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ABSTRACT

This study analyzes the impact of school structure on the friendship networks of students in desegregated schools in Israel. It highlights the importance of school features, such as the homeclass, to the formation of relationships among seventh through ninth grade students. A review of research literature on this topic is presented in the areas of friendships, desegregated schools, and contact theory/categorization processes. School policies for assigning students to classrooms is the structural feature in question. The findings show that students grouped in homogeneous homeclasses with low academic status name out-of-homeclass students as their friends while students in homogeneous homeclasses of high academic status name in-class students as their friends. Students in heterogeneous homeclasses have a more balanced structure of insider/outsider friendships. The balance may be due to the increased contact of these latter students with classmates who are more diverse than those in homogeneous classrooms. These results indicate that educators, administrators, and policy makers must become more aware of the social aspects of schooling so that the educational environment can help to foster better social development. Six tables and a 49-item bibliography are included. (VM)

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## Introduction

The aim of the present work is to study the impact of structural elements of the school setting on friendship networks of students in school.

The Israeli desegregated schools serve as the ecosystem for this research. Different grouping practices of schools served as one independent variable in studying the effect of organizational grouping on the structure of friendship networks. The individual's resources, as measured in academic status, served as the second independent variable in the study.

In reviewing the growing research literature on friends in school (Epstein & Karweil 1983) it seems that the analysis of the impact of structural variables on friends' selection and influence is confounded with major individual and group differences such as race, high scope tracking and status. Thus, it is difficult to separate school structural variables from other variables in order to establish a causal explanation.

The Israeli society, and the desegregated school in Israel might suggest a more crystallized conception of the impact of school structure vs. individual variables on the structure of friendship network, since the similarity of the total Jewish population within

the desegregated schools is much greater than the similarity of the students in most US desegregated schools (Miller, 1984).

The focus of this paper is in friendship networks in general, and particularly in the impact schools' policies of differentiation groups of students hold on friendships. This impact is examined in various settings such as the classroom, the school and also friendships out of the school. The main claim of the study is that when schools practice differentiation policies that create instructional settings, with different academic status, the academic grouping will generate social comparisons and categorizations, which will affect the social world of students and will result in loss of social contacts and friendship networks for students in lower status home classrooms.

In order to present the theoretical background for the study, three areas have to be reviewed, one, the literature of friendship, which is the intimate relating to peers. Second, the setting on the Israeli desegregated school and third, contact theory and categorization processes.

In order to make the reader acquainted to the Israeli educational scene, we will present this area first.

### The Israeli Educational Setting

Until the early 1970s the Israeli educational system consisted of three main stages: Primary education in grades one through eight; secondary education in grades nine through twelve, and post secondary education.

By the late 1960s, a complete primary education was virtually universal with over 95% of first graders completing eighth grade (State of Israel, 1978).

Secondary school in Israel are differentiated according to their level of selectivity and curriculum specialization. Most selective are the academic high school. They typically recruit the top 40 percent of the ability distribution and prepare them for higher education. An additional 40 to 50 percent of primary school graduates attend vocational schools, which are usually less selective and do not provide access to higher education. The remaining 10 percent or so of primary school graduates did not continue to ninth grade. For a more complete description of the structure of Israeli education in the sixties see Kleinberger (1969).

Until the late sixties the ultimate level of educational attainment of Israeli students was largely determined in the transition from primary (8th grade) to secondary (9th grade) school (Shavit-Streifler, 1983, ch. 5).

Until the early 1970s the major mechanism for selecting into the various forms of secondary education was the "Seker" aptitude and achievement test. The test was administered to all eighth graders in the public education system during the first school year. The "Seker" results sharply demonstrated the inequality that exists between ethnic groups in Israel (Shavit, 1984).

Israeli JHS are a new product of the educational reform of the 1970s. Similar to the desegregation movement in the USA (Stephan, 1978; Chen, Lewy and Adler, 1978).

The Jewish student population consists of two major ethnic groups: Ashkenazim of European birth or extraction, and Sepharadim, most of whose families had immigrated to Israel during the early fifties from North Africa, Iraq and other Mid-Eastern countries. The Sepharadim are a subordinate group in the Israeli social structure (Smooha, 1978). Their educational and occupational attainment are considerably lower than those of Ashkenazim. This is often attributed to their lower measured scholastic aptitude: A full standard deviation separates the mean measured aptitude of Ashkenazi and Sephardi students (Minkovich et al., 1977). The results of the Seker were analysed and evaluated by researcher and policy makers (Shavit, 1986). This social and educational reality caused inter-ethnic tension and conflict, and in 1968 the Israeli Knesset (Parliament) set into motion a process of school desegregation and ethnic integration of the Jewish

population. The complete change in school structure, known as the "Reforma" in Israel divided schooling to three units, elementary school grade 1-6, junior high school grades 7-9, and high school grades 10-12. This reform, which aimed toward integration of the two ethnic groups in Israeli society was first and foremost an ideological and political decision. In Israel the two ethnic groups are almost equal in their size. The educational and job opportunity handicap suffered by non-Western Jews, threatened the mere existence of the Israeli new nation.

Inadequate educational preparation in schools, especially for the Sephardic group was one explanation to the gap between the two ethnic groups. Equal educational opportunity were translated in Israel to a major effort of desegregation and better schools for the Sephardic group.

Implementation of the desegregation policy started in the early 1970s, and was gradually implemented in the country. Implementation of the desegregation policy was accompanied by research in Israel by social scientists and educators (Chen, Lewi & Adler, 1978; Sharan & Rich, 1984).

To date, 15 years after the "reform", the vast majority of all Israeli schools have restructured the sequence of schooling to 6 plus 3 plus 3. To date the ultimate level of educational attainment of

Israeli students is largely determined in the transition from junior high school (9th grade) to high school (10th grade).

The educational reform was aimed in social political integration of students from different ethnic groups, and in the facilitation of educational attainment and social mobility. There is an ongoing debate as to the fulfillment of these goals. Generally, the data indicates that secondary education became virtually universal with over 90 percent of first graders completing twelfth grade (State of Israel, 1985). However educational inequality did not narrow between the two ethnic groups. Most of the academic high school graduates are of Ashkenazim origin. The attainment of the Bagrut diploma (State matriculation exams) is determined by the type of high school. Only 6-7 percent of Sephardic first graders attain this diploma at the end of 12th grade, in the oriented high school as opposed to 36 percent of Ashkenazim. This diploma is the pass and path to university education in Israel. The social achievements in the terms of positive intergroups relations will be discussed later.

There are various explanations to the fact that in the late 1980s overall, the educational system continued the social reproduction of the 1960s. In a recent book of desegregation in Israel some of these issues are attributed to macrosocial forces such as social, political and geographical sources that are beyond the control of the educational system (for more details see Amir, Sharan, Ben-Ari, 1984).



For the focus of this paper, we have to observe closely microsocial variables, which are part of school decision making power and control. Such structural features are mainly differentiation processes of grouping students into instructional units.

### The School as an Academic and Social Setting

In Israel, junior high schools integrate students with modest heterogeneity from different elementary schools within the same neighborhood, or very close neighborhood. Thus, in comparison to the heterogeneity of USA schools, one might conclude that similarity in values, norms and identity are high among school population (Miller, 1984 ch.11).

To date, most of the Israeli school students were born in Israel, and up to a third of their parents are native born of the State of Israel (Sabras). Immigration from typical Middle-Eastern countries has stopped in the 1950s. In order to identify Sepharadim origin students in school, one should ask for the birth origin of the grandparents. In 1983 the Ministry of Education in Israel stopped collecting data, and recalling data on ethnic origin of school population. The terms used recently in schools are referring to "multiability" classrooms as opposed to earlier reference and research in multiethnic classrooms (Dar & Resh, 1986).

Even though labels have changed somewhat, correlations between ethnic origin, background variables (specifically parents level of education) and academic achievement remain still relatively high. This reality yet challenges the drive for equality in education.

Social relations and interethnic group relations within desegregated schools in Israel were studied extensively. This line of research was heavily influenced by the research conducted in the USA. Very similar concepts and measures were used. Namely, the ratio of ethnic group student in the classroom, amount of contact, individual social and academic resources and type of schools, served as independent variables to study measures of popularity, liking, attitudes, and acceptance. The overall picture indicates similar trends as found in the USA, for the first years of desegregation, namely a-symmetry in social relations but in much more moderate amounts. Recently, it is argued, that the social categorization of the "students" in ethnic terms is irrelevant to the reality of school pupils, and classroom composition in terms of students ability in IQ and academic measures, is more suitable, but this needs further research, and is still debated in Israel, and in the social-psychological literature.

As claimed by Miller (1984) in his chapter comparing school desegregation in Israel and the United States ... It can be argued that the real difference between whites and Hispanics or Blacks within

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the United States substantially exceed those between Middle-Eastern and Western (Ashkenazim) Jews in Israel. Furthermore, intermarriage rates and social mobility suggest that the objective differences between the two groups are declining. Nevertheless, they are of sufficient magnitude to form a substantial basis for the social categorization processes that underly ingroup, outgroup relations, and thereby, to interfere with the goal of nation integration." (p. 243).

The universal reality is that schools do divide their student population into groups for instructional purposes. The differentiation process affects the likelihood of meeting particular other students in classroom and produces a distinct social system that influence interaction among students. School use several assignment variables to create instructional groups. Age grading is an almost universal grouping procedure. Structuring groups of student by age, stems from the importance placed on same age peer group as source of influence facilitators of social development (Youniss, 1985; Hartup, 1978).

Grouping by ability is also a common practice in most schools, especially in secondary schools. The intention of this differentiation practice is to make instruction more effective by reducing student diversity for the classroom teacher, who must simultaneously teach 30-40 students. The actual results of such

differentiation may, however, extend appreciably beyond this stated organizational purpose.

Structural features of school organization affect many dimensions in the life of teachers and students within the school setting (Sharan and Hertz-Lazarowitz, 1978, 1984). The most salient structural feature of schools is the division of student population into groups for instructional purposes.

The ecosystem of Israeli schools is different in some structural variables from schools in the USA. One main difference, critical to the present study, is the fact that in Israeli schools, from 1st grade to the 12th grade students are assigned to homeclassroom (in Hebrew the term is mother classroom "kitat Em") in which they spend most of the learning week, six days, seven hours per day, with the same group of students. The structure of the Israeli society is characterized in geographic stability. It is common to find homeclasses that keep almost the same students for many years as classmates.

In Israeli Junior High schools students don't take courses, and thus their transition from one teacher to another, and from one group of peers to another is almost non-existent. The typical school day of the Israeli adolescent consists of entering his/her homeclass at 7.00 a.m. and studying in the same homeclass with the same group of classmates until 2.00 p.m. Six days a week. Different teachers for

different subjects matter enter the classroom for instruction. Moving out of the classroom for instruction is usually limited only for laboratory work in science or to physical education lessons.

The affiliation to a certain classroom in the Israeli school is significant to the social world and social development of the Israeli youngster. Teachers, parents and students emphasis the need for social cohesion of homeclasses and attribute to the social elements of the classroom a critical value (Hertz-Lazarowitz, 1983, 1986). Recently a qualitative research had demonstrated the "Ethos" of the social dimensions of the homeclassroom and the significant role that cohesiveness, crystallization and unity hold for Israeli teachers and classmates (Katriel and Nesher 1985). This is described as a unique Israeli culture of the homeclass.

In such a setting, the claim made by Epstein and Karweit in "Friends in School" is very accurate. "The differentiation process (of assigning students to instructional groups), effects the likelihood of meeting particular other students in classroom and produces a distinct social system that influences interaction among students ... The actual result of such differentiation practices may however extent appreciably beyond this stated organizational purpose." (1983, p. ).

Schools differ in their differentiation practices. There are school to school variation in differentiation practices. The term "tracking" in USA schools refers to certain program and curriculum which are different to a sizeable degree, such as college and non-college tracking. In the Israeli JHS, after the "reform" "tracking" in this meaning is non-existent. Similar tracking systems as described by Sorensen (1970, 1978) are typical of the highschool in Israel. In the JHS the message of equality in opportunity is the core of the setting. So how do school group students for instructional purposes? First of all, there is not yet a unified practice. Schools are very autonomous in making decisions about their policy in grouping students to instructional units. To date the schools in Israel practice different grouping policies as to the composition of homeclassrooms. There are school to school variation in grouping, even in very similar schools with similar student composition. Most of the JHS in Israel group students according to their academic ability in core subjects such as Maths and English as a second language. The common grouping practice is called "grouping" (Hak'baza) and usually consists of three levels, high (A), average (B) and low (C). The students group for instructional periods in grouping classroom according to their academic status in the core subject and return to their homeclasses for all the instruction in other subjects. The range of instructional grouping in core subjects is 8-12 hours per week, depending on students' need and school organizational features. In Sorensen terms, this practice is a very low-scope tracking. In Dar

& Resh (1986) terminology this is considered as a weak flexible homogenization (p.14).

Friedman (1982) and Inbar and Friedman (1984) had studied the dynamics by which schools make their decision as to grouping policies. On a micro-organizational level, the composition of homeclassroom in the Israeli JHS, determines to a great degree the possibilities of contact between groups of students from different backgrounds and different academic levels. If the school decides to compose heterogeneous homeclasses, multiability and multiethnic homeclass are established as the academic and social units. If the school decide to compose homogeneous homeclasses, the result of this policy is the establishment of high scope grouping, similar to tracking with salient academic status assigned to the total homeclassrooms. Students belong now to strong, average, or low status classroom. Historically, in the first years of the reform implementation, schools became integrative schools with segregated homeclasses (Chen, Levi and Adler, 1978). Political and social resistance to this policy, affect schools to compose heterogeneous homeclasses with grouping in few subjects. Usually, if the student population was very heterogeneous, schools practice grouping policy very early (beginning of 7th grade) and in many subjects, which contradict the essence of the heterogeneous homeclass. Research findings clearly indicated that these policies did not contribute to academic gains for most of the students. The academic achievement gap did not close. In Israel, similar to the

findings reported by Oakes (1985) keeping track established inequality in schools.

This somewhat lengthy overview of the Israeli scene is needed for the reader in order to get acquainted to the Israeli school system. It is important to recall that the work relates to in-school policies, decided by the schools, who by classroom composition of either composing heterogeneous or different academic level homogeneous classroom determinate to a great degree the social setting in which contacts and friendships are developed.

#### Contact and Friendship in Schools

The change in the educational system, in Israel as in other European and U.S.A. settings had two major goals. One to close the academic gap between different groups in the society, and second to enhance positive social relations and decrease between groups tension. If we review closely the classical conditions for contact (Allport 1954, Brewer & Miller 1984), one has to recognize that schools are not the best setting to enhance contact between groups. Schools are competitive organizations, with strong comparative processes embedded in its nature. Status cues are constantly and highly salient. Indeed, most schools are not interested, or evaluated by society in achieving social outcomes. Schools are for academic achievement



outcomes, which are based on competition for status (Cohen, 1984). On the other hand, schools hold unique characteristics that have the potential to affect social relations and social development. The peer-group is an important domain of youngsters in school. Schools are a total institution, that holds the total population of youngsters for very long period of their day, week, year and developmental span. The educational system declares and believes in societal values and the significance of transmission of values. Integration, equality and mobility are broad accepted values by the school systems. However, as criticized by various writers, the relationship between academic and social outcomes of integration remained unclear, and the general debate was on the cost and profit balance on one (academic) at the account of the other (social) (Klein & Eshel, 1981; Johnson, Johnson & Maruyama, 1984; Sharan, Hertz-Lazarowitz & Kussel, 1984).

Contacts, social relations and social integration can be viewed as a continuum from very random and superficial contacts to close and intimate relationships. Most of the research on social outcomes in desegregated schools focused until recently on the more "superficial" elements of contacts as measured by stereotypes, attitudes, popularity and other measures of social distance. Recently more studies are making differentiation in the social world of peers in school and this line of research relies on early conceptualization made in 1937 by Runner, which views circles of social relations from acquaintances to friends, good friends and best friends that are closer to the self.

These circles are representatives of increased elements of social-emotional qualities that are related to intimacy and object-relation (Sharabany, 1984; Sharabany and Hertz-Lazarowitz, 1981).

In this work, the concepts of friends was used instead of peers, or classmates. Students were asked to nominate their good friends, and to specify the source of their friends in physical-terms. This is only a first step in investigating classmates as friends. Hallinan (1978), and Hansell (1986), take this path in studying social relations. Changing the research question from "whom do you like to study with? or "be seated next to"? to "who are your closest friends? and "with who you talk about personal thing" are steps in studying meaningful relations in the school.

Friendship can be viewed from a sociological point of view as a source of influence, from a social-psychological point of view as a source of social contact, and from a developmental point of view as a growing capacity of relating to others, in dimensions such as liking, trust, partnership, exclusivity, helping, common activities, affection etc. (see Sharabany, 1974; Youniss & Smoller, 1985). Developmental psychology points to the findings that "children with friends" and "children without friends" are different in many measures. The former are more psychologically balanced and "well beings" the latter being in psychological risk (Hartup, 1978; Sharabany, 1984; Sharabany and

Hertz-Lazarowitz, 1981; Youniss, 1985). Schools today, remain one of the most significant settings for friendship development. Many traditional social-settings such as the family, the neighborhood and the out of door play yards, lost their impetus, and were replaced by non-interactive, solitary activities such as watching T.V. and computer-games. In my own studies in Israel, school is reported as the main resource of friends for children in elementary, middle and secondary schools (Hertz-Lazarowitz, 1986). Epstein (1985) wrote "Although most friendship and significant relationship take place in school our knowledge about specific ways that school influence the friendship process is limited (p.11). Epstein and Karweit book is a breakthrough in this field, but yet, as Maruyama (1985) points, individual differences explanation are not yet well separated from structural change explanation in the schools.

On the basis of theories of contact (Brewer and Miller, 1984) and structural elements of schools, (Sharan and Hertz-Lazarowitz, 1978, 1981) we conceptualize the following theoretical frame for the study.

Schools structure contacts between peers in two main avenues; a) in classroom contacts and b) in-school contacts. Peers can interact with schoolmates during various activities that are restricted or not restricted by homeroom classes. Since most of the time per student is in-classroom the probability of more contacts with classmates from the most salient social-setting is predicted. Thus, students homeroom

class is assumed to be the main setting for contacts which are precondition for friendship development, because the contacts enable the manifestation of friendship qualities.

The policy of the school in assigning students to classroom, which is a structural feature, determinates to a critical degree the variability of students range of resources in the classroom. These resources may be related to social identity of the group (race, colour, ethnic, sex) to academic ability, to background characteristic and to variance in individual resources. Composing classes on heterogeneous basis implies a greater variance between individual in the classroom. Composing classes on homogeneous basis narrows the variance of the class. In an heterogeneous homeroom each student can interact and contact with peers which are similar and non-similar to own characteristics. Thus, such a setting allows for more contacts, which are free of prior classroom categorization. On the other hand, composing classes of homogeneous basis usually creates also an hierarchical order of strong and less strong, or weak homeclasses. The terms ability grouping, tracking and streaming, all refer also to a ladder effect of high, average and low status order in the school organization. In such classrooms, contact is mainly with similar peers, at least in academic ability, which is correlated with group variables. Grouping on academic basis highly determines the population in which the student interacts for most of the day.

The theoretical model proposed here is based on social identity theory proposed in relation to schools by Brewer & Miller (1984). We assume that the student as an individual has a clear conception of self identity in academic terms. In school this is a salient part of students' identity. Students categorized themselves as strong, average or weak pupils on the basis of former experiences in schools (Steinberg, 1987). This is a very private circle of categorization, which may change as a result of student investment in academic work, or classroom variance, such as the academic ability of a given classroom. Students are also members of in-classroom social groups. Thus, academic and social identity of each student is a part of a given structure. In the particular classroom, different student hold different academic and social status that are a result of in-group perceptions which are based mostly on academic evaluations of teachers, and other peer-evaluation. If schools structure the homeroom classroom on a non-categorized basis, most of the units are equal, or in school terms heterogeneous, i.e., each "group" - homeroom classroom holds a mixed ability population of students. Actually in such settings in-class cohesiveness is assumed to be strong. If schools structure the homeclass on a strong categorization basis, and specify hierarchical order to the classroom, on academic terms, the in-group, out-group relation is affected drastically. In many schools, homogeneous classroom are created for different academic-ability students. Thus, if school allocates 400 students for 7th grade, schools' policy of classroom composition can be to group

the students to 10 heterogeneous homerooms, or to differentiate the students to 3 high ability classroom, 3 average, and 3 low ability classrooms. As mentioned earlier, in Israel, most of the school practice their policy making decision, in full autonomy. Friedman (1982) Friedman & Inbar (1984) describe the dynamics of the processes of this policy in Israel. They could not justify any decision on the "real" need of the students, but rather on other consideration held by school policy makers. Thus, schools are different in creating the status distinction between classroom when they practice grouping into homogeneous classrooms with distinct hierarchical order and value. We claim that within school setting students are involved in three levels of evaluation that imply comparison and categorization processes on the self identity of every student. The first level is the self, the second level is the evaluation of the self within-group, i.e., in a given classroom and the third is the evaluation of the self as a member of a group, i.e., as a member of a classroom with a overt, public and distinct categorization value. Thus, identification on the classroom level is similar to non-personalized affiliation to a group "entity", be it sex, race, ethnic group, or in the case of the present study a "strong" high status homeclass where all the "smarts" are, or a "weak" low-status homeclass were all the "retarded" are.

The hypotheses of the study stem from the conception of these three level of categorization. We focus of the social consequences of academic categorization. The study hypothesized that categorization

in the second level, i.e., different academic status within the classroom will not affect friendship networks in school, and that belonging to different status classroom will affect significantly friendship networks of students. Specially, students placed in low homogeneous classroom will have the greater loss in friendship networks.

The existence of schools within a similar student population, i.e., all Jews, middle class, and the same ethnic mix (see subjects) enabled to test the effect of school structural features, in our case the existence of heterogeneous homeroom vs low and high homogeneous homerooms vs. students individual features, in our case, academic status, as measured in average grade on friendship networks.

### Method

497 students from four junior high schools in northern Israel were asked to answer a questionnaire relating to various aspects of their social world in schools and out of school. Part of the questionnaire required the students to nominate their best friend and also their closest friends in general. Ten lines were left for friend's nomination. The subjects were asked to specify for each nominee, the resource of that friend, i.e., are each of these friends from the classroom, the school, the neighborhood, the family, etc. This table

of friends and their origin is the basis for the data presented here. The full questionnaire was developed by Hertz-Lazarowitz (1983) and had an  $\alpha$  of .73.

The information about the two independent variables: school policy and the academic status of the student were derived from several measures. For school policy an open interview was held with the principal and the classroom teacher. In order to validate school policy, students were also asked about the existence of "strong and weak" home classrooms in their "tracked" school. In the JHSs with the homogeneous tracking policy 96% of the students confirmed the existence of such "labelled" classrooms, while in the JHS with no tracking policy the vast majority of the students answered "no" and "I dont know" (80%) for the same question.

The academic status of each student was obtained from the main homeclassroom teacher (the educator in Israel terminology) which gave the average grades for each of the student. Three levels were presented: A; students with high academic status - average grades 80 and above, B; students with average academic status - average grades 60-79, and C; low academic status, average grades 40-60.

All the four JHS were located in the neighborhoods of middle class, with similar ethnic composition of students and families. Ninety five percent of the students were native born of Israel, but their parents



were distributed almost equally among Sephardic Middle-Eastern origin (32%) Ashkenazim European origin (34%) and Israelis (34%). All schools had desegregated populations of students in terms of ethnic origin and academic ability.

All four schools were attached to non comprehensive high schools. Thus, the schools were mostly academically oriented. Two of the JHS had a heterogeneous classroom composition policy, and two schools had a homogeneous policy assigning student to either "strong" or "weak" homeroom classes.

The subjects that participated in the study were from 7th to 9th grades. In the schools with heterogeneous homeclass composition two 7th and two 9th grades classroom were randomly selected. In the JHS that held a policy of homogeneous homeclass, from each grade level, one "strong" and one "weak" homeclassrooms were selected for the study. The classes were all 35-40 students in size.

It is important to note that all the JHS had ability grouping in core subjects of Maths and English. The JHS had also special classroom for "slow learners" and special education classroom. Students from these classrooms were not included in the study.

The questionnaire was administered to the whole class, while the teacher was not present. Graduate students of education with

extensive experience in education and questionnaire administration collected the data.

## Results

First we will present some descriptive findings. Table 1 presents the count of friends according to their origin, i.e. from where are they allocated. No doubt, based on these results, that the classroom consists the major social organization resource for friendship networks. Forty one percent of all friends nominated were members of the same homeclassroom. The school, is the second resource for friendships. Usually friends from other classrooms composed this category. Of special interest are the findings that other social settings such as the former school and the neighborhood are not salient resources for friendship networks. The finding that 14 percent of our sample did not answer to this question indicates that some of the students did not reply fully as to the origin of their friends. Only a very small number of subjects (less than 10) did not nominate any friends in the questionnaire: All of our subjects nominated a sizeable group of peers as their friends.

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Insert Table 1 over here

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The structure of friendships networks was conceptualized theoretically on the basis of social circles of in-classroom, in-school (out of classroom) and out of school friendships. These three measures comprised the total network of friends available to an individual. Table 2 presents the correlations between the four measures. The correlations indicated a range of  $-.19$  to  $.56$ . All of friendship correlational measures are significant. The correlations between in-classroom and out-of classroom friendships are negative and low. The correlation between all measures and total friendships are significant and high. The highest correlation ( $.56$ ) is between total friendship and in-classroom friendships. Based on this correlational table it seems that these measures are separated and we omitted the "total friendship" from further analysis due to the high correlation with the rest of the friendships networks measures.

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Insert Table 2 over here

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Before testing our hypothesis that in schools with homogeneous non equal policy students' assigned to "low" classrooms are adversely affected in friendship networks, we tested the hypothesis that our subjects are not different in the overall measures of friendships networks. We assumed that there is not a prior reason on which school policy was determined which might be a result of students' different socialibility and friendliness qualities. Thus we assumed that

overall students will not differ in total number of friends between schools with the different policy. Four t-test comparisons analyses were conducted for each of the four friendship measures. Indeed Table 3 indicates that for the Israeli sample, friendship networks is quite large in size. Each student had nominated almost seven friends as his/her close friends. The remarkable differences in the size of the standard deviation of the means in so-called tracking and non-tracking schools indicates that the variance in the non tracking schools are much larger. Overall this comparison indicates that the sociability of the students in the different school setting is similar. The significant difference in friendship network size are in the measures of out of classroom friendships. Thus, this table indicates on one hand the overall similarities in this domain, and on the other hand points to the effect of school formal organizational features on out of classroom friendships. A one way anova tested the difference in total number of friends by students' father origin, to test for ethnic differences. No significant difference appears between student of different ethnic background on the size of friendships network. We also did not find significant differences between the four schools. Thus, the independent variables, according to the research hypotheses were tested. Three 3 x 3 factorial ANOVAS were conducted for each of three dependent variables of friendships networks. The dependent variables were students' academic status (low, average and high) and classroom composition policy (heterogeneous non-tracking, high ability track, low ability track). The ANOVAS indicated only one interaction

effect for the dependent variable of friends in school. Thus the tables present the means and standard deviation for the main effects, and the interaction is reported only for the variable of friends in school.

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Insert Table 3 over here

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The following tables present the results for the main effects. Table 4 presents the data for students friendship network according to their academic levels. The findings indicated no significant differences in friendship networks in the classroom and in school. While students of low academic status reported on significant less friends out of school ( $F(Df 2.492) = 4.44$   $p < .01$ . low academic ability students nominated less friends in their homeclassroom but this finding was not significant.

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Insert Table 4 over here

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Table 5 presents friendship networks according to school policy regarding classroom composition. When friendship networks were compared using the different organizational school-classroom settings, i.e. heterogeneous, high, and low homogeneous separately, significant differences appear in all measures. Students that were assigned to

low-ability homogeneous "weak" homeclassrooms nominated significantly less in-classroom friends ( $F(df\ 2.476) = 8.59\ p < .01$ ) less out of school friends ( $F(2.488) = 6.66\ p < .01$ ) and more in-school friends ( $F(2.494) = 4.03\ p < .01$ ).

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Insert Table 5 over here

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The interaction effect of student academic status by classroom composition was significant ( $F(4.440) = 2.33\ p < .05$ ). As can be seen from Table 6, it enlightens the fact that students of all academic status levels in the heterogeneous classrooms did not nominate as many friends in school. This interaction suggests that most of the students in the schools that held the policy of some tracking, i.e. homogeneous homeroom find their friends out of their classroom (still in school) significantly more than students in the heterogeneous classrooms. The social "holding power" of the homeclassroom is less in these schools. These results will be discussed in the following section.

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Insert Table 5 over here

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## Discussion

This work, first and foremost illustrates the importance of the school, and particularly the significance of the homeclass in the development of friendship networks for youngsters. Most of the students nominated a sizeable network of friends which points on their social well-being. Similar results, as for the size of their friendship networks were document in a study of elementary school pupils grade 4th to 6th (Hertz-Lazarowitz, Rosenberg, & Guttman, 1985, 1986). Sharabany (1987) found a similar size of network for preadolescents in comparing kibbutz and city peer group relations. Israeli social culture emphasizes peer-relations and friendship networks. This might be reflected in the amount of 6-7 "good friends" reported by Israeli youngsters.

The homeclass or, in the Hebrew terminology, the motherclassroom was as expected, the main source for friendships. Thus, our assumption that grouping practices to instructional units of homeclass are significant for friendship networks, was confirmed by the results of the study. Forty percent of friends were in-classroom nominees, and only the smallest portion of friends were from out of school-settings. Thus, it can be concluded that students and their friends associate in school. And friendships develop within the school setting. Currently most educators do not take seriously the potential of school in friendship formation and the potential of these

relationship as a powerful and positive force for enhancing the academic and social goals, which the schools set for their students.

The results of the present study, also contributed to a better understanding of individual variables vs. organizational variables in friendship networks. Reviewing "friends in school" Maruyama (1985) points... Although the analyses are thoughtful and creative, they cannot separate individual difference explanation from structural change explanation"(p.405). The data indicates that individual variables such as the academic status, as measured in academic grades, did not affect significantly friendship networks within the homeclass and within school. It did affect however out of school friendship, which was significant smaller for low-academic students. This phenomena requires further research, in this specific friendship component. Since in general out-of school friends were nominated very infrequently, and the fact that the measures of friends in school and in the classroom are the focus of the study, on the discussion will not elaborate on this issue.

Generally speaking, academic status of students did not affect their school and classroom friendships networks, as reported by the students themselves.

On the other hand structural elements of the school did affect significantly all measures of friendship networks. Students who were



grouped in homogeneous homeclasses with low academic status, demonstrated an interesting pattern of the structure of their friendship networks. It seems as those students disaffiliated themselves from their homeclasses. They nominated less in class friends, more in-school (out of classroom) friends and less out of school friends. Student in homogeneous academic high status homeclasses nominated the largest in-classroom friendship networks. Students in heterogeneous homeclasses, where possibilities for contact with non-similar classmates was structurally maximized by the school policy, had a more balanced structure of friendship networks.

Overall, students grouped in "low" classes indicated a loss in friendships. Bower and Miller (1984, ch.13) discussing social identity theory and categorization processes in general, note that "considerable elaboration of the theory is required, however, to make it on adequate basis for understanding the processes and outcomes characteristics of desegregation situations (p.283). The data presented here suggests that the salience of academic categorization combined with structural features of the school environment trigger social categorical responses of peers that result in affective friendship networks. One has to remember that the schools under investigation were all similar in terms of student population and students' ability. All were upper middle class schools, academically oriented with a similar ethnic mix. Still, the categorical membership to a different academic status, within the homeclass, which is the

second more private level of categorization in our conceptual framework has not a significant effect on friendship networks. On the other hand, the homeclass membership, even within this similar population was as we predict, a much more relevant and important aspect of individual identity. This overt and public third level of categorical membership affected adversely the individual friendship network, particularly among members who belong to low-status-academic homeclasses. In the school environment, specially in Israel, the homeclass membership is very important, thus this structural feature affects the standards for evaluating other peers, and the attraction and liking toward them. Schwarzwald and Cohen (1982) and Schwarzwald (1984) in recent studies demonstrated that liking and attraction is always higher among homeclassmates in Israel as compared to liking and attraction to ability grouping classmates.

Belonging to either a strong or a weak homeclasses is more salient than self categorization of being a strong or a weak student. This is evident from the result of the interaction, all the students in the "weak" low-status classrooms and most of the students in the "strong" high status classrooms, nominated more out of classroom friends which is a sign of attraction to out-group members in the school. The groups of students who exhibit the greatest disattachment to own homeclassroom are those groups which are mostly categorized and stigmatized by the classroom label (be it strong or weak). I.e., students with high academic level in the "weak" classroom, which might

feel they don't justly belong to "this classroom", and all the students except the high academic students in the "strong" classroom, which might feel pressured by comparison, and feel even rejection by the academically strongest group of students in the entire school. In order to understand better the categorization processes in the school, we introduced at the end of the questionnaire two open questions. The questions were: 1) what are the opinions of students in your school on students that belong to weak classroom, and 2) the same question related to student that belong to strong classrooms. In the schools that low and high grouping policy existed students stated many opinions in response to these questions.

Qualitative content analysis (Hertz-Lazarowitz & Steinberg 1987) indicated a high level of categorization and stigma. For example typical answers were: "They have severe behavior problems. They are retarded", for the students in the weak classrooms, and "They are genius, they are the pride of the school. They are snobs", for the students in the strong homeclassrooms.

From these answers, and other data presented earlier, it is clear that students in the school are aware of the policies behind composition of homeclasses and they have the knowledge of the real status affiliated to different homeclasses in their schools. As presented earlier, 96% of the students in the schools with non-equal grouping policy knew which of the classrooms are "strong" or "weak" in

academic terms. We claim that this academic categorization generalized itself to social categorization, since these two domains are strongly attached and unseparated in the life of schools. The intriguing question is how does that process of academic categorization generalize to other dimensions and what are the dynamics that result in loss or gain in friendships of individuals? This phenomena was studied extensively in group-relation literature such as in racial or ethnic groups relation (Tajfel, 1982; Turner, 1978; Brewer and Miller, 1984). It is suggested that similar processes work in school. When a sixth grader enters JHS in Israel, the first cues in understanding the new system are the presence of familiar peers in the homeclassroom. Analysing this informational cues, and comparing the presence of other familiar peer in other classrooms, each student conceptualizes in his/her own terms the policy of the school. For example, if an average-academic students finds that all the familiar peer, from last year homeclassroom, in the current new homeclass, are average and low academic students, and he does not find the "high", "strong" students in the current homeclassroom. He concludes that he was assigned to a "weak" setting. This new setting is threatening the selfworth of the individual and decreases dramatically the status of the students since he is isolated from the highly academic peers, and was placed in "such a classroom". First weeks of school, are very intensive and stressful, as can be learned from teaches and counsellors in the schools. Students are constantly busy and concerned with social aspects of schooling and comparisons of classrooms status. These

concerns are related to the continuity and discontinuity with former peer-relations, the need and desire to acquire new friends, who came from different classrooms and different schools and in reorganizing the status within classroom and between classrooms. If the student is assigned to a "weak" classroom, the self level of categorization, which is the academic level of the individual, is magnified by belonging to a low-status homeclassroom with very little chances of moving and mobility upwards. Each individual is evaluated now according to two categories of comparison, and since the classroom categorization is much more salient and public, student in such classrooms are de-evaluated, and perceived as being inferior. For such students, this reality subtracts from their academic status, and results in stigmatization and social loss. On the contradictory, a high-academic students who finds in the classroom familiar peers, similar to him/her self, and does not find weak student within this classroom, receives an addition to the prior status, by being assigned to a new in-group of the "strong students". Gradually, such student rejects former friends and other students on the basis of their classroom affiliation, and discontinues to relate to them as persons. Differentiation without personalization occurs, and "yesterdays friends" turn to be strangers in the new category based setting. In schools that categorization processes are not extremely accelerated by school policy students might continue to search friendship on the basis of personalized characteristics. We do know from a vast body of literature that friendship develops between people with similar

resources (Epstein and Karwait, 1983). But this similarity in school can be based on a large range of resources such as hobbies, clubs, sports, academic interests, social interest and others. Once a group is characterized as high status by such a powerful agency - as the school, we constantly find that such a group establishes a high esteem and tends to associate with similars on the most salient categorization of in group basis and reject out-group member. This finding was documented by Brand, Ruiz and Padila (1974) in the States, and by Hadad and Shapira (1977) and Amir and Bizman (1984) in Israel. In our study, students similarity was much greater than in the studies noted. Schofield (1982) describes the dynamics by which black students, categorized as low-academic students try to make themselves salient in schools by aggressive ways in order to get peer (status) and friends. In Israel also, many "weak" classrooms are gradually becoming on one hand more socially isolated and on the other hand more aggressive and problematic for the school system. In fact some principals expressed their opinion that this latter fact made them change grouping policies in their schools. (Hertz-Lazarowitz, 1987, personal communication with principals). Indeed, most students in the present study, when grouped to non-equal schools expressed a lower level of liking to school and feeling estranged to school (Steinberg, 1987). The present study calls for further investigation, since many questions are awaiting more clarification. First of all, the present study did not investigate the structure of friendship networks, by examining reciprocal patterns of choices and selection.

A very complex and sophisticated analyses of friendship networks were developed in the literature (see for example Hansell, 1986), but were not conducted in this initial present study. In order to better understand the nature of the findings, a larger sample of schools are required. A second question is developmental in nature. Are the structural features of schools more salient and thus more powerful in early stages of the JJS, i.e. 7th grade, or toward its later stage, i.e. 9th grade? Third, nomination of friends is a measure that is currently common in studying social development, and social outcomes of various experimental and natural field setting. (Sharabanay, 1982; Hansell, 1986; Hertz-Lazarowitz and Steinberg, in press; Hertz-Lazarowitz, 1984, 1986). Yet, the stability of this measure, needs further investigation, specially in different cultures and ecosystems. Friends in school are an important factor in students life. The significance of school and the homeclassroom on the development and maintenance of friendship networks as presented in the study is no doubtly a call upon teachers, educators, and policy makers, to be more responsive to social aspects of schoolings, and to engineer skillfully the school to enhance social contacts and friendship development.

Table 1: Sources of friendship: frequency and percentage (n = 497) of  
Junior High School students (in Israel)

Sources	Frequency	Percentage
Family	29	6
Former school	8	2
Neighborhood	52	11
Current school	94	19
Homeclassroom	204	41
Others	32	7
No answer	68	14 (1)
Total	497	100

(1) Refers to the fact that no information of the source of friendship was specified



Table 2: Correlations of friendship networks (1) (n = 497) of  
Junior High School students (in Israel)

Friendship network	1	2	3	4
1. Friends in class	-	.16	*-.12	.56
2. Friends in school		-	-.19	.43
3. Friends out of school			-	.35
4. Total friends				-

(1) All correlations are significant at the .001 level

\* significant at the .006 level

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Table 3: Friendship networks of Junior High School students in schools with different classroom composition policy (n = 497)

Friendship network	Heterogenous classrooms n = 257	Homogeneous classrooms n = 240	t
In classroom	3.14 (1.71)	3.14 (1.02)	n.s.
In school	2.07 (1.82)	1.60 (1.45)	3.27*
Out of school	1.27 (1.48)	1.52 (1.50)	1.91*
Total friends	6.67 (2.96)	6.69 (4.05)	n.s.

\* <.05

\*\*<.01

Table 4: Friendship networks of Junior High School students by their academic status: Means and SDs

Friendship network	N = 97	Academic Status			F
		low	average	high	
In classroom	2.80 (1.87)	3.22 (1.71)	3.26 (1.92)	n.s.	
In school	1.87 (1.57)	1.90 (1.77)	1.73 (1.53)	n.s.	
Out of school	.98 (1.30)	1.46 (1.53)	1.52 (1.51)	4.44*	

\* (df 2.492)  $p > .01$

Table 5: Friendship networks of Junior High School students by school policy of classroom composition (n = 497)

Policy of Schools	Heterogeneous		Homogeneous	
	mix-ability classroom	High ability	Low ability	
Friendship networks	(n = 240)	(n = 140)	(n = 117)	F
In classroom	3.14 (1.92)	3.57 (1.56)	2.64 (1.75)	(1)8.50
In school	1.60 (1.45)	1.90 (1.77)	2.27 (1.86)	(2)6.66
Out of school	1 (1)	1.45 (1.44)	1.05 (1.50)	(3)4.03

(1) df (2.476) p < .001

(2) df (2.488) p < .01

(3) df (2.494) p < .01

Table 6: Friends in school; by student academic status and school  
policy  
of classroom composition (n = 441)(1)

School Policy	Heterogeneous		Homogeneous	
	mix-ability (n = 216)	High (n = 121)	Low (n = 104)	
Low	1.76 (49)	2.26 (23)	1.95 (19)	
Average	1.48 (98)	2.03 (63)	2.06 (65)	
High	1.54 (69)	1.43 (35)	2.85 (20)	

(1) (n = for each cell)

F(4.440) = 2.23

p < .05

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