This paper reports a case study of 47 students drawn from an open education and a traditional school. After statistically controlling on student background and earlier academic performance, investigators found no significant differences between students from the two schools in adjustment to junior high school as measured by grades, attendance, discipline, and satisfaction with school. Before entering junior high, the open elementary school students had a stronger preference for open school organization than did traditional elementary school students. However, the differences disappeared during the first year in junior high as the students from the traditional elementary school increased their acceptance of the open school organization. General findings indicate that students from open elementary schools see greater similarities between elementary and junior high school than do students from traditional elementary schools. These results are discussed in terms of the diversity of activities and the dominance of authority as organizational properties of schools. Some evidence on how family factors may influence student transition between different stages of school organization is also provided. (Author/DN)
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STUDENT REACTIONS TO THE TRANSITION
FROM OPEN ELEMENTARY SCHOOL
TO JUNIOR HIGH SCHOOL: A CASE STUDY

Grant No. OEG-2-7-061610-0207

Program No. R16J4

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INTRODUCTORY STATEMENT

The Center for Social Organization of Schools has two primary objectives: to develop a scientific knowledge of how schools affect their students, and to use this knowledge to develop better school practices and organization.

The Center works through five programs to achieve its objectives. The Academic Games program has developed simulation games for use in the classroom. It is evaluating the effects of games on student learning and studying how games can improve interpersonal relations in the schools. The Social Accounts program is examining how a student's education affects his actual occupational attainment, and how education results in different vocational outcomes for blacks and whites. The Talents and Competencies program is studying the effects of educational experience on a wide range of human talents, competencies, and personal dispositions in order to formulate -- and research -- important educational goals other than traditional academic achievement. The School Organization program is currently concerned with authority-control structure, task structures and peer group processes in secondary schools. The Careers and Curricula program bases its work upon a theory of career development. It has developed a self-administered vocational guidance device and a self-directed vocational guidance system to promote vocational development for high school, college, and adult populations.

This report, a project of the School Organization program, investigates how having attended an open elementary school influences student adjustment to a junior high school.
ACKNOWLEDGMENTS

The study was made possible through the generous cooperation of three school principals, John E. Feathers, Doris L. Hammond and Blanche Stark, together with their staffs and students. Rubie Harris helped with the data collection and preparation. Judith P. Clark assisted with the computer analysis. We received helpful suggestions on earlier drafts from David DeVries, James Fennessey, and John Holland.
INTRODUCTION

There has been a growing acceptance of elementary schools that use open space arrangements for learning activities. Studies in the elementary grades have shown significant differences between open and traditional classroom processes, with students in open classrooms having more freedom of movement and conversation and receiving more individual attention, among other things, as part of the typical classroom routine (Walberg and Thomas, 1972; Resnick, 1971). The organization of the open elementary school is thought to facilitate better relationships among teachers and students and to encourage a wider range of personal development of students (Flowden et. al. 1966; Meyer and Cohen, 1971; Rathbone, 1971; Weber, 1971).

In many school districts, the recent changes in school structure have occurred at the elementary level while the junior and senior high schools continue to operate as they have in the past. If only because they seem to come from the same era and philosophy of education, one might expect that the typical secondary school is more like the traditional elementary school than the open elementary, and consequently that students from open elementary schools will have more difficulty in adjusting to junior high. But there have been no studies of the contrasts in organization between junior high and open or traditional elementary schools, nor research on student reactions to the different school structures (Barth and Rathbone, 1971).
An immediate question then is how students from different types of elementary schools react to the transition to junior high school. Does the open elementary school create new expectations and desires about the most appropriate kind of school structure? Do these cause serious problems of adjustment for students in the junior high school? More generally, is there a natural sequence of stages of school structure that facilitates the transition between the different levels of school and supports the social and academic development of students?

To provide some evidence on these questions, this paper presents a case study of a junior high school which uses neither individualized instruction nor open-space structure and the students it receives from two elementary schools, one of which may be characterized as an open elementary school and the other as a traditional elementary school.

The Sample

The two elementary schools and the junior high school serve the same geographic area of a large urban public school system in the Northeast. Both elementary schools feed more of their students to this junior high school than to any other, although students are free to attend any junior high school in the district.

All sixth-grade students in the two elementary schools were administered a survey questionnaire in their final term in these schools. One year later, a similar questionnaire was given to the students from the selected elementary schools who were attending the junior high
school which was geographically closest to the original elementary schools.

The sixth grade sample included 151 students, 63 from the open elementary school and 88 from the traditional elementary school. Of the original sample of 151, a subsample of 47 students completed the follow-up survey as seventh graders in the selected junior high school. Of the 105 students from the original sample who were not contacted in seventh grade, 71 attended other junior high schools and 34 attended the selected junior high school but were absent the day the second questionnaire was administered.

Table 1 compares the original sample of 151 students who were surveyed in the sixth grade with the subsample of 47 who attended the selected junior high school and responded to the seventh grade survey. The differences between the original sample and subsample are not statistically significant either on the attitudinal scales which will be used in subsequent analysis, or in percent male, or average number of siblings. Table 1 also presents the comparison between the original sample and the subsample separately for each of the elementary schools. Except for number of siblings in the open school sample, the differences between original samples and subsamples in each elementary school are not statistically significant. That is, the bias due to self-selected attendance at the junior high school or to non-response on the seventh grade questionnaire does not appear to be serious. But because this study involves only one junior high and two of its feeder schools with a small sample of students, replications of the findings to be reported in this paper are needed before they can be generalized or taken as representative of the typical student reactions.
In this case study, the goal is to isolate the effects of type of elementary school attended on student reactions to junior high school. Therefore, in subsequent comparisons between students from the two elementary schools, statistical controls will be placed on personal and social background characteristics of students which were measured in the seventh grade survey, in order to remove from the effects of school any contrasts in background of students from the two schools.

STUDENT ADJUSTMENT TO JUNIOR HIGH SCHOOL

Four behavioral characteristics were examined to see whether students from either of the two elementary schools had more serious problems than the other in adjusting to junior high school. Comparisons were made between the two groups by using their junior high school average grades, number of absences, number of latenesses, and a scale of discipline problems. To show the effects of type of elementary

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1 The scale of discipline problems is composed of five items from the seventh grade student survey: the number of times sent to the office for getting in trouble, separately for the Fall, Winter and Spring Quarter of the seventh grade; whether the student was ever suspended from school during the year; and the frequency of being scolded in class. (The range of each item is 1-4, and the scale is the sum of the item scores.) Measures of grade point average, number of times absent and number of times late were obtained from official school records.
schools attended, multiple regression analyses were conducted using a dummy variable which is scored 1 for students from the open elementary school and 0 for those from the traditional elementary school.

Table 2 presents the standardized regression coefficients and associated t-statistics for the effect of type of elementary school attended on each of the four measures of behavioral adjustment, under different control conditions. The first row of the table presents the effects of attending the open elementary school without any controls on background differences of students. This shows no significant relationships of elementary school attended with discipline, absences or lateness in junior high school, but shows a significant relationship with grades. Without controlling for differences in student background, those who had attended the open elementary school receive lower grades than the students from the traditional elementary school. However, the next row of the table indicates that this difference is due to contrasts in background between the two groups of students and not to the type of elementary school attended. This row shows the regression coefficients for type of elementary school attended in multiple regression analyses which included the student's I.Q., sex, race and number of siblings as control variables. When the four background variables are included in the analysis, the initial differences in grades due to attendance at an open elementary school are reduced to statistical non-significance.  

1 In a separate regression that used sixth grade test scores in reading and arithmetic as control variables, the effect of having attended an open elementary school on junior high school grades was reduced to - .138 (t = -1.12, N.S.). This strongly suggests that the students from the open elementary school received lower average grades in junior high school because of the lower performance level with which they entered the seventh grade.
The general conclusion from Table 2 is that open elementary school students show no special problems of adjustment to junior high school in terms of discipline, attendance, tardiness, or academic performance.

Table 3 shows additional evidence of similarity in adjustment to junior high school in terms of students' satisfaction with school. A scale was constructed of four items from the questionnaire dealing with whether students liked school or not. The scale items were included in both sixth grade and seventh grade survey forms, permitting separate analyses for each year. Table 3 indicates no significant differences in student satisfaction with either their elementary or junior high school between those from the open and traditional elementary school. With and without controls on student background characteristics, the school differences are not statistically significant.

The four true-false items which are summed together for the scale are:
- I'm pretty happy when I'm in school (T=1, F=0)
- Most of the time I don't want to go to school (T=0, F=1)
- I really like school a lot (T=1, F=0)
- The kids in my class are pretty happy in school (T=1, F=0)

Although the coefficients do not reach statistical significance, there is an interesting reversal in signs between the sixth grade and seventh grade. In the sixth grade, there is a slight tendency for traditional school students to express higher satisfaction with school; but this pattern changes in junior high school when the students from open elementary school show a tendency to be more satisfied. Thus, relative to traditional school students, the open elementary students seem to change more in the direction of satisfaction with school as a response to the transition to junior high. This is consistent with later arguments that the open elementary school may provide a more natural point of transition to junior high.
Possible Explanations

There are two explanations that could account for the similarity in adjustment to junior high school for students from the two elementary schools. First, it is possible that there were in fact no initial salient differences in elementary school structures. Perhaps whatever differences existed between the schools were not important to the students and had little influence on what they expected to find in junior high school. Second, it is possible that the elementary schools did have different effects on student attitudes toward the appropriate structure and operation of schools, but such differences in attitudes were eliminated over time as students successfully accommodated themselves psychologically to the practices they actually found in junior high school.

We shall examine each of these possibilities in turn. If students did have different expectations about how school should be run when they entered junior high school, the question will remain about which group had to make a greater adjustment.

DIFFERENCES IN EXPECTATIONS ABOUT SCHOOL ORGANIZATION OVER TIME

A six-item scale of "students' acceptance of open school" was constructed from items asked on the sixth grade survey and repeated in the seventh grade. Each item in the scale asked students to indicate the kind of classroom in which they learn best, choosing between one response describing the open classroom or one describing the
traditional classroom.  

The student averages on this particular scale showed that both groups of elementary students strongly accepted the norms of the traditional rather than open school organization. However, the scale did distinguish between different kinds of families and different kinds of schools in the degree of student acceptance.

Table 4 presents the relationship between students' preference for open school and an index of their family style. The family style index represents the degree to which relationships between parents and children are comparatively free and open. This index combines four measures, obtained from the seventh grade student questionnaires, of the number of rules parents have for their children and the manner of decision-making.

Insert Table 4

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The specific items which are summed together for the scale are:
I think I learn most in a classroom:
(a) where I am told just what to do and then I do it (=0); or where I decide what I should do and then I do it (=1).
(b) where everyone in the class is working on different lessons (=1), or where everyone in the classroom is doing the same lesson at the same time (=0).
(c) where everyone stays in his own seat most of the time (=0) or where everyone does not have to stay in his own seat (=1).
(d) where I can talk to others while I work (=1); or where it is pretty silent while I work (=0).
(e) where I must hand in work when the rest of the class does (=0); or where I can work at my own speed and hand in work when I am done (=1).
(f) if students are allowed to talk and walk around in class they; only fool around (=0), or help each other (=1).

An alternative scale covering many more contrasts between open and traditional schools based on a 50-item teacher questionnaire is described in Walberg and Thomas (1972).
between parents and children.¹ The positive coefficients shown in Table 4 imply that students will be more likely to prefer open school organization when they are accustomed at home to more flexible rules governing their behavior and a more influential role in the decision-making processes. These coefficients reach high levels of statistical significance for the seventh grade sample only, probably because family measures were taken only in the seventh grade and used in examining relationships with students' school preferences in both the sixth and seventh grade. Had sixth grade family measures been available to examine relationships with student preferences in the sixth grade, it is likely that more significant relationships would have been discovered. The relationships are shown in Table 4 to be of the same order of magnitude when controls are introduced on students' background characteristics and on the type of elementary school attended. Thus it appears that family style is significantly related to student preferences for open school organization.

¹The family style index is composed of the sum of the following items from the seventh grade survey.
(a) the number of rules from a check-list of eleven which the parents have for the student (0-5=1, 6-7=2, 8-11=3).
(b) student rating of parental strictness (3 categories, scored 1,2,3).
(c) student rating of "how much say you have in family decisions about yourself" (3 categories, scored 1,2,3).
(d) student rating of "how decisions are made between you and your family" (who gives opinions and who finally decides; 3 categories, scored 1,2,3).
Table 5 shows the regression coefficient for differences due to type of elementary school attended on the student preference scale when it was administered in grade six (while the students were still in elementary school) and in grade seven (while the students were in junior high school). The students did hold significantly different expectations of school operations when they were in elementary school. The students enrolled in the open elementary school scored higher on the scale of preference for open school than those who were enrolled in the traditional elementary school. The difference between schools at the sixth grade remains statistically significant when four controls on student background are included in the regression equation.

To check further that the differences are direct effects of the type of elementary school attended, the index of family style was added as a control in the regression analyses. With this additional control, the sixth grade difference between the schools remains statistically significant on students' preference for open schools.

Thus, we may reject the first possibility mentioned above to account for the similarity of adjustment to junior high school. The students did not enter junior high school with the same expectations and preferences for the way school should be operated. At the end of the sixth grade, the open elementary students prefer a more open school than those from the traditional elementary school.

In junior high, however, there is no longer any difference in preferences for open school organization which is related to the type
of elementary school attended, as evidenced by the non-significant regression coefficient in the seventh grade under each of the control conditions. This implies that either the open elementary school students decreased their preferences for open school organization, or the traditional elementary school students increased theirs.

Table 6 shows which group of students changed most in their attitudes about open schools, and in which direction. This table gives the average number of items on the scale answered in the direction of preferences for open school by each of the student groups at the two points in time.

The surprising result is that the open elementary students do not lose their preference for open schools (the change in attitude for this group is not significant), but the students from the traditional elementary school significantly increase over the year in acceptance of open school characteristics so as to approximate the preferences of the other group.

Insert Table 6

An analysis was performed to examine whether the Table 6 values remained unchanged when differences in student background across the schools are taken into account. As a basis for standardizing on student background, a least squares equation was obtained separately in each grade by regressing students' preference for open school on six variables.
(family style, I.Q., sex, race, number of siblings, and type of elementary school attended). Separate estimates were then obtained for open and traditional schools of average student preferences by substituting the mean values for the entire population into the equation for the first five independent variables and substituting either 0 or 1 into the equation for type of elementary school attended. The resulting standardized estimates of average student preferences, shown in Table 7, are similar to the uncontrolled values and reflect the same pattern of changes over time as shown in Table 5.

Insert Table 7

This result is surprising if one had assumed that the students would see the junior high school as more similar to the traditional elementary school. If this assumption were true, and if students come to accept the type of school they are actually attending, we would expect the traditional elementary students to maintain their original lower preference for open school characteristics. We would also expect the open elementary students to decrease their original preference to become more like the traditional elementary students. Instead, the results are the opposite; the open elementary students remain the same and the traditional elementary students increase their acceptance of open school procedures.

In fact, it is not the traditional elementary students who see the greatest similarity between elementary and junior high school, but the
open elementary students. Students were asked the question in the seventh grade survey, "In this junior high school, are the classes run the same as in your sixth grade school, or are they different?" Only 33 percent from the traditional elementary school answered "very much different," while 58 percent from the traditional elementary school answered this way (p < .001). Table 8 shows that the differences between elementary and junior high school remain significant under controls for background and family.

On another series of 8 items, students were asked to compare and evaluate school this year with school last year, and were to check one of the three responses: "more last year," "more this year," or "same both years." On seven of the eight items, the students from the open elementary school checked "same both years" more frequently than the traditional elementary students. When controls on background and family factors were introduced, the open elementary students still more frequently saw similarities between the two schools on seven of the eight items.

Insert Table 8

Putting the results together, it appears that because the junior high school is seen to be more like the open elementary school than the traditional one, students coming from open schools have more appropriate expectations about junior high school organization and do
not have to change their preferences. On the other hand, traditional school students must change their preferences if they are to accommodate themselves to the new structures they find in junior high school. Thus, it appears that the open elementary school may assist the transition to junior high more than the traditional elementary because of similarities in structure which foster more appropriate preferences and expectations in students.

To understand this process of transition through the grades more completely, we need to determine which characteristics of schools are the most salient for students at each stage in their development.

TWO SALIENT ORGANIZATIONAL PROPERTIES OF ELEMENTARY AND SECONDARY SCHOOLS

There are at least two general organizational properties where the similarities may be greater between the junior high school and the open rather than traditional elementary school, and there is some indirect evidence that these organizational properties have salience for students.

The first organizational property is simply the total number of different kinds of activities which comprise the typical school day, which might be termed "the diversity of activities." The traditional elementary school and the junior high school seem to be quite different in this area. In the traditional elementary school, a student sees only one teacher for most of the day. Although the subject matter covered in class may change throughout the day, the child still interacts with the same personality. In junior high school, however, a student receives instruction from several different teachers each day, depending on the
courses in which he is enrolled. The student also changes rooms and classmates several times during the day. There is usually a greater variety of settings the junior high school student visits during his daily schedule, since junior high schools have shops, laboratories and athletic facilities which elementary schools usually cannot match. The student in junior high school has a home room but no home base, a locker but no one desk, a school but no one room. In short, he must make himself comfortable as a transient in a wider world than he has known before.

Students from traditional elementary schools notice this contrast in junior high school and place high value on it. An open ended question was asked on the seventh grade survey: "What are the main differences between your sixth grade and school this year? (List as many things as you can think of.)" Of the 26 students from the traditional elementary school, 18 prominently listed changing classes or having several different teachers. Some example of student answers include:

"We change classes, there are different people in every class. We have a different teacher every quarter in almost every class."

"Different teachers each period."

"We change classes here. We don't spend all day on math, etc."

"We all stayed in one class last year."

"You have more than one teacher."

"In sixth grade, we did not have different periods. We had one teacher."
"We have six teachers. Last year we only had one teacher."

"(last year) Never had a schedule, never change classes."

"At my other school I had to go to one room for all my classes."

"You just don't have 1 teacher."

The diversity of activities that changing classes and teachers provides is important to students in part because the novelty and change throughout the day make school less boring and more interesting.

Nearly two-thirds of the traditional school students on the open-ended question mentioned the greater variety of activities, while fewer than one-tenth of those from open elementary school remarked on this. As perceived by students, the open elementary school with its team of teachers, distinctive specialty rooms and areas, and numerous instructional projects did not offer any less of a variety of activities to fill the day than in the junior high school. But, the diversity of activities stood out more clearly than any other feature of junior high school in the minds of students from the traditional elementary school.

A second organizational feature that may present a greater contrast between junior high and traditional elementary than between junior high and open elementary schools is the degree to which students are dependent on the teacher's authority for determining their behavior. This might be termed "dominance of authority." To be sure, teachers hold strong official authority in both elementary and junior high school, but there are differences in how closely student behavior is supervised.
and in the extent to which students are permitted to take initiative in school decisions. For example, junior high school students have more freedom of movement without supervision. In traditional elementary schools, students line up as a class when they move from place to place, so they can remain under the watchful eye of the teacher. In junior high school, the movement between locations in school is neither so carefully organized nor so closely supervised -- the students are more often out of the sight of the teacher. There are also differences between the two levels of school in how much choice and initiative the students have in deciding the specific behaviors they will follow. In the traditional elementary school, student behavior is largely dependent on teacher directives. The teacher determines activities for a class, and students are seldom permitted to choose alternative activities or asked to take the initiative in defining activities for themselves. On the other hand, junior high school students have the chance to choose one or more elective courses. In some junior high schools there are course alternatives to choose among in each subject area. Moreover, teachers frequently allow the students more personal initiative in defining

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1Jackson (1968, pp. 11-19) makes similar observations on the degree to which students in the traditional elementary school must wait for teacher direction for much of their behavior.
the assignments which will be accomplished within the individual courses. In junior high school, it appears that the authorities more often set the limits and alternatives for student behavior, rather than prescribing exactly what the behavior must be, as in the traditional elementary school.

Because traditional elementary school students are so thoroughly dependent on teachers' direction and supervision for what they will do in school, they are very conscious of the authority system as an organizational feature. Some evidence of this is found in responses to questions from the elementary school survey which asked students to plan the kind of junior high school they would like to attend. Over half of the students from the traditional elementary school emphasized the authority of the teacher and how it should be exercised. Following are some representative examples of the students' preoccupation with their dependence on the teachers' authority.

"I would want the teachers strict but nice. I would want to be able to learn a lot and the teachers to explain things.

"Students could not do whatever they wanted to, they must do what the teachers have asked and told them to do."

"That kids should listen to the people in charge of them, the teachers have the right to suspend the children if they are not being good."

"Some of the teachers would have to be strict to some kids because of their action. But then some of them could at least try to be nice."

"The way teachers want to run it."
"It should be firm and upheld! The teachers wouldn't pile you with work. We should do some exciting things. The teachers should listen to explanations. They should know what they're talking about before they accuse you!"

"The teachers should not be so mean."

Again, it seems that the open elementary school may be closer to the junior high school in authority structure than is the traditional elementary school. Like the junior high, the open elementary school frequently permits students to move about the building as individuals rather than as members of organized groups. Also, students often move about without the immediate supervision of teachers. The instructional program in the open elementary school frequently lets students select alternative activities, and many of these activities are carried on without the teacher being immediately present to direct and supervise the student. In short, it appears that the open elementary school is more like the junior high school than the traditional elementary school in the extent to which the authority of the teacher dominates the students' behavior. The responses of open elementary students to the open-ended question asked in the sixth grade supports the contention that they are less dependent on and less conscious of the teachers' authority and direction. Whereas about half of the traditional school students stressed the teachers' role in their answers, only about one quarter of those from the open school mentioned this.
Changes in School Organization Across the Grades

This case study points to a need for better understanding of how changes in organizational properties of schools across the grades can affect student development of academic and non-academic skills.

In terms of students' academic development, the school organization comprises the setting for the academic instruction and academic tasks affecting student growth. If the organization changes too abruptly from what a student is familiar with in his earlier experiences in school or at home, the changes may cause problems of adjustment that will interfere with the student's academic attention and learning. The discontinuities in organization between elementary and junior high school contrasted in this study did not affect student responses to their academic program. Although it was found that the traditional elementary school students had to confront more dissimilarities in school organization upon entering junior high school than the open school students, they were able to adjust to these changes in the first year without manifesting any relative academic disadvantages. But this study involved only a small fraction of the possible organizational properties which may change across the grades and only a limited range of variation on the organizational characteristics which did change. Would the similarity of academic adjustment have been the same if the junior high school had required students to function with considerably more free time without close adult supervision and direction? Would the disruptions to academic progress have been more serious if other organizational properties had changed significantly, such as the way grading and reward systems relate to academic behavior? Studies are needed to identify the types of changes in
school organization which will significantly hinder or help the academic progress of particular kinds of students.

More than being merely the conditions for academic activities, organizational changes across the grades can themselves be learning experiences for students to become adept at successfully functioning in increasingly diverse or complex organizational settings. Since students will be required to deal with a variety of organizational settings in pursuing their goals as adults, it is appropriate for schools to provide coherent learning experiences for students about different organizational processes. In these terms, discontinuities in school organization are not to be avoided for fear of creating the need for student adjustments. Instead, changes in school organization across the grades should be arranged in the degrees and sequences which best help develop student awareness of and abilities for dealing successfully with organizational processes. This case study has suggested two organizational processes -- the diversity of activities and the dominance of authority -- which changed across the grades to require new responses and skills from students. Further work is needed to understand how various changes in these and other important organizational properties can be best arranged across the grades in school to foster student abilities for functioning in progressively demanding organizational settings.
REFERENCES


TABLE 1

Comparison of Sample of Sixth Grade Students and Subsample Which
Transferred to Selected Junior High School in the Following Year

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Total Sample N=151</th>
<th>Subsample N=47</th>
<th>Total Sample from Open Elementary N=63</th>
<th>Subsample from Open Elementary N=21</th>
<th>Total Sample from Traditional Elementary N=88</th>
<th>Subsample from Traditional Elementary N=26</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average number of siblings</td>
<td>3.56</td>
<td>2.89</td>
<td>3.98</td>
<td>3.10</td>
<td>3.27</td>
<td>2.71</td>
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<td></td>
<td>N.S.</td>
<td></td>
<td></td>
<td>p &lt; .05</td>
<td></td>
<td>N.S.</td>
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<tr>
<td>Percent male</td>
<td>.47</td>
<td>.40</td>
<td>.48</td>
<td>.38</td>
<td>.46</td>
<td>.42</td>
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<tr>
<td>Average Score on Preference for Open School Scale (Grade 6)</td>
<td>1.50</td>
<td>1.78</td>
<td>1.93</td>
<td>2.61</td>
<td>1.20</td>
<td>1.11</td>
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<td>N.S.</td>
<td></td>
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</tr>
<tr>
<td>Average Score on Satisfaction with School Scale (Grade 6)</td>
<td>2.48</td>
<td>2.10</td>
<td>2.17</td>
<td>1.85</td>
<td>2.69</td>
<td>2.30</td>
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</table>
### TABLE 2

Summary of Regressions of Behavioral Adjustment to Junior High School on Type of Elementary School Attended, Under Different Control Conditions

<table>
<thead>
<tr>
<th>Effect on J.H.S. Discipline</th>
<th>Effect on J.H.S. Absences</th>
<th>Effect on J.H.S. Lateness</th>
<th>Effect on J.H.S. Grades</th>
</tr>
</thead>
<tbody>
<tr>
<td>Std. Beta (t)</td>
<td>Std. Beta (t)</td>
<td>Std. Beta (t)</td>
<td>Std. Beta (t)</td>
</tr>
<tr>
<td>Attended open elementary</td>
<td>.04 (0.26)</td>
<td>.24 (1.88)</td>
<td>.00 (0.00)</td>
</tr>
<tr>
<td></td>
<td>N.S.</td>
<td>N.S.</td>
<td>N.S.</td>
</tr>
<tr>
<td>Attended open elementary,</td>
<td>-.16 (0.95)</td>
<td>.18 (1.17)</td>
<td>-.04 (-0.22)</td>
</tr>
<tr>
<td>given 4 control variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(IQ at grade 6, sex, race</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>and number of siblings)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 3

Summary of Regressions of Students' Satisfaction with School at Two Points in Time, on Type of Elementary School Attended, Under Different Control Conditions

<table>
<thead>
<tr>
<th>Attended open elementary school</th>
<th>Satisfaction with School as Sixth Graders</th>
<th>Std. Beta (t-statistic)</th>
<th>Satisfaction with School as Seventh Graders</th>
<th>Std. Beta (t-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Satisfaction with School as Sixth Graders</td>
<td>Std. Beta (t-statistic)</td>
<td>Satisfaction with School as Seventh Graders</td>
<td>Std. Beta (t-statistic)</td>
</tr>
<tr>
<td>Attended open elementary school</td>
<td>-.15 (-1.01)</td>
<td>N.S.</td>
<td>.09 (0.58)</td>
<td>N.S.</td>
</tr>
<tr>
<td>Attended open elementary school, given 4 controls (IQ, sex, race, and number of siblings)</td>
<td>-.12 (-0.69)</td>
<td>N.S.</td>
<td>.13 (0.67)</td>
<td>N.S.</td>
</tr>
</tbody>
</table>
TABLE 4

Summary of Regressions of Students' Preference for Open Schools at Two Points in Time on Type of Family Style, Under Different Control Conditions

<table>
<thead>
<tr>
<th></th>
<th>Preference for Open School as Sixth Graders</th>
<th>Preference for Open School as Seventh Graders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Beta (t-statistic)</td>
<td>Std. Beta (t-statistic)</td>
</tr>
<tr>
<td>Family Style*</td>
<td>.28 (1.92)</td>
<td>.40 (2.94)</td>
</tr>
<tr>
<td>Family Style, given</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 controls</td>
<td>.23 (1.54)</td>
<td>.34 (2.37)</td>
</tr>
<tr>
<td>Family Style, given</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 controls and type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of elementary school</td>
<td></td>
<td></td>
</tr>
<tr>
<td>attended</td>
<td>.23 (1.57)</td>
<td>.34 (2.34)</td>
</tr>
</tbody>
</table>

*A positive coefficient means a greater preference for open schools by students from families which have fewer firm rules for child behavior or where children have a more active role in parental decision-making processes.*
### TABLE 5

Summary of Regressions of Students' Preference for Open School at Two Points in Time on Type of Elementary School Attended, Under Different Control Conditions

<table>
<thead>
<tr>
<th></th>
<th>Preference for Open School as Sixth Graders</th>
<th>Preference for Open School as Seventh Graders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Std. Beta (t-statistic)</td>
<td>Std. Beta (t-statistic)</td>
</tr>
<tr>
<td><strong>Attended open elementary school</strong></td>
<td>.45 (3.40)</td>
<td>.03 (0.18)</td>
</tr>
<tr>
<td></td>
<td>p&lt; .01</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>Attended open elementary school, given 4 control variables (IQ, sex, race, and number of siblings)</strong></td>
<td>.42 (2.35)</td>
<td>.07 (0.39)</td>
</tr>
<tr>
<td></td>
<td>p &lt; .05</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>Attended open elementary school, given 5 control variables (IQ, sex, race, number of siblings and family style)</strong></td>
<td>.41 (2.36)</td>
<td>.06 (0.35)</td>
</tr>
<tr>
<td></td>
<td>p &lt; .05</td>
<td>N.S.</td>
</tr>
</tbody>
</table>
TABLE 6

Student Acceptance of Open School in Grade 6 and 7, By Attendance at Open or Traditional Elementary Schools

<table>
<thead>
<tr>
<th>Type of Elementary School Attended</th>
<th>Grade</th>
<th>Average Preference for Open School*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>7</td>
<td>2.238 (N=21)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2.619 (N=21)</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>-.381 t=0.77 N.S.</td>
</tr>
<tr>
<td>Traditional</td>
<td>7</td>
<td>2.153 (N=26)</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1.115 (N=26)</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>1.038 t=2.57 p&lt;.01</td>
</tr>
</tbody>
</table>

*Preference for open school is the average response to six items, each scored 1 for acceptance of open school practices and 0 for nonacceptance.
TABLE 7

Standardized Estimates* of Student Preferences for Open School in Grade 6 and 7, By Attendance at Open or Traditional Elementary Schools

<table>
<thead>
<tr>
<th>Type of Elementary School Attended</th>
<th>Grade</th>
<th>Average Preference for Open School</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open</td>
<td>7</td>
<td>2.289</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>2.503</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>-0.214</td>
</tr>
<tr>
<td>Traditional</td>
<td>7</td>
<td>2.103</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>1.143</td>
</tr>
<tr>
<td>Difference</td>
<td></td>
<td>0.960</td>
</tr>
</tbody>
</table>

*Estimates standardized for differences across schools in students' family style, I.Q., sex, race, and number of siblings.
TABLE 8

Summary of Regression of Perceived Differences
Between Elementary and Junior High Classes on Type
of Elementary School Attended, Under Different Control Conditions

<table>
<thead>
<tr>
<th>Standardized Beta (t-statistic)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attended Open Elementary</td>
</tr>
<tr>
<td>Attended Open Elementary,</td>
</tr>
<tr>
<td>given 4 Controls (IQ, sex,</td>
</tr>
<tr>
<td>race, and number of siblings)</td>
</tr>
</tbody>
</table>

*Significance level determined for one-tailed test