on LEADS, generated by the questionnaire, the researcher considered the possibility of leading students being esteemed merely by their own clique or sub-group and not being accorded prestige by the Form VII as-a-whole. Therefore, the reciprocated friendships and communication network of each Form was scrutinized alongside the data from students' responses to Questionnaire Items 19, 59, 64, 68 and 69. In every case the LEADS identified in each Form VII were the most esteemed members of the Form. In passing, it should be mentioned that LEADS identified at the Towers had unexpected positions in the association and communication network (see Figure III-ii, page 54), Mark\* had no reciprocated friendship with any other LEAD nor with those boys holding school office over whom he had much influence, but Form members' questionnaire responses named him as a student they respected and detailed the attributes for which they respected him.

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\* Mark's attitudes and opinions coincided with those of Tom, Dick and Harry who formed a clique of LEADS; he was older than his peers and physically striking; the life-style of his family was exotic but these attributes went unmentioned by his peers!



Table II-2

Thirty-six Critical Responses

Chi-square values indicative of statistical significance at the .10 level or better were derived from data based upon the frequency with which respondents selected the critical alternative(s) in 36 of the 136 Questionnaire Items processed quantitatively to provide aggregates of Form VII members' perceptions.

<u>Item</u>		
2.	Would complete Form VII year	cf. otherwise
3.	Form VII was more enjoyable than F.V or VI	cf. otherwise
4.	2, 3 or more hours on homework per night	cf. otherwise
5.	Would use an extra hour as a study period to do something else	cf. otherwise
6.	Spend 5 or more evenings a week at home	cf. otherwise
8.	Almost no TV weekdays	cf. otherwise
9.	(Comparison of 1st choices from 3 alternatives)	
10.	(Comparison of 1st choices from 4 alternatives)	
15.	Yes, going steady with one particular girl/boy friend	cf. otherwise
17.	Am at the centre of school activities	cf. otherwise
18.	Would wish to be at the centre of school activities	cf. otherwise
20.	Father's education U.E. or better	cf. otherwise
22.	Father's occupation: professional/high-low managerial	cf. otherwise
24.	No. hours per week spent earning outside the home NIL	cf. otherwise
25.	No weeks (or less than 2) spent earning during the summer holidays	cf. otherwise
29.*	A person who is alone is bored/lonely/afraid	cf. otherwise
32.	Change to new clothing style before/same time/after friends change	cf. otherwise
36a.	(Comparison of 1st choices from 3 alternatives)	
38.	Go to TV finals with group	cf. otherwise



39. Would choose school activities leader as luncheon companion cf. otherwise
40. Would want a reputation as one everyone likes to have around cf. otherwise
41. Would stay to watch inter-school match cf. otherwise
42. Would not join a group my parents disapproved of cf. otherwise
44. Would not join a group if closest friendship was at risk cf. otherwise
46. LEADS are expected to achieve good academic results cf. otherwise
- 50vii To be a LEAD here one must sometimes go against one's principles cf. otherwise
53. Students most respected usually persuade the undecided form what to do cf. otherwise
- 61a. Can borrow my parents' car when I want it cf. otherwise
- 61b&c Own a car or scooter or motorbike cf. otherwise
- 62i Would support a big school picnic or barbecue cf. otherwise
- 62ii Would support the planned get-together of relatives cf. otherwise
- 62iii Would help decorate the school hall for dance cf. otherwise
- 62iv Would go to the pictures with my parents if they wished it cf. otherwise
- 63vi After an important team win I would join friends cf. otherwise
- 65b. The years in secondary school have been: full of fun and excitement; interesting and hard work cf. otherwise
67. Do not read magazines regularly cf. otherwise

\* (Item 29) Nearing significance at the .10 level, Chi-square = 2.69, cf. 2.71,  $p = .10$



### CHAPTER III

#### Four Social Systems: a comparison of Form VII in each of four high schools

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For each school in turn a report will be made on

- (i) the characteristic pattern of norms and values in the Form VII group: the data generated by IPA and by the Students' Questionnaire will be used to test H.1 (see pp.17-18...H.1,2 & 3) that each Form VII would show a characteristic pattern different from other Form Sevens. Attention will focus on those items where the group scored highest or lowest in the frequency count;
- (ii) the conformity of LEADS. H.2, that LEADS would show to a greater degree than the REST those differences which distinguish their Form VII from the others will also be tested against the data;
- (iii) the centrality and observability of LEADS will be examined; data both from observation of interaction and from the Questionnaire responses will be used to test H.3 that in interaction within the Form VII group, the LEADS would have (a) more centrality and (b) more observability. The attributes of LEADS will also be considered and the relationship of the external and internal systems.

The chapter concludes with a summarized statement of the findings. Table III-6 p.76 summarizes the findings from the Questionnaire data, with reference to H.1 and H.2, and Fig. III-v, page 78 shows in juxtaposition the four sociograms relating to H.3.

#### A The Academy: (n=17) Characteristic pattern of norms and values (H.1)

Form VII in this Independent girls' school was the smallest of those studied. They were about 3 per cent of the total student body. The school goals and means of achieving these were supported by the group and this showed in the girls' responses to the Students' Questionnaire. By comparison with other groups (Table III-2, p.40) a high proportion spent more than two hours nightly on homework (Q4), they would not use a 'study' period to do something else (Q5), they valued the school activities leader above others (Q39), would watch their second school team play an interschool fixture (Q41), expected their LEADS to produce good academic results (Q46), would



Table III - 1

## COMPARISONS

The frequency of responses of each of the Form VII groups to selected alternatives, offering in the Questionnaire Items, where the Chi-square values indicate statistical significance at the .10 level or higher

	Question No.	Academy(n=17)	Towers(n=28)	Riverlea(n=24)	Waterview(n=23)	4 F.VII's combined:
Would complete Form VII	2	88% (15)	61% (17)	83% (20)	91% (21)	80%
Enjoyed Form VII more	3	47% ( 8)	64% (18)	83% (20)	96% (22)	74%
Two or more hours'homework	4	88% (15)	43% (12)	42% (10)	61% (14)	55%
"Study" for something else	5	12% ( 2)	14% ( 4)	25% ( 6)	43% (10)	24%
At least 5 evenings a week at home	6	82% (14)	68% (16)	50% (12)	70% (16)	63%
Almost no TV weekdays	8	65% (11)	50% (14)	0% ( 0)	35% ( 8)	36%
First choice learning the maximum	9	29% ( 5)	32% ( 9)	29% ( 7)	22% ( 5)	28%
" " living up to ideals	9	24% ( 4)	11% ( 3)	46% (11)	61% (14)	35%
" " being accepted by others	9	18% ( 3)	32% ( 9)	21% ( 5)	9% ( 2)	21%
" " activities outside school	10	0% ( 0)	32% ( 9)	42% (10)	22% ( 5)	26%
" " activities of school	10	59% (10)	21% ( 6)	8% ( 2)	0% ( 0)	20%
" " having a good time	10	18% ( 3)	39% (11)	29% ( 7)	43% (10)	34%
" " having a good reputation	10	12% ( 2)	7% ( 2)	21% ( 5)	30% ( 7)	17%
Going steady	15	18% ( 3)	11% ( 3)	33% ( 8)	39% ( 9)	25%
At the centre of school activities	17	18% ( 3)	4% ( 1)	13% ( 3)	22% ( 5)	13%
Wish to be at the centre	18	29% ( 5)	7% ( 2)	8% ( 2)	17% ( 4)	14%
Father's education UE or better	20	24% ( 4)	54% (15)	25% ( 6)	35% ( 8)	25%
Father professional/managerial	22	82% (14)	82% (23)	54% (13)	48% (11)	66%
Paid work per week NIL	24	65% (11)	89% (25)	42% (10)	35% ( 8)	59%
Less than 2 weeks vacation work	25	47% ( 8)	36% (10)	17% ( 4)	17% ( 4)	34%
* Negative reaction to 'alone'	29	35% ( 6)	61% (17)	58% (14)	43% (10)	51%

\* did not reach significance at .10 level      Chi-square = 2.69      cf. Chi-square = 2.71 for p      .10



contd. The frequency of responses of each of the Form VII groups to selected alternatives, offering in the Questionnaire Items, where the Chi-square values indicate statistical significance at the .10 level or higher

	Question No.	Academy(n=17)	Towers(n=28)	Riverlea(n=24)	Waterview(n=23)	4 F.VII's combined:
Influenced by clothing fashions	32	71% (12)	46% (13)	50% (12)	70% (16)	58%
At university, stimulation of new ideas	36(a)	29% ( 5)	43% (12)	25% ( 6)	35% ( 8)	34%
University preparation for earning	36(a)	29% ( 5)	25% ( 7)	46% (11)	22% ( 5)	30%
Anticipation of campus life/new friends	36(a)	18% ( 3)	21% ( 6)	21% ( 5)	26% ( 6)	22%
Go to finals with group	38	76% (13)	50% (14)	79% (19)	74% (17)	69%
Lunch with activities leader	39	82% (14)	29% ( 8)	58% (14)	57% (13)	53%
Be the person all like around	40	71% (12)	39% (11)	58% (14)	57% (13)	54%
Stay and see inter-school match	41	82% (14)	32% ( 9)	38% ( 9)	48% (11)	47%
Won't join - parents disapprove	42	82% (14)	36% (10)	25% ( 6)	43% (10)	44%
Won't join - friendship at risk	44	82% (14)	71% (20)	79% (19)	87% (20)	79%
Good academic results expected of LEADS	46	76% (13)	39% (11)	58% (14)	61% (14)	57%
LEADS may need to deny principles	50vii	18% ( 3)	61% (17)	38% ( 9)	17% ( 4)	36%
LEADS persuade undecided F.VII	53	12% ( 2)	39% (11)	25% ( 6)	17% ( 4)	25%
May have parents' car	61(a)	65% (11)	82% (23)	46% (11)	48% (11)	61%
Own car/scooter/motorbike	61(b&c)	12% ( 2)	18% ( 5)	29% ( 7)	22% ( 5)	23%
Would support school barbecue	62 i	94% (16)	68% (19)	83% (20)	96% (22)	84%
Would support relatives' get-together	62 ii	82% (14)	54% (15)	54% (13)	61% (14)	61%
Would decorate the school hall	62 iii	94% (16)	75% (21)	83% (20)	91% (21)	85%
Would go with parents to a film	62 iv	76% (13)	50% (14)	33% ( 8)	52% (12)	51%
After a team win would join friends	63 vi	53% ( 9)	32% ( 9)	75% (18)	61% (14)	54%
School fun, exciting/interesting	65(b)	71% (12)	25% ( 7)	38% ( 9)	61% (14)	46%
I do not read magazines regularly	67	12% ( 2)	29% ( 8)	21% ( 5)	43% (10)	27%



help decorate the hall for a school dance (Q62), considered their school years to be full of fun and excitement or at least interesting (Q65). They viewed almost no television during the school week (Q8). They tended to regard 'being alone' in terms of being happy, relaxed, thinking or reading (Q29), but they wanted to be the kind of person 'everyone liked to have around' (Q40). They set small store by 'having a good time' or by 'activities outside school'; for them the 'activities associated with school' mattered most (Q10). When they looked forward to university, social life on campus mattered less than preparation for earning a living or the stimulation of new ideas (Q36a). Only at Waterview were the students keener than the Academy girls in supporting the completion of their Form VII year (Q2). Interestingly, though, as a group Academy girls enjoyed Form VII less than either of the two previous years (Q3). No-one ranked first in importance 'groups and activities outside school' and ten of seventeen gave first place to 'activities associated with the school' (Q10). A high proportion wished 'to be in the centre of activities at school' (Q18).

Most of the group spent at least five evenings at home a week (Q6), regularly read magazines (Q67), were influenced by clothing fashions (Q32), dated but didn't 'go steady'. Academy girls were unlikely to own a car or motorscooter (Q61 b&c).

For the Form as a whole, their fathers' formal education level was below University Entrance standard (Q20) but their occupational ranking was managerial (Q22). Comparatively few of them worked in the summer vacation (Q25). They would not join a group of which their parents disapproved (Q42); for some 'pleasing my parents' was of prime importance (Q9). They would support family and kin occasions if these did not conflict with peer group loyalties (Q62ii) and they would accompany their parents to the pictures if the parents wished it (Q62iv).



Q.	Combined F.VII's	All F.VII Academy (17)	LEADS (4)
2. Would complete Form VII	80%	88% (15)	(4)
3. Enjoyed F.VII more	74%	47% (8)	(3)
4. More than 2 hours' homework (or 2 hrs)	55%	88% (15)	(3)
5. "Study" for something else	24%	12% (2)	(0)
6. At least 5 evenings a week at home	63%	82% (14)	(4)
8. Almost no TV weekdays	36%	65% (11)	(2)
9. First choice pleasing parents	11%	18% (3)	(1)
"    "    learning the maximum	28%	29% (5)	(2)
"    "    living up to ideals	35%	24% (4)	(1)
"    "    being accepted by others	21%	18% (3)	(0)
10. First choice activities outside school	26%	0% (0)	(0)
"    "    activities of school	20%	59% (10)	(4)
"    "    having a good time	34%	18% (3)	(0)
"    "    having a good reputation	17%	12% (2)	(0)
15. Going steady	25%	18% (3)	(1)
17. At the centre of school activities	13%	18% (3)	(3)
18. Wish to be at the centre	14%	29% (5)	(2)
20. Father's education UE or better	25%	24% (4)	(2)
22. Father professional/managerial	66%	82% (14)	(3)
24. Paid work per week NIL	59%	65% (11)	(3)
25. Less than 2 weeks vacation work	34%	47% (8)	(1)
29. Negative reaction to 'alone'	51%	35% (6)	(2)
32. Influenced by clothing fashions	58%	71% (12)	(4)
36. At university, stimulation of new ideas	34%	29% (5)	(1)
University preparation for earning	30%	29% (5)	(1)
Anticipation of campus life/new friends	22%	18% (3)	(0)
38. Go to finals with group	69%	76% (13)	(3)
39. Lunch with activities leader	53%	82% (14)	(3)
40. Be the person all like around	54%	71% (12)	(3)
41. Stay and see inter-school match	47%	82% (14)	(3)
42. Won't join - parents disapprove	44%	82% (14)	(3)
44. Won't join - friendship at risk	79%	82% (14)	(4)
46. Good academic results expected of LEADS	57%	76% (13)	(4)
50. LEADS may need to deny principles	36%	18% (3)	(0)
53. LEADS persuade undecided Form VII	25%	12% (2)	(1)
61. May have parents' car	61%	65% (11)	(3)
Own car/scooter/motorbike	23%	12% (2)	(1)
62. Would support school barbecue	84%	94% (16)	(4)
Would support relatives' get-together	61%	82% (14)	(4)
Would decorate the school hall	85%	94% (16)	(4)
Would go with parents to a film	51%	76% (13)	(3)
63. After a team win would join friends	54%	53% (9)	(3)
65. School fun, exciting/interesting	46%	71% (12)	(3)
67. I do not read magazines regularly	27%	12% (2)	(1)



Academy girls did not think their LEADS might sometimes have to deny their principles in order to remain LEADS (Q50); nor did they consider the LEADS should persuade the Form what to do (Q53).

The social activities of these girls clustered around their school and the adult community supporting the school identified closely with it. Beliefs, values and patterns of family life were relatively homogeneous. These were peers "whose family-derived attitudes tend(ed) to reinforce one another" (Harris 1969: 180). There was a potential conflict situation in that girls from low status families lacked the means of achieving status (Coleman 1961: 198). But the girls of Form VII in their debating, music and drama, strove for the honour of their school and achieved group cohesion, common goals and a group identity. The school authorities delegated much responsibility and power to Form VII members and all felt their group enjoyed high status in the school and in the community which supported it. The external and internal systems reinforced each other.

#### The conformity of LEADS (H.2)

The students' questionnaire responses showed that the four LEAD members, Mary, Martha, Lois and Eunice, generally accorded with the majority response of the whole Form to the 30 items commented on as providing information about the distinguishing characteristics of the social system in Form VII at the Academy (see Table III-6, p.76). One notable exception was that all LEADS enjoyed Form VII more, or as much as, Forms V and VI whereas most members did not.

Lois, a LEAD member, Beauty Queen and fashion leader, differed from the other LEADS, and most of the Form VII, in spending only one hour on homework and viewing more television than most. She enjoyed



Form VII no more and no less than her previous two years. She differed from the Form and from the other LEADS in that she had been going steady for six months and she dated more frequently than other LEADS. She alone of the LEADS was unaware of her position 'at the centre of school activities' and her father, who received a high income from farming his own property and supplementing it with work in a skilled trade, was unlike the fathers of Mary and Martha, for he had not been to university nor gained professional qualifications; nor was he in a professional or managerial position. Lois also placed 'going with friends' ahead of watching an inter-school fixture and pleasing herself rather than her parents. She would join a group despite her parents' disapproval and she wouldn't accompany them to a film.

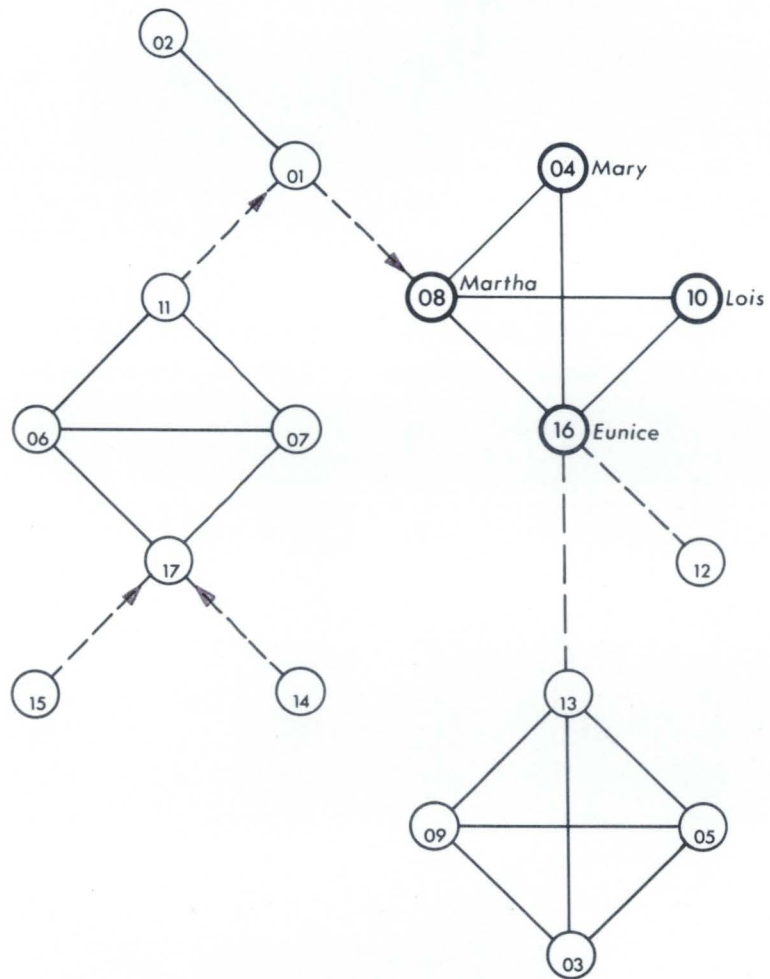
Another LEAD, Martha, differed from the others and from the great majority of the Form VII in that she rated 'good looks' in a boy, ahead of leadership in activities (Q39). Mary, accorded the highest position obtainable by a student in the external system, differed from the Form and from the other LEADS, in not being a regular reader of magazines (Q67).

The data, for the most part, supports H.2, but the exceptions, which have just been detailed, indicate that an individual LEAD member may be unconforming in some specific areas. "Persons of high esteem do not necessarily conform to all the norms of a group, though they certainly do conform to some of them" (Homans, 1961:162). These LEADS' personalities related closely to the specific areas in which they were nonconformist.



FIGURE III - i

The Academy - private girls' high school



- Reciprocated friendships
- - - Unreciprocated friendships
- 16 Member of the LEAD group
- 03 Member of the REST group



The centrality and observability of LEADS (H.3) and their attributes

The sociogram (Fig.III-i) provides details of the association and communication network operating in the Academy Form VII at the time the Students' Questionnaire was administered.

Three LEADS, Martha, Lois and Eunice, all reciprocated one another's friendship. Mary, most honoured in the school's formal organization, shared a reciprocated friendship with Martha and Eunice and saw herself as a friend of Lois but this friendship was not reciprocated. '12', a new comer to the form, linked herself to Eunice, and '13', member of a clique of four, also linked herself to Eunice. Two fringe members linked themselves to a double clique of four girls and one of this group linked herself to '01' who enjoyed a close friendship with '02' and, in turn, linked herself to the LEAD, Martha. The structure of the Form VII social system was that of three disparate groups, not antagonistic one to the other, all accepting that Mary, Martha, Lois and Eunice were LEADS and all according them the prestige their position warranted. Spheres of influence were clear; the LEADS dominated in drama and music and two held the two highest student offices in the school. The clique of four included two boarders; this was a clique of highly intelligent girls intent on exploring new ideas with zest. The remainder of the Form included three holding school office who were leaders in organizing fund-raising efforts and school activities generally. In this Form VII sport was not important and a very good athlete was the only member who viewed school as an 'unhappy' experience. Martha and Eunice were central in the association and communication network. Eunice did not hold school office but wholeheartedly approved the school authorities' decision that she should not hold office; she was the embodiment of the norms of the internal system. The four LEADS had been closely associated all their five years at secondary school and two of them, Mary and Martha,



had been at school together for twelve years and Eunice had joined them one year after their formal schooling began. The LEADS Mary and Lois owed their centrality to their association with Martha and Eunice.

Concerning the observability of LEADS (i.e. their ability to know consensus in the Form) data from Student Questionnaire (pp.115, 120-122) Items 19, 59, 64, and 68 together with data from observation of the Academy Form VII in action, supported the notion that the four LEADS were best placed to gauge consensus in the form group. Mary appeared to the Form and the school as the most powerful student. She was gifted musically, debated well, was an accomplished public speaker, organized a school house, was school librarian and something of a scholar. On numerous occasions in and beyond the school she demonstrated her gifts, gaining greater confidence the longer she held office. She had a genuine regard for at least two girls outside her own clique, one in each of the other sub-groupings within the Form. She also from time to time openly questioned some of the values and behaviour the school authorities expected of their students. In informal debate the clique of '13, '03', '05', and '09' often began the attack on those values and behaviour and the ideas were taken up by others in the Form. Martha, too, was prominent in music and drama, and ranked in the external system second only to Mary; she had earlier been prominent in athletics. Both Martha and Mary were younger members of highly respected families, well-known in the community which supported the school. Lois was different, she had her own car and experience of the adult world through part-time employment. Lois had joined the group at the beginning of her secondary school education; she was interested in fashion, in sewing and in dancing and shared a deep friendship with Martha; she was in communication with several girls in the school who were not in Form VII. She was socially



prominent and an excellent organizer. Eunice had so many talents that they were all underdeveloped. Something of a madcap, she was mercurial in temperament, witty and unconstrained.

The LEADS at the Academy were girls of whom both their teachers and their parish community fully approved and liked to see in control. They were more active in their social participation than the REST (Rose 1962: 838) and, except Lois, gained academic distinction in the end of year national examinations for university bursaries. In interaction in the Form the LEADS were equally remarkable for their high rate of interaction initiation (Kirscht et alia, 1959: 406), and for the large amount of behaviour of the REST, aimed to stimulate a response from them.

#### The External and Internal Systems

The researcher regularly observed the interaction of the Form VII members, including the LEADS. The classroom atmosphere, both during informal times and during class sessions, was relaxed and at the same time active. The seventeen members seemed highly task oriented and Mary, with her first rank in the official system, proved to be the group's task leader while Martha reinforced her task leadership. The social-emotional leaders were Eunice and Lois. The high proportion of time used for the expression of opinion and the giving of information (Bales 1950:182 -186) set this Form VII apart from the others in the study.

The Academy girls saw their LEADS as leaders of the school, able to dominate the Form VII group whenever they were present, enjoying prestige because of 'who they were'. They were expected to be enthusiastic participants over a wide range of school activities, interacting with teachers, with numerous less senior pupils, with adults in the community. A happy disposition was expected of LEADS, as was administrative ability. To brag was a cardinal sin among the Form VII girls and LEADS were not guilty of it.



Teachers saw the LEADS as girls with attractive appearances and manner, conforming but articulate on the group's behalf, keen on photography, music and drama, having outside interests, enjoying life and staunchly holding Christian values, leaders in Form VII and in the school.

The internal social system complemented the external system. The institutional arrangements not only maintained, they tended to increase interaction among the Form VII members: their classroom was also their common room and the administrative centre for all the activities for which students were given the responsibility by the school authorities. Every Form VII member enjoyed an enviable high status in the wider society of the school. With only two or three exceptions the members shared most class lessons with the group; in this respect the organization of their work differed from that in the other Form Sevens in the study. The influence the LEADS, especially Mary and Martha, had in mediating between the girls of Form VII and the school authorities was clear to all: their behaviour was rewarding for the group. The external system having ranked Mary and Martha so highly helped to determine the status differentiation within the Form. However, the internal development of Form VII was not unduly constrained by the environment. The girls had a pleasant place to work in, the relationship with staff was happy and confident (see page 174, Q.48), work was interesting and their extra-curricular activities were rewarding. The institutional arrangements provided much more than just a learning/teaching situation. There was a pervading ethos at the Academy: the values the school emphasized, were the values on which the Form VII girls based much of their behaviour.



B The Towers: (n=28) Characteristic pattern of norms and values (H.1)

Form VII in this Independent boys' school was the largest in the study; it formed 7 per cent of the total student body of the school. The school's goals and means received the qualified support of a minority of the Form - academic achievement was largely accepted but in terms of self-gratification, or occasionally of 'pleasing one's parents'. Achievement in organized sport, as distinct from individual sport, was largely rejected though organized group activities in drama and music were tolerated and achievement in them recognised.

To the observer, the Towers Form VII appeared a dissatisfied group: small pieces of physical movement, snatches of gesture, like the raised eyebrow, the quizzical look, changes in seating or in the order of entry to the classroom or withdrawal from it and a minimal amount of verbal behaviour left the observer interpreting and extrapolating from a few clues. The group offered less than half the number of suggestions offered in the other Forms observed. In place of questions and answers freely posed or given, as at the Academy and Riverlea, the Towers group in most 'observation' periods gave more than 60 per cent of its observable behaviour to positive or negative reactions. The questions and answers, which took up the remaining proportion of observable behaviour, were limited to some three to six class members.

Responses to the students' questionnaire (pp.37-38; 127-134) showed that the Towers boys differed markedly from the other Form Sevens in the high proportion who would choose not to complete the year if the matter were completely up to them (Q2). 'Having a good reputation'(Q10) and 'Living up to my ideals' were largely rejected but as many boys gave first rank to 'learning the maximum' as gave priority to 'being accepted by others'(Q9); these two choices were less frequent in other Form VII groups. The boys tended to see 'being alone' as an undesirable state(Q29). On the other hand, they did



Q.	Combined F.VII's	All F.VII Towers(28)	LEADS (4)
2.Would complete F.VII	80%	61% (17)	(1)
3.Enjoyed F.VII more	74%	64% (18)	(0)
4.Two or more hours' homework	55%	43% (12)	(3)
5."Study" for something else	24%	14% ( 4)	(0)
6.At least 5 evenings a week at home	63%	68% (16)	(1)
8.Almost no TV weekdays	36%	50% (14)	(4)
9.First choice pleasing parents	11%	18% ( 5)	(2)
"    "    learning the maximum	28%	32% ( 9)	(1)
"    "    living up to ideals	35%	11% ( 3)	(1)
"    "    being accepted by others	21%	32% ( 9)	(0)
10.First choice activities outside school	26%	32% ( 9)	(3)
"    "    activities of school	20%	21% ( 6)	(0)
"    "    having a good time	34%	39% (11)	(1)
"    "    having a good reputation	17%	7% ( 2)	(0)
15.Going steady	25%	11% ( 3)	(1)
17.At the centre of school activities	13%	4% ( 1)	(0)
18.Wish to be at the centre	14%	7% ( 2)	(0)
20.Father's education UE or better	25%	54% (15)	(1)
22.Father professional/managerial	66%	82% (23)	(3)
24.Paid work per week NIL	59%	89% (25)	(4)
25.Less than 2 weeks vacation work	34%	36% (10)	(1)
29.Negative reaction to 'alone'	51%	61% (17)	(2)
32.Influenced by clothing fashions	58%	46% (13)	(1)
36.At university,stimulation of new ideas	34%	43% (12)	(4)
University preparation for earning	30%	25% ( 7)	(0)
Anticipation of campus life/new friends	22%	21% ( 6)	(0)
38.Go to finals with group	69%	50% (14)	(4)
39.Lunch with activities leader	53%	29% ( 8)	(1)
40.Be the person all like around	54%	39% (11)	(1)
41.Stay and see inter-school match	47%	32% ( 9)	(2)
42.Won't join - parents disapprove	44%	36% (10)	(3)
44.Won't join - friendship at risk	79%	71% (20)	(4)
46.Good academic results expected of LEADS	57%	39% (11)	(2)
50.LEADS may need to deny principles	36%	61% (17)	(2)
53.LEADS may persuade undecided F.VII	25%	39% (11)	(1)
61.May have parents' car	61%	82% (23)	(4)
Own car/scooter/motorbike	23%	18% ( 5)	(1)
62.Would support school barbecue	84%	68% (19)	(2)
Would support relatives' get-together	61%	54% (15)	(4)
Would decorate the school hall	85%	75% (21)	(3)
Would go with parents to a film	51%	50% (14)	(4)
63.After a team win would join friends	54%	32% ( 9)	(0)
65.School fun, exciting/interesting	46%	25% ( 7)	(0)
67.I do not read magazines regularly	27%	29% ( 8)	(1)



not want a reputation for being 'one of those people everybody likes to have around' (Q40).

They gave the lowest support of all the schools to 'staying to see the interschool match'(Q41) and for 'expecting good academic results from LEADS'(Q46) and for 'decorating the hall for a school dance'(Q62). Only 25% (n=7) perceived their school years as being 'interesting' or, in the one case, 'full of fun and excitement'(Q65). Both the Towers and the Academy groups were similar in their disinclination to choose 'a study period to do something other than study'(Q5), in their disenchantment with Form VII(Q3), and in the relatively small amount of week-day television viewing they engaged in. (Perhaps all this was a reflection of fee-paying parents' attitudes!)

Only 11% (n=3) claimed to have a steady girl friend (Q15). Just over half of the boys' fathers had a formal education level of University Entrance qualification or better (Q20) and in all but five cases their fathers' occupational level was professional or managerial(Q22). Only three of the Towers boys had part-time work during term time(Q24): one, a day boy from a farm, claimed to work in excess of fourteen hours weekly; the other two worked three to six hours mowing lawns for friends of their families who asked for a favour and paid for it. Only one considered himself at the centre of school activities(Q17) and only two wished to be at the centre(Q18). The majority claimed not to be influenced by clothing fashions(Q32). They were equally divided when forced to choose between the conflicting loyalties to parents and peer group whereas in all other Form VII's in the study a majority favoured loyalty to the peer group(Q38). A bigger minority than in the other Form VII's would place a friendship at risk in order to suit themselves(Q44). Unlike the other groups, the majority of the Towers boys thought that LEADS might sometimes have to go against their principles if they wished to maintain their



-51-

status(Q50). A larger minority of this group, cf. the other three groups, felt it was the function of LEADS to persuade an undecided Form about what course of action to take(Q53)(Table III-1, p.38). With only five exceptions Towers boys could make free use of their parents' car but few owned a car(Q61). This group gave the least support to 'joining friends after a team win'(Q63). Like the majority of males in the study fifteen of the twenty-eight Towers boys would choose 'the girl who was best looking' as a luncheon companion(Q39). A higher proportion, of the Towers Form VII, than of any other group in the study, looked forward to 'the stimulation of new ideas' at university(Q36). When the Towers boys judged their peers (ref. The Kendall Coefficient of Concordance: W, Appendix D-II, pp.171-172) they ranked in first place 'sports minded'. In second place equal they ranked 'critical' and 'out for a good time'.

Form VII at the Towers lacked an all-pervading ethos. The group tended towards disintegration. Members appeared to have few morally significant relations with others in Form VII (Rex, 1968: 7). Towers members tended to reject the reward structure of the school and their internal status system accorded most prestige to members most deviant from school norms. A contraculture (Yinger 1960:625 - 635) existed, but precariously, for one of the LEADS, Tom, before the school year ended, was raised from second to top level rank in the official system, and there were signs of a shift in consensus as members increasingly concerned themselves with the future - for most, university life.

#### The conformity of LEADS (H.2)

Only one LEAD, Tom, participated with questions and answers in class. Mark, once a class period was under way, was merely present; he did not initiate any communication; before and after class he expressed opinions and requested information but, unlike Tom, Dick and Harry never suggested or asked for orientation. In class there was every indication that Form VII were conscientiously deviating



from many of the school's behavioural norms. Harry appeared to be the task leader and Tom the Social emotional leader (Bales, 1950: 9, 59.).

The four LEADS in Form VII at the Towers (Fig.III-2, p.54) were not given first rank by the school authorities; two of them, Mark and Tom, had second level ranking in the official system (at the time the questionnaire was administered).

The responses of the LEADS accorded with those of the majority of the Form VII members at the Towers for those items where the Towers' frequency count (expressed as a percentage) placed them either highest or lowest among the four groups being compared in this study.

However, the LEADS in this were notable in that they did not accord with most members' responses to seven of the items where Towers' responses indicated the characteristics and value standards of this group differed from those of other Form VII groups. These exceptions were (1) related to the educational attainment and occupational status of the LEADS' fathers\*(Q20,22) and the solidarity of LEADS with their kin(Q62ii) and (2) the high value LEADS placed on friendship(Q44) and respect for the group; while not caring whether they were 'liked and accepted by others'(Q9) they did not consider that LEADS should try to persuade the group what to do (Q53) and they would support a group to which they belonged rather than a family occasion, if the two clashed.

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\* It was notable that only one LEAD, Dick, had a father who had gained professional qualifications (and his mother had gone to university); Harry claimed not to know what level of education his father (or mother) had attained; Tom's father had left school at fifteen (but his mother had professional qualifications); Mark's father had spent five years at secondary school but had not qualified to enter the university (and his mother had had three years' secondary education). So the LEADS did not reflect the high proportion cf. other Form VII members, of parents with professional qualifications. On the other hand the fathers of three LEADS were in professional/managerial positions, and the fourth occupied a lower supervisory position.



When judging their peers the LEADS, like the Form, ranked first 'sports minded' and second equal 'critical' and 'out for a good time' but they also accorded second place ranking to 'mad on clothes/cars/motorbikes' and 'girl crazy'.

Overall, then, the LEADS mirrored the dissatisfaction of the Form VII group with the goals and means favoured by the external system.

The Centrality and Observability of LEADS (H.3) and their attributes

The identification of the Towers' four LEADS resulted from systematic observation of classroom interaction, from peer informants' perception of members' influence and behaviour, and from the sociometric information provided by responses to students' questionnaire items 12, 19, 59, 64 and 68.

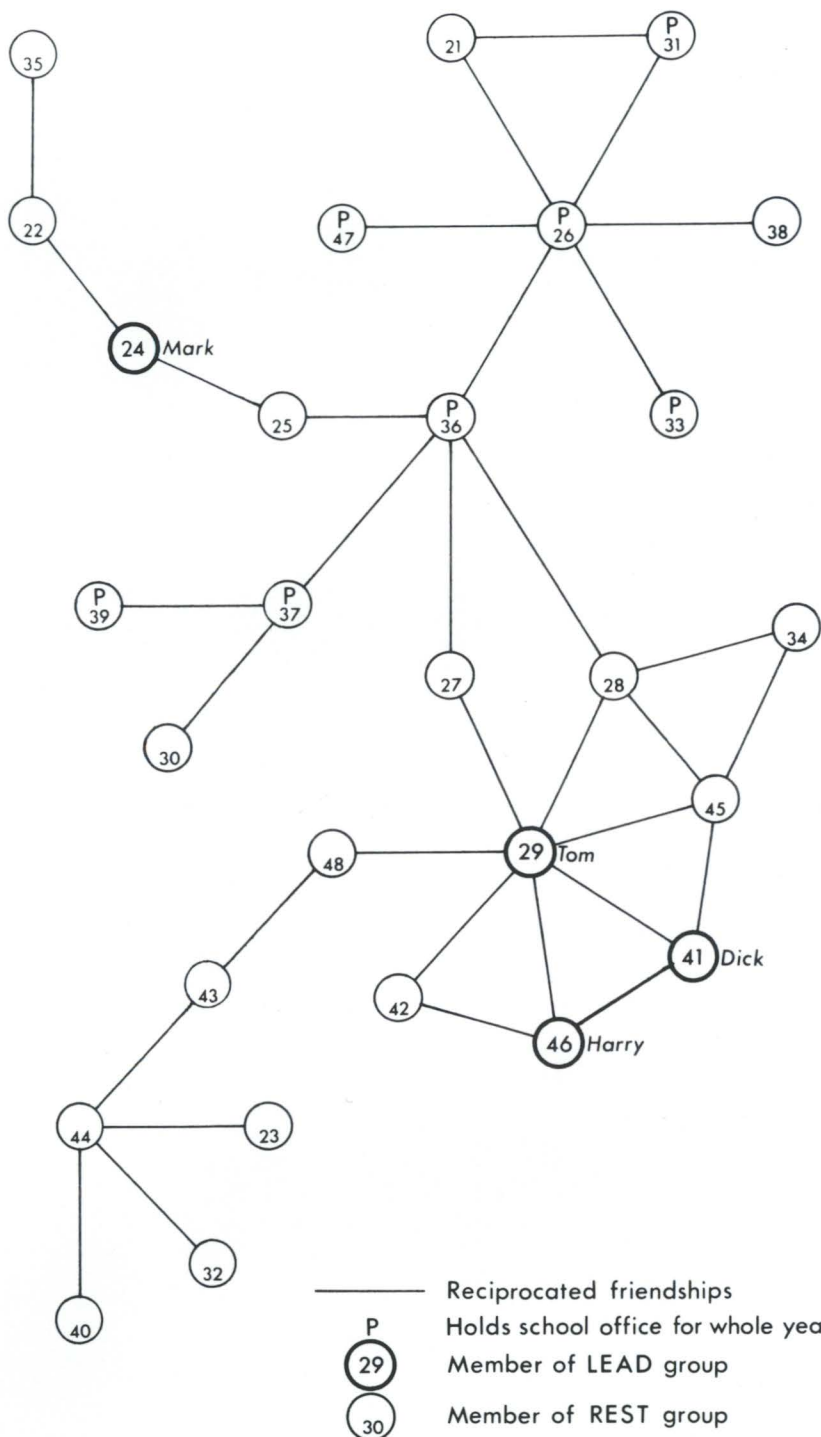
The sociogram shows that Tom, Dick and Harry formed a clique and through Tom their communication network involved all twenty-eight members. The REST included seven members who held school office at the top level for students but who were not high ranking in the Form VII students' internal system. The fourth LEAD, Mark, exercised his influence through a strategic but less concentrated association network; his influence was exerted on school students holding office in the external system, as well as on the generality of the Form. One of the clique LEADS summed up their function: "We are only a group for one reason - we disagree with the political system of this school."

Two of the LEADS, Tom and Dick, were librarians and used the library as a central location for communicating their ideas to interested boys from the Third Form upwards. LEADS Tom, Dick and Harry saw themselves, in the words of one member, as



Figure III - ii

# The Towers - private boys' high school





"effective and constructive in their own way - even if a minority". Had the LEADS known the extent of the influence that they had in the internal system, the external system would probably have been confronted by defiance. The fourth LEAD, Mark, commended any boy who "remains himself in behaviour and thought".

The four LEADS were visible to their Form and to the whole school as long-standing successful participants in activities: two were school representatives in basketball, in athletics, active in "House" music and soccer; a third represented the school in rugby and athletics; the fourth had played major parts in dramatic productions and figured prominently in the library; the school authorities viewed him as a 'pleasant and co-operative member' of his boarding house; he was no great scholar but his two friends in the clique were known for their good academic record. The 'centrality' and 'observability' of three of the four LEADS in the Towers Form VII could not be contested, but Mark kept a great social distance between himself and others whom he influenced, and since he acknowledged only two reciprocated friendships he depended heavily on his friend "25" for his knowledge of consensus and his exercise of influence over Form VII members. Both teachers and students attested that the Form gave Mark recognition and respect and many claimed to be his friends. Among the REST "26" and "36" were so strategically placed that LEAD members might have been those two and some of their friends who held rank in the external system.

The strategically placed "26" and "36" were average achievers in their academic study but in their Form VII year performed far below their potential. "26" was described by his housemaster as "a helpful prefect, not very vocal but good at sport", while his principal commended his fine service but mentioned "one tends



not to notice such good school citizens are around". "36" and, indeed, the others holding high student rank in the external system were capable, hard working and reliable in organizing sport but were considered disappointing academically on the grounds that either they had ability but had not used it well in Form VII, or they lacked the ability to do well in their studies. As a group they were not articulate and the activities they excelled in might impress younger pupils but not Form VII.

#### The External and Internal Systems

The students ranked high in the external system were, with two exceptions, boarders. In their Form VII year two LEADS, Mark and Harry, both became day-boys. What had been rewarding activity in Forms V and VI has ceased to be rewarding for Form VII as a group. The school office-holders among the students were rewarded, by members of the wider school society, not by their Form VII peers. Time and again the boys indicated during informal discussion that the school goals of academic and organized team sports achievement had been very fully realized by Form VII members - and others no longer at school - when they had been in the sixth form and earlier. Because their natural ability in team sports and in scholarship did not permit them to achieve high national honours, they were looking elsewhere for challenge. What had been acceptable goals when they were younger were now no longer adequate. These young men in Form VII might have responded well to an environment in which the means legitimated by the school authorities would have lead to goals which the boys valued. As it was, the group seemed too closely constrained, in its internal development, by its surroundings.

Discussion with some members about the attributes of those



they most respected in the Form indicated that an interest in classical music, in European novels (especially Russian ones), in poetry and in political ideas were rewarded by prestige. 'Greasing' to a school teacher was an anathema to the whole Form membership and LEADS were meticulous in avoiding this behaviour. Knowledge of topical affairs was valued, as was skill in logical thinking and in the defense of a point of view - usually associated with desired changes in the external system. An avowed detestation of both cars and rugby contributed to a student's prestige ranking. Behaviour indicative of a refusal to succumb to outside pressures (of society, of teachers, of peers) was highly regarded, as was imagination and creativity, the ability to be 'interesting' and to provide 'togetherness'.

Teachers at the Towers talked of their Form VII students' "studied non-conformity", "rejection of responsibility", "respect for people's weaknesses as well as for their strengths".

The Towers boys were more influenced by news of protest movements in New Zealand and overseas than were other Form VII's in the study. The value of the LEADS to the generality of members was that they could stir up a little excitement by challenging the external system. In the other Form Sevens, many boys were active part-time in the work force and many participated in several out-of-school peer group activities.



C Riverlea (n=24: 9 females and 15 males)

The third Form VII in the study was at Riverlea, a State Co-educational high school. This group made up about 2 per cent of the student body. The group contrasted in many ways with the Form VII groups at the Academy and the Towers which were Independent (fee-paying) single-sex schools.

The researcher treated the two co-educational schools as a unit, for the purpose of analysing the students' responses and applying the Chi-square test to determine whether the set of frequencies were the result of chance alone or whether the observed differences were greater than could reasonably be attributed to chance.

Characteristic pattern of norms and values (H.1)

Responses to the students' questionnaire(see Table III-4 p.58) showed that as a form these students mattered less in the life of their school i.e. in the institutional arrangements\*, than did Form VII at the Academy or at the Towers. They went out more in the evenings (Q6), watched some television (Q8); most were light on homework (Q4). Their fathers' occupations covered the whole range from unskilled manual to professional. Practically all chose to go with their group to the television finals, not with their parents to celebrate their wedding anniversary (Q38). Most would disregard their parents' disapproval and join a group if they wanted to (Q42). Most of them earned 'big money' during the long vacation and many were supporting themselves by part-time work (Q24,25).

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\* At Riverlea with its system of student government, responsibility was delegated to representative students from Form III onwards. Individual attributes determined whether the most responsible student offices would be filled by a Form VI member rather than a Form VII member and it was even conceivable that a Form V student might gain such an office.



TABLE III-4

Riverlea Responses

Q.	Combined F.VII's	All F.VII Riverlea(24)	LEADS (5)
2.Would complete F.VII	80%	83% (20)	(4)
3.Enjoyed F.VII more	74%	83% (20)	(4)
4.Two or more hours' homework	55%	42% (10)	(1)
5."Study" for something else	24%	25% ( 6)	(0)
6.At least 5 evenings a week at home	63%	50% (12)	(1)
8.Almost no TV weekdays	36%	0% ( 0)	(0)
9.First choice pleasing parents	11%	0% ( 0)	(0)
" " learning the maximum	28%	29% ( 7)	(2)
" " living up to ideals	35%	46% (11)	(3)
" " being accepted by others	21%	21% ( 5)	(0)
10.First choice activities outside school	26%	42% (10)	(2)
" " activities of school	20%	8% ( 2)	(2)
" " having a good time	34%	29% ( 7)	(1)
" " having a good reputation	17%	21% ( 5)	(0)
15.Going steady	25%	33% ( 8)	(1)
17.At the centre of school activities	13%	13% ( 3)	(2)
18.Wish to be at the centre	14%	8% ( 2)	(1)
20.Father's education UE or better	25%	25% ( 6)	(3)
22.Father professional/managerial	66%	54% (13)	(5)
24.Paid work per week NIL	59%	42% (10)	(2)
25.Less than 2 weeks vacation work	34%	17% ( 4)	(1)
29.Negative reaction to 'alone'	51%	58% (14)	(2)
32.Influenced by clothing fashions	58%	50% (12)	(2)
36.At university,stimulation of new ideas	34%	25% ( 6)	(3)
University preparation for earning	30%	46% (11)	(1)
Anticipation of campus life/new friends	22%	21% ( 5)	(1)
38.Go to finals with group	69%	79% (19)	(5)
39.Lunch with activities leader	53%	58% (14)	(2)
40.Be the person all like around	54%	58% (14)	(3)
41.Stay and see inter-school match	47%	38% ( 9)	(3)
42.Won't join - parents disapprove	44%	25% ( 6)	(0)
44.Won't join - friendship at risk	79%	79% (19)	(4)
46.Good academic results expected ofLEADS	57%	58% (14)	(3)
50.LEADS may need to deny principles	36%	38% ( 9)	(2)
53.LEADS persuade undecided Form VII	25%	25% ( 6)	(2)
61.May have parents' car	61%	46% (11)	(3)
61.Own car/scooter/motorbike	23%	29% ( 7)	(2)
62.Would support school barbecue	84%	83% (20)	(5)
Would support relatives' get-together	61%	54% (13)	(2)
Would decorate the school hall	85%	83% (20)	(4)
Would go with parents to a film	51%	33% ( 8)	(1)
63.After a team win would join friends	54%	75% (18)	(5)
65.School fun, exciting/interesting	46%	38% ( 9)	(2)
67.I do not read magazines regularly	27%	21% ( 5)	(0)



Most could not borrow a parent's car when they wanted it but seven owned their own motor transport (Q61). Only one in three would be willing to please their parents by going with them to the pictures and they tended to avoid participating in a get-together of relatives (Q62). Most were keen to seek out their friends' company after an important match had been won (Q63). Not one gave priority to 'pleasing my parents' but almost half valued foremost 'living up to my ideals' (Q9). The majority valued 'activities outside school' (Q10).

Every second member of the Form said they wished to achieve high academic distinction during their Form VII year (Q58). They tended to look forward to university years as a preparation for earning a living.

The conformity of LEADS (H.2)

At Riverlea there were five LEADS: three boys, Ross, Rob and Ron; and two girls, Fleur and Fay. Although the LEADS, in many of their attitudes and values, conformed to their Form VII group there were some areas of behaviour where the LEADS showed to a greater degree than other members, those differences in norms and values which distinguished this form from others in the sample. The LEADS tended to have more evenings out (Q6), they viewed rather more television (Q8) than their Form peers. LEADS tended to work most of the vacation and seemed even more adult-oriented than the group as a whole. All five LEADS would choose in favour of the group rather than parents (Q38). After a team win they would enjoy the company of their peers (Q63). Their parents' disapproval would not keep them from joining a group if they wished to (Q42). With one exception, LEADS would not



accompany their parents to the pictures (Q62iv). Not one LEAD boy considered school activities most important; activities outside the school were more important (Q10).

The LEADS, however, had a few notable characteristics which distinguished them from the Form as a whole; these characteristics were all linked with the socio-economic status of their families. Whereas two in every three males in Riverlea Form VII worked part-time, only one male LEAD did so (Q24). All five LEADS had motor transport freely available, though only one owned his own (Q61). Only one LEAD saw the years at university foremost in terms of preparing to earn a living (Q36).

Two of the LEADS, Fay and Fleur, placed 'activities associated with school' as being the most important of the options; they were the only Form VII members to offer that response.

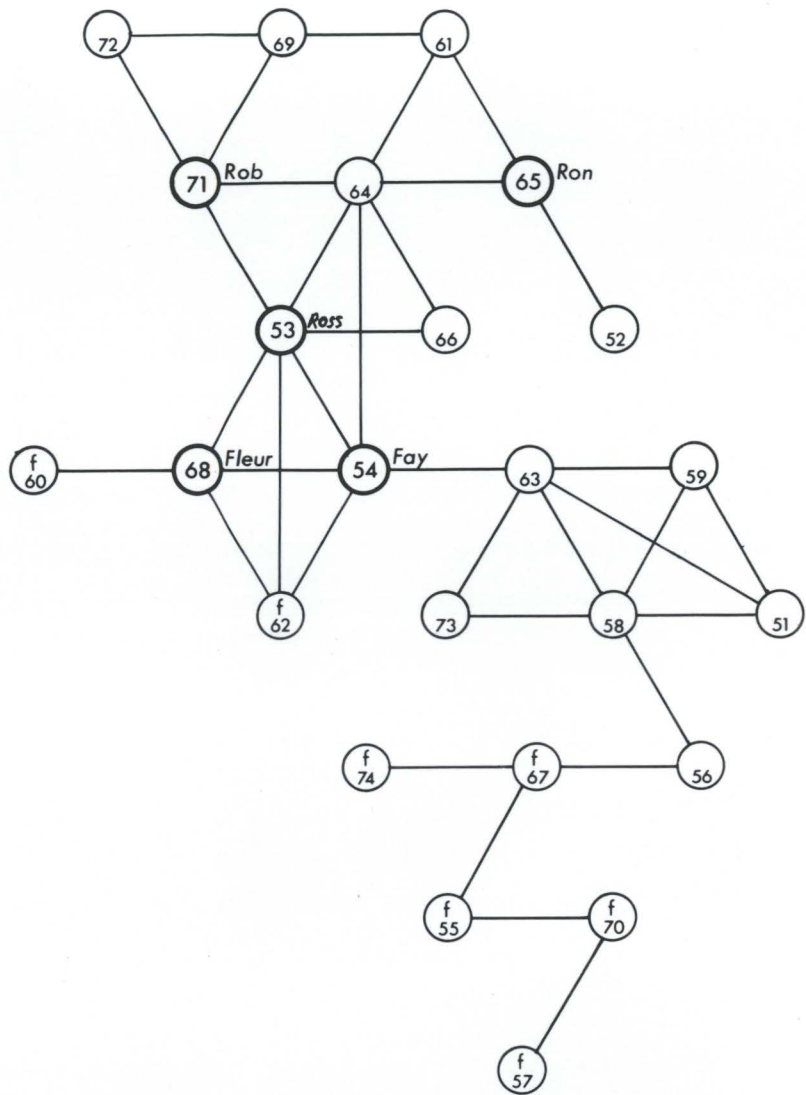
#### The Centrality and Observability of LEADS (H.3) and their attributes

The Riverlea LEADS were members of inter-locking cliques, as the sociogram shows (see Figure III - iii, page 62). Ross appeared paramount in prestige and had direct association, through reciprocated friendships, with six members of Form VII, including the two girl LEADS; one of these friends, Fay, was linked with '64', a boy who had immediate communication through reciprocated friendship with six others. '64' functioned as an invaluable lieutenant to Fay, and through her, he served Fleur, Ross and Rob and provided a link between Ron and the other LEADS. Both Fleur and Ron had a fringe member linked to them. The communication network at Riverlea was more intermeshed and more members were involved in the nucleus than was the case at the Towers and it contrasts with the tripartite arrangement at the



FIGURE III - iii

Riverlea- state co-ed. high school



- Reciprocated friendships
- f Form VII female student
- 54 Member of the LEAD group
- 57 Member of the REST group



Academy. Like the Towers LEADS, three Riverlea LEADS formed a clique (2 girls and a boy); the boy, Ross, was also a member of two other cliques; Fay was also in two other cliques; Rob also and Fleur, were members of three cliques which intermeshed. '72' functioned as a lieutenant for Rob and '62' gave most useful and loyal support to Fleur, and through Fay, Fleur's influence was very widely spread. The support given to Riverlea LEADS by their lieutenants was a feature of their communication network not matched at either the Academy or the Towers.

All five LEADS were highly 'visible' not only among Form VII members but in the school at large and their high rate of interaction with the school authorities, the generality of high school students and the Form VII members placed them strategically to know and to influence the consensus in Form VII. Fleur, on a number of occasions, exerted herself to modify that consensus and Form VII members acknowledged that their behaviour and attitudes were at times affected by her, particularly when she was supported by Ron and Fay. Fleur's prominence in the unofficial system was matched by her standing in the official system. She was an outstanding and all-round scholar; she gained distinction in Badminton and Lifesaving and ranked second in the province in her mastery of German language. She was a key official in the authorized student policy-making body and she helped edit the school magazine.

Fay was a tireless worker in social and welfare projects and also worked on the magazine and served as a student representative. Rob captained and coached indoor basketball, organized table tennis, was prominent as a Rugby player, an outstanding Scout and a competent scholar. Ross excelled at swimming and soccer but academically was rather weak; he was the best all-round



boy athlete and the school's footballer of the year. Ron, whose secret ambition was to win the 'Service to the School' award, was a key organizer of social activities, and actively pursued many interests of a cultural nature, both inside and outside school. He captained a soccer team, the second, and held high, but not the highest, student rank in the official school system. He was a better-than-average scholar and gained a national bursary award as a result of his performance in end-of-year examinations.

#### The Internal and External Systems

The LEADS at Riverlea appeared to live comfortably with both the official organization of the school and with the internal social system in Form VII.

At Riverlea, the behaviour observed clearly pointed to the fact that Ron and Fleur were task leaders while Ross, Fay and Rob were the social-emotional leaders. Close on sixty per cent of the observed behaviour involved expression of opinion and giving of information. Interaction observed at Riverlea on the whole seemed to indicate a satisfied group. Often this Form VII group seemed highly task-oriented but at other times the Form VII members appeared anxious about their relations with each other and were concerned to develop solidarity. The institutional arrangements meant that members spent comparatively little of their class time together: the group had its origins in classification - those who returned to school having gained University Entrance were classified as Form VII and an internal social system began to develop and operate. As a group the students spent about five per cent of their time on requesting information and expressing opinion connected with those requests. The remainder of their time was taken up with positive



reactions (i.e. shows of solidarity, or tension release, or agreement) or negative reactions (i.e. indications of tension, or antagonism, or disagreement). Positive reactions outnumbered negative, two-to-one.

Form VII students' behaviour at Riverlea showed that they gave recognition and respect to those members who were most articulate in expressing an honest opinion. A marked degree of participation in and out of school was expected of LEADS; they must be active people. Riverlea expected LEADS to influence consensus in Form VII, even dominate other members. Another criterion for prestige was 'being sensible' - exercising common sense. LEADS were expected to be responsible people. LEADS had also to impress other members as being intelligent and knowledgeable. Some acute observers among the members perceived that the Form membership esteemed those who kept the REST at some social distance from themselves. Holding office in the Council or being on the Social or Magazine Committees contributed to a member's status in the Form.

Teachers at Riverlea also regarded membership of the Council, Social or Magazine Committee as contributing to high ranking in Form VII. Initiative, enthusiasm, the exercise of responsibility and demonstration of organizational skills were considered by teachers to be attributes of the LEADS.

The Form VII members seemed to view their relationship with the school authorities as contractual and they felt free to terminate the contract at will. Two LEADS, Ross and Rob, left school before the academic year was completed, though at the time they completed the questionnaire they had no such intention; Rob had the ability and intention to proceed to full-time university



study for a science degree but he was the only male LEAD with a part-time job and worked between 6 and 8 hours a week. Hopkin's comment (1959: 235) "...interaction between member and non-member has socializing and constraining consequences on the participants; (it) weakens the member's adherence to the group's norms and values" may be apposite to this situation and, indeed, to an interpretation of Riverlea Form VII behaviour, so unlike the conflict situation at the Towers. The Form VII students' perception of the external system comes through in the comment of one: "Our school has a very good record for keeping up with change; alterations have never been far behind the introduction of new ideas." The external system recognised its Form VII members as adults: for example, they were not required to wear school uniform and they had a Common Room. However, they were expected to see themselves as part of the school community, participating, having a point of view and listening to that of others, and being much too busy to 'grouse'.

The internal system operated to the satisfaction of Form VII members for the REST merely left the LEADS to provide the administrative skills, the ideas and the enthusiasm that the school authorities expect of the group-as-a-whole.



D Waterview (n=23: 11 females and 12 males)

This State Co-educational high school Form VII, forming about 2 per cent of the student body, had much in common with Riverlea and contrasted strongly with the Academy and the Towers Form VII groups. Unfortunately the researcher was not able to study systematically the on-going social life of the group during the 1971 school year.

For testing with the Chi-square, the students' questionnaire responses from Riverlea and Waterview were combined. In terms of the socio-economic status of the communities which supported the schools, and as regards the size of the student body and the institutional arrangements, the schools were similar and the Form VII groups at these two State co-educational high schools could satisfactorily be treated as a unity.

Characteristic pattern of norms and values (H.1)

Students' responses to the questionnaire ( Table III-5 p.68) indicated that Waterview students had enjoyed their school experience and were in Form VII because they wished to be there (Q2). The Form VII year was perceived by them as an even more enjoyable year than any which had preceded it (Q3). Almost without exception they would support a big school social event (Q62i). There was group solidarity but it was not intense; rather it was a working arrangement and accepted as such, though the Form arranged and wholeheartedly supported and greatly enjoyed three Dinners - purely social occasions - during the year. The fringe members and isolates seemed under no pressure to become more actively interested in the group and the LEADS were apparently just as involved in the wider society of the school



Table III-5

## Waterview Responses

-68-

Q.	Combined F.VII's	All F.VII Waterview(23)	LEADS (6)
2.Would complete F.VII	80%	91% (21)	(5)
3.Enjoyed F.VII more	74%	96% (22)	(6)
4.More than 2 hrs homework, or 2 hrs	55%	61% (14)	(3)
5."Study" for something else	24%	42% (10)	(2)
6.At least 5 evenings a week at home	63%	70% (16)	(3)
8.Almost no TV weekdays	36%	35% ( 8)	(2)
9.First choice pleasing parents	11%	4% ( 1)	(1)
"    "    learning the maximum	28%	22% ( 5)	(0)
"    "    living up to ideals	35%	61% (14)	(4)
"    "    being accepted by others	21%	9% ( 2)	(1)
10.First choice activities outside school	26%	22% ( 5)	(1)
"    "    activities of school	20%	0% ( 0)	(0)
"    "    having a good time	34%	43% (10)	(1)
"    "    having a good reputation	17%	30% ( 7)	(4)
15.Going steady	25%	39% ( 9)	(3)
17.At the centre of school activities	13%	22% ( 5)	(4)
18.Wish to be at the centre	14%	17% ( 4)	(2)
20.Father's education UE or better	25%	35% ( 8)	(3)
22.Father professional/managerial	66%	48% (11)	(4)
24.Paid work per week NIL	59%	35% ( 8)	(1)
25.Less than 2 weeks vacation work	34%	17% ( 4)	(1)
29.Negative reaction to 'alone'	51%	43% (10)	(5)
32.Influenced by clothing fashions	58%	70% (16)	(5)
36.At university,stimulation of new ideas	34%	35% ( 8)	(0)
University preparation for earning	30%	22% ( 5)	(3)
Anticipation of campus life/new friends	22%	26% ( 6)	(2)
38.Go to finals with group	69%	74% (17)	(5)
39.Lunch with activities leader	53%	57% (13)	(5)
40.Be the person all like around	54%	57% (13)	(4)
41.Stay and see interschool match	47%	48% (11)	(6)
42.Won't join - parents disapprove	44%	43% (10)	(4)
44.Won't join - friendship at risk	79%	87% (20)	(5)
46.Good academic results expected of LEADS	57%	61% (14)	(3)
50.LEADS may need to deny principles	36%	17% ( 4)	(1)
53.LEADS persuade undecided F.VII	25%	17% ( 4)	(2)
61.May have parents' car	61%	48% (11)	(3)
Own car/scooter/motorbike	23%	22% ( 5)	(2)
62.Would support school barbecue	84%	96% (22)	(6)
Would support relatives' get-together	61%	61% (14)	(5)
Would decorate the school hall	85%	91% (21)	(6)
Would go with parents to a film	51%	52% (12)	(3)
63.After a team win would join friends	54%	61% (14)	(3)
65.School fun, exciting/interesting	46%	61% (14)	(2)
67.I do not read magazines regularly	27%	43% (10)	(4)



and in community youth organizations outside the school, as they were in their Form VII group.

When compared with the Riverlea group, Form VII at Waterview were more likely to spend longer on homework (Q4) but also more likely to choose a 'study period' and use it for something else (Q5); they were more likely to spend at least five evenings at home (Q6) and view less television (Q8); more students (than at Riverlea) chose 'living up to my ideals' (Q9) and, similarly, more gave priority to 'having a good reputation' and more chose 'having a good time' (Q10). More admitted being influenced by clothing fashions (Q32) and to 'going steady' (Q15). They were less inclined to read magazines regularly (Q67) and were not inclined to see university in terms of preparation for earning a living (Q36); rather they looked forward to campus social life. Fewer of their fathers were in professional or managerial positions (Q22). More students at Waterview, than in the other groups, valued friendship so highly that they would be unwilling to place it at risk by joining some group which appealed to them (Q44). As a group they were lowest on selecting as priorities 'learning the maximum' or 'being liked and accepted by others' (Q9); they were lowest, too, on giving priority to 'activities associated with the school' (Q10). More of them had part-time employment (cf. the other three Form VII groups) (Q24). Like the Academy girls, they did not think their LEADS might at times have to deny their principles in order to retain their status (Q50).

#### The conformity of LEADS (H.2)

The LEADS' responses (to those items where the Form VII frequency of response, expressed as a percentage, was highest or lowest of the four groups in the study) accorded with the Form but



for three exceptions.

(i) Four LEADS valued a 'good reputation' as compared with only two members of the REST.

(ii) Only about one in three of the form (the lowest percentage of members cf. other Form VII groups) saw university as a preparation for earning a living but the three male LEADS all had this view.

(iii) In a group where fathers with professional or managerial status were few, cf. other Form VII groups, four of the six LEADS' fathers were high in occupational status. The boy who ranked as foremost student in the official school organization, Mervin, was son of a "lower supervisory worker" - category 4 on Congalton's 7-point scale, but he was acknowledged by his peers as a superb organizer, as outstanding in athletics and team sports, gifted at foreign language study and an outstanding all-rounder academically. Mildred was daughter of a semi-skilled worker and by achievement in swimming and in scholarship held LEAD status.

All the LEADS but Mervin were superior scholars and the form as a whole gained fifteen creditable awards in national Bursaries Examinations held at the end of the school year.

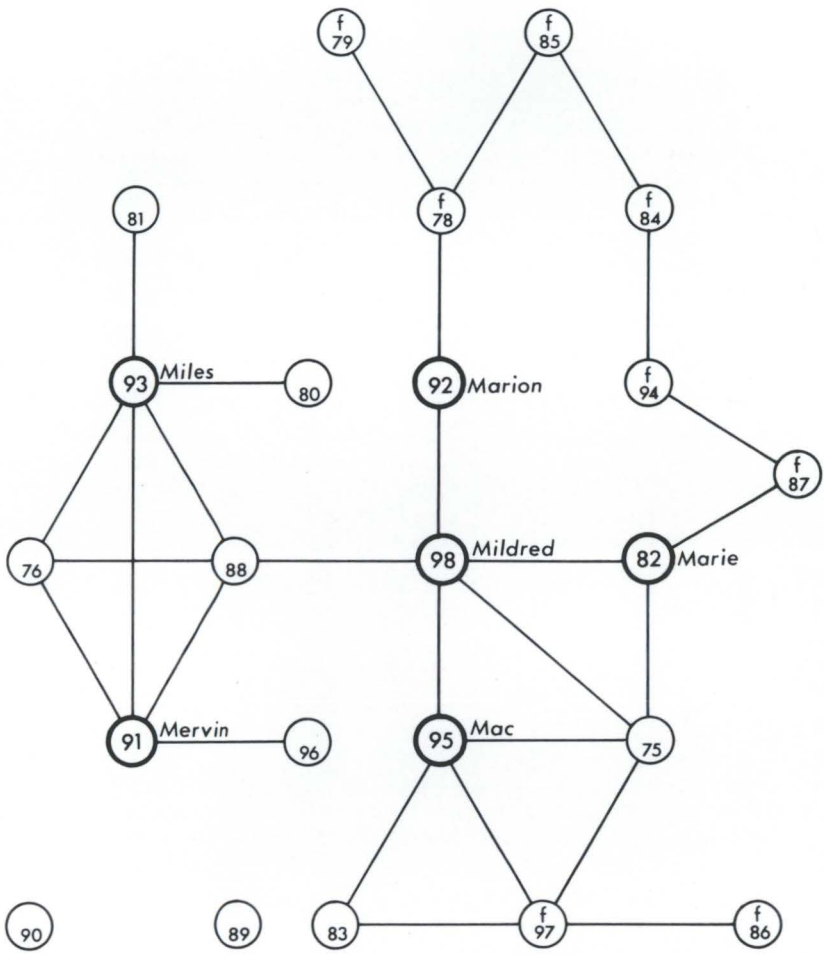
#### The Centrality and Observability of LEADS (H.3)

The Sociogram for Waterview Form VII( Fig. III-iv p.71) was constructed on the basis of members' responses to the students' questionnaire items 12, 16, 19, 57, 59, 64 and 68. The LEADS, three boys and three girls were linked by reciprocated friendship to at least one other LEAD member and Miles' friend '88' served him as his link with Mildred, and so the LEADS were able to communicate directly with ten of the REST, thanks to reciprocated friendships. Waterview Form VII appeared to include



FIGURE III - iv

Waterview-state co-ed. high school



- Reciprocated friendships
- f Form VII female student
- 92 Member of the LEAD group
- 83 Member of the REST group



two isolates and three fringe members and in this way differed from the other groups in the study.

Although the association and communication network suggested by the students' responses was studied in terms of staff responses it is proffered somewhat tentatively since the researcher could not observe the behaviour of the group and since staff perceptions in the cases of the other groups in the sample did not entirely coincide (though at the Academy they were very close to doing so) with data from the researcher's observation and from students' perceptions of behaviour.

Because Form VII was an amalgam of members who a year before had belonged to any one of a number of Form Sixes including those at other high schools, members of the new entity, Form VII, frequently viewed their interaction in their subject groupings as more important than the interaction of Form VII as a whole. Broadly, Form VII students at Waterview regarded themselves as belonging either to the science group or to the Arts/Humanities group. The LEADS were drawn from both groups: Maria, Mervin and Miles were essentially science oriented; Marion and Mac studied Arts subjects while Mildred, who had been science oriented two years before, had finally concentrated on foreign languages. The LEADS were also prominent in different areas of school life: Maria in student politics, Marion in netball, Mervin in rugby and cricket, Miles in rugby and athletics, Mac in drama and literary pursuits, and Mildred in swimming and languages. Because all LEADS were not concentrated in one clique they were well placed to pass information out through the communication network and to receive back information about members' reactions to events and to proposals. While Marion had family links with the school authorities, Mildred had the advantage of five reciprocated



friendships and Mervin, holding high office in the school, served to connect both the external and the internal social systems.

Waterview students' responses to Item 64 of the questionnaire showed their regard for the articulate individual who would propogate his opinions and defend them. For LEADS of the group they looked for members who would 'liven up a dull atmosphere'.



SUMMARY OF THE FINDINGS

Table III-6 pp. 76-77 "Distinguishing Differences in the Four Form VII Groups" presents the essence of the data which support Hypothesis One

- (H.1) that each Form VII studied would show a characteristic pattern of norms and values different from that of other Form Sevens

Table III-6, subtitled "The Conformity of LEADS to their Form VII Group" also sets out details which show that, with the exception of LEADS' responses to Questionnaire Items 20, 22, 25, 29, and 36a 'preparation for earning' as First Choice, the LEADS in each Form VII conformed to their group.

Hypothesis Two

- (H.2) that in each Form VII the LEADS would show to a greater degree than the REST, those differences in values which distinguish the Form VII, to which they belong, from other Form Sevens

is largely supported but the data from Questions 3, 8, 9 'being accepted by others' as First Choice, 38, 44, 53, 62ii, lend support to H.2 only in terms of either the highest or lowest frequency count (expressed as a percentage). The modification, "to a greater degree than the REST" would require that further exceptions be added viz Questions 4 and 67 for the Academy, and Questions 46 and 50 for the Towers.

Figure III-v, page 78, "Four Association Networks" sets the four sociograms in juxtaposition. These association and communication networks, along with the researcher's other findings on LEADS' centrality and observability (see pages 44-46; 53-56; 61-64 and 70-73) largely support Hypothesis Three

- (H.3) that in interaction within the Form VII group, the LEADS



would have (a) more centrality and (b) more observability than the REST

The data from three schools, the Academy, Riverlea and Waterview, support H.3. At the Towers, however, two members of the REST who held school office (these students being designated by the symbol 'p' alongside their code number in the sociogram, page 54) were high in centrality and observability. Student '26' was non-conforming to the Form's value standards. On fifteen 'critical' responses he selected quite differently from the LEADS and from the majority of his peers. Student '36' was high in centrality, much more conforming, and fairly high in observability. Yet, he was not a LEAD! The reason why he was not remains something of a mystery but seems to relate to his friendship with student '26' and the influence of the reciprocated friendships which centred on '26'.



TABLE III-6: DISTINGUISHING DIFFERENCES IN THE FOUR FORM VII GROUPS

The Conformity of LEADS to their Form Seven group

when, cf. other Form VII group, the frequency count (as a percentage of the total number in the group) was HIGHEST or LOWEST and LEAD Responses compared over the four groups

No.	Item	Academy LEADS=4	Towers LEADS=4	Riverlea LEADS=5	Waterview LEADS=6
2.	Would complete F.VII	H= 4	L 1	4	H= 5
3.	Enjoyed F.VII more	L x3	0	4	H 6
4.	Homework, 2 or more hours	H 3	3	L 1	3
5.	"Study" misused	L 0	0	0	H 2
6.	At home, 5 or more evenings	H 4	1	L 1	3
8.	Almost no TV weekdays	H x2	4	L 0	2
9.	FIRST CHOICE -				
	pleasing parents	H= 1	H= 2	L 0	1
	learning the maximum	2	H 1	2	L 0
	living up to ideals	1	L 1	3	H 4
	being accepted by others	0	H x0	0	L 1
10.	FIRST CHOICE -				
	activities outside school	L 0	3	H 2	1
	activities of the school	H 4	0	2	L 0
	having a good time	L 0	1	1	H 1
	having a good reputation	0	L 0	0	H 4
15.	Going steady	1	L 1	1	H 3
18.	Wish to be at the centre	H 2	L 0	1	2
20.	Father has UE or better	L 2	H x1	3	3
22.	Father, prof/managerial	H= 3*	H x3	5	L x4
24.	No part-time work	3	H 4	2	L 1
25.	Almost no vacation work	H x1	1	L= 1	L= 1
29.	'Alone' - negative reaction**	L x2	H x2	2	5
32.	Clothing fashions affect	H= 4	L 1	2	H= 5
36.	UNIVERSITY, priority for -				
	stimulation of new ideas	1	H 4	L 3	0
	preparation for earning	1	0	H x1	L x3
	social life/new friends	L 0	0	1	H 2
	(d.n.a.)	(2)			(1)
38.	Go to finals with group	3	L x4	H 5	5
39.	Choose activities leader	H 3	L 1	2	5
40.	Be person all like around	H 3	L 1	3	4

\*Question not applicable to 4th LEAD

\*\* (Item 29) nearing significance at the .10 level,  $\chi^2=2.69$ , cf. 2.71,  $p=.10$

SEE PAGE 77 FOR THE KEY



No.	Item	Academy LEADS=4		Towers LEADS=4		Riverlea LEADS=5		Waterview LEADS=6	
41.	Watch interschool match	H	<u>3</u>	L	<u>2</u>		<u>3</u>		<u>6</u>
42.	Won't join, parents disapprove	H	3		3	L	0		4
44.	Won't join, friendship at risk		4	L	x4		4	H	5
46.	Expect good academic results of LEADS	H	4	L	2		3		3
50.	LEADS may need to deny prin- ciples	L=	0	H	2		2	L=	1
53.	LEADS should persuade Form	L	1	H	x1		2		2
61.	May have parents' car		3	H	4		3		3
	Own car/scooter/motorbike	L	1		1	H	2		2
62i	Support school barbecue		4	L	2		5	H	6
	ii Support relatives' gettogether	H	4	L=	x4	L=	2		5
	iii Would decorate school hall	H=	4	L	3		4	H=	6
	iv Go with parents to film	H	3		4	L	1		3
63.	Join peers after team wins		3	L	0	H	5		3
65.	School fun/interesting	H	3	L	0		2		2
67.	Magazines <u>not</u> read regularly	L	1		1		0	H	4

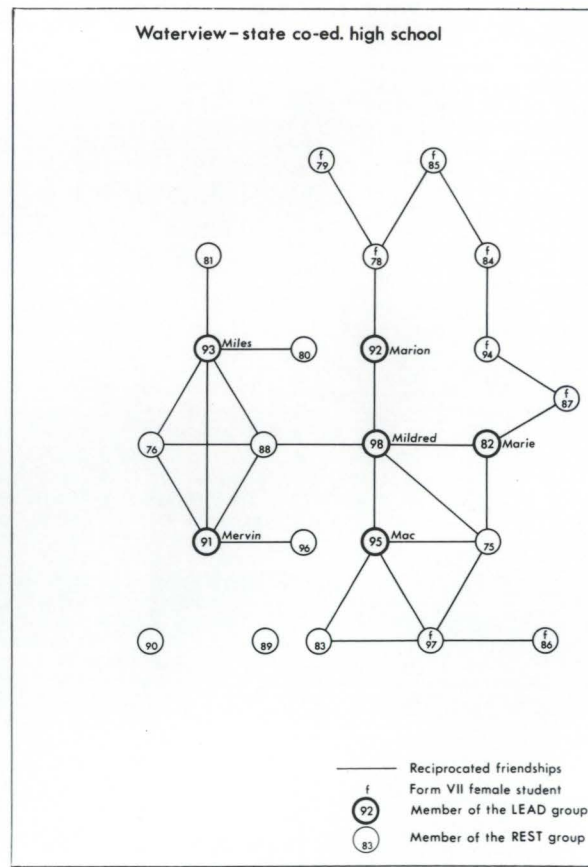
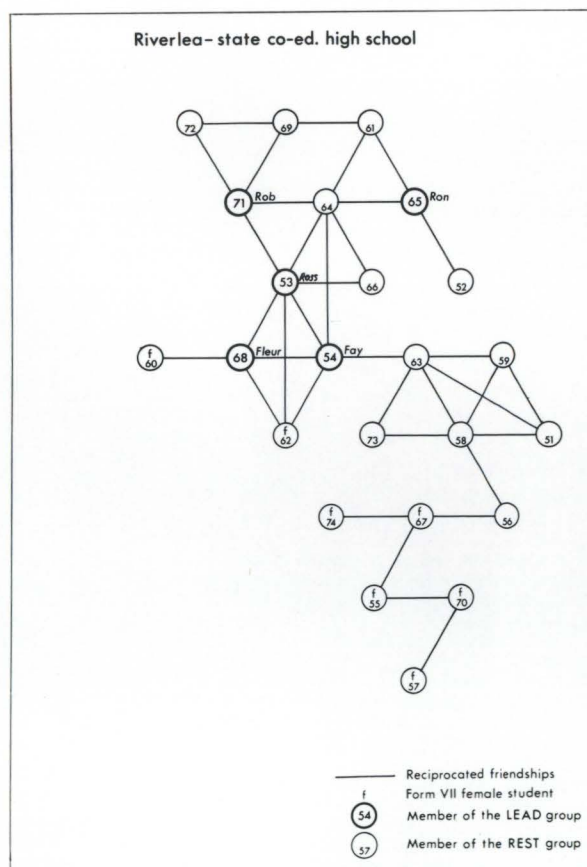
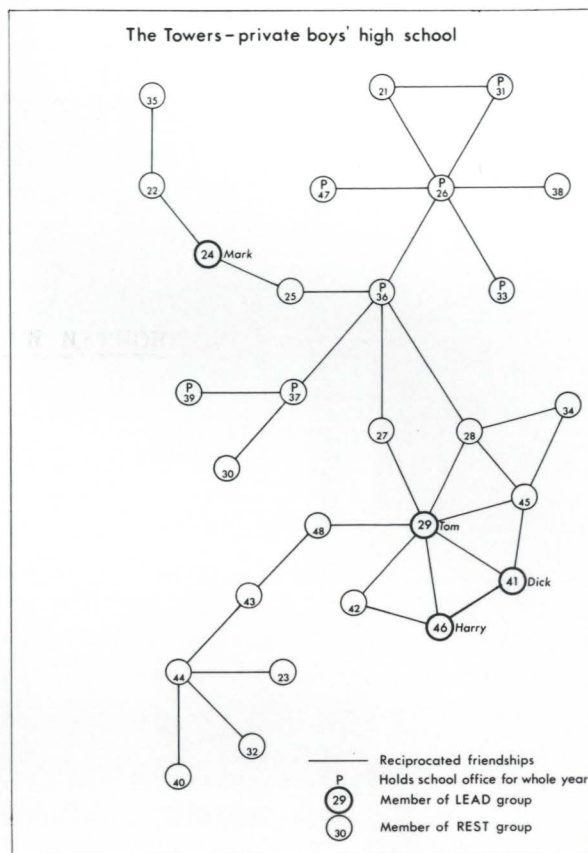
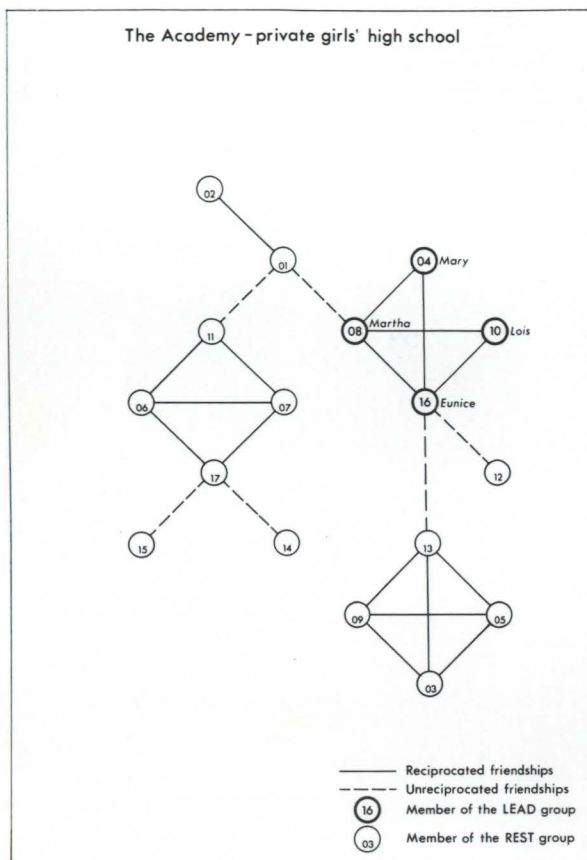
KEY

- H signifies highest support of any  
Form VII group
- L signifies lowest support of any  
Form VII group
- x signifies non-conformity of LEADS
- ALL LEADS in the study differ  
significantly from the REST



Figure III-v

## FOUR ASSOCIATION NETWORKS





CHAPTER IVThat Which Characterizes a LEAD

Hypothesis 4 stated in a null hypothesis form reads:

There are no significant differences in the frequency of responses to items in the questionnaire given by LEADS and the REST.

Table IV-1, p.84 (Q. 17, 21, 38 and 41) sets out data which enable this null hypothesis to be rejected and thus give support to the research hypothesis that the LEADS in all Form VII groups would exhibit certain common characteristics distinguishing them from the REST.

Most LEADS saw themselves at the centre of school activities. The wording of the question (17) was confusing for those who distinguished between the students' social system and the external system. Ten of the nineteen LEADS did not rate themselves at the centre. A number of unstructured interviews held with these LEADS subsequent to their completion of the Students' Questionnaire indicated that those LEADS who saw themselves somewhat removed from the centre of school activities were thinking in terms of the school's formal organization, i.e. the external system, rather than in terms of the on-going social life of their Form VII group, i.e. the internal system. At the Academy the one LEAD who did not see herself at the centre was Lois. She was not in the first rank academically in either her Form VI or VII year though she had been so ranked earlier; nor was she involved in drama or music. She was not officially ranked as high as were two other LEADS in her Form. At the Towers the four LEADS were divided in their self-perception. Mark and Tom held second level rank in the official system but saw themselves at the centre of activities while Dick and Harry, completely unranked by the school authorities, were conscious of a conflict situation and aware of their great



influence in the informal social system and lack of influence in the official organization. At Riverlea, Ross and Fay who were conscious of their academic failure and Ron who had a reciprocated friendship with only one other LEAD (cf. two reciprocated friendships for each of the others) did not rate themselves at the centre of activities at school. At Waterview Miles, who was middle-ranking academically, and a friend of two fringe members of the Form VII social system; and Mac who had three friends who were middle-ranking members and whose earnest academic work resulted in a mediocre achievement, both failed to recognize their place at the centre.

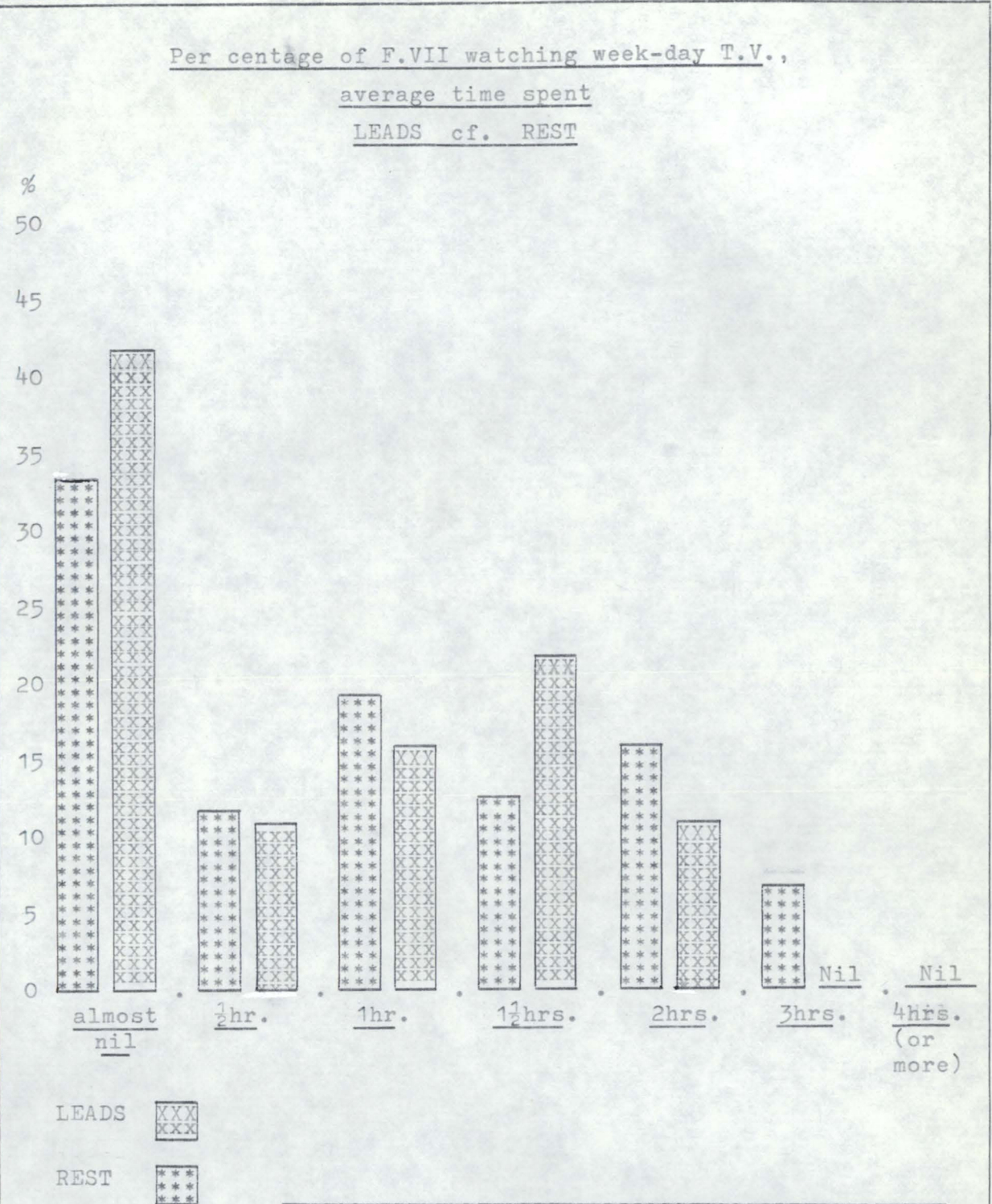
Thus it would appear that ranking in the formal organization of the school and the LEADS' success in reaching the school's goal of academic excellence in Form VII both affected the LEADS' self-perception as regards their centrality in activities in school. A LEAD's place in the association network might also affect his recognition of 'being at the centre'.

The LEADS placed loyalty to the group above loyalty to family in terms of supporting ceremonial occasions (Q41, Table IV-1 p.84). On the other hand the family and its kin network were valued and supported when no conflict with group loyalty was involved and parents' wishes tended to take precedence over personal wishes about joining a group. Connell (1957: 65 - 66) noted that when there was conflict between peer groups and parents about activities of a controversial nature, adolescents were likely to follow the peer group against their parents if the group was perceived as in accord with general age practice.

The LEADS appeared to have internalized many of the goals of the school: they would stay on to watch an inter-school feature, even if their friends chose a pleasurable alternative; they would



FIGURE IV - 1



Note: Where the parents place the emphasis  
(LEADS cf. REST) -  
 parents of 9.58% had rules for REST re the  
 time to be spent on T.V.  
 parents of 21.05% had rules for LEADS re  
 the time to be spent on T.V.

cf.

parents of 19.17% had rules for REST re  
 the time to be spent on homework  
 parents of 10.52% had rules for LEADS re  
 the time to be spent on homework



not use a study period for purposes other than study. LEADS' parents were more likely to have rules about the time to be allowed for viewing television than they were to impose rules as to how long should be spent on homework. (See Fig. IV-1, page 81.)

Hypothesis 5 in its null form reads:

Parents of LEADS would not hold status as indicated by their level of education and level of occupation significantly different from that held by parents of the REST.

Results set out in Table IV-1(Q21), page 84 enable the null form of Hypothesis 5 to be rejected and thus support is given to the research hypothesis - now modified to read -

that the LEADS would tend to be those whose parents' status, as indicated by their mother's level of education, was high in the wider society.

The data showed a higher proportion of LEADS' fathers (except that only 25 per cent of Towers' LEADS' fathers cf. 58.3 per cent of fathers of the REST at the Towers) had University Entrance or better educational attainment and a higher proportion of LEADS' fathers cf. fathers of the REST (except at the Academy where only 75 per cent of LEADS' fathers cf. 84.6 per cent of fathers of the REST) had professional/managerial status.

The data for State co-educational Form Sevens thus strongly support the hypothesis but the evidence from the Independent single-sex schools though lending some support is not equivocal. Whereas Brickman (1964: 55 - 60 and 86 - 90) concluded that Independent schools both conferred and reinforced ascriptive status characteristics, the data on the two New Zealand Independent schools' final year senior students does not justify this conclusion.

Although data from the Students' Questionnaire responses were of use in testing hypotheses 4 and 5 the researcher gained more knowledge of the characteristics of LEADS as a result of discussions with members of Form VII at the Academy, the Towers



and Riverlea. From information so derived the researcher learned that the common criteria for allocating prestige in these forms were:- adherence to ideals, much participation, ability to mix well (be friendly), ability to be articulate, humour, good achievement at school while not striving too hard for it, sporting ability, happy disposition, interaction outside Form VII, ability to liven up a dull atmosphere. There was emphasis on being friendly and having a good personality (as in Coleman's findings), but activity was valued also. A very few boys in the State co-educational schools, and at the Towers, mentioned the importance of smoking, drinking and swearing; a few boys also mentioned 'having lots of girl friends'.



Table IV-i

THE FREQUENCY OF RESPONSES OF THE COMBINED FORM VII LEADS (n=19) cf. REST (n=73)

Q.No.	LEADS	REST		Q.No.	LEADS	REST	
2.Would complete Form VII n=	14 74%	59 81%		32.Influenced by fashions n=	12 63%	41 56%	
3.Enjoyed Form VII more	13 68%	55 75%		36.University: new ideas	8 42%	23 32%	
4.Two hours or more homework	10 53%	41 56%		36. " prep. for earning	5 26%	23 32%	
5."Study" for something else	2 11%	20 27%		36. " campus life	3 16%	17 23%	
6. At least 5 evenings home	9 47%	49 67%		38.Go to finals with group	17 89%	46 63%	p<.10
8.Almost no TV weekdays	8 42%	25 34%		39.Lunch with activities leader	11 58%	38 52%	
9.1st choice)pleasing parents	4 21%	6 8%		40.Be the person all like around	11 58%	39 53%	
9. )learning maximum	5 26%	21 29%		41.Stay and see interschool match	14 74%	29 40%	p<.02
9. )living up to ideals	9 47%	23 32%		42.Won't join - parents disapprove	10 53%	30 41%	
9. )being accepted by rest	1 5%	18 25%		44.Won't join - friendship at risk	17 89%	56 77%	
10.1st choice)activities outside	6 32%	18 25%		46.LEADS, good school marks expected	12 63%	40 55%	
10. )activities of school	6 32%	12 16%		50.LEADS may need to deny principles	5 26%	28 38%	
10. )having a good time	3 16%	28 38%		53.LEADS persuade undecided F.VII	6 32%	17 23%	
10. )having a good reputation	4 21%	12 16%		61.May have parents' car	13 68%	43 59%	
15.Going steady	6 32%	17 23%		61.Own car/scooter/motorbike	6 32%	15 21%	
17.At the centre of school activities	9 47%	3 4%	p<.001	62.Would support school barbecue	17 89%	60 82%	
18.Wish to be at the centre	5 26%	8 11%		62.Would support relatives' reunion	15 79%	41 56%	
20.Father's education UE or better	9 47%	24 33%		62.Would decorate school hall	17 89%	61 84%	
21.Mother's education UE or better	9 47%	18 25%	p<.10	62.Would go with parents to a film	11 58%	36 49%	
22.Father professional/managerial	15 79%	46 63%		63.After team win join peers	11 58%	39 53%	
24.Paid work per week NIL	10 53%	44 60%		65.School: fun/interesting	7 37%	35 48%	
25.Less than 2 wks vacation work	4 21%	27 37%		67.Do <u>Not</u> read magazines regularly	6 32%	19 26%	
29.Negative reaction to 'alone'	11 58%	36 49%					



CHAPTER VThe Effect of (A) Type of School and(B) Sex(A) The Type of School

Research hypothesis 6 -

that the norms and values of Form VII students in co-educational State high schools would differ from those of students attending single-sex Independent schools

may be stated in the statistical null hypothesis form:

that there are no significant differences in the norms and values of the Form VII students in the two State co-educational high schools and Form VII students in the two single-sex Independent schools.

Table V-1

Items where significant differences occurred between Form VII students in State co-educational schools and single-sex Independent schools.

No.	Item	Chi-square	Probability	Higher Count from...
3.	Enjoyed F.VII more than FV or FVI	10.31	<.01	State co-ed.
4.	Almost no T.V. viewing weekdays	13.50	<.001	Independent single-sex
9.	More likely to select 'living up to my ideals' as 1st choice (df=6) (see pages 128 & 148)	13.50	<.05	State co-ed.
15.	"Going steady"	5.23	<.05	State co-ed.
22.	More likely to have fathers in professional/managerial positions	8.64	<.01	Independent single-sex
25.	More students in paid employment over long vacation	4.91	<.05	State co-ed.
61a.	More likely to have use of parents' car	6.81	<.01	Independent single-sex



No.	Item	Chi-square	Probability	Higher Count from...
63.	After a team win more students likely to join peers	6.22	<.05	State co-ed

The Table shows 8 items where significant differences between Form VII students in State co-educational schools and those in Independent single-sex schools were obtained. Thus, the null hypothesis is rejected for these items. However, it should be noted that Questions 4 and 15 on watching television and going steady would be influenced to some extent by the fact that some of the Form VII students in the Independent schools were boarders. Nevertheless it can be seen that a father's occupation did have some influence on whether a child would have his Form VII year in an Independent school. Such students did not have pressures placed on them to be financially independent and hence they did not have to take work in the long vacation; neither was there the same drive to buy their own transport as parents were willing to meet their children's requirements. On the other hand, students in the Independent schools did not spend time watching television and it is interesting to note that they were less likely to join their peers after their sports team had won an important game. Perhaps having done their duty by their Independent school these Form VII students felt they had more pressing matters to attend to.

It is interesting that Form VII students in the Independent aggregates of responses from the Academy (n=17) plus Riverlea single-sex schools did not enjoy their final year more than the girls (n=9) and Waterview girls (n=11). The total sample of fifth or sixth form year whereas those in the State co-educational girls numbered 37. The boys' total was 55 drawn from the Tower schools did. It might be hypothesised that this difference was due to the size of the school: in a large State co-educational school it would be difficult to become an identity in the school while



still one among many; Form VII members were more visible, they were a select few.

Perhaps the most interesting of all the differences was that co-educational State school Form VII students were more likely to give priority to 'living up to my ideals' if they had to select from the three options: learning the maximum, living up to my ideals, being liked and accepted by others (Q.9). Their independence and self-regard were precious to them. Both 'learning' and 'being accepted' imply dependence on other people!

(B) Sex

Research hypothesis 7 -

that the norms and values of Form VII students would differ (i) according to the students' sex and (ii) according to the type of school (i.e. State co-educational or Independent single-sex) students attended

may be stated in the statistical null hypothesis form:

there are no significant differences in the responses by Form VII students to questionnaire items when they are compared according to (i) sex and (ii) girls attending an Independent girls' school and girls at State co-educational schools; or boys attending an Independent boys' school and boys at State co-educational schools.

The data presented in Table V-2, page 88 generated by Students' Questionnaire items, were examined by comparing the aggregates of responses from the Academy (n=17) plus Riverlea girls (n=9) and Waterview girls (n=11). The total sample of girls numbered 37. The boys' total was 55 drawn from the Towers (n=28) plus Riverlea boys (n=15) and Waterview boys (n=12).



Table V-2

Items where significant differences were observed between the sexes in Form VII.

No.	Item	Chi-square	Probability	Higher Count from...
4.	Spend 2 or more hrs. an evening on homework	2.91	<.10	girls
6.	Spend at least 5 evenings at home in the week	3.38	<.10	girls
10.	Ranking activities outside school as of 1st importance cf. school activities cf. a good time cf. a good reputation (df=9)	32.9	<.001	boys
17.	See themselves more as being in the centre of things at school	2.85	<.10	girls
18.	Would wish to be in the centre of things at school	6.80	<.01	girls
32.	Clothing fashions had greater influence	3.24	<.10	girls
36.	Looking forward to university for campus life cf. new ideas cf. preparation for earning (df=6)	22.5	<.001	girls
39.	Leader in school activities favoured as escort for luncheon	21.16	<.001	girls
40.	Being one of the people everyone likes to have around	9.95	<.01	girls
46.	Form VII LEADS expected to achieve good academic results	3.87	<.05	girls
53.	LEADS expected to persuade undecided Form VII	5.44	<.02	boys
61 b&c	Owning-motor transport	8.17	<.01	boys
62ii	Supporting a get-together of relatives	3.00	<.10	girls
62iii	Decorating the school hall for a dance	5.98	<.02	girls
67.	<u>Not</u> reading magazines regularly	2.89	<.10	boys



Fifteen items have shown differences between the sexes that are large enough to be significant. The null form of  $H_2$  (i) is thus rejected and the research hypothesis considered in more detail.

From the items where significant differences are observed it can be seen that the girls centred their lives around school activities to a much greater extent than the boys. The boys showed greater drive to obtain independence from their homes as well as from the school (own motor transport, are out more at night, and are less likely to support a get-together of relatives). Magazine reading and clothing fashions were for girls!

In examining section (ii) of the null form of hypothesis 7, the responses given by the 17 girls at the Academy were compared with the responses of the 11 girls at Waterview plus the 9 at Riverlea to give a total of 20 girls in State co-educational schools.

Table V-3

Items showing significant differences in responses given by girls in an Independent girls' school and girls in two State co-educational schools.

No.	Item	Chi-square	Probability	Higher Count from...
3.	Preferred F.VII year	4.43	$<.05$	co-ed.girls
4.	2 hrs or more homework	4.51	$<.05$	Independent
9.	Preferred 'living up to ideals' cf. learning cf. being liked	13.55	$<.05$	co-ed.girls
10.	Preferred 'having good reputation' cf. outside activities cf. school activities cf. a good time	32.90	$<.001$	co-ed.girls



No.	Item	Chi-square	Probability	Higher Count from...
25.	More likely to work for more than 2 wks in vacation	13.55	$<.05$	co-ed.girls
36.	University as preparation for making a living	22.50	$<.001$	Independent
41.	Watch an interschool match	5.19	$<.05$	Independent
42.	Join group which parents disapproved	5.19	$<.05$	co-ed.girls

Girls in Form VII at co-educational State schools were enjoying the present rather than deferring their gratification. Even at university they would be concerned with the present - not with preparing to earn a living. They felt free to act despite their parents' disapproval and they looked to their peers for company (they would not join their parents at the pictures, not even to please them); spending money they often earned themselves and this added to their independence.

In examining section (ii) of the null form of hypothesis 7, the responses of 28 boys at the Towers were compared with 15 boys at Riverlea plus 12 boys at Waterview to give a total of 27 boys in State co-educational schools.



Table V-4

Items showing significant differences in responses given by boys in an independent boys' school and boys in two State co-educational schools.

No.	Item	Chi-square	Probability	Higher Count from...
2.	Wish to complete F.VII year	3.01	<.10	co-ed.boys
3.	Enjoy F.VII year most	4.90	<.05	co-ed.boys
8.	TV during school week	4.71	<.05	co-ed.boys
9.	Being liked by others (df=6) cf. ideals cf. learning	13.55	<.05	Independent
10.	Activities associated with school (df=9) cf.outside activities cf.good time cf.good reputation	32.9	<.001	Independent
20.	Father's qualification U.E.	3.30	<.10	Independent
24.	More likely to have part-time job	14.04	<.001	co-ed.boys
36.	At university, social life and new friends most important (df=6)	22.50	<.001	Independent
38.	More likely to go with group than join family	8.00	<.01	co-ed.boys
44.	Unwilling to place a friendship at risk by joining a group	2.84	<.10	co-ed.boys
50.	Agree LEADS might have to go against principles to retain status	6.27	<.02	Independent
61a.	More likely to have use of parents' car	3.39	<.10	Independent
61 b&c	Own own motor transport	4.44	<.05	co-ed.boys
63.	More likely to seek peer company after their team wins match	5.25	<.05	co-ed.boys



Fourteen items have shown statistically significant differences according to the type of school attended. The null form of Hypothesis 7 (ii) is thus rejected and the research hypothesis considered in more detail.

From the items where significant differences existed it was apparent that Form VII boys in co-educational schools were more oriented towards their peers than the boys attending Form VII at an Independent single-sex school. They were also more independent of their parents. Life in the present was rewarding; delayed gratification was not for co-educational Form VII boys though they did tend to see university years as a preparation for earning a living!



CHAPTER VIDiscussion - methods and findings

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What is discovered is inevitably influenced by the methods used in conducting the research. Whereas Coleman attempted a school-by-school analysis, in this study attention was focused on one class, Form VII, in each of four randomly selected high schools.

This study, like Coleman's (1961) and Gordon's (1957), has illustrated the value of combining sociometric with statistical techniques but it has the further advantage of also being based on data generated by the analysis of interaction observed weekly throughout the 1971 school year. The findings were derived from all the data obtained, the techniques being used to complement one another. Where systematic observation did not take place, that is, in the case of the second of the two co-educational State schools, the understanding of the behaviour in Form VII was much less complete.

In Coleman's study of adolescent society the criteria for being elite were (1) membership of the leading crowd, (2) being "someone to be friends with", (3) being "someone to be like", (4) having a number of friends. (See Coleman 1961: 153). In this study only at the Academy could interlocking cliques be said to form a close-knit 'leading crowd' or "Big Wheel" clique. (See Gordon op.cit.103). LEADS tended to reciprocate friendship both with LEADS and with members of the REST. (See Figure III-5, p.78). Form VII members distinguished between those they esteemed, the LEADS, and those whom they wished as friends. Sociometric techniques were not only used to measure sentiment, or liking; respondents were also required to report on



the status of other members - those who belonged to the 'most respected' group cf. the rest of the Form VII membership.

Coleman's criteria for prestige included the number of friends a student had. He considered this indicated the degree to which the internal system centred around that student (op.cit. 146). This appeared to be generally true in Form VII but it leaves unexplained the phenomenon of three students at the Towers who shared very many friendships, and yet were not rated by their peers as esteemed students i.e. LEADS. It would seem that ranking high on friendship could merely contribute to general social status; it could not ensure it.

The Form VII students did not necessarily wish to be like those they esteemed. Coleman's criteria then, proved unsatisfactory for establishing the criteria for gaining prestige in Form VII.

Gordon's criteria for prestige were "friendships, dress, grade level, clique incorporation, dating and approved behaviour. Money, leisure, car and kindred possessions also were highly prized" (op.cit. 133). The present New Zealand Form VII study confirmed the importance of friendships, of dress (as far as following fashion or disregarding it was concerned); good academic results helped and so, also, clique incorporation. Dating was no more important than academic results but talk about the opposite sex was an important topic of conversation at the Towers. 'Approved behaviour' was certainly a criterion; what was 'approved behaviour' at the Academy contrasted with that at the Towers; and the co-educational students' norms were different again (see Table III-6, pp.76 - 77). Money was more highly prized at the State, than at the Independent schools, as were a car and 'kindred possessions.' Leisure did not appear to be a criterion for prestige in any of the groups.



In the Questionnaire used with students in this study, Coleman's four criteria and the ten criteria used by Gordon were all probed by obvious questions but in the study of prestige in Form VII these criteria proved either unsatisfactory or inadequate. However, the open-end questions, 64 and 69 (see Appendix Bi, pp.121-2) and systematic observation supplemented by interviews produced some conclusions about the criteria, and the values which lay behind these criteria, which the Form VII students used to give prestige ranking to their peers.

The students in Form VII valued individuality and the creativity they associated with it; from these was derived the value of tolerance. They were tolerant towards their peers and their teachers (Q48), even in the conflict situation at the Towers. Therefore, a very wide range of behaviour could be 'approved behaviour'. Wit and humour and the ability to liven up a dull atmosphere were other important criteria.

The behaviour compelling the greatest measure of social approval of Form VII members was the competent articulation of a point of view which was stoutly and convincingly defended and skilfully elaborated. If this articulation was directed towards social objects outside the students' internal social system so much the better. The rather inarticulate sportsman, or good organizer who was lacking in "ideas", incapable of political thought, no matter what his many other claims to high ranking might be, would not be rated a LEAD in Form VII. So it was that school prefects at the Towers, were not high ranking in the students' internal system.

Those esteemed students who spoke on behalf of their Form VII group had all been highly visible in the school in earlier years; they had publicly excelled in one or other, or a combination of the



following: team and individual sports, music, drama, wit, humour, academic achievement, organization, debating, being host. Often their physical appearance attracted the admiration of their peers. Such students were rewarded with the social approval of their peers, their parents and their teachers.

So, those who had successfully impressed their fellows in the past, were most likely to be successful in Form VII if they could perform the services the group required of them. For many members to find the same service valuable, they had to share the same values, (See Homans, 1961: 147), and so the discovery of a Form VII's values was the key to understanding that group's allocation of prestige. Hence, the Questionnaire responses were of central importance.

To some extent the instrument, adapted from Coleman's questionnaires (1961: 338 - 364), set limits to the findings. The researcher learned from informal interviews with students that there was a whole range of values (see pages 83, 57, 65, 73, 95) important to members, which were not dealt with in the Students' Questionnaire. Those values dealt with by forced-choice items, while annoying most respondents, did stimulate some students to give illuminating comments in the open-ended Items 64 and 69. These points were then followed up in discussion with small groups of students. Inferential evidence of the instrument's validity was forthcoming from systematic observation of students' interaction in each Form VII group. But this observation also established that there were differences between perceived and actual values e.g. some respondents who reported that they would be unwilling to place a friendship at risk by joining some group to which they wished to belong, in actual behaviour, jeopardised a close friendship; three respondents who perceived that they would choose to complete



their Form VII year, abandoned it, for apparently trivial reasons, about mid-way in their final term.

A scrutiny of the Questionnaire items invoking non-responses, though not undertaken in this present study, would be likely to prove fruitful for the recognition of the norms and values of the 1971 Form VII students in the New Zealand city where the study was carried out. However, it should be noted that changing behavioural norms and values would tend to limit the predictability and, to some extent, replication of this research.

The frame of reference used, excluded both the institutional and developmental approaches and so social change had to be disregarded though the on-going social life in each of the groups was observed over one school year. In the absence of techniques able to reveal all, or nearly all, of the details of a social system operating at one point in time - such as the day the students responded to the Questionnaire - the social systems were studied over many months. However, social processes were changing the systems, all that time!

The analysis of the data generated by the Students' Questionnaire relied heavily on the fact that there were statistical differences in the frequency with which students selected a particular response to each of a number of items. Merton's warning, as reiterated by Homans (1951: xxii) that "the absolute percentages of people responding in a given fashion to a questionnaire are very largely affected by the mere wording of the questions and, therefore, change appreciably as the wording is slightly modified" was heeded. Nevertheless, in view of the way Coleman's Questionnaire was developed and its proven usefulness in a study of high school students' values, and because it had been modified for 1971 New Zealand conditions and many items were pretested,



the researcher felt justified<sup>98</sup> in placing weight on the differences in the frequency of selection of critical responses.

In studying the centrality and observability of LEADS, it would have been relevant to establish the extent to which knowledge was limited to either the LEAD sub-group or the REST. A matrix providing scores on individual frequencies of originating and communicating information would have given further evidence of the communication system within a Form VII group. A similar matrix could have shown the extent to which LEADS interacted with staff and students beyond the group.

By using non-parametric statistics, the researcher attempted to determine what values two different status groups, the LEADS and the REST, had in common and what characterized only one group. The assumption was that some members formed a category of 'Respected, esteemed, high ranking members' and that in a Form VII there would be consensus as to which members belonged to this LEAD category. It could have been the case that some students might have held top status in their cliques, not in the group as-a-whole. The empirical work based on the assumption that a LEAD strata existed, produced results which indicated that LEADS were identified as such by the membership\* and their attributes distinguished them within their group. Indeed, some LEAD characteristics were common to all those with LEAD status in whatever Form VII they might be. (See Chapter IV, Page 83, and Appendix C-III, Page 142.)

In this study, the relationship between LEAD status and LEADS' parents' status was not clearly enough established owing to the indicators selected to determine parents' status. The data

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\* It would be useful to test the hypothesis: that stratification into LEADS and REST would be more clearly perceived by members of social systems where the Leads in the internal, unofficial system received high rank in the official system also. This could be tested against the data collected for the present study.



show that the achievement of managerial status by these fathers was not tied to formal educational attainment. The life-style of the families from which LEADS came might be implied from the fact that their parents wished them to reach a high level of academic attainment and that money was available either, to pay school fees, or to forego the son's/daughter's earnings for many years, or to provide so that part-time earning was neither necessary, nor encouraged. Their life-style appeared to be the key to establishing the status ranking of a LEAD's family and the Questionnaire Items on fathers' education and occupation did not provide sufficient information about it. Certainly at the Independent girls' school members of the REST perceived LEADS as being at an advantage in terms of their families' high status in the community, even though two LEADS' fathers had not gained University Entrance and one was not in a managerial or professional position. The LEADS themselves did not perceive the advantages that derived from their parents' position: their good school results, their poise, their skills in organizing, the wide range of their experience and of their interaction. This study supports Gordon (1957: 100) and Coleman (op.cit. 39) in finding a relationship between the family's income and position and a young person's ranking in the informal student social system, but the educational and occupational level of the father were not perfect indicators of income and position.

The comparison of single-sex and co-educational schools was complicated by the fact that the single-sex schools were also Independent while the co-educational schools were also State schools. Since there is only one co-educational Independent school in New Zealand the stratification which allowed single-sex schools and Independent schools to coincide was justifiable. A comparative field study of six schools including a single-sex boys' and a single-sex girls' state school was unfortunately an impossible undertaking



for this researcher in 1971.

In Coleman's study girls' and boys' social systems were examined independently, though they existed in the same school. In this empirical study the Form VII system involved membership by both girls and boys and the findings support Gordon in his claim (op.cit. 60) that girls rated about the same as boys in the organizations where they participated together. The association and communication networks were especially interesting when notice was taken of the sex of the student (see pp. 62, 71). The boy/girl relationship did not, as in Coleman's study, appear important in shaping the status system among the boys (see op.cit. 151).

Rose (1962: 834 - 838) concluded that leaders develop the characteristics of leaders because they provide leadership in response to the group's pressure for this service. This study provides evidence compatible with this proposition. The LEADS were more responsible in terms of parents, teachers and community behavioural norms than were the rank and file membership and yet, at the same time, the LEADS were outspoken advocates of their peer group's attitudes, such as, young people's right to take independent action. Freedom to take independent action, however, appeared to mean that many facets of an individual member's behaviour attracted the attention of his Form VII peer group and consequently narrowed his freedom, or at least, this attention from his peers intruded on the individual's privacy. 'Doing one's own thing' seemed to be a public matter.

In Coleman's study the dominance of a school by the white-collar segment of the adult community ensured an unchallenged school-oriented elite (see Coleman 1961: 282). However, in this study, the Towers boys whose fee-paying parents were certainly



"white-collar," esteemed most four members who challenged many of the value standards held by the school authorities. In both the boys' and girls' Independent schools the values emphasized by the school affected the behaviour of the Form VII students. The school's value standards became part of the value standards of the girls. The boys, by contrast, were more selective: by consensus they rigorously rejected Loyalty-to-the-school as one of their values and they determined to respect persons, not offices. Where the values of their parents obviously coincided with the seen values of their school, those values were held by the boys themselves. Form VII Towers boys perceived that their values had changed from those they had held even a few months earlier. At the co-educational schools the seen values of the school seemed to make less impact on the Form VII students in general but were incorporated into the value system of the LEADS. Unfortunately, it was beyond the scope of this study to determine the extent to which the value standards of co-educational LEADS' parents differed from those of parents of the REST. In Adelaide, from his study of Form IV and V students, Feathers (1972: 309) concluded that the values of Independent school students were closer to the school's seen values than were those of State school students. The New Zealand study supports a similar conclusion, (see, for example, comparative data on students' responses to Questions 4, 5, 15, and 63; pp. 145, 146, 149, 167) but with certain qualifications, as already mentioned, in respect of the boys' Independent school.

The findings must now be considered in relation to the specific questions the study was designed to clarify. (Refer to Chapter I, page 13.)



I. The study showed that value standards can be measured, as between one high school Form VII and another and that the instrument, the Students' Questionnaire, discriminated well between one Form VII and another (see discussion of H.1, Chapter III, pp. 36, 39, 41; 48, 50, 51; 58, 60; 67, 69).

There were differences, at the .10 level or beyond it statistically significant, in the frequency with which one Form VII group, compared with other groups, selected the critical response to thirty-five of the Students' Questionnaire Items (see Table III-6, pp. 76 - 77).

The instrument also established that there were statistically significant differences attributable to the type of school the Form VII students attended (See Table V-1, p.85 and discussion of H.6, pp. 86 - 87). When compared with the single-sex Independent students, State co-educational students tended to enjoy their Form VII year more than the two preceding years, spend more time during the school week nights viewing television, rank 'living up to my ideals' ahead of 'pleasing my parents' or 'learning as much as possible at school' or 'being accepted and liked by other students'. They were more likely to 'go steady'. Their fathers were less likely to hold professional or managerial positions. More of them would be in paid employment during the summer vacation. They were less likely to have the use of their parents' car and they were much more likely to seek out the company of their peers following success in an important sports match.

Girls in the two State co-educational schools when compared with those in the single-sex Independent school, preferred Form VII to Forms V and VI, but spent less time on homework. They gave priority to 'living up to my ideals', and were more likely



to value 'having a good reputation'. They were more likely also to work in the long vacation but less likely to view university in terms of preparing to earn a living. Comparatively few of them would remain to watch an interschool match when excused from class to do so, and their parents' disapproval of a group they wished to join, was less likely to deter them than was the case with the girls at the Independent school (see Table V - 3 and the discussion of H.7(ii), pp. 89 - 90).

The boys in the State co-educational schools, when compared with boys in the Independent single-sex school, were more likely to wish to complete Form VII and to be enjoying it more than Forms V and VI. They were likely to be viewing more week-night television, and engaging in more outside activities, including part-time paid employment. Their fathers were less likely to have reached University Entrance level. They were less likely to look forward to university for the social life on campus. Fewer of them thought they would place a friendship at risk by joining a group which was unwilling to ask their friend to join. They tended to put loyalty to the group ahead of consideration to parents. They would be very likely to seek out the company of their peers at the conclusion of a winning match. They would be much less likely than the Independent Form VII students, to be allowed the use of their parents' car but were more likely to own their own transport. Very few thought that those students they esteemed might sometimes have to deny their principles in order to safeguard their status in Form VII. (See Table V-4 p.91 and the discussion of H.7(ii), p.92.)

- II. The relationship between the perceived value standards of the most esteemed students and the value standards of the



Form VII group in which they occupied high general social status, was established by comparing the responses of LEAD members in each Form VII with those of the group's membership at large. (See Table IV-1, page 84.)

To the extent that perceived value standards were indicated by critical responses to Questionnaire Items, the study established that LEADS generally conformed to the value standards of their Form VII group. There were two important exceptions: (1) whatever the group response, their LEADS would "go to the finals with the group" rather than go with their parents to celebrate their wedding anniversary in Sydney (chi-square = 3.74,  $p < .10$ ); and (2) LEADS, if school was dismissed one hour early to give everyone the opportunity to see part of a match between their school's second team and a visiting school team, would stay and watch the match, not join their friends who were going into town to buy a record (chi-square = 5.68,  $p < .02$ ). (See Chapter IV, pages 79 - 82 for the discussion of H.4)

LEADS appeared to be more accepting of school norms and to adhere closely to those values of their parents, indicated by (a) LEADS' limited week night television, (b) their acceptance that a Form VII year should be completed whether it appealed or not, and (c) their intention to go on to university. (See Table IV-1, p.84, for a comparison of the responses of LEADS and REST.)

III. The study throws some light on the extent to which the actual observed behaviour of the esteemed members of a Form VII differed from the group's behavioural norms. Discussion with members, together with the Form's responses to the Questionnaire



Items, provided information on the group's norms and values.

The behaviour of LEADS was affected by the fact that they usually came from homes where the father's occupation was professional or managerial (see pages 82 - 83 for a discussion of H.5). Consequently, they had socio-economic advantages over the rest at the co-educational State schools: instead of spending out-of-school time working to earn, they had time to pursue a variety of extra-curricular activities and they tended to be involved in these both at school and in the community beyond it. The norms of their Form VII group did not require such a life-style.

One service each group rewarded, was the 'stirring up of a little excitement' and if while conforming to the most important values the LEAD could be something of a non-conformist, there was no risk to status. For example, at the Academy, Lois violated the group norm by not wishing to support a big school social event; she wished for something more sophisticated. On the other hand both her words and her behaviour viewed-as-a-whole indicated that in her Form VII year the activities associated with her school were far more important to her than any activities outside it.

Usually the LEADS' behaviour surpassed what the group demanded. The Towers Form VII consensus demanded that members not actively participate in discussion in class, and assuredly LEADS were the keenest non-participants. At Riverlea and the Academy group norms demanded that opinions expressed must be defended by sound argument; the LEADS excelled in that activity.

Because they were LEADS, their experience in interaction with the REST together with their wide range of interaction beyond the Form VII group, affected their behaviour. What



they found rewarding did not entirely co-incide with what was rewarding for the REST. So it was that LEADS at the Academy openly enjoyed their Form VII year more than any that had gone before; the REST did not.

IV. The study included, by chance, one Form VII (at the Towers) where the students' internal social system gave status to four members who were not ranked as school prefects while members of the group who had school prefect status in the external system were just part of the ordinary membership of the students' social system. It was, therefore, possible to approach the problem of how high status in the external system affected the allocation of prestige in Form VII's internal system by studying the effects of low status in the external system on members with high status in the internal system and conversely to study the problem in the form it was originally posed. In all four schools there were Form VII LEAD members who did not hold office.

Where school offices were distributed over a wider group of students (as at Riverlea and Waterview) and were not exclusively for Form VII members, the external ranking interfered little with the internal ranking. In either case, high status in the school's external system was reflected in the expectations the generality of Form VII students had of the behaviour of those students highly ranked by the school. They were expected to participate more actively, to be high achievers over a wide range of activities, to exercise influence on the Form VII group, as well as over more junior members of the school. School office did not guarantee LEAD status but it predisposed members to regard a student as a potential LEAD



and so gave him an advantage over students unranked in the external system. If those holding school office failed, for whatever reason, to influence their Form VII peers, they gained little status from the mere fact that they held school office.

If ranking by the school, did not co-incide at least in part with ranking in the students' internal system, those students highly ranked in the external system and lacking status in their peer group, were not effective in achieving what the school authorities expected of them. As a consequence, the school's institutional arrangements were felt by Form VII students to have failed in respect of student ranking. Where a Form VII student gained prestige from his peers without the aid of the school authority's high ranking, he enjoyed an enhanced reputation with them. When (as at the Academy) criteria for school ranking were clearly understood and accepted as desirable <sup>by</sup> consensus of the school, then an unranked Form VII LEAD did not embarrass the institution.

From such diverse students' social systems as those described in this report, emerge the students who enrol as "First-years" at the university. Values emphasized in their homes and in their secondary schools may have little or no part in the value standards of the social systems at the tertiary institution in which they will hold membership. The value of objectivity will be emphasized, and enquiry may be regarded as a supreme value, but human behaviour cannot be neutral; it will continue to be influenced by the sets of values students hold. Their assumptions about Man and Society will possibly be subjected to closer scrutiny and scrutinized



for longer than they were in the student's Form VII year.

To this researcher it seemed that high school seniors were highly sensitive to conflicting values and frequently felt constrained to revise their value standards. Parents, schools and the wider society provided the social experiences out of which these young people fashioned their value system. Prestige was the tribute they paid to those members of their group whose behaviour exemplified the values they deemed most important.



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APPENDIX APrestige in Form VII : a comparative field studyBRIEF RESEARCH DESIGNResearch Area:

The research concerns the structure of social relations in a stratified random sample of Form VII in schools located in a N.Z. university city. J.S.Coleman's empirical generalizations will be investigated. The research will not be a replication but rather an elaboration in one area - the status system.

The Problem:

What is the nature of each Form VII peer group value system?  
 What are the norms and values of the elite?  
 What is the nature of the stratified relationships in each Form VII?  
 What is the general worth of each member in the group?

Principal Aims:

In part the study will be oriented to throw light on the problem of motivation for pursuit of academic excellence. In part it will be a descriptive study focused upon a limited area of social life.

Method:

Hypotheses relating to Kilbourne Hopkin's (Columbia Ph.D. thesis 1959) propositions on centrality, observability and conformity of elites, will be tested. Data will be obtained from (I) weekly observation in the classroom to determine patterns of communication, differentiation of rules, behavioural norms and values. Behavioural events will be recorded using Robt. F. Bales' "Interaction Process Analysis"; (II) a questionnaire, pretested in a small pilot survey, will be administered in the classroom to provide data on norms, values in the peer group and membership and characteristics of the elite; (III) a structured interview with Form VII teachers and with the school Principals. School records will be used for supplementing the data.



CONFIDENTIAL

Facsimile of the questionnaire presented to students

(Coding, etc., shown in red, did not appear on the original form)

This questionnaire is part of a study being carried out by [redacted] in selected [redacted] schools to learn about the interests and attitudes of Form VII students. We think you will find the questions below interesting to answer. You will help to provide a representative picture if you answer all of the questions. (If you do not wish to answer a particular question (NOT if you don't know) just draw a line through the question).

You are asked to write your name on this form and you are asked to name some of your fellow students in some of your answers. The personal nature of your responses will be respected. Like the New Zealand Census information, once your answers have been coded, all original documents with these names will be destroyed and the statistical information only will remain. The study will not be completed until December 1972 and before it is written up, all the documents providing the data will be destroyed. Feel free to answer each question exactly as you feel. The [redacted] is the only person who will see your answers. When you have completed the questionnaire please hand it in. All completed questionnaires will be taken directly to the University [redacted] for statistical tabulation.

Remember: This is an attitude questionnaire, and not a test. There are no right or wrong answers. Most of the questions can be answered by a check in a box (like this (✓)), or by numbers on short lines (like this ..3..). Do not spend long on any one item, your first reaction is possibly the right one.

FORM VII STUDENTS' QUESTIONNAIRE

Name ..... Age..... Years at school.....

- NS \* 1. In 1972 are you planning for:
- |                         |                                     |
|-------------------------|-------------------------------------|
| (0) a job in industry;  | (1) a job in business and commerce; |
| (2) further education;  | (3) working holiday in New Zealand; |
| (4) abroad;             | (5) V.S.A;                          |
| (6) other; (what?.....) |                                     |
- \* 2. If it were completely up to you, would you:
- |                                 |            |
|---------------------------------|------------|
| (0) complete your Form VII year |            |
| (1) leave during the year       |            |
| (2) don't know                  | (3) d.n.a. |
- \* 3. Thinking back to Forms V and VI, did you enjoy them more than you are enjoying Form VII, or are you enjoying Form VII more?
- |                      |                   |               |
|----------------------|-------------------|---------------|
| (0) Form V & VI more | (1) Form VII more | (2) both same |
|                      |                   | (3) d.n.a.    |
- \* 4. How much time, on the average, do you spend doing homework outside school?
- |                            |                         |
|----------------------------|-------------------------|
| (0) less than 1½ hrs a day | (1) about 1½ hrs a day  |
| (2) about 2 hrs a day      | (3) 3 or more hrs a day |
|                            | (4) d.n.a.              |
- \* 5. Suppose you had an extra hour in school and could either take some subject of your own choosing, or use it for athletics, or some other activity or use it as a study period, how would you use it?
- |                           |                                       |
|---------------------------|---------------------------------------|
| (0) chosen subject        | (1) club or activity                  |
| (2) study period to study | (3) study period to do something else |
| (4) sport                 | (5) d.n.a.                            |



- \* 6. About how many evenings do you spend at home?

0 1 2 3 4 5 6 7 (8) d.n.a.  
(circle the number)

7. Who is your favourite recording artist or group?

.....

- \* 8. About how much time, on the average, do you spend watching T.V. on a weekday?

(0) none or almost none (1) about  $\frac{1}{2}$  hr a day  
(2) about 1 hr a day (3) about 1 $\frac{1}{2}$  hrs a day  
(4) about 2 hrs a day (5) about 3 hrs a day  
(6) 4 or more hrs a day

- \* 9. Different people strive for different things. Here are some things that you have probably thought about. Among the things you strive for during your secondary school years, just how important is each of these (Rank 1 to 4):

(1) ..... pleasing my parents  
(2) ..... learning as much as possible in school  
(3) ..... living up to my ideals - are they religious ideals (YES/NO)  
(4) ..... being accepted and liked by other students.  
(5) d.n.a.

- \* 10. Now rank the following 4 items in terms of their importance to you: (Rank 1 to 4)

(1) ..... groups and activities outside school  
(2) ..... activities associated with school  
(3) ..... having a good time  
(4) ..... having a good reputation  
(5) d.n.a.

- NS \* 11. Below is a list of items on which some parents have rules for their teen-age children, while others don't. Check each item that your parents have definite rules for:

(0) time spent for being in at night on weekends  
(1) amount of dating (2) against going steady  
(3) time spent watching T.V. (4) time spent on homework  
(5) against going around with certain boys  
(6) against going around with certain girls  
(7) being home to eat dinner with the family  
(8) no rules for any of the above items  
(9) d.n.a.

12. What people here in Form VII do you go around with most often?

.....  
.....

What do you and the people you go around with here at school have most in common - what activities do you share?

.....

13. Among the crowd you go around with, which of the things below are important to do in order to be popular in the group? (Check as many as apply)

(0) be a good dancer (1) have the right clothes  
(2) have a good reputation (3) stirring up a little excitement  
(4) have money (5) smoking  
(6) being up on cars  
(7) know what's going on in the world of popular singers and T.V. personalities and actors.

14. Among the crowd you go around with, what are the styles or things that are popular right now in Form VII?

Clothing .....  
Haircuts .....  
Cars and accessories .....  
Anything else?.....



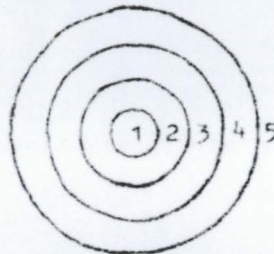
15. Do you go out with a friend of the opposite sex? (0) no  
 (1) yes, about once a month  
 (2) yes, about once every 2 or 3 weeks  
 (3) yes, about once a week (4) yes, about twice a week  
 (5) yes, about 3 or 4 times a week  
 (6) yes, more than 4 times a week

- \* 15(b) If Yes: Do you go steady with one particular friend? (0) No (1) Yes (2) d.n.a.  
 If Yes: About how long have you been going steady with her/him?  
 (0) less than a month (1) 1 to 3 months  
 (2) 4 to 6 months (3) 6 months to a year  
 (4) a year to 2 years (5) more than 2 years

16. Thinking of all the students in Form VII, who would you most want to be like?.....(Name)

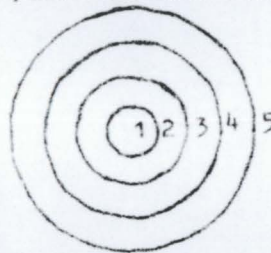
- \* 17. Suppose the circle below represented the activities that go on here at school. How far out from the centre of things are you?

- (0) 1  
 (1) 2  
 (2) 3  
 (3) 4  
 (4) 5  
 (5) d.n.a.



- \* 18. Now in the circle below, place a check where you would like to be.

- (0) 1  
 (1) 2  
 (2) 3  
 (3) 4  
 (4) 5  
 (5) d.n.a.



19. If a student came here to Form VII from another school and wanted to get in with the leading crowd, whom should he seek to become friends with? (Names)

.....  
 .....

- \* 20. How much formal education did your father have?  
 (0) left school at 15 (1) 3 years at secondary  
 (2) 4 years at secondary (3) 5 years at secondary  
 (4) gained U.E. (5) went to university  
 (6) gained a degree - indicate which degree e.g., B.Sc.,  
 (7) gained professional qualifications - indicate the profession  
 and qualification e.g., A.M.I.E.E., A.C.C., M.P.S., etc.  
 (8) don't know/d.n.a. (9) left before 15

- \* 21. How much formal education did your mother have?  
 (0) left school at 15 (1) 3 years at secondary  
 (2) 4 years at secondary (3) 5 years at secondary  
 (4) gained U.E. (5) went to university  
 (6) gained a degree - indicate which degree e.g., B.Sc.,  
 (7) gained professional qualifications - indicate the profession  
 and qualification e.g., A.M.I.E.E., A.C.C., M.P.S., etc.  
 (8) d.k./d.n.a. (9) left before 15

- \* 22. (a) What is your father's occupation? Be as specific as you can  
 (If he is dead say what his occupation was) [Congalton's 7 point scale]  
 (2) managerial / high admin. (3) high supervisory (4) lower supervisory (5) skilled (6) semi-skilled (7) unskilled  
 / routine non-manual manual  
 (0) don't know



- (b) In what organization does he work?.....  
 (9) Is he self-employed?

- NS \* 23. Does any adult in your family belong to any community organizations like clubs, sports or religious groups (Check as many as apply):  
 (0) Old Boys/Girls associations  
 (1) ex-servicemen's associations  
 (2) service club (Rotary, Chamber of Commerce, Lions, St. John's Ambulance  
 (3) hobby or sports group  
 (4) youth organization (Y.M.C.A., Scouts, Girls/Boys Brigade, Duke of Edinburgh Award Scheme, Leo, Interact  
 (5) Parent Teacher Association, Primary School Committee  
 (6) Social Club (Cosmopolitan, Lyceum, Hamilton or other, specify:  
 .....  
 (7) trade union or professional group  
 (8) other (what ones.....)  
 (9) d.n.a.
- \* 24. Do you earn any money by working outside the home? ( ) Yes (0) No  
 If yes, what do you do?.....  
 On average how many hours a week do you work? ① under 3 hrs. ② 3-6 hrs. ③ 6-8 hrs.  
 ④ 8-10 hrs ⑤ over 10 hrs. under 12. ⑥ 12-14 hrs. ⑦ over 14, 14 hrs.
- \* 25. Did you take a job last year during the summer holidays (0) No  
 ( ) Yes. If yes, what did you do?.....  
 How many weeks did you work? ① one week or less ② 2 weeks ③ 3 weeks ④ 4 weeks ⑤ 5 weeks  
 ⑥ 6 weeks ⑦ 7 weeks ⑧ 8 weeks ⑨ 9 weeks & over
- NS \* 26. Do you want to take a holiday job when school finishes in December this year? (1) Yes ( ) No  
 If No, will you be seeking a regular job: (2) Yes (0) No (6) d.n.a.
- NS \* 27. Do you get any money from your parents?  
 (0) No (1) I get money when I need some  
 (2) I get a regular allowance (How much per week? .....)(3) d.n.a.
- NS \* 28. If you could be any of these things you wanted, which would you most want to be?  
 (0) Astronaut  
 (1) N.Z. representative player in some sport  
 (2) Research scientist or social scientist  
 (3) Working abroad in a medical or welfare team  
 (4) None (5) d.n.a.
- \* 29. A person who is alone is.. (check one)  
 (0) bored or unhappy (1) lonely  
 (2) afraid (3) better off  
 (4) relaxed, thinking or reading (5) happy (6) d.n.a.
- NS \* 30. Rank the 5 items below in terms of their importance to you on a job (Rank 1 to 5):  
 (1) ..... the security of steady work  
 (2) ..... the opportunity for a rapid rise  
 (3) ..... the enjoyment of the work itself  
 (4) ..... friendly people to work with  
 (5) ..... a high income (6) d.n.a.
31. What is your favourite way of spending your leisure time?  
 .....  
 .....
- \* 32. When a new clothing style comes out, how soon do you change to the new style?  
 (0) I'm usually one of the first in my group to change  
 (1) I change about the same time that most other people in my group change  
 (2) I usually don't change until most of my friends have changed  
 (3) I don't follow the change at all  
 (4) clothing styles don't matter to me. (5) d.n.a. (6) other comment.



- NS \* 33. Suppose you have money to buy new clothes for a special occasion. How would you decide what style or fashion to look for?
- (0) I'd ask a friend my own age for advice
  - (1) I'd ask a friend a little older than I am for advice
  - (2) I'd ask one of the members of my family for advice
  - (3) I'd find out what is in style from a magazine
  - (4) I would'nt consult anyone or anything. (5) d.n.a.

34. What student in Form VII would be best able to keep you informed about what the latest style is?.....  
(name)

- NS \* 35. Are you planning to go to university after Form VII?  
(2) Yes (1) Undecided (0) No

If No - skip to question 36 (f).

- \* 36. (a) Looking forward to your years at university, how important do you think each of the following will be to you? (Rank 1 to 4):
- (1) .... the stimulation of new ideas
  - (2) .... preparation for making a living
  - (3) .... campus activities and social life
  - (4) .... new friends who share my interests. (6) d.n.a.

- (b) What will you study at university?
- (0) undecided
  - (1) Arts - English, History, Philosophy, Languages
  - (2) a science programme
  - (3) a commerce and administration programme
  - (4) engineering (8) agriculture
  - (5) medicine, dentistry or other intermediate
  - (6) education
  - (7) other, specify .....

- (c) If you have already decided on a specific field within one of the above categories, what is it?  
.....

- (d) In thinking about going to university, which of the persons listed below have you talked to about it? (Check those with whom you have talked about university):
- (0) parents (1) friends here in school
  - (2) friends or acquaintances attending university
  - (3) history or geography teacher
  - (4) maths or science teacher (5) English teacher
  - (6) Form teacher (7) Phys.Ed teacher
  - (7) sports team coach (8) counsellor
  - (8) member of university staff

- NS \* 36. (e) For each of the items below, check which ones you and your parents agree about, which ones you disagree about, and which ones have'nt been discussed with your parents.

	<u>Agree</u>	<u>Don't Agree</u>	<u>Have'nt discussed</u>
What course of study you should take	(0)	(1)	(2) (9) d.n.a.
Which university you should go to	(6)	(7)	(8) (9) d.n.a.
Whether you should live away from home	(3)	(4)	(5) (9) d.n.a.
How your university education will be paid for	(.)	(.)	(.)



## IF NOT GOING TO UNIVERSITY:

36. (f) Check the most important reasons why you are not going to university (check as many as apply):

- (1) I never considered going to university
- (2) I could't afford it
- (3) Most of my friends aren't going to university
- (4) My academic results are not good enough
- (5) I don't need a university education
- (6) My parents have'nt encouraged me
- (7) The school has'nt encouraged me

Suppose that you were to decide that you would like to go to university. How would your family react to this?

- (8) They would feel happy and encourage me
- (9) They would think I was doing the wrong thing and would discourage me.
- (0) They would'nt care much one way or the other.

- NS \* 37. Which do you think is most important in the school?
- (0) for the teachers to be fair in their judgement of you
  - (1) for the other students to be fair in their judgement of you. (2) d.n.a./equal
- \* 38. A situation like this might face anyone sooner or later. Suppose your parents planned a special trip to Sydney to celebrate their wedding anniversary, and they wanted to take the whole family along. But then it happens that this year you're playing in a group and the group is competing for a T.V. award and the very time your family is going to Sydney the group has to compete in the finals at AKTV2 studios in Auckland. Your parents can't change their plans, and they leave it up to you. Which do you think you would do?
- (0) go with parents
  - (1) go to the finals with the group. (3) other comment (4) d.n.a.
- \* 39. You're the boy/girl chosen to be one of two to represent your school at a Students' Luncheon given by the Waikato Savings Bank or the City Council or a Service Club. If you were asked which of three students of the opposite sex you'd like to accompany you - one the best looking person in Form VII, one a student who has just been awarded the Royal Society's prize for a piece of original scientific research, and one who is a leader in lots of school activities. You like them all as people, which one will you choose to go with you?
- (0) the best looking
  - (1) the student with the science award
  - (2) the school activities leader. (3) d.n.a. (4) other comment
- \* 40. If you could build a reputation just by wishing, would you wish to be:
- (0) an outstanding team sportsman
  - (1) an outstanding individual sportsman
  - (2) a brilliant researcher
  - (3) one of those people everybody likes to have around. (4) d.n.a.
- \* 41. Suppose school was dismissed one hour early to give everyone the opportunity to see part of a match between your second team and a visiting school team. On the way to the field your friends asked you to go into town to buy a record. What do you think you would do?
- (0) definitely go to watch the match
  - (1) probably go to watch the match
  - (2) definitely go with your friends
  - (3) probably go with your friends. (4) d.n.a.
- \* 42. Let's say that you had always wanted to join a particular group in your Form, e.g. a group who go surfing and then finally when the group invited you to join them you found out that your parents didn't approve of the group. Do you think you would ..
- (0) definitely join anyway
  - (1) probably join
  - (2) probably not join
  - (3) definitely not join. (4) d.n.a.



- NS \* 43. What if your parents approved, but the teacher you liked most disapproved of the group. Would you ..  
 (0) definitely join anyway (1) probably join  
 (2) probably not join (3) definitely not join (4) d.n.a.

- \* 44. But what if your parents and teachers approved of the group, but by joining it you would break with your closest friend who was'nt asked to join. Would you ..  
 (0) definitely join anyway (1) probably join  
 (2) probably not join (3) definitely not join. (4) d.n.a.

45. Just suppose you were asked to join the group you most wanted to be in here at school, what group would it be?  
 .....

Do you belong to this group? ( ) Yes ( ) No

- \* 46. Are the students you most respect in Form VII regularly expected to achieve good results in school work?  
 (0) Yes (1) Yes but sometimes they do not  
 (2) No, good results are not important. (3) d.n.a.

- NS \* 47. Which of the items below fit most of the students in Form VII?  
 (Check as many as apply):  
 (0) friendly (0) critical  
 (1) hard to get to know (2) mad about clothes or cars or bikes  
 (3) active around school (4) boy or girl crazy  
 (5) studious (6) out for a good time  
 (7) concerned only with their own little group  
 (8) sports minded (9) d.n.a.

- NS \* 48. Which of the items below fit most of the Form VII teachers  
 (Check as many as apply):  
 (0) friendly (1) too strict  
 (2) too easy with school work (3) understand problems of teen-agers  
 (4) not interested in teenagers (5) willing to help out in activities  
 (9) d.n.a.

- NS \* 49. Among the items below, what does it take to be important and looked up to by the other students here at school? (Rank 1 to 6):  
 (1) .... coming from the right family  
 (2) .... leader in activities  
 (3) .... having a car/motorbike  
 (4) .... achieving really good results in school and Public examinations  
 (5) .... being outstanding at one or more sports  
 (6) .... being in the leading crowd. (8) d.n.a.

- \* 50. Do you agree or disagree that..

	<u>Agree</u>	<u>Disagree</u>	
i The real qualities of a person come out in a group	(0)	(1)	(2) d.n.a.
ii If I could trade, I would be someone different from myself	(0)	(1)	(2) d.n.a.
iii I enjoy social gatherings just to be with people	(0)	(1)	(2) d.n.a.
iv I am often not able to keep up with the rest	(0)	(1)	(2) d.n.a.
v There are a few who control things in this Form and the rest of us are out in the cold	(0)	(1)	(2) d.n.a.
vi I am not doing so well at school	(0)	(1)	(2) d.n.a.
vii If a person wants to be part of the leading crowd around here, he/she sometimes has to go against his/her principles	(0)	(1)	(2) d.n.a.
viii I often find myself day dreaming	(0)	(1)	(2) d.n.a.



- NS \* 51. Are the students you most respect in Form VII able to put the young person's point of view convincingly to old people?  
(0) yes, to a marked degree (1) yes, most of the time  
(2) no (3) no, they wouldn't even try (4) d.n.a.
- NS \* 52. Rank the following in terms of their attractiveness for you, if you could be any of these (Rank from 1 to 4):  
(1) .... an executive in a large bank or insurance company or manufacturing or commercial enterprise,  
(2) .... a respected leader in civic and political affairs in your community,  
(3) .... a respected member of the Cabinet,  
(4) .... a successful businessman in your community. (8) d.n.a.
- \* 53. When the group cannot make up its mind the student(s) you most respect usually ..  
(0) persuade the Form what to do  
(1) put up an idea to the Form and let them decide  
(2) put the case for and against a proposal (3) d.n.a.
- NS \* 54. If you could spend some money on making a car as you wanted it, would you ..  
(0) modify the engine (1) fit accessories  
(2) paint it up in a personalized way. (3) other comment (4) d.n.a.
55. What boy among the students in Form VII knows most about cars?  
.....(name).
- NS \* 56. Rank the following four activities in the order that you best like doing them (Rank 1 to 4; 1 is highest, 4 is lowest):  
(1) .... watching T.V.  
(2) .... listening to the radio or to records with friends  
(3) .... listening to the radio or to records by yourself  
(4) .... going to the pictures (8) d.n.a.
57. List any clubs or activities in school in which you are presently a member. If you are in office, list the office you hold in each:
- | Club or Activity | Office |
|------------------|--------|
| .....            | .....  |
| .....            | .....  |
| .....            | .....  |
| .....            | .....  |
58. (a) Since you have been at this school have you won any honours or awards ( ) yes ( ) no  
If yes, which ones .....  
.....
- (b) Which one honour or achievement would you most like to gain at secondary school .....
59. If you had an idea you wanted to "sell" to the Form who would you try first to convince (first and last name):  
.....  
and who would be the most important person to win over to your way of thinking? (name):  
.....
60. Of all the subjects you've studied here at school, are there any you would like to follow up in later life, just for pleasure?  
(0) yes (1) no  
If yes, which ones .....



- \* 61. (a) Can you have your parents' car?  
 (0) yes, when I want it (1) yes, but only for dates  
 (2) parents have no car (3) no (u) d.n.a.

- \* { (b) Do you own a car? (0) yes (1) no (2) d.n.a.  
 (c) Do you own a scotter or motorbike? (0) yes (1) no (2) d.n.a.

- \* 62. For each of these situations, check whether you think you would 'go along with it' or 'try to get out of it'

		<u>Go along with it</u>	<u>Try to get out of it</u>
i	The school is sponsoring a big picnic or barbecue	(0)	(1) (2) d.n.a.
ii	Your family is planning a get together of relatives	(0)	(1) (2) d.n.a.
iii	You are asked to help decorate the school hall for a big dance	(0)	(1) (2) d.n.a.
iv	Your parents want you to go with them to the pictures	(0)	(1) (2) d.n.a.

- \* 63. For each of the situations listed on the left, pick the one item from the list on the right that comes closest to what you think you would feel like doing. Write the number of the activity you choose on the line; you may use the same number more than once if you like.

NS	i	.... when I'm bored..	(1) I go down town
NS	ii	.... when I finish my homework on a week night ..	(2) watch T.V.
NS	iii	.... I've had a bad day at school ..	(3) ride/walk around with friends
NS	iv	.... I've had an argument with my best friend ..	(4) stay home and read
NS	v	.... I've had an argument with my parents ..	(5) go over to a friend's house
	vi	.... our team has just won an important game ..	(6) raid the fridg.
NS	vii	.... our team has just lost an important game ..	(7) listen to the radio by myself
			(8) listen to records with friends
			(9) go to the pictures
			(0) d.n.a.

64. (a) Name the students you most respect in Form VII and if you can briefly say why .....

.....

- (b) Who are their closest friends? .....

.....

- NS \* 65. (a) When you have to decide between yourself and the group ..  
 (0) I always go along with the group  
 (1) I usually go along with the group  
 (2) I usually decide for myself  
 (3) I always decide for myself

- \* (b) The years in secondary school have been ..  
 (0) full of fun and excitement  
 (1) interesting and hard work  
 (2) fairly pleasant  
 (3) fairly dull  
 (4) unhappy



66. Check any of the following drinks that are ever served in your home:
- |                   |                               |
|-------------------|-------------------------------|
| (0) cocktails     | (1) beer                      |
| (2) whiskey       | (3) table wine                |
| (4) sherry        | (5) other alcoholic beverages |
| (6) none of these |                               |

- \* 67. Do you read any magazines regularly or fairly regularly?  
 (0) yes (1) no (2) d.n.a.  
 If yes, which ones .....

68. In some schools, there seems to be one group that more or less runs things among the students. What about here? Is there one group that seems always in the middle of things, or are there several groups like that - leadership changing from one activity/situation to another?

(0) one (1) two (2) more than two

Who are the leading people in this group or groups? (give first and last names)

first group	second group
.....	.....
.....	.....
.....	.....
.....	.....
third group	fourth group
.....	.....
.....	.....
.....	.....
.....	.....

69. In this questionnaire you have been asked quite a few questions about what it takes to be in good standing among Form VII students here. Now would you put in your own words what you feel are the really important things that give a person prestige among the Form VII group. (Use the remaining space below):

.....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....  
 .....

- (1) \* indicates the items processed by computer. Data from these items is provided in Appendix C-1, except that data for Questions 11 & 23 has been excluded since no patterns of behaviour were indicated in Q11 responses & the rate of 'no response' to Q23 was high. (2) NS indicates 'not statistically significant.'



A STUDY OF THE INTERESTS AND ATTITUDES OF FORM VII STUDENTS

TEACHERS' QUESTIONNAIRE

Most of the questions can be answered by placing a tick like this ( ) or by numbers on short lines like this (....). Specific instructions are given where needed. If you would like to elaborate on any question please use the blank space at the end of the questionnaire.

1. Which of the categories below comes closest to the attitude of most of the Form VII students towards the teachers in this school?
  - ( ) They feel close to the teachers; will confide in them; and feel that the teachers understand them.
  - ( ) They feel that the teachers are trying to help them, but don't really understand their problems.
  - ( ) They feel that the teachers are fairly indifferent to their problems.
  - ( ) They are distrustful of the teachers, and suspicious of the teachers' intentions.
  
2. Thinking only of the following four things, just how important do you think they should be for a student?  
(Rank items from 1 to 4)
  - .... pleasing their parents
  - .... learning as much as possible in school
  - .... living up to religious ideals
  - .... being accepted and liked by other students
  
3. Some schools seem to have one group of Form VII students that more or less dominates student life around the school. What about this school? Is there one group that seems to be always in the middle of things or are there several groups like that?
  - ( ) one
  - ( ) two
  - ( ) more than two
  
4. Who are the leading Form VII students in this group or groups?
 

(first group) <div style="text-align: center;">           .....            .....            .....            .....         </div>	(second group) <div style="text-align: center;">           .....            .....            .....            .....         </div>
(third group) <div style="text-align: center;">           .....            .....            .....            .....         </div>	(fourth group) <div style="text-align: center;">           .....            .....            .....            .....         </div>



5. What does it take for a Form VII student to become part of the leading crowd in this school?
- .....
- .....
- .....
6. What is the best way to describe the different groups of Form VII students in this school according to the interests and behaviour which characterize each group?
- .....
- .....
- .....
- .....
7. What is the best way to describe the group of Form VII students in this school which offers the greatest problems for a teacher or for the school?
- .....
- .....
- .....
- .....
8. If you could see any of three Form VII boys made Head Boy, which would you rather it would be?
- ( ) an outstanding sportsman
- ( ) a student outstanding academically
- ( ) a leader in extra-curricular activities
9. Among the items below, what ones are most important in giving a Form VII boy prestige or making him looked up to by other boys here at school?
- (Rank from 1 to 6)
- .... coming from the right family
- .... leader in activities
- .... having a nice car or motorbike
- .... outstanding academic results
- .... outstanding sportsmanship
- .... being in the leading crowd
10. There are many things young people can get from university. How important do you think each of the following should be for a student in his university experience?
- (Rank from 1 to 4)
- .... the stimulation of new ideas
- .... preparation for making a living
- .... campus activities and social life
- .... new friends who share his interests
11. Do you agree or disagree that...
- |       |          |  |
|-------|----------|--|
| Agree | Disagree |  |
| ( )   | ( )      | There are a few students in Form VII who control things among the student body in this school, and the rest are out in the cold. |



## 11. (continued)

Agree	Disagree	
(   )	(   )	If a Form VII student wants to be part of the leading crowd around here he sometimes has to go against his principles.

## 12. What seating arrangement do you use in your Form VII classes?

- (   ) I assign them desks which they keep throughout the year
- (   ) They choose their desks at the start of the year and keep them for the year
- (   ) They choose the desks they like each day

(For your comments)

We are studying the prestige system in Form VII. The categorical questions above provide only a crude way of gaining information. We would appreciate any further comments you might have which are relevant to our study.



APPENDIX C-1Frequencies of responses to Questionnaire Items

which when subjected to the Chi-square test, allowed the rejection of  $H_0$  "that, between one Form VII group and another, at the .10 level, there is no significant difference in the frequency of responses to a question"

Chi-square not significant (N.S.)  
for all the remaining questionnaire  
items which were processed by the  
IBM '1130' computer.



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11
2. If it were completely up to you, would you -						
(0) complete the F.VII year	15	17	12	8	11	10
(1) leave during the year	2	9	2	0	0	1
(2) don't know		2	1	1	1	0
(0) <u>cf. other</u>						
3. Thinking back to F. V & VI, are you enjoying F. VII more?						
(1) Form VII more	8	18	14	6	11	11
(0) Form V, VI more	4	66	0	1	00	0
(2) Both the same	4	4	1	2	1	0
(3) dna	1	-	0	0	0	0
(1) <u>cf. other</u>						
4. How much time spent on homework outside school?						
(2) about 2 hours a day	3	10	3	2	4	5
(3) 3 or more hours a day	12	2	3	2	4	1
(0) less than 1½ hours a day	0	8	6	2	2	2
(1) about 1½ hours a day	2	7	3	3	2	2
(4) dna	0	1	0	0	0	0
(2) + (3) <u>cf. (0), (1) + (4)</u>						
5. Suppose you had an extra hour in school, how would you use it?						
(3) Study period to do something else	2	4	6	0	4	6
(0) chosen subject	3	6	3	2	1	1
(1) club or activity	3	10	3	4	1	2
(2) study period to study	6	1	0	2	3	1
(4) sport	3	7	3	1	3	1
(3) <u>cf. (0), (1), (2), (4)</u>						
6. About how many evenings do you spend at home?						
5 evenings	3	8	4	4	3	5
6 evenings	7	6	2	2	4	3
7 evenings	4	2	0	0	1	0
0 evenings	1	1	0	0	0	0
1 evening	0	1	0	0	1	0
2 evenings	0	0	0	0	0	1
3 evenings	1	3	3	3	0	0
4 evenings	0	5	6	2	3	2
dna	1					
<u>5 or more evenings at home cf. rest</u>						



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.  
(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males	females	males	females
			n=15	n=9	n=12	n=11
8. How much time do you spend watching T.V. on a weekday?						
(0) none or almost none	11	14	0	0	5	3
(1) $\frac{1}{2}$ hour a day	1	0	4	2	1	2
(2) 1 hour a day	1	8	2	1	1	4
(3) $1\frac{1}{2}$ hours a day	2	4	2	3	2	0
(4) 2 hours a day	1	1	6	3	2	1
(5) 3 hours a day	1	1	1	0	1	1
(6) 4 or more hours a day	0	0	0	0	0	0
(0) cf. rest						
9. Which would be your first choice?						
(1) pleasing your parents	3	5	0	1	0	1
(2) learning as much as possible at school	5	9	6	2	2	2
(3) living up to your ideals	4	3	8	3	7	7
(4) being accepted and liked by other students	3	9	2	3	1	1
(1) cf. rest						
10. Which would be of most importance to you?						
(1) groups and activities outside school	0	9	7	3	2	3
(2) Activities assoc. with school	10	6	1	1	0	0
(3) having a good time	3	11	5	2	5	5
(4) having a good reputation	2	2	3	3	4	2
15. Do you go steady with one particular boy/girl friend?						
(1) yes	3	3	3	5	5	4
(0) no	11	18	6	1	2	4
(2) n/a; does not go out with opposite sex	3	7	6	3	5	3
(1) cf. (0)+(2)						
17. How far out from the centre of school activities are you?						
(0) at the centre	3	1	2	1	1	4
(1) once removed	7	12	1	2	1	1
(2) Twice removed	4	3	3	2	5	2
(3) three times removed	3	5	7	3	3	2
(4) four times removed	0	7	2	1	1	1
d.n.a.					1	1
(0) cf. the rest						
18. How far out from the centre of school activities would you like to be?						
(0) at the centre	5	2	1	1	0	4
(1) once removed	6	9	4	5	3	1
(2) twice removed	2	5	3	2	6	2
(3) three times removed	1	4	6	1	0	2
(4) four times removed	1	8	1	0	2	1
d.n.a.	2				1	1
(0) cf. the rest						



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.

(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11

20. How much formal education did your father have?

(4) gained U.E.	1	2	0	1	2	0
(5) went to university	1	0	0	1	0	0
(6) gained a degree	1	0	1	0	1	3
(7) gained professional qual.	1	13	2	1	1	1
(9) left before 15/less than 3 years' secondary school	1	0	2	0	1	2
(0) left school at 15	5	5	4	3	4	1
(1) 3 years at secondary	2	0	3	2	1	0
(2) 4 years at secondary	2	2	0	0	0	1
(3) 5 years at secondary	0	1	0	0	0	0
(8) d.n.a.	3	5	3	1	2	3

(4),(5),(6)+(7) cf. rest

22. Father's occupation

(1) Professional & semi-prof.	2	13	1	1	2	3
(2) high managerial	5	4	3	2	0	1
(3) low managerial	7	6	4	2	3	2
(4) sales or clerical	3	4	1	3	4	3
(5) skilled manual or routine non-manual	0	0	5	0	2	0
(6) semi-skilled	0	0	1	1	1	1
(7) unskilled manual	0	0	0	0	0	1
(0) don't know	0	1	0	0	0	0

(1),(2),(3) cf. rest

24. How many hours a week do you work to earn money outside the home?

(0) none	11	25	5	5	5	3
(1) less than 3	2	0	0	0	1	1
(2) less than 6, more than 3	1	2	1	3	3	4
(3) less than 8, more than 6	3	0	1	1	2	1
(4) less than 10, more than 8	0	0	3	0	0	0
(5) less than 12, more than 10	0	0	1	0	1	1
(6) less than 14, more than 12	0	0	2	0	0	0
(7) 14 or more hours	0	1	2	0	0	1

(0) cf. rest



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.

(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11
25. How many weeks did you work during the summer holidays?						
(o) none	8	8	2	2	3	1
(1) less than two weeks	0	2	0	0	0	0
(2) two weeks	1	3	0	0	1	0
(3) Three weeks	4	3	1	0	0	2
(4) four weeks	0	3	4	3	2	2
(5) five weeks	1	3	2	0	0	1
(6) six weeks	1	4	2	2	1	5
(7) seven weeks	0	2	1	0	0	0
(8) eight weeks	1	0	1	2	3	0
(9) more than eight weeks	1	0	2	0	2	0
<u>(o)+(1) cf. rest</u>						
29. A person who is alone is...						
(0) bored	2	4	4	2	2	1
(1) lonely	3	11	3	3	4	2
(2) afraid	1	2	2	0	0	1
d.n.a.	1	2			2	1
(3) better off	0	2	3	0	1	0
(4) relaxed, thinking, reading	8	6	3	4	3	5
(5) happy	2	1	0	0	0	1
<u>(3),(4),(5) cf. rest</u>						
32. How soon do you change to the new clothing style?						
(0) one of the first in my group to change	2	0	1	2	0	1
(1) change same as group	8	10	4	2	6	7
(2) wait till after friends change	2	3	2	1	1	1
(3) don't change	0	2	1	0	1	1
(4) clothing style doesn't matter to me	5	8	7	4	3	0
(6) change if I want to/can afford to	0	1	0	0	1	0
(5) d.n.a.	0	1	0	0	1	0
<u>(3),(4),(5),(6) cf. rest</u>						
36 (a) Looking forward to your years at university, which do you expect to be of most importance to you?						
the stimulation of new ideas	5	12	3	3	3	5
preparation for making a living	5	7	11	1	4	0
campus activities, social life, new friends who share your interests	1+2	3+3	0+0	1+4	0+1	1+4



(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11
38. Go with parents or attend with your group?						
(1) go to the finals with the group	13	14	13	6	11	6
(0) go with parents to Sydney	4	10	2	3	0	4
(2) d.n.a.	0	4	0	0	1	1
(0)+(2) cf. (1)						
39. Choice of companion to attend luncheon						
(2) the school activities leader	14	8	5	9	5	8
(0) the best looking	3	15	5	0	5	2
(1) winner of science award	0	2	3	0	1	0
(4) doesn't matter which	0	0	1	0	0	0
(3) d.n.a.	0	3	1	0	1	1
(2) cf. rest						
40. Would you choose to build a reputation as -						
(3) one of those people everybody likes to have around	12	11	5	9	6	7
(0) team sportsman	0	6	3	0	2	0
(1) individual sportsman	0	4	2	0	1	0
(2) brilliant researcher	2	3	5	0	2	2
(4) d.n.a.	3	4	0	0	1	2
(3) cf. rest						
41. Would you see the inter-school match or go in to town with your friends?						
(0) definitely watch match	9	4	4	1	3	1
(1) probably watch match	5	5	1	3	4	3
(2) definitely go with friends	0	5	0	0	0	3
(3) probably go with friends	3	14	10	5	5	4
(0)+(1) cf. (2)+(3)						
42. Would you join a group you wanted to join, though your parents disapproved?						
(3) definitely not join	3	2	0	0	0	0
(2) probably not join	11	8	3	3	5	5
(1) probably join	2	10	9	6	5	4
(0) definitely join	0	3	3	0	2	1
(4) d.n.a.	1	5	0	0	0	1
(2)+(3) cf. rest						



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.

(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11
44. Would you join a group if it meant breaking with your closest friend?						
(2) probably not join	8	13	9	3	6	5
(3) definitely not join	6	7	5	2	5	4
(0) definitely join	0	1	0	1	0	0
(1) probably join	1	3	1	2	1	1
(4) d.n.a.	2	4		1		1
<u>(2)+(3) cf. rest</u>						
46. Are the most respected form members expected to achieve good academic results?						
(0) yes	5	3	3	2	1	2
(1) yes, but sometimes they do not	8	8	7	2	4	7
(2) no, good results are not important	3	15	5	5	6	2
(3) d.n.a.	1	2	0	0	1	0
<u>(0)+(1) cf. (2)+(3)</u>						
50. If a person wants to be part of the Form VII leading crowd he/she sometimes must go against his/her principles						
(0) agree	3	17	5	4	2	2
(1) disagree	12	9	9	4	10	8
(2) d.n.a.	2	2	1	1	0	1
<u>(0) cf. (1)+(2)</u>						
53. When the group cannot make up its mind the student(s) you most respect usually...						
(0) persuade the Form what to do	2	11	5	1	3	1
(1) put an idea to the Form and let them decide	9	11	5	7	4	7
(2) put the case for and against a proposal	6	2	5	1	4	1
(3) d.n.a.	0	4	0	0	1	2
<u>(0) cf. (1)+(2)+(3)</u>						



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.

(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11
61.(a) Can you have your parents' car?						
(0) yes, when I want it	11	23	6	5	9	2
(1) yes, but only for dates	0	2	3	0	1	0
(2) parents have no car	2	0	1	0	0	0
(3) no	4	2	5	3	2	6
(4) d.n.a./don't drive	0	1	0	1	0	3
(0) <u>cf. rest</u>						

61. (b),(c) Do you own a car, scooter or motorbike?

(0) yes	2	5	7	0	6	0
(1) no	14	22	8	9	6	11
(2) d.n.a.	1	1				
(0) <u>cf. rest</u>						

62. (i) The school holds a big picnic or barbecue. Would you -

(0) go along with it	16	19	11	9	12	10
(1) try to get out of it	1	9	4	0	0	1
(1) <u>cf. (0)</u>						

62. (ii) Your family is planning a get together of relatives. Would you -

(0) go along with it	14	15	7	6	7	7
(1) try to get out of it	3	11	8	3	5	3
d.n.a.		2				1
(1) <u>cf. (0)</u>						

62. (iii) You are asked to help decorate the school hall for a big dance. Would you -

(0) go along with it	16	21	11	9	10	11
(1) try to get out of it	1	5	4	0	2	0
d.n.a.		2				
(1) <u>cf. (0)</u>						



Table showing the frequency of responses where there are statistically significant differences between some groups of Form VII students.

(contd.)

Question No. and coding	Academy n=17	Towers n=28	Riverlea		Waterview	
			males n=15	females n=9	males n=12	females n=11
62. (iv) Your parents want you to go with them to the pictures. Would you -						
(0) go along with it	13	14	4	4	7	5
(1) try to get out of it	4	12	11	5	5	6
d.n.a.		2				
(1) cf. (0)						
63. (vi) After your team has just won an important game, would you -						
(3) ride/walk around with friends	6	3	6	2	2	3
(5) go over to a friend's house	3	4	5	0	4	2
(8) listen to records with friends	0	2	1	4	0	3
(1) go down town	0	3	0	1	0	0
(2) watch T.V.	0	1	1	0	0	1
(4) stay home and read	0	0	0	0	0	0
(6) raid the refrigerator	2	3	0	0	0	0
(7) listen to the radio by yourself	0	1	0	0	1	0
(9) go to the pictures	2	3	1	0	3	0
(0) d.n.a.	4	8	1	2	2	2
(3),(5),(8) cf. rest						
65. (b) The years in secondary school have been...						
(0) full of fun and excitement	2	1	2	0	2	2
(1) interesting and hard work	10	6	4	3	7	3
(2) fairly pleasant	4	14	6	5	3	6
(3) fairly dull	0	4	3	1	0	0
(4) unhappy	1	3	0	0	0	0
(0)+(1) cf. rest						
67. Do you read any magazines regularly or fairly regularly?						
(1) no	2	8	5	0	6	4
(0) yes	15	19	10	9	6	7
(2) d.n.a.	0	1	0	0	0	0
(1) cf. (0)+(2)						



APPENDIX C-IIIntroductory note:The chi-square test for independent samples

For questionnaire items 2, 3, 4, 5, 6, 8, 10, 17, 18, 20, 21, 22, 24, 25, 29, 32, 38, 39, 40, 41, 42, 44, 46, 50 vii, 53, 61(a), 61(b&c), 62 i, 62 ii, 62 iii, 62 iv, 63 vi, 65(b), 67 the observed frequencies (for suitably combined categories) were cast in a 2 x 2 contingency table. The formula - to obtain a chi-square value - with Yates correction (theoretical frequencies in each case exceeding 5) was:-

$$\chi^2 = \frac{N(AD - BC - \frac{N}{2})^2}{(A+C)(B+D)(A+B)(C+D)}$$

(For application of the formula please see the working for Q2)

Statistical significance levels were established by checking the chi-square values against a table of critical values of chi-square in Siegel (1956: 249)

In the case of questionnaire items 9, 10 and 36(a) *pp. 148 & 155* the expected frequency for each cell was determined by finding the product of the marginal totals common to it and dividing this by N - N representing the total number of independent observations and formula for obtaining the chi-square value

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

The expected values are obtained on the assumption that in fact there is no association in the contingency table; the researcher is interested to know whether there is an association between the particular Form VII to which students belong and their responses to questionnaire items.



## Appendix C-II

KEY :No. of  
students

A	the Academy, private girls' high school Form VII	17
B	the Towers, private boys' high school Form VII	28
C	Riverlea, state co-educational high school Form VII	24
D	Waterview, state co-educational high school Form VII	23
E	females in Form VII at Riverlea	9
F	females in Form VII at Waterview	11
G	males in Form VII at Riverlea	15
H	males in Form VII at Waterview	12



Table of  $\chi^2$  values and their \*significance level(Probability under  $H_0$  that  $\chi^2 \geq$  chi square)

Questionnaire Number	nearing significance $\chi^2$	$\leq .10$ 2.71	$\leq .05$ 3.84	$\leq .02$ 5.41	$\leq .01$ 6.64	$\leq .001$ 10.83
2. "would complete FVII year" A cf. B G&H cf. B A&E&F cf. B E&F cf. G&H NOT SIGNIFICANT	2.68	3.01		5.76		
3. "enjoyed FVII more than FV or FVI" A cf. E&F B cf. G&H A&B cf. C&D E&F cf. G&H NOT SIGNIFICANT			4.43 4.90		10.31	
4. "hours per day on homework" more than two hours A cf. B A cf. E&F A cf. G&H A&E&F cf. B&G&H B cf. G&H NOT SIGNIFICANT		2.91	4.51 4.63		7.28	
5. "choose study period to do something else" A&B cf. C&D B cf. G&H	2.65		4.47			
6. "spend 5,6,7 evenings at home" A&E&F cf. B&G&H		3.38				
8. "almost no week-day TV" A cf. E&F B cf. G&H A&B cf. C&D			4.71		7.65	13.50
9. First preference from:- Maximum learning Living up to ideals Being liked by others A cf. B cf. E&F cf. C&D			(df 6) 13.5			

KEY: see P.136

\* Refer to Siegel S. Nonparametric Statistics, McGraw-Hill, 1956  
p249 'Table of Critical Values of Chi Square'



Table of  $\chi^2$  values and their significance level(Probability under  $H_0$  that  $\chi^2 \geq$  chi square)

(contd.)

Questionnaire Number	nearing signif- icance	$\leq .10$	$\leq .05$	$\leq .02$	$\leq .01$	$\leq .001$
10. First preference from:- outside school activities school activities having a good time having a good reputation A cf. B cf. E&F cf. G&H						(df. 9) 32.9
15. "going steady with one girl/ boy friend" A cf. E&F B cf. G&H A&B cf. C&D	2.01 2.00		5.23			
17. "am at the centre of school activities" A&E&F cf. B&G&H		2.85				
18. "want to be at the centre of school activities" A&E&F cf. B&G&H					6.80	
20. "father's education, U.E. or better" A cf. B G&H cf B A&G&H cf. B&E&F G&H cf. E&F NOT SIGNIFICANT		2.78 3.30 3.47				
22. "father's occupation, professional/managerial" A cf. E&F B cf. G&H A&B cf C&D	2.01			5.60	8.64	
24. "hours per week paid work"- nil B cf. G&H A&B cf. C&D B cf. C&D B cf. A&E&F					8.82	14.04 14.82 16.62
25. "less than 2 weeks paid vacation work" A cf. E&F A&B cf. C&D		3.12	4.91			

KEY: see P.136



Table of  $X^2$  values and their significance level(Probability under  $H_0$  that  $X^2 \geq$  chi square)

(contd.)

Questionnaire Number	nearing signif- icance	$\leq .10$	$\leq .05$	$\leq .02$	$\leq .01$	$\leq .001$
29. Positive reaction to "a person who is alone"  A cf. B A&E&F cf. B&G&H	2.09 2.69					
32. "Changing with changing clothing fashions"  A&E&F cf. B&G&H		3.24				
36 (a) At university, first preference from:-  new ideas, career preparation, friends and activities  A cf. B cf. E&F cf. G&H						(df=6) 22.5
38. "Go to finals with group" - not with parents  A cf. B B cf. G&H E&F cf. G&H A&E&F cf. G&H  A&E&F cf. B NOT SIGNIFICANT	2.08				8.00	
		2.87	3.86			
39. "school activities leader" as luncheon companion  A cf. B A&E&F cf. B&G&H E&F cf. G&H					10.19 8.94	21.16
40. "would be person all like to have around"  A cf. B A&E&F cf. B&G&H		2.99			9.95	
41. "would see inter-school match" cf. go into town with friends  A cf. B A cf. E&F A cf. G&H					8.76	
			5.19 4.73			

KEY: see P. 136



Table of  $\chi^2$  values and their significance level(Probability under  $H_0$  that  $\chi^2 \geq$  chi square)

(contd.)

Questionnaire Number	nearing signif- icance	$\leq .10$	$\leq .05$	$\leq .02$	$\leq .01$	$\leq .001$
42. "would not join group, if parents disapproved" A cf. B A cf. E&F A cf. G&H E&F cf. G&H NOT SIGNIFICANT			5.19		7.47 9.59	
44. "would not join group and break friendship" B cf. G&H A&E&F cf. G&H A&E&F cf. B NOT SIGNIFICANT	2.06	2.84				
46. "elite should achieve good academic records" A&E&F cf. B&G&H			3.87			
50 vii "elite must sometimes sacrifice principles" A cf. B B cf. G&H B cf. E&F				6.13 6.27		
53. "elite persuade group what to do" A&E&F cf. B&G&H				5.44		
61 (a) "can have parents' car when I want it" A cf. E&F B cf. G&H A&B cf. C&D E&F cf. G&H NOT SIGNIFICANT	2.17	3.39			6.81	
61 (b&c) "own a car/motorbike or scooter" A&F cf. G&H A&E&F cf. B&G&H A&E&F cf. G&H B cf. G&H			4.44		9.75 8.17	13.46
62 i "would support school barbecue" B cf. A&E&F				6.31		

KEY: see P.136



Table of  $X^2$  values and their significance level(Probability under  $H_0$  that  $X^2 \geq$  chi square)

(contd.)

Questionnaire Number	nearing signif- icance	$\leq .10$	$\leq .05$	$\leq .02$	$\leq .01$	$\leq .001$
62 ii "would support relatives' get-together" A cf. B A&E&F cf. B&G&H	2.67	3.00				
62 iii "would decorate the school hall" A&E&F cf B&G&H				5.98		
62 iv "would go with parents to pictures" A cf. B A cf. E&F A cf. G&H E&F cf.G&H NOT SIGNIFICANT	2.08 2.58		4.03			
63 vi "after a team win would join friends" B cf. G&H A&B cf.C&D E&F cf.G&H NOT SIGNIFICANT			5.25 6.22			
65 (b) "secondary school years fun, excitement/interest- ing" A cf. B B cf. G&H A cf. E&F A&G&H cf. B&E&F	2.34		4.15		7.24 7.22	
67. "read magazines regularly" A&E&F cf. B&G&H		2.89				

KEY: see P.136



## APPENDIX C-III

Table of  $\chi^2$  values and their significance level

for Questionnaire Items where the differences between the frequency of response between the LEADS and the REST were statistically significant approaching the .10 level or beyond it.

Questionnaire Number	nearing signif- icance $\chi^2$	$\leq .10$ 2.71	$\leq .05$ 3.84	$\leq .02$ 5.41	$\leq .01$ 6.64	$\leq .001$ 10.83
9. <u>First choice</u> - "being accepted by others" LEADS cf. REST	2.37					
10. <u>First choice</u> - "having a good time" LEADS cf. REST	2.50					
17. "am at the centre of school activities" LEADS cf. REST						21.21
21. "mother's education U.E. or better" LEADS cf. REST		2.73				
38. "go to the finals with the group" LEADS cf. REST		3.74				
41. "stay for inter-school match" LEADS cf. REST				5.68		
62 ii "support get-together of relatives" LEADS cf. REST	2.40					



Appendix D-IThe Computation of Chi-square shown in the Table C-IQuestion No. 2


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	<u>Would complete FVII</u>	<u>Otherwise</u>	<u>Total</u>
School (A)	15	2	17
School (B)	17	11	28
	<u>32</u>	<u>13</u>	<u>45</u>

$$\chi^2 = \frac{45((165 - 34) - 22.5)^2}{(32)(13)(17)(28)} = \frac{45(11,772.25)}{198,016}$$

$$= \frac{529,751.25}{198,016}$$

df 1

$$\chi^2 = 2.68 \quad (2.71 \text{ required for } .10 \text{ level of significance})$$

The probability of occurrence under  $H_0$  for  $\chi^2 = 2.68$  with df = 1,  $p < .10$

---

School (G & H)	23	4	27
School (B)	17	11	28
	<u>40</u>	<u>15</u>	<u>55</u>

$$\chi^2 = \frac{55((253 - 68) - 27.5)^2}{(40)(15)(27)(28)} = \frac{55(24,806.25)}{453,600}$$

$$= \frac{1,364,343.75}{453,600}$$

df 1

$$\chi^2 = 3.01 \quad (2.71 \text{ required for } .10 \text{ level of significance})$$

(3.84 required for .05 level of significance)

---

School (A & E & F)	33	4	37
School (B)	17	11	28
	<u>50</u>	<u>15</u>	<u>65</u>

$$\chi^2 = \frac{65((363 - 68) - 32.5)^2}{(50)(15)(37)(28)} = \frac{4,478,906.25}{777,000}$$

$$\chi^2 = 5.76 \quad (.02 \text{ level of significance})$$


---



	<u>Enjoyed F.VII more</u>	<u>Otherwise</u>	<u>Total</u>
School (A)	8	9	17
School (E & F)	17	3	20
	<u>25</u>	<u>12</u>	<u>37</u>

$$\chi^2 = \frac{37((153 - 24) - 18.5)^2}{(25)(12)(17)(20)} = \frac{37(12,210.25)}{102,000}$$

$$= \frac{451,779.25}{102,000}$$

$$\chi^2 = 4.43 \quad (\text{above } .05 \text{ level of significance,} \\ \text{below } .02 \quad " \quad " \quad " \quad " \quad )$$

School (B)	18	10	28
School (G & H)	25	2	27
	<u>43</u>	<u>12</u>	<u>55</u>

$$\chi^2 = \frac{55((250 - 36) - 27.5)^2}{(43)(12)(28)(27)} = \frac{55(34,782.25)}{390,096}$$

$$= \frac{1,913,023.75}{390,096}$$

$$\chi^2 = 4.90 \quad (3.84 \text{ required for significance at } .05 \text{ level,} \\ 5.41 \quad " \quad " \quad " \quad " \quad .02 \text{ level.})$$

Schools (A & B)	26	19	45
Schools (C & D)	42	5	47
	<u>68</u>	<u>24</u>	<u>92</u>

$$\chi^2 = \frac{92((798 - 130) - 46)^2}{(68)(24)(45)(47)} = \frac{92(386,884)}{3,451,680}$$

$$= \frac{35,593,328}{3,451,680}$$

$$\chi^2 = 10.31 \quad (6.64 \text{ required for significance at } .01 \text{ level,} \\ 10.83 \quad " \quad " \quad " \quad " \quad .001 \quad " \quad )$$



Question No. 4

	<u>More than 2 hrs homework</u>	<u>otherwise</u>	<u>Total</u>
School (A)	15	2	17
School (B)	12	16	28
	<u>27</u>	<u>18</u>	<u>45</u>

$$\chi^2 = \frac{45((240 - 24) - 22.5)^2}{(27)(18)(17)(28)} = \frac{45(37,442.25)}{231,336}$$

$$= \frac{1,684,901.25}{231,336}$$

$$\chi^2 = 7.28 \quad (.01 \text{ level of significance})$$

School (A)	15	2	17
Schools (E & F)	10	10	20
	<u>25</u>	<u>12</u>	<u>37</u>

$$\chi^2 = \frac{37((150 - 20) - 18.5)^2}{(25)(12)(17)(20)} = \frac{37(12,432.25)}{102,000}$$

$$= \frac{459,993.25}{102,000}$$

$$\chi^2 = 4.51 \quad (.05 \text{ level of significance})$$

School (A)	15	2	17
Schools (G & H)	14	13	27
	<u>29</u>	<u>15</u>	<u>44</u>

$$\chi^2 = \frac{44((195 - 28) - 22)^2}{(29)(15)(17)(27)} = \frac{925,100}{199,665}$$

$$\chi^2 = 4.63 \quad (.05 \text{ level of significance})$$

Schools (A & E & F)	25	12	37
Schools (B & G & H)	26	29	55
	<u>51</u>	<u>41</u>	<u>92</u>

$$\chi^2 = \frac{92((725 - 312) - 46)^2}{(51)(41)(37)(55)} = \frac{92(134,689)}{4,255,185}$$

$$= \frac{12,391,388}{4,255,185}$$

$$\chi^2 = 2.91 \quad (2.71 \text{ required for significance at } .10 \text{ level,}$$

3.84   "   "   "   "   .05   " )



Question No. 5

	<u>"study"period for something else</u>	<u>otherwise</u>	<u>total</u>
Schools (A & B)	6	39	45
Schools (C & D)	16	31	47
	<u>22</u>	<u>70</u>	<u>92</u>

$$\chi^2 = \frac{92((624 - 180) - 46)^2}{(22)(70)(45)(47)} = \frac{92(158,404)}{3,257,100}$$

$$= \frac{14,573,168}{3,257,100}$$

$$\chi^2 = 4.47 \quad (3.84 \text{ required for significance at } .05 \text{ level, } 5.41 \text{ " " " " } .02 \text{ " } )$$

---

School (B)	4	24	28
Schools (G & H)	10	17	27
	<u>14</u>	<u>41</u>	<u>55</u>

$$\chi^2 = \frac{55((240 - 68) - 27.5)^2}{(14)(41)(28)(27)} = \frac{55(20,880.25)}{433,944}$$

$$= \frac{1,148,413.75}{433,944}$$

$$\chi^2 = 2.65 \quad (2.71 \text{ required for significance at } .10 \text{ level})$$


---



	spend at least 5 evenings a week at home	otherwise	total
Schools (A & E & F)	28	9	37
Schools (B & G & H)	30	25	55
	<u>58</u>	<u>34</u>	<u>92</u>

$$\chi^2 = \frac{92((700 - 270) - 46)^2}{(58)(34)(37)(55)} = \frac{92(147,456)}{4,013,020}$$

$$= \frac{13,565,952}{4,013,020}$$

$$\chi^2 = 3.38 \quad (2.71 \text{ required for significance at } .10 \text{ level,}$$

$$3.84 \quad " \quad " \quad " \quad " \quad .05 \quad " \quad )$$

## Question No. 8

	almost no T.V.	otherwise	total
School (A)	11	6	17
Schools (E & F)	<u>3</u>	<u>17</u>	<u>20</u>
	14	23	37

$$\chi^2 = \frac{37((187 - 18) - 18.5)^2}{(14)(23)(17)(20)} = \frac{37(22,650.25)}{109,480}$$

$$= \frac{838,059.25}{109,480}$$

$$\chi^2 = 7.65 \quad \text{significant at the } .01 \text{ level}$$

School (B)	14	14	28
Schools (G & H)	<u>5</u>	<u>22</u>	<u>27</u>
	19	36	55

$$\chi^2 = \frac{55((308 - 70) - 27.5)^2}{(19)(36)(28)(27)} = \frac{55(44,310.25)}{517,104}$$

$$= \frac{2,437,063.75}{517,104}$$

$$\chi^2 = 4.71 \quad (3.84 \text{ required for significance at } .05 \text{ level,}$$

$$5.41 \quad " \quad " \quad " \quad " \quad .02 \text{ level.})$$

Schools (A & B)	25	20	45
Schools (C & D)	<u>8</u>	<u>39</u>	<u>46</u>
	33	59	92

$$\chi^2 = \frac{92((975 - 160) - 46)^2}{(33)(59)(45)(46)} = \frac{54,405,212}{4,030,290}$$

$$\chi^2 = 13.50 \quad (10.83 \text{ required for significance at the } .001 \text{ level})$$



Question No. 9

First Preferences -  
observed frequencies and  
expected frequencies  
(bracketed)

	Item 2	Item 3	Item 4	Totals	
School A	5 (4)	4 (5)	3 (3)	12	.25 + .2 + 0
School B	9 (7)	3 (9)	9 (5)	21	.6 + 4.0 + 3.2
Schools E & F	4 (6)	10 (7)	4 (5)	18	.7 + 1.3 + 0.2
Schools G & H	8 (9)	15 (11)	3 (6)	26	.1 + 1.5 + 1.5
	<u>26</u>	<u>32</u>	<u>19</u>	<u>77</u>	$\chi^2 = 13.55$
	<u><u>26</u></u>	<u><u>32</u></u>	<u><u>19</u></u>	<u><u>77</u></u>	

$$df = (4 - 1)(3 - 1) = 6$$

$$\text{then, } p < .05$$

Question No. 10

	Item 1	Item 2	Item 3	Item 4	Totals	
School A	0 (4)	10 (3)	3 (5)	2 (3)	15	4 + 16.3 + 0.8 + 0.3
School B	9 (8)	6 (5)	11 (10)	2 (5)	28	0.1 + 0.2 + 0.1 + 1.8
Schools E & F	6 (5)	1 (4)	7 (7)	5 (3)	19	0.2 + 2.2 + 0 + 1.3
Schools G & H	9 (7)	1 (6)	10 (9)	7 (5)	27	0.6 + 4.1 + 0.1 + 0.8
	<u>24</u>	<u>18</u>	<u>31</u>	<u>16</u>	<u>89</u>	$\chi^2 = 32.9$
	<u><u>24</u></u>	<u><u>18</u></u>	<u><u>31</u></u>	<u><u>16</u></u>	<u><u>89</u></u>	

$$df = 9$$

$$\text{then, } p < .001$$

Key - Question 9

2. "learning as much as possible in school" ranked as first in importance  
 3. "living up to my ideals" " " " " "  
 4. "being accepted and liked by other students" " " " " "  
 (1. "pleasing my parents")

Key - Question 10

1. "groups & activities outside school" ranked as first in importance  
 2. "activities associated with school" " " " " "  
 3. "having a good time" " " " " "  
 4. "having a good reputation" " " " " "



Question No. 15

	<u>going steady</u>	<u>otherwise</u>	<u>total</u>
A	3	14	17
E & F	9	11	20
	<u>12</u>	<u>25</u>	<u>37</u>

$$\chi^2 = \frac{37((126 - 33) - 18.5)^2}{(12)(25)(17)(20)} = \frac{37(5,550.25)}{102,000}$$

$$= \frac{205,359.25}{102,000}$$

$$\chi^2 = 2.01 \quad (2.71 \text{ required for significance at } .10 \text{ level})$$

---

B	3	25	28
G & H	8	19	27
	<u>11</u>	<u>44</u>	<u>55</u>

$$\chi^2 = \frac{55((200 - 57) - 27.5)^2}{(11)(44)(28)(27)} = \frac{55(13,340.25)}{365,904}$$

$$= \frac{733,713.75}{365,904}$$

$$\chi^2 = 2.00 \quad \text{nearing significance at } .10 \text{ level}$$

---

A & B	6	39	45
C & D	17	30	47
	<u>23</u>	<u>69</u>	<u>92</u>

$$\chi^2 = \frac{92((663 - 180) - 46)^2}{(23)(69)(45)(47)} = \frac{17,569,148}{3,356,505}$$

$$\chi^2 = 5.23 \quad (2.71 \text{ required for significance at } .10 \text{ level, } 3.84 \text{ " " " " " } .05 \text{ " " })$$



Question No. 17

	<u>at centre of School activities</u>	<u>otherwise</u>	<u>total</u>
A & E & F	8	29	37
B & G & H	4	51	55
	<u>12</u>	<u>80</u>	<u>92</u>

$$\chi^2 = \frac{92((408 - 116) - 46)^2}{(12)(80)(37)(55)} = \frac{5,567,472}{1,953,600}$$

$$\chi^2 = 2.85 \quad (2.71 \text{ required for significance at } \cdot 10 \text{ level,} \\ 3.84 \text{ required for significance at } \cdot 05 \text{ level})$$


---

Question No. 18

	<u>wish to be at centre</u>	<u>otherwise</u>	<u>total</u>
A & E & F	10	27	37
B & G & H	3	52	55
	<u>13</u>	<u>79</u>	<u>92</u>

$$\chi^2 = \frac{92((520 - 81) - 46)^2}{(13)(79)(37)(55)} = \frac{14,209,308}{2,089,945}$$

$$\chi^2 = 6.80 \quad (6.64 \text{ required for significance at } \cdot 01 \text{ level,} \\ 10.83 \text{ required for significance at } \cdot 001 \text{ level})$$


---



Question 20

	<u>Father's education UE or better</u>	<u>Otherwise</u>	<u>Total</u>
A	4	13	17
B	15	13	28
	<u>19</u>	<u>26</u>	<u>45</u>

$$\chi^2 = \frac{45((195 - 52) - 22.5)^2}{(19)(26)(17)(28)} = \frac{45(14,520.25)}{235,144}$$

$$= \frac{635,411.25}{235,144}$$

$$\chi^2 = 2.78 \quad (2.71 \text{ required for significance at } .10 \text{ level})$$

---

B	15	13	28
G & H	7	20	27
	<u>22</u>	<u>33</u>	<u>55</u>

$$\chi^2 = \frac{55((300 - 91) - 27.5)^2}{(22)(33)(28)(27)} = \frac{55(32,942.25)}{548,856}$$

$$= \frac{1,811,823.75}{548,856}$$

$$\chi^2 = 3.30 \quad (2.71 \text{ required for significance at } .10 \text{ level}$$

3.84    "    "    "    "    .05 level)

---

A & G & H	11	33	44
B & E & F	22	26	48
	<u>33</u>	<u>59</u>	<u>92</u>

$$\chi^2 = \frac{92((726 - 286) - 46)^2}{(33)(59)(44)(48)} = \frac{14,281,712}{4,112,064}$$

$$\chi^2 = 3.47 \quad (2.71 \text{ required for significance at } .10 \text{ level,}$$

3.84    "    "    "    "    .05 level)

---



Question No. 22

	<u>Father managerial - prof.</u>	<u>Otherwise</u>	<u>Total</u>
A	14	3	17
E & F	11	9	20
	<u>25</u>	<u>12</u>	<u>37</u>

$$\chi^2 = \frac{37((126 - 33) - 18.5)^2}{(25)(12)(17)(20)} = \frac{37(5,550.25)}{102,000}$$

$$= \frac{205,359.25}{102,000}$$

$$\chi^2 = 2.01 \quad (2.71 \text{ required for } p < .10)$$

---

B	23	5	28
G & H	13	14	27
	<u>36</u>	<u>19</u>	<u>55</u>

$$\chi^2 = \frac{55((322 - 65) - 27.5)^2}{(36)(19)(28)(27)} = \frac{55(52,670.25)}{517,104}$$

$$= \frac{2,896,863.75}{517,104}$$

$$\chi^2 = 5.60 \quad \begin{array}{l} (5.41 \text{ required for } p < .02, \\ 6.64 \quad " \quad " \quad p < .01) \end{array}$$

---

A & B	37	8	45
C & D	24	23	47
	<u>61</u>	<u>31</u>	<u>92</u>

$$\chi^2 = \frac{92((851 - 192) - 46)^2}{(61)(31)(45)(47)} = \frac{92(375,769)}{3,999,465}$$

$$= \frac{34,570,748}{3,999,465}$$

$$\chi^2 = 8.64 \quad \begin{array}{l} (6.64 \text{ required for } p < .01 \\ 10.83 \quad " \quad " \quad p < .001) \end{array}$$


---



	<u>Hours per wk paid work NIL</u>	<u>Otherwise</u>	<u>Total</u>
B	25	3	28
G & H	10	17	27
	<u>35</u>	<u>20</u>	<u>55</u>

$$\chi^2 = \frac{55((425 - 30) - 27.5)^2}{(35)(20)(28)(27)} = \frac{55(135.056.25)}{529,200}$$

$$= \frac{7,428,093.75}{529,200}$$

$$\chi^2 = 14.04 \quad (10.83 \text{ required for } p < .001)$$

---

A & B	36	9	45
C & D	18	29	47
	<u>54</u>	<u>38</u>	<u>92</u>

$$\chi^2 = \frac{92((1044 - 162) - 42)^2}{(54)(38)(45)(47)} = \frac{64,298,432}{4,339,980}$$

$$\chi^2 = 14.82 \quad (10.83 \text{ required for } p < .001)$$

---

B	25	3	28
C & D	18	29	47
	<u>43</u>	<u>32</u>	<u>75</u>

$$\chi^2 = \frac{75((725 - 54) - 37.5)^2}{(43)(32)(28)(47)} = \frac{30,099,168.75}{1,810,816}$$

$$\chi^2 = 16.62 \quad (10.83 \text{ required for } p < .001)$$

---

B	25	3	28
A & E & F	19	18	37
	<u>44</u>	<u>21</u>	<u>65</u>

$$\chi^2 = \frac{65((450 - 57) - 32.5)^2}{(54)(11)(28)(37)} = \frac{8,447,416.25}{957,264}$$

$$\chi^2 = 8.82 \quad (6.64 \text{ required for } p < .01, \\ 10.83 \text{ required for } p < .001)$$



Question No. 25

	<u>Less than 2 wks vac. work</u>	<u>Otherwise</u>	<u>Total</u>
A	8	9	17
E & F	3	17	20
	<u>11</u>	<u>26</u>	<u>37</u>

$$X^2 = \frac{37((136 - 27) - 18.5)^2}{(11)(26)(17)(20)} = \frac{37(8,190.25)}{97,240}$$

$$= \frac{303,039.25}{97,240}$$

$$X^2 = 3.12 \quad (2.71 \text{ required for } p < .10, \\ 3.84 \text{ required for } p < .05)$$

---

A & B	18	27	45
C & D	8	39	47
	<u>26</u>	<u>66</u>	<u>92</u>

$$X^2 = \frac{92((702 - 216) - 46)^2}{(26)(66)(45)(47)} = \frac{17,811,200}{3,629,340}$$

$$X^2 = 4.91 \quad (3.84 \text{ required for } p < .05, \\ 5.41 \text{ required for } p < .02)$$

Question No. 29

	<u>negative reaction to 'alone'</u>	<u>otherwise</u>	<u>total</u>
A	7	10	17
B	19	9	28
	<u>26</u>	<u>19</u>	<u>45</u>

$$X^2 = \frac{45((190 - 63) - 22.5)^2}{(19)(26)(17)(28)} = \frac{45(10,920.25)}{235,144}$$

$$= \frac{491,411.25}{235,144}$$

$$X^2 = 2.09 \quad (2.71 \text{ required for } p < .10)$$

---

A & E & F	17	20	37
B & G & H	36	19	55
	<u>53</u>	<u>39</u>	<u>92</u>

$$X^2 = \frac{92((720 - 323) - 46)^2}{(39)(53)(37)(55)} = \frac{11,334,492}{4,206,345}$$

$$X^2 = 2.69 \quad (2.71 \text{ required for } p < .10)$$



	<u>Influenced by clothing fashions</u>	<u>Otherwise</u>	<u>Total</u>
A & E & F	26	11	37
B & G & H	27	28	55
	<u>53</u>	<u>39</u>	<u>92</u>

$$\chi^2 = \frac{92((728 - 297) - 46)^2}{(53)(39)(37)(55)} = \frac{13,636,700}{4,206,345}$$

$$\chi^2 = 3.24 \quad \begin{array}{l} (2.71 \text{ required for } p < .10 \\ 3.84 \quad \quad \quad " \quad \quad \quad p < .05) \end{array}$$

Question No. 36 (a)

	Item 1	Item 2	Items 3&4 combined	Totals	
A	5 (5.1)	5 (4.6)	3 (3.3)	13	.0 + .0 + .0
B	12 (9.8)	7 (8.9)	6 (6.3)	25	.5 + .4 + .0
E & F	8 (7.5)	1 (6.7)	10 (4.8)	19	.0 + 4.8 + 5.6
G & H	6 (8.6)	15 (7.8)	1 (5.6)	22	.8 + 6.6 + 3.8
	<u>31</u>	<u>28</u>	<u>20</u>	<u>79</u>	(13 students d.n.a.)

$$\chi^2 = 22.5$$

$$df = 6$$

$$\text{then } p \leq .001$$

Key:

Re years at university:-

1. "looking forward to the stimulation of new ideas" ranked as most important
2. "looking forward to university as preparation for making a living" ranked as most important
- {3. "looking forward either to campus activities and social life
- {4. or to new friends who share my interests" ranked as most important



Question No. 38

	<u>Go to finals with group</u>	<u>Otherwise</u>	<u>Total</u>
A	13	4	17
B	14	14	28
	<u>27</u>	<u>18</u>	<u>45</u>

$$\chi^2 = \frac{45((182 - 56) - 22.5)^2}{(27)(18)(17)(28)} = \frac{45(10,712.25)}{231,336}$$

$$= \frac{482,051.25}{231,336}$$

$$\chi^2 = 2.08 \quad (2.71 \text{ required for } p < .10)$$

B	14	14	28
G & H	24	3	27
	<u>38</u>	<u>17</u>	<u>55</u>

$$\chi^2 = \frac{55((336 - 42) - 27.5)^2}{(38)(17)(28)(27)} = \frac{55(71,022.25)}{488,376}$$

$$= \frac{3,906,223.75}{488,376}$$

$$\chi^2 = 8.00 \quad (6.64 \text{ required for } p < .01)$$

E & F	12	8	20
G & H	24	3	27
	<u>36</u>	<u>11</u>	<u>47</u>

$$\chi^2 = \frac{47((192 - 36) - 23.5)^2}{(36)(11)(20)(27)} = \frac{47(17,556.25)}{213,840}$$

$$= \frac{825,143.75}{213,840}$$

$$\chi^2 = 3.86 \quad (3.84 \text{ required for } p < .05)$$

A & E & F	25	12	37
G & H	14	14	28
	<u>39</u>	<u>26</u>	<u>65</u>

$$\chi^2 = \frac{65((350 - 168) - 32.5)^2}{(39)(26)(37)(28)} = \frac{1,452,766.25}{1,050,504}$$

$$\chi^2 = 2.87 \quad (2.71 \text{ required for } p < .10)$$


---



Question No. 39

	<u>Lunch with activities leader</u>	<u>Otherwise</u>	<u>Total</u>
A	14	3	17
B	8	20	28
	<u>22</u>	<u>23</u>	<u>45</u>

$$\chi^2 = \frac{45((280 - 24) - 22.5)^2}{(22)(23)(17)(28)} = \frac{45(54,522.25)}{240,856}$$

$$= \frac{2,453,501.25}{240,856}$$

$$\chi^2 = 10.19 \quad \begin{array}{l} (6.64 \text{ required for } p < .01 \\ 10.83 \text{ required for } p < .001) \end{array}$$

---

A & E & F	31	6	37
B & G & H	18	37	55
	<u>49</u>	<u>43</u>	<u>92</u>

$$\chi^2 = \frac{92((1,147 - 108) - 46)^2}{(49)(43)(37)(55)} = \frac{90,716,508}{4,287,745}$$

$$\chi^2 = 21.16 \quad (10.83 \text{ required for } p < .001)$$

---

E & F	17	3	20
G & H	10	17	27
	<u>27</u>	<u>20</u>	<u>47</u>

$$\chi^2 = \frac{47((289 - 30) - 23.5)^2}{(27)(20)(20)(27)} = \frac{47(55,460.25)}{291,600}$$

$$\chi^2 = 8.94 \quad \begin{array}{l} (6.64 \text{ required for } p < .01 \\ 10.83 \text{ required for } p < .001) \end{array}$$



Question No. 40

	<u>Be the person all like around</u>	<u>Otherwise</u>	<u>Total</u>
A	12	5	17
B	11	17	28
	<u>23</u>	<u>22</u>	<u>45</u>

$$\begin{aligned} \chi^2 &= \frac{45((204 - 55) - 22.5)^2}{(23)(22)(17)(28)} \\ &= \frac{45(16,002.25)}{240,856} \\ &= \frac{720,101.25}{240,856} \end{aligned}$$

$$\chi^2 = 2.99$$

(2.71 required for p < .10  
3.84 required for p < .05)

---

A & E & F	28	9	37
B & G & H	22	33	55
	<u>50</u>	<u>42</u>	<u>92</u>

$$\begin{aligned} \chi^2 &= \frac{92((924 - 198) - 46)^2}{(50)(42)(37)(55)} \\ &= \frac{42,540,800}{4,273,500} \end{aligned}$$

$$\chi^2 = 9.95$$

6.64 required for p < .01  
10.83 required for p < .001)

---



Question No. 41

	<u>Stay and see inter-school match</u>	<u>Otherwise</u>	<u>Total</u>
A	14	3	17
B	9	19	28
	<u>23</u>	<u>22</u>	<u>45</u>

$$\chi^2 = \frac{45((266 - 27) - 22.5)^2}{(23)(22)(17)(28)} = \frac{45(46,872.25)}{240,856}$$

$$= \frac{2,109,251.25}{240,856}$$

$$\chi^2 = 8.76$$

(6.64 required for  $p < .01$   
10.83 required for  $p < .001$ )

---

A	14	3	17
E & F	8	12	20
	<u>22</u>	<u>15</u>	<u>37</u>

$$\chi^2 = \frac{37((168 - 24) - 18.5)^2}{(22)(15)(17)(20)} = \frac{37(15,750.25)}{112,200}$$

$$= \frac{582,759.25}{112,200}$$

$$\chi^2 = 5.19$$

(3.84 required for  $p < .05$   
5.41 required for  $p < .02$ )

---

A	14	3	17
G & H	12	15	27
	<u>26</u>	<u>18</u>	<u>44</u>

$$\chi^2 = \frac{44((210 - 36) - 22)^2}{(26)(18)(17)(27)} = \frac{1,016,576}{214,812}$$

$$\chi^2 = 4.73$$

(3.84 required for  $p < .05$   
5.41 required for  $p < .02$ )

---



Question No. 42

	<u>Won't join - parents disapprove</u>	<u>Otherwise</u>	<u>Total</u>
A	14	3	17
B	10	18	28
	<u>24</u>	<u>21</u>	<u>45</u>

$$\chi^2 = \frac{45((252 - 30) - 22.5)^2}{(24)(21)(17)(28)} = \frac{45(39,800.25)}{239,904}$$

$$= \frac{1,791,011.25}{239,904}$$

$$\chi^2 = 7.47$$

6.64 required for  $p < .01$

A	14	3	17
E & F	8	12	20
	<u>22</u>	<u>15</u>	<u>37</u>

$$\chi^2 = \frac{37((168 - 24) - 18.5)^2}{(22)(15)(17)(20)} = \frac{37(15,750.25)}{112,200}$$

$$= \frac{582,759.25}{112,200}$$

$$\chi^2 = 5.19$$

3.84 required for  $p < .05$   
5.41 required for  $p < .02$

A	14	3	17
G & H	8	19	27
	<u>22</u>	<u>22</u>	<u>44</u>

$$\chi^2 = \frac{44((266 - 24) - 42)^2}{(22)(22)(17)(27)} = \frac{2,129,600}{222,156}$$

$$\chi^2 = 9.59$$

6.64 required for  $p < .01$   
10.83 required for  $p < .001$



Question No. 44

	<u>Won't join - friendship at risk</u>	<u>Otherwise</u>	<u>Total</u>
B	20	8	28
G & H	25	2	27
	<u>45</u>	<u>10</u>	<u>55</u>

$$\chi^2 = \frac{55((200 - 40) - 27.5)^2}{(45)(10)(28)(27)} = \frac{965,593.75}{340,200}$$

$$\chi^2 = 2.84$$

(2.71 required for  $p < .10$ )

---

A & E & F	28	9	37
G & H	25	2	27
	<u>53</u>	<u>11</u>	<u>64</u>

$$\chi^2 = \frac{64((225 - 56) - 32)^2}{(53)(11)(37)(27)} = \frac{1,201,216}{582,417}$$

$$\chi^2 = 2.06$$

(2.71 required for  $p < .10$ )

Question No. 46

	<u>Good academic results ex- pected of LEADS</u>	<u>Otherwise</u>	<u>Total</u>
A & E & F	26	11	37
B & G & H	26	29	55
	<u>52</u>	<u>40</u>	<u>92</u>

$$\chi^2 = \frac{92((754 - 286) - 46)^2}{(52)(40)(37)(55)} = \frac{16,383,728}{4,232,800}$$

$$\chi^2 = 3.87$$

(3.84 required for  $p < .05$ )



Question No. 50 vii

	<u>LEADS may need to deny principles</u>	<u>Otherwise</u>	<u>Total</u>
A	3	12	15 (dna 2 from each group)
B	17	9	26
	<u>20</u>	<u>21</u>	<u>41</u>

$$\chi^2 = \frac{41((204 - 27) - 20.5)^2}{(20)(21)(15)(26)} = \frac{41(24,492.25)}{163,800}$$

$$= \frac{1,004,182.25}{163,800}$$

$$\chi^2 = 6.13 \quad (5.41 \text{ required for } p < .02 \\ 6.64 \text{ required for } p < .01)$$

B	17	9	26 (dna 2)
G & H	7	19	26
	<u>24</u>	<u>28</u>	<u>52</u>

$$\chi^2 = \frac{52((323 - 63) - 26)^2}{(24)(28)(26)(26)} = \frac{52(54,756)}{454,272}$$

$$= \frac{2,847,312}{454,272}$$

$$\chi^2 = 6.27 \quad (5.41 \text{ required for } p < .02 \\ 6.64 \text{ required for } p < .01)$$

B	17	9	26 (dna 2 from each group)
E & F	6	12	18
	<u>23</u>	<u>21</u>	<u>44</u>

$$\chi^2 = \frac{44((204 - 54) - 22)^2}{(23)(21)(26)(18)} = \frac{720,896}{226,044}$$

$$\chi^2 = 3.19 \quad (2.71 \text{ required for } p < .10 \\ 3.84 \text{ required for } p < .05)$$



	<u>LEADS persuade</u>	<u>Otherwise</u>	<u>Total</u>
A & E & F	4	33	37
B & G & H	19	36	55
	<u>23</u>	<u>69</u>	<u>92</u>

$$\chi^2 = \frac{92((627 - 144) - 46)^2}{(23)(69)(37)(55)} = \frac{17,569,148}{3,229,545}$$

$$\chi^2 = 5.44 \quad (5.41 \text{ required for significance at } .02 \text{ level})$$

## Question No. 61 (a)

	<u>May have parents' car when wanted</u>	<u>Otherwise</u>	<u>Total</u>
A	11	6	17
E & F	7	13	20
	<u>18</u>	<u>19</u>	<u>37</u>

$$\chi^2 = \frac{37((143 - 42) - 18.5)^2}{(18)(19)(17)(20)} = \frac{37(6806.25)}{116,280}$$

$$= \frac{251,831.25}{116,280}$$

$$\chi^2 = 2.17 \quad (2.71 \text{ required for } p < .10)$$

B	23	5	28
G & H	15	12	27
	<u>38</u>	<u>17</u>	<u>55</u>

$$\chi^2 = \frac{55((276 - 75) - 27.5)^2}{(38)(17)(28)(27)} = \frac{55(30,102.25)}{488,376}$$

$$= \frac{1,655,623.75}{488,376}$$

$$\chi^2 = 3.39 \quad (2.71 \text{ required for } p < .10 \\ 3.84 \text{ required for } p < .05)$$

A & B	34	11	45
C & D	22	25	47
	<u>56</u>	<u>36</u>	<u>92</u>

$$\chi^2 = \frac{92((850 - 242) - 46)^2}{(56)(36)(45)(47)} = \frac{92(315,844)}{426,384}$$

$$= \frac{2,905,764.8}{426,384}$$

$$\chi^2 = 6.81 \quad (6.64 \text{ required for } p < .01)$$



Question No. 61 (b & c)

	<u>Own car/scooter/motorbike</u>	<u>Otherwise</u>	<u>Total</u>
E & F	0	20	20
G & H	13	14	27
	<u>13</u>	<u>34</u>	<u>47</u>

$$\chi^2 = \frac{47((260 - 14) - 23.5)^2}{(13)(34)(20)(27)} = \frac{2,326,793.75}{238,680}$$

$$\chi^2 = 9.75 \quad (6.64 \text{ required for } p < .01 \\ 10.83 \text{ required for } p < .001)$$

A & E & F	2	35	37
B & G & H	18	37	55
	<u>20</u>	<u>72</u>	<u>92</u>

$$\chi^2 = \frac{92((630 - 74) - 46)^2}{(20)(72)(37)(55)} = \frac{23,929,200}{2,930,400}$$

$$\chi^2 = 8.17 \quad (6.64 \text{ required for } p < .01 \\ 10.83 \text{ required for } p < .001)$$

A & E & F	2	35	37
G & H	13	14	27
	<u>15</u>	<u>49</u>	<u>64</u>

$$\chi^2 = \frac{64((455 - 28) - 34)^2}{(15)(49)(37)(27)} = \frac{9884,736}{734,265}$$

$$\chi^2 = 13.46 \quad (10.83 \text{ required for } p < .001)$$

B	5	23	28
G & H	13	14	27
	<u>18</u>	<u>37</u>	<u>55</u>

$$\chi^2 = \frac{55((299 - 70) - 27.5)^2}{(18)(37)(28)(27)} = \frac{2,233,123.75}{503,496}$$

$$\chi^2 = 4.44 \quad (3.84 \text{ required for } p < .05)$$

---

KEY: p.136



	<u>Would support school barbecue</u>	<u>Otherwise</u>	<u>Total</u>
B	19	9	28
A & E & F	35	2	37
	<u>54</u>	<u>11</u>	<u>65</u>
$\chi^2$	$= \frac{65((315 - 38) - 32.5)^2}{(54)(11)(28)(27)} = \frac{3,885,716.25}{615,384}$		
$\chi^2$	$= 6.31 \quad (5.41 \text{ required for } p < .02)$ $6.64 \text{ required for } p < .01)$		

## Question No. 62 ii

	<u>Would support relatives' get-together</u>	<u>Otherwise</u>	<u>Total</u>
A	14	3	17
B	15	13	28
	<u>29</u>	<u>16</u>	<u>45</u>
$\chi^2$	$= \frac{45((182 - 45) - 22.5)^2}{(29)(16)(17)(28)} = \frac{45(13,110.25)}{220,864}$		
	$= \frac{589,961.25}{220,864}$		
$\chi^2$	$= 2.67 \quad (2.71 \text{ required for } p < .10)$		
A & E & F	27	10	37
B & G & H	29	26	55
	<u>56</u>	<u>36</u>	<u>92</u>
$\chi^2$	$= \frac{92((702 - 290) - 46)^2}{(56)(36)(37)(55)} = \frac{12,323,952}{4,102,560}$		
$\chi^2$	$= 3.00 \quad (2.71 \text{ required for } p < .10)$ $3.84 \text{ required for } p < .05)$		

## Question No. 62 iii

	<u>Would decorate the School hall</u>	<u>Otherwise</u>	<u>Total</u>
A & E & F	36	1	37
B & G & H	42	13	55
	<u>78</u>	<u>14</u>	<u>92</u>
$\chi^2$	$= \frac{92((468 - 42) - 46)^2}{(78)(14)(37)(55)} = \frac{13,284,800}{2,222,220}$		
	(2 from B dna - included)		
$\chi^2$	$= 5.98 \quad (5.41 \text{ required for } p < .02)$		



Question No. 62 iv

	<u>Would go with parents to film</u>	<u>Otherwise</u>	<u>Total</u>
A	13	4	17
B	14	14	28
	<u>27</u>	<u>18</u>	<u>45</u>

$$\chi^2 = \frac{45((182 - 56) - 22.5)^2}{(27)(18)(17)(28)} = \frac{45(10,712.25)}{231,336}$$

$$= \frac{482,051.25}{231,336}$$

$$\chi^2 = 2.08 \quad (2.71 \text{ required for } p < .10)$$

---

A	13	4	17
E & F	9	11	20
	<u>22</u>	<u>15</u>	<u>37</u>

$$\chi^2 = \frac{37((143 - 36) - 18.5)^2}{(22)(15)(17)(20)} = \frac{37(7,832.25)}{112,200}$$

$$= \frac{289,793.25}{112,200}$$

$$\chi^2 = 2.58 \quad (2.71 \text{ required for } p < .10)$$

---

A	11	16	27
G & H	13	4	17
	<u>24</u>	<u>20</u>	<u>44</u>

$$\chi^2 = \frac{44((208 - 44) - 22)^2}{(24)(20)(27)(17)} = \frac{887,216}{220,320}$$

$$\chi^2 = 4.03 \quad (3.84 \text{ required for } p < .05 \\ 5.41 \text{ required for } p < .02)$$



Question No. 63 vi

	<u>after a team win would join friends</u>	<u>Otherwise</u>	<u>Total</u>
B	9	19	28
G & H	18	9	27
	<u>27</u>	<u>28</u>	<u>55</u>

$$\chi^2 = \frac{55((343 - 81) - 27.5)^2}{(27)(28)(28)(27)} = \frac{55(54,522.25)}{571,536}$$

$$= \frac{2,998,723.75}{571,536}$$

$$\chi^2 = 5.25$$

(3.84 required for  $p < .05$   
5.41 required for  $p < .02$ )

---

A & B	18	27	45
C & D	32	15	47
	<u>50</u>	<u>42</u>	<u>92</u>

$$\chi^2 = \frac{92((864 - 270) - 46)^2}{(50)(42)(45)(47)} = \frac{27,627,968}{4,441,500}$$

$$\chi^2 = 6.22 \quad \begin{array}{l} (5.41 \text{ required for } p < .05) \\ (6.64 \text{ required for } p < .02) \end{array}$$

Question No. 65 (b)

	<u>School fun, excitement/ interesting</u>	<u>Otherwise (fairly pleasant/fairly dull/unhappy)</u>	<u>Total</u>
A	12	5	17
B	7	21	28
	<u>19</u>	<u>26</u>	<u>45</u>

$$\chi^2 = \frac{45((252 - 35) - 22.5)^2}{(19)(26)(17)(28)} = \frac{1,702,361.25}{235,144}$$

$$\chi^2 = 7.24 \quad \begin{array}{l} (6.64 \text{ required for } p < .01) \\ (10.83 \text{ required for } p < .001) \end{array}$$

Q. 65 (b) contd...



	<u>School fun, excitement/ interesting</u>	<u>Otherwise</u>	<u>Total</u>
B	7	21	28
G & H	15	12	27
	<u>22</u>	<u>33</u>	<u>55</u>

$$\chi^2 = \frac{55((315 - 84) - 27.5)^2}{(22)(33)(28)(27)} = \frac{2,277,673.75}{548,856}$$

$$\chi^2 = 4.15 \quad (3.84 \text{ required for } p < .05 \\ 5.41 \text{ required for } p < .02)$$

A	12	5	17
E & F	8	12	20
	<u>20</u>	<u>17</u>	<u>37</u>

$$\chi^2 = \frac{37((144 - 40) - 18.5)^2}{(20)(17)(17)(20)} = \frac{270,479.25}{115,600}$$

$$\chi^2 = 2.34 \quad (2.71 \text{ required for } p < .10)$$

A & G & H	27	17	44
B & E & F	15	33	48
	<u>42</u>	<u>50</u>	<u>92</u>

$$\chi^2 = \frac{92((891 - 255) - 46)^2}{(42)(50)(44)(48)} = \frac{32,025,200}{4,435,200}$$

$$\chi^2 = 7.22 \quad (6.64 \text{ required for } p < .01 \\ 10.83 \text{ required for } p < .001)$$

## Question No. 67

	<u>do not read magazines regularly</u>	<u>Otherwise</u>	<u>Total</u>
A & E & F	6	31	37
B & G & H	19	36	55
	<u>25</u>	<u>67</u>	<u>92</u>

$$\chi^2 = \frac{92((589 - 216) - 46)^2}{(67)(25)(37)(55)} = \frac{9,837,468}{3,408,625}$$

$$\chi^2 = 2.89 \quad (2.71 \text{ required for } p < .10 \\ 3.84 \text{ required for } p < .05)$$



## Appendix D-I (continued)

The Computation of Chi-square shown in the Table C-IIIQuestion No. 9

	<u>'Being accepted by others'</u> <u>most important</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	1	18	19
REST	18	55	73
	<u>19</u>	<u>73</u>	<u>92</u>

$$X^2 = \frac{4,575,068}{1,923,769}$$

$$X^2 = 2.37 \quad (2.71 \text{ required for } p < .10)$$

Question No. 10

	<u>'Having a good time'</u> <u>most important</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	3	16	19
REST	28	45	73
	<u>31</u>	<u>61</u>	<u>92</u>

$$X^2 = \frac{6,558,588}{2,622,817}$$

$$X^2 = 2.50 \quad (2.71 \text{ required for } p < .10)$$

Question No. 17

	<u>'At the centre</u> <u>of school activities'</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	9	10	19
REST	3	70	73
	<u>12</u>	<u>80</u>	<u>92</u>

$$X^2 = \frac{28,236,272}{1,331,520}$$

$$X^2 = 21.21 \quad (10.83 \text{ required for } p < .001)$$



Question No. 21

	<u>'Mother's education U.E. or better'</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	9	10	19
REST	18	55	73
	<u>27</u>	<u>65</u>	<u>92</u>

$$\chi^2 = \frac{6,657,212}{2,434,185}$$

$$\chi^2 = 2.73 \quad (2.71 \text{ required for } p < .10)$$


---

Question No. 38

	<u>'Go with the group'</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	17	2	19
REST	46	27	73
	<u>63</u>	<u>29</u>	<u>92</u>

$$\chi^2 = \frac{9,479,772}{2,534,049}$$

$$\chi^2 = 3.74 \quad (2.71 \text{ required for } p < .10 \\ 3.84 \text{ required for } p < .05)$$


---

Question No. 41

	<u>'Watch match'</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	14	5	19
REST	29	44	73
	<u>43</u>	<u>49</u>	<u>92</u>

$$\chi^2 = \frac{16,617,500}{2,922,409}$$

$$\chi^2 = 5.68 \quad (5.41 \text{ required for } p < .02)$$


---

Question No. 62 ii

	<u>'support get-together of relatives'</u>	<u>Otherwise</u>	<u>Total</u>
LEADS	15	4	19
REST	41	32	73
	<u>56</u>	<u>36</u>	<u>92</u>

$$\chi^2 = \frac{6,706,800}{2,796,192}$$

$$\chi^2 = 2.399 \quad (2.71 \text{ required for } p < .10)$$


---



Appendix D-II iThe Kendall Coefficient of Concordance : W

- to establish the degree of association in the judgement of the four Form VII groups: A, B, E&F, G&H; rankings 1 to 9 on each item are based on the frequencies (i.e. number of times checked by students).

Questionnaire number 47 asked the students to indicate which descriptive comments suited their own Form VII members.

		58	59	60	61	62	63	64	65	66	
		Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	Rank	
Sets of rank-ings (4)	(A)	2.5	5.5	7.5	1	9	2.5	5.5	4	7.5	
	(B)	2.5	8.5	5.5	7	4	8.5	2.5	5.5	1	
	(E&F)	2	5	6	4	8.5	8.5	1	7	3	
	(G&H)	2.5	7	7	2.5	9	7	1	4.5	4.5	
Sum of ranks	Rj	9.5	26.0	26.0	14.5	30.5	26.5	10.0	21.0	16.0	$\leq 180.0$

$K = 4$  (no. of sets of rankings);  $N = 9$  (no. of entities ranked);

$S =$  Sum of square of the observed deviations from the mean of  $R_j$

Formula:

$$W = \frac{S}{\frac{1}{12} K^2 (N^3 - N)}$$

$$S = (10.5)^2 + (6)^2 + (6)^2 + (5.5)^2 + (10.5)^2 + (6.5)^2 + (10)^2 + (1)^2 + (4)^2 \quad R_j \bar{X} = 20.0$$

$$= 110.25 + 36 + 36 + 30.25 + 110.25 + 42.25 + 100 + 1 + 16 = 482.0$$

$$\underline{W} = \frac{482}{\frac{1}{12} (16)(729 - 9)} = \frac{482}{960} = \underline{\underline{.50}}$$

but the effect of tied ranks is to depress the value of  $W$  and, therefore,  $W$  is corrected by subtracting  $\frac{K \sum T}{T}$  from the denominator, 960

$$T = \sum \left( \frac{t^3 - t}{12} \right)$$

$$T (A) = \sum \frac{(2^3 - 2) + (2^3 - 2) + (2^3 - 2)}{12} = \frac{6+6+6}{12} = 1.5$$

$$T (B) = \sum \frac{(2^3 - 2) + (2^3 - 2) + (2^3 - 2)}{12} = 1.5$$

$$T (E\&F) = \sum \frac{(2^3 - 2)}{12} = 0.5$$

.....contd.



(contd.)

$$T \text{ (G\&H)} = \frac{\sum (2^3 - 2) + (2^3 - 2) + (2^3 - 2)}{12} = \frac{6+6+24}{12} = 3.0$$

$$\sum T = 6.5$$

$$\underline{W \text{ corrected}} = \frac{482}{960} - 4(6.5) = \frac{482}{934} = .52$$

$$\text{Significance: } X^2 = K(N-1)W = 4(9-1)(.52) = 16.64$$

$$df = N-1 = 9-1 = 8$$

(15.51 required for  $P < .05$ )

Finding: The four groups are applying essentially the same standard in judging their F.VII peers - 95% of the time!

\* Key:

A (Academy)

B (Towers)

E&amp;F (Riverlea and Waterview females)

G&amp;H (Riverlea and Waterview males)

58 - critical

59 - hard to get to know

60 - mad on clothes, cars or motorbikes

61 - active around school

62 - boy or girl crazy

63 - studious

64 - out for a good time

65 - concerned only with their own little group

66 - sportsminded



Using data supplied by F.VII students in response to No. 47 of the Students' Questionnaire -

To test the hypothesis that there is a significant difference between males and females in co-educational form sevens at Riverlea and Waterview in their rankings of descriptive items applied to their fellow form seven students.

Item	58	59	60	61	62	63	64	65	66
(females) E & F rank	2	5	6	4	8.5	8.5	1	7	3
cf.(males) G & H rank	2.5	7	7	2.5	9	7	1	4.5	4.5
difference in rank	0.5	2	1	1.5	0.5	1.5	0	2.5	1.5
Difference <sup>2</sup>	0.25	4.00	1	2.25	0.25	2.25	0	6.25	2.25

Sum of the differences = 18.5

Correlation between ranking of females cf. males =  $1 - \frac{6 \times 18.5}{9(80)}$

$$= 1 - \frac{111}{720}$$

$$1 - .15$$

$$= .85 \text{ ( } .01 \text{ level of significance on a one tailed test)}$$

Finding: Items 61, 63 and 65 are ranked more highly by females, all the other items are ranked more highly by males.

The Spearman rank correlation coefficients : ps formula

$$ps = 1 - \frac{6 \sum_{i=1}^N di^2}{N^3 - N}$$

was applied.



The Kendall coefficient of concordance : W

Questionnaire number 48 asked the students to indicate which descriptive comments suited their Form VII teachers.

	67	68	69	70	71	72
	Rank	Rank	Rank	Rank	Rank	Rank
(A)	1	4.5	4.5	3	6	2
(B)	1	5	6	3	4	2
(E & F)	1	5.5	4	3	5.5	2
(G & H)	1	6	4	3	5	2
Rj	4	21.0	18.5	12	20.5	8

$\sum 84 - Rj\bar{X} = 14$

K (no. of sets of rankings) = 4; N (no. of entities ranked) = 9

$$\begin{aligned}
 S &= (4-14)^2 + (21-14)^2 + (18.5-14)^2 + (12-14)^2 + (20.5-14)^2 + (8-14)^2 \\
 &= 100 + 49 + 20.25 + 4 + 42.25 + 36 \\
 &= 202.5
 \end{aligned}$$

$$W = \frac{202.5}{\frac{1}{2} \text{ of } 16(216 - 6)} = \frac{202.5}{288} = .70$$

but corrected W (to allow for depression of its value by tied ranks)

$$= \frac{202.5}{288 - \frac{K \sum T}{T}} = \frac{202.5}{288 - 4} = \frac{202.5}{284} = .71$$

$$\begin{aligned}
 \text{Significance: } \chi^2 &= K(N - 1)W \\
 &= 4(6 - 1) \cdot 71 \\
 &= 14.2
 \end{aligned}$$

$$df = N - 1 = 6 - 1 = 5$$

$\chi^2 = 14.2$  (such a value of  $\chi^2$  is significant beyond the .02 level)

13.39 required for  $p < .02$

15.09 required for  $p < .01$

**Finding:** The four groups are applying the same standard in judging their Form VII teachers - 98% of the time!

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**Key:** (A) Academy (E & F) Riverlea and Waterview females  
 (B) Towers (G & H) Riverlea and Waterview males  
 67 friendly 68 too strict  
 69 too easy with school work 70 understand teenagers' problems  
 71 not interested in teenagers 72 willing to help out in activities