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ABSTRACT

The effects of college attendance by working adults on educational motivations of their children were studied. A total of 740 parents in the Detroit area who attended a college program combining in-home televised instruction with weekend decentralized seminars were surveyed along with 211 of their children and 75 respondents from Kansas City. Many of the adults were blue collar workers without previous college experience. Questionnaires and telephone interviews were completed by those who had attended class in union locals and by graduates of the University Studies and Weekend College, Detroit. Parents were asked their opinions about the quality of the education to which they or their children may have access and about the importance of education. They were asked to state the importance of three factors regarding their children at the time they decided to enter college: a desire to be better equipped to help with schoolwork; the wish to encourage children by setting an example; or a need to keep up with children because school subjects have changed. Adults frequently reported that they enrolled in a college degree program to set an example for their children. Parent-child talk about school was consistently related to children's learning attitude and grade changes. Many parents perceived positive changes in the motivation of their offspring, and extensive verbatim statements from parents and children are included as illustration. Effects that were noticed shortly after parents began their college studies included young children pretending to do homework with the parent and young adults deciding to attend college. Blacks reported stronger program effects than nonblacks; graduates perceived more change than noncompleters. Children, especially blacks, reported that their attitudes toward learning were positively influenced by their parents' college attendance. (SW)

Occasional Papers II.2

College Attendance by Working Adults and Its Effects on the Educational Motivations of Their Children

by

Eric Fenster

To Educate the People Consortium

April 1982

COLLEGE ATTENDANCE BY WORKING ADULTS AND ITS EFFECTS ON THE EDUCATIONAL MOTIVATIONS OF THEIR CHILDREN

by

Eric Fenster*

To Educate the People Consortium

April, 1982

This project was initiated in 1979 in observance of the International Year of the Child.

*Discriminant analyses of parents' assessments of their children's "changes in learning attitudes", "caring more about education" and "probable job type" were performed by Katherine Frohardt-Lane.

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Paul Bertelsen, Chief of Adult Education at UNESCO, provided the idea when he encouraged the study of University Studies and Weekend College's impacts beyond the classroom--and especially on the students' children. Sue Smock, Director of the Center for Urban Studies at Wayne State University, was a frequent and enthusiastic consultant who gave direction to the project. Katherine Frohardt-Lane meticulously carried out the discriminant analyses on a number of variables. She bears no responsibility for errors or omissions which may have occurred when I condensed her reports, and certainly not for the analyses I carried out on my own. Dorothy Snell trained and supervised the interviewers of the children. Richard McMann drafted the parent questionnaire and wrote the SPSS file for it. He and Patrice Alpert took on the tedious task of disseminating the questionnaire. The coding of it was supervised by Neva Nahan. Projects associated with University Studies and Weekend College and with the To Educate the People Consortium are always indebted to Otto Feinstein, who established them both. In this instance, he assumed an extra burden of work while this report was being written.

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As a newcomer to social science research, I did not always make the best use of good advice, and the fault for any resulting errors is my own.

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INTRODUCTION

The tendency of parental career and educational attainments to reproduce themselves in offspring is a worldwide phenomenon. Even in the United States, where access to some form of higher education has been largely democratized, the level (two-year or four-year), quality and prestige of the institution attended by a child will often reflect the educational experiences and social status of the parents.

Career level, educational achievement and intellectual atmosphere are, for the most part, pre-existing conditions of the family into which a child is born. They derive from the traditional pattern of completing most education before beginning full-time work and starting a family. This model is changing as adults return to school, not only for continuing (professional maintenance) education and personal enrichment, but to obtain qualifications which may markedly change their place in the job and economic hierarchies. The counterpart in developing countries is the effort to extend to all adults an initial educational experience, that of literacy.

If the scholastic goals and attainments of children and their eventual places in the career pyramid correlate with those of their parents, there is no evidence that this is genetic destiny. On the contrary, at least one careful study has shown that workers' children abandoned at birth and adopted into upper middle class homes (executives) at the age of four months have the IQ's and school success of the social group in which they are raised.[1]

If the potential success of children is not predestined, and if adults are increasingly going to school, how do children respond when they are able to observe their parents undertake an educational commitment later in life and, especially, if their parents succeed at it?

Whatever the level of instruction, it is a common observation--and, again, international--among adult educators that parents tell stories of how their own involvement in formal learning has affected their children,

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[1]Michel Schiff, Michel Duyme, Annick Dumaret and Stanislaw Tomkiewicz, Enfants de Travailleurs Manuels Adoptés par des Cadres, Cahier No. 93, Institut National d'Etudes Démographiques, Presses Universitaires de France, Paris, 1981.

usually positively. This fact has had its most notable practical recognition in Tanzania, where the deliberate intent of adult education policy is to reach children through their parents.

On the occasion of the celebration of the Fourteenth International Literacy Day, the Director-General of UNESCO, Mr. Amadou M'Bow, observed that, "Educated families rarely produce illiterate children," and a message from Pope John Paul II stressed the benefit to children of making their parents literate.[2] In a changing industrial society, the principle may be the same; only the level and kind of "literacy training" in which parents participate in order to best influence their children may be different.

It does seem that emphasis deserves to be placed on modification of the home environment because that is what dominates over the schools in determining children's educational aspirations and attainments.[3] The same appears to hold true for career attitudes. For example, one recent study of working class children in England (of different ethnic origins) "found that variables associated with the home environment dominated as indicators of career attitudes". Those correlations "were higher than those found for variables related to school or to peer group influences".[4]

Unfortunately, awareness of the effects on children whose parents return to school appears, so far, to be only anecdotal. There has been no research on the subject in Tanzania[5] and rumors of such a study in Yugoslavia proved unfounded.[6] Inquiries at UNESCO, the OECD, the Open University and to a number of adult educators also produced negative results.

An ERIC search located one reference, describing how parental participation in adult basic education (ABE) was

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[2]Adult Education Information Notes, No. 4, UNESCO, Paris, 1979

[3]Christopher Jencks, et. al., Inequality, Basic Books, Inc., New York, 1972.

[4]Leo Raby and Geoffrey Walford, "Career Related Attitudes and Their Determinants for Middle- and Low-Stream Pupils in an Urban, Multi-Racial Comprehensive School", Research in Education, No. 25, May, 1981.

[5]Nicholas Kuhanga, Minister of Education of Tanzania, personal communication.

[6]Ranko Bulatović, personal communication.

related to the success of children in primary school.[1] In that study, null hypotheses concerning differences in conduct, attendance and academic achievement of children whose parents were or were not enrolled in ABE could not be rejected, but there were "consistently greater" achievement gains among the children of participants, with a "pattern in the direction of significance", and a similar "trend" in attendance data.

*

The University Studies and Weekend College (USWC) has existed in Detroit since 1973 and is a bachelor's level program designed to make full-time work and full-time pursuit of a degree compatible. Moreover, its recruitment strategy has brought many blue collar workers into higher education for the first time. The curriculum at USWC is delivered by means of daily broadcast television lessons, weekly four-hour seminars and conferences which occupy two full weekends per 11-week term. This volume of learning activity, and the fact that a part of it enters the home, means that other members of the family cannot help but be exposed to the educational endeavor of the student-parent. USWC students therefore seemed to provide a good sample to explore how an adult's entry or reentry into formal higher education might affect the attitudes and/or behavior of his children.

Two instruments were used for this study, a written questionnaire administered to parents and an interview, with closed and open questions, administered to their children. Both documents focus on perceptions of attitudinal and behavioral change. While it was hoped to be able to measure changes in achievement test scores of children, the respondents were dispersed among too many school districts with different testing and record-keeping policies for this goal to be practicable.

This report contains statistical analyses of both surveys, extensive comments by parents and children, comparisons of the responses of the two groups and a supplement describing answers to questions about occupational goals.

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[1] Fred Douglas Johnson, A Study of the Relationship Between Parental Enrollment in Adult Basic Education in Shelby County and Their Children's Achievement, Ed.D. dissertation, University of Tennessee, 1975.

THE PARENT SAMPLE

Sample Selection

In this pilot study, there was no attempt to draw a random sample of USWC students; rather, it was decided to take advantage of the program's uniqueness: its success in attracting large numbers of a group sparsely represented in adult higher education--blue collar workers--who, at one time, constituted two-thirds (over 2,000) of the enrollment.

While students' records do not show job category, the weekly seminar course of the College is taught in locations near the students' places of work or residence and nearly all factory workers attended classes in their union halls. By selecting people who registered for at least one class in such a location, most blue collar workers were identified. Under the assumption that some time would be required for effects on children to occur, the subjects selected were all those who enrolled for at least three academic terms, whether or not contiguous. There was no exclusion of students who failed or did not complete the courses for which they registered.

A second sample drawn from the population consisted of all students who were graduated from the College with their bachelor's degrees (some of whom, of course, overlapped the selection based upon class location).

The USWC degree model is being adopted elsewhere in the United States[4] and a third sample came from Longview Community College in Kansas City, where the PACE Program, a version of the model, has been in operation since 1979. While the questionnaire was mailed to subjects in the Detroit area, in Kansas City it was handed to all students attending a weekend conference course, with the request that it be turned in during that weekend.

There was no control group of adults not attending college. It would have been difficult to constitute one in which the only varying parameter was participation in higher education, and since the intent was to measure perceptions of attitudinal and behavioral change as a result of such participation, a very different instrument would have had to be constructed for such controls.

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[4]The dissemination is effected by the To Educate the People Consortium.

Aside from program design and recruitment methods, the practical fact which permitted workers to attend the university was that most of them were eligible for benefits under the GI Bill (the tuition rate in Michigan public universities being one of the highest in the nation). From June, 1976, when Congress failed to extend the suspension of the requirement that these benefits be used within ten years of separation from military service, many veterans lost their entitlements and withdrew from studies. By virtue of graduation or withdrawal, only 3.7% of the target population in Detroit (as described above) were still students when the questionnaire was mailed and approximately 23% had withdrawn in June, 1976 alone. In contrast, the entire population in Kansas City were current students.

Response Rate

A total of 3,825 questionnaires were mailed to the two groups of parents comprising the population, those who had attended class in union locals and graduates. Most surveys were sent in late September, 1980, but 248 were not mailed until early December because of a flaw in the data base.

The data base contains information on all students who have ever attended USWC (about 11,000) and it is updated each time a student enrolls for classes. The problem is that students near graduation often take extra time to complete a senior thesis. When they finish, credit is awarded for the work, but since this does not entail a new registration their file in the data base is not updated and they are missed when selection of graduates is performed on the basis of credit hours earned. These students were eventually located by manual perusal of student records.

There were 793 questionnaires returned by the post office because of bad addresses, 134 of which came back with address corrections--in which case, the questionnaire was remailed. (Three people were reported as deceased.) Among graduates there were 13.6% bad initial addresses, while among non-graduates this figure was 22.3%--the interest in this being that 71% of the non-graduates were blue collar workers and this mobility may be a measure of dislocation in an area of high unemployment.

Non-respondents were sent a post card reminder several weeks after the first mailing, and a second questionnaire with a letter several weeks after that. After this process there were 2,373 people thought to have received the questionnaire but who had not replied.

From that group, a random sample of 300 was selected for contact by telephone and these people were called in mid-December, 1980 and during the first half of January,

1981. Of these, 114 (38%) were wrong numbers (the people had moved), 41 people could not be contacted, 37 were contacted but refused to answer questions, 97 were contacted and responded to questions and one said he had never attended the college.

Of the 41 people not contacted, there were 23 cases in which the phone was never answered or was busy and it is possible that some among these had moved as well. In 18 cases there was an answer but the student parent was not at home and upon calling back at designated times there was usually no answer. Of the 37 people who declined to answer questions, two said they had no children, two had "no time" and 33 were "hostile".

The results of the 97 telephone interviews are in Table 1, in which the first striking number is the nearly 47% who said they never received the questionnaire. In most respects, those interviewed by telephone resemble the people who returned the questionnaire. First, the reason for non-response was not the absence of children; 94.6% of those interviewed have at least one child, compared to 90.7% among respondents--and the children's age ranges are similar. Furthermore, 82% of people interviewed had children in school while they were attending college, compared to 77% for respondents.

Employment status is also comparable, but there are more blue collar workers in the interviewed group (80% vs 60%). However, graduates responded at a greater frequency than non-graduates and blue collar workers account for 38% of graduates and 70% of non-graduates (among respondents) so that the population from which telephone interviews were selected could have been left with a higher percentage of blue collar workers than the original population. In the end, 24 of the 62 people who said they were willing to return the questionnaire, did so (38.7%).

The total number of completed questionnaires was 817.[1] The first estimate of the response rate is 25.8%, excluding only uncorrected bad addresses from the population. The telephone survey of those non-respondents thought to have received the questionnaire indicated that 38% had not, even though the materials were not returned by the post office (probably because change of address notices had not been filed or had expired). If the telephone sample was representative of all non-respondents believed to have

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[1]One grandmother responded for her grandchildren and these data were not used.

Table 1
TELEPHONE INTERVIEWS (N=97)

	N	%
Did you receive the survey in the mail? (N=94)		
Yes	45	47.9
No	44	46.8
Don't remember	5	5.3
If received, was there a reason for not replying? (N=45)		
Not a parent	0	0
Too complicated/no time	8	17.8
Too personal	4	8.9
Lost/misplaced/forgot	7	15.6
No comment or no reason	20	44.5
Do you wish to discuss reasons with project director? (N=87)		
Yes	0	0
No	20	23
No response	67	77
Do you still have a copy of the questionnaire? (N=77)		
Yes, and will return it	15	19.4
Yes, but will not return it	2	2.6
No, but send another	47	61.0
No, and don't send another	13	16.9
Do you have any children? (N=93)		
Yes	88	94.6
Mean Ages of Children (Mean Number of Children=2.5)		
First child	12.5	
Second child	9.7	
Third child	9.2	
Fourth child (14 families)	12.4	
Any children in school while you were in college? (N=89)		
Yes	73	82.0

Table 1 (continued)

	N	%
Current Employment Status (N=90)		
Housewife	2	2.2
Retired	1	1.1
Employed full-time	74	82.2
Unemployed	7	7.8
Other	6	6.7
Job Category If Employed (N=74)		
Blue collar	59	79.7
White collar	14	18.9
No answer	1	1.3

received the questionnaire, the response rate becomes 35.6%.[10]

This rate accounts for all people who have moved, whether or not known to the post office; but, according to the telephone sample, 46.8% of those for whom there was a correct address did not receive a questionnaire. If this were true, it would bring the response rate to about 50%.[11]

It is an easy matter to claim non-receipt as an explanation for not responding and perhaps some people interviewed did so, but there are other facts worth considering to decide if those claims are valid.

[10]There were 3,825 questionnaires mailed; 817 were completed, 659 were returned as unforwardable, 62 were mailed to people interviewed by telephone and presumed to be received by them on this second mailing. This means there were (3,825-817-659-62)=2,287 non-respondents believed to have received the questionnaire. But 38% of 300 of these people who were called had apparently moved, adding (0.38 x 2,287)=869 non-recipients. The other 62%, 1,418 people, are believed to be recipients, and the total number of recipients is (817+1,418+62)=2,297. The rate of response would then be 817/2,297=35.6%.

[11]Of the 1,418 non-respondents for whom the mailing address is correct, 46.8%=664. If these people did not, for some other reason, receive the questionnaire, the recipient population would be reduced to (2,297-664)=1,633.

1) 50% of the graduates who received the September mailing responded vs. 27% of graduates to whom the questionnaire was first mailed in December. The second group had very few graduated blue collar workers; they had already been detected by class location, not credit hours earned. Since a 1978 survey of graduates produced a response rate over 50%, it is hard to account for this difference unless there were postal problems--perhaps because of the approaching Christmas season.

2) Of the 134 questionnaires remailed with corrected addresses, only six were completed and returned. There is no good explanation for this extremely low rate except, perhaps, non-receipt. Some of the address corrections were not received until four months after the original mailing, so some of the remailings occurred during the Christmas season. In some cases, the second address was also found to be incorrect. As a group, these people differed only marginally from other non-respondents in characteristics known about them from the data base (below). Of the addresses corrected by the post office, only 17% were originally in Detroit proper, while 34% of the addresses of other non-respondents were from the city of Detroit. The meaning of this is not clear, but it could reflect either different habits in leaving forwarding addresses or the efficiency differences among local post offices.

3) There were several aberrant areas. For example, in one cluster of suburbs, only two people of 51 responded and 21 questionnaires were returned because of bad addresses. Of the remaining 28 supposedly delivered, 13 were not listed in the telephone directory published in April, 1981. Of three people contacted by telephone, two were interviewed and they then sent in questionnaires.

4) People who do not leave forwarding addresses (especially when the economy is bad) account for part of the problem, but there has also been a history of postal mishaps. Students often complain they missed certain programs or courses because they did not receive newsletters or brochures, and in two known cases entire mailings disappeared.

Altogether, the known rate of non-receipt from the telephone survey, the fact that some people telephoned but not reached may also represent non-recipients, the very low response rate after address corrections, the difference in response rate by date of mailing, the postal history, the number of people who stated they did not receive the questionnaire and the correlation (see below) between response

and the last date of college attendance suggest that the true response rate may very well be 45-50%.

One other factor is that 66 people in the population were incarcerated when they were students and only six of them returned questionnaires. Apparently, 21 inmates had been released (bad addresses), but prison authorities did not provide any forwarding addresses. If this group were entirely excluded from the calculations, however, it would only change the response rate (positively) by about 1%.

The response rate in Kansas City was 50%. Most questionnaires were turned in the weekend they were administered (May, 1981) and a few were mailed to Detroit.

The second way to compare respondents and non-respondents is to examine the variables available in the original data base of the population of 3,825: total credit hours earned, USWC credit hours, transfer credits, grade average and first and last terms attended. Table 2 shows the correlations between these variables and response to the questionnaire and also the partial correlations controlling for first and last terms at USWC.

From the total population, it would appear that response is related to academic success (hours earned and grades) and to the terms of entry to, and exit from, the College. The effect of credit hours is largely driven by the graduates in the population and, in any case, is substantially reduced when controlled for last term attended. The role of grade average, on the other hand, is not very affected by the entry and exit terms. Inversely (not shown), the correlation of response with the last term attended is reduced to a smaller extent when controlled for credit hours earned.

Three groups of respondents emerge: 1) those who earned less than 36 hours (response rate=9.1%); 2) non-graduates who earned more than 36 hours (response rate=17.8%), and; 3) graduates and near-graduates (response rate=33.9%).[12] The median last terms for these groups are, respectively: Winter 1976, Spring 1977, and Winter 1979.

It remains to determine whether the respondents reflect the socioeconomic makeup of the population. With respect to last term attended, the highest response rate between summer, 1975 and spring, 1978 occurs in spring, 1976, the term known to be the last for many blue collar workers who lost VA benefits.

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[12]Rates before any adjustments for bad addresses.

Table 2
RETURN OF QUESTIONNAIRE CORRELATIONS*

	Credit Hours Earned			Grades	Term	
	total	at USWC	transfer		first	last
TOTAL POPULATION (N=3835)						
Pearson's R	0.221	0.193	0.130	0.175	0.129	0.198
P≤	0.000	0.000	0.000	0.000	0.000	0.000
Partials by:						
First term	0.200	0.185	0.100	0.160		
P≤	0.000	0.000	0.000	0.000		
Last term	0.121	0.080	0.085	0.139		
P≤	0.000	0.000	0.000	0.000		
STUDENTS EARNING LESS THAN 36 HOURS AT USWC (N=427)						
Pearson's R	-0.003	.....	-0.003	0.073	0.093	0.149
P≤	0.472	.....	0.477	0.066	0.027	0.001
Partials by:						
First term	-0.023	.....	-0.018	0.061		
P≤	0.316	.....	0.359	0.106		
Last term	-0.052	.....	-0.041	0.054		
P≤	0.141	.....	0.201	0.132		
NON-GRADUATES WHO EARNED AT LEAST 36 HOURS AT USWC (N=2657)						
Pearson's R	0.081	0.072	0.040	0.117	0.060	0.075
P≤	0.000	0.000	0.002	0.000	0.001	0.000
Partials by:						
First term	0.077	0.071	0.033	0.113		
P≤	0.000	0.000	0.045	0.000		
Last term	0.045	0.032	0.030	0.117		
P≤	0.011	0.052	0.062	0.000		
GRADUATES AND NEAR GRADUATES (N=751)**						
Pearson's R	.....	0.059	-0.058	0.082	0.137	0.170
P≤	.....	0.054	0.057	0.012	0.000	0.000
Partials by:						
First term	.....	0.100	0.102	0.074		
P≤	.....	0.003	0.003	0.021		
Last term	.....	-0.003	0.002	0.097		
P≤	.....	0.470	0.479	0.004		

*Residence (USWC) hours for those who earned less than 36 and total hours for graduates are omitted since there is so little variation in both circumstances.

**Near graduates had earned at least 169 of the 180 hours required for completion.

The socioeconomic characteristics of the non-respondents are otherwise unknown, but among all respondents the median entrance and exit times of white collar workers follow those of people with blue collar jobs by about five months. However, the median term of graduation is the same for both job categories and so any suggestion that the effect of the last term attended is to skew the sample by job category is mitigated. Furthermore, in a selection of zip codes across which there was a two-fold difference in response rates, there was no pattern to indicate that this difference could be explained by job category, race, graduation or even bad addresses detected by the post office.

The data seem to permit the conclusions that academic success slightly favors response (with grade average more important than hours earned), that recent students are more likely to respond (and this may be a function of the successful delivery of the questionnaire), that non-respondents did not differ in not having children and that there is no solid evidence that any socioeconomic group was more likely to respond than another. In short, while the response rate could be higher, the sample is probably a reasonable reflection of the population (except that graduates are over-represented, but this is a variable which can be controlled during analysis).

Sample Profile

Of the 816 people who answered the questionnaire, 740 have children and are profiled in Table 3. Nine in ten are men and one-fifth of the sample are blacks;[13] among women, the proportion of blacks and graduates is greater than among men. About 20% of the people in the sample classify themselves as European ethnics (white) and about 6% as southern whites. All are grouped as "non-black".

The women tend to be in job category "6" (often in public employment) or to do clerical work and they are more likely than the men to have spouses with postsecondary education. One-third of the women are divorced or separated, compared to 7% of the men.

The sample is 60% blue collar. Already at the time of this survey, over 14% of the blue collar workers were unemployed--and more than 19% of blacks in that job category, a figure which was 22.7% for black men.

More than one-third of the graduates hold blue collar jobs, a fact worth pointing out because it is a current

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[13]Less than 2% of the sample is Chicano, Arab or Native American.

Table 3
PROFILE OF RESPONDENTS
(having at least one child: N=740)

	Total Sample	Type of Job*						Race		Sex		Graduate	
		1	2	3	4	5	6	black	non-black	male	female	yes	no
SEX													
Male	90.8	96.1	100.0	80.5	91.7	85.7	80.5	78.0	93.7	...	....	80.4	96.1
Female	9.2	3.5	0	19.5	8 3	14.3	19.5	22.0	6.2	....	...	19.6	3.7
RACE													
Black	19.5	20.6	14.9	26.3	25.7	10.6	20 5	...	..	16.0	46.3	21 9	18.3
Non-black	80.5	79.4	85.1	73.7	74.3	89.4	79 5	....	.	83 2	53.7	78.1	81.7
MARITAL STATUS													
Single	1.4	1.6	0	3.9	0	0	1.6	5.0	0 5	1 0	4 5	1.6	1.2
Married	88.2	89 8	92.7	80.5	80.6	89 8	87.8	78.0	90.7	91.8	52.2	85.3	89.6
Separated	2.4	2.4	2.4	1.3	5.6	2.0	1.6	4.3	2.1	2.7	0	3.6	1.9
Divorced	6.9	6.3	4.3	11.7	11.1	6.1	8.1	11 3	5.7	4 2	34.3	7 9	6.4
Widowed	1.1	0	0.6	2.6	2.8	2.0	0.8	1.4	1 0	0.3	9.0	1.6	0.8
OCCUPATIONAL STATUS													
Homemaker	2.2	0.4	2.5	1.3	0	2.1	0.9	0.7	2.6	1 5	9 1	3.2	1.7
Retired	1.4	0.4	0.6	6.5	0	0	0.9	3.0	1.1	0.8	7 6	2.8	0.6
Employed	85.6	83.7	84.4	90.9	91 4	95.8	92.3	76.9	87.7	86.4	77.3	83.9	86.5
Unemployed	10.8	15.4	12.5	1.3	8 6	2 1	6.0	19 4	8.6	11.3	6.1	10.1	11.2
TYPE OF JOB*													
1	36.2	.. .	.....	....	..	....	....	38.5	36.0	37 9	15.5	22.1	43.3
2	23.4	....	.....	....	. ..	....	....	17.8	24 5	25.5	0	14.5	27.7
3	10.9	....	.....	....	....	....	....	14.8	10.0	9 6	25.9	14.9	9.0
4	5.1	....	.....	....	....	. .	. .	6.7	4.7	5.1	5.2	8.5	3.4
5	7 0	.. .	....	.. .	....	...	....	3.7	7.5	6.5	12.1	6.8	7.0
6	17.4	....	.....	....	....	....	....	18.5	17.4	15 3	41.4	33.2	9.6
UNION MEMBERSHIP													
Yes	65.8	92.1	79.4	45.5	48.6	33.3	30.1	69.8	65.0	68.4	39.4	45.2	76.5
GRADUATE OF THE COLLEGE													
Yes	34.5	20.4	20.6	45.5	55 6	32.7	63.4	38.3	33.3	30 6	73.5	....	...

Table 3 (continued):

	Total Sample	Type of Job*						Race		Sex		Graduate	
		1	2	3	4	5	6	black	non-black	male	female	yes	no
HIGHEST EDUCATION OF SPOUSE													
Some high school .	13.4	15.9	15.3	8.5	14.7	6.7	11.9	13 5	13.2	12.9	17.6	12.2	14.0
High school .	48.5	54.8	53.5	43.7	38.2	46 7	36 4	34 1	52.4	50.5	23.5	37.4	54.3
Some college .	25.2	21.3	24.2	33.8	29.4	20.0	28.8	32.5	23.3	25.3	23.5	28.2	23.6
College degree or higher . .	12.7	7.6	7.0	14.1	17 6	26 7	22 9	19.8	11.1	10 9	35 3	22.2	7.7
WILLINGNESS TO BE INTERVIEWED													
Yes	40.8	37.9	33.1	46.8	46.7	35.0	53.8	53 9	37.7	39.0	60 4	52.8	34.5

*Types of jobs. 1=unskilled, semi-skilled blue collar and pink collar, 2=skilled trades, 3=clerical, 4=sales and service (including security jobs), 5=technical, 6=other white collar (social workers and counselors, supervisors, businesspersons, etc.). The first two are combined in other tables as "blue collar", the last four are combined as "white collar". These classifications are not exact because of compression into just six categories and some assignment errors may have occurred because there were several coders.

Some variables are used in this table as both dependents and independents. Thus, 20.4% of type 1 job holders in the sample are graduates but 22.1% of the graduates have job type 1. Note that one can add percentages vertically but not horizontally.

status, even after earning a degree. Of the non-graduates, about 80% stated they were forced to withdraw because they lost veterans' benefits and most of the rest had other financial difficulties; only 4% decided they didn't want a degree and about 80% would like to return. Among blue collar workers, 77% transferred only 0-11 credit hours into USWC (generally credit allowed for learning experiences during military service). In other job categories, 33-49% of the students transferred this number of credits.

When reading the results of this study, it is important to keep in mind that for many of the respondents, USWC was their first experience in higher education, that a majority were kept from completing it and that many of the graduates did not see their degree translate into job mobility.[14]

There are about 1,850 children in the families of the respondents and 1,550 still lived at home at the time of the survey. The mean number of children is 2.48 and the mean number at home was 2.27. The distribution of family size is shown in Table 4.

Table 4
FAMILY SIZE

	Number of Children (per cent of families)						
	0	1	2	3	4	5	6+
In the family	...	15.2	43.9	24.9	10.3	4.2	1.5
Living at home	8.8	17.5	43.4	21.0	6.8	1.6	1.0

Some questions requested answers for each of the first four children. Age distribution by birth order is in Table 5, presented for both ages at the time of the survey and at the time the parent last attended USWC. Respondents have been out of college from 0-5 years and so answered questions about children whose last experience having a parent in college was up to that long ago. Besides the time lag, children will have passed through age ranges in which maturity and awareness change markedly.

[14]Nor was this the motivation for most blue collar workers. (Eric Fenster, unpublished survey of graduates.)

Table 5
AGES OF CHILDREN IN SAMPLE*

Birth Order	Age Group N in 1980/N When Parent Left College (% in 1980/% When Parent Left College)						Total N's
	0-5	6-11	12-17	18-23	24-29	30+	
First	89/138 (12.3/19.1)	270/325 (37.2/45.1)	200/162 (27.5/22.5)	114/57 (15.7/7.9)	37/39 (5.1/5.4)	16/- (2.3/-)	726/721
Second	160/226 (25.9/37.4)	226/214 (36.6/35.4)	123/105 (19.9/17.4)	75/35 (12.2/5.8)	25/24 (4.1/4.0)	8/- (1.3/-)	617/604
Third	82/109 (27.9/38.5)	101/91 (34.4/32.2)	58/47 (19.7/16.6)	33/21 (11.2/7.4)	15/15 (5.1/5.3)	5/- (1.7/-)	294/283
Fourth	32/43 (26.9/36.8)	27/34 (22.7/29.1)	37/20 (31.1/17.1)	15/12 (12.6/10.3)	5/8 (4.2/6.8)	3/- (2.5/-)	119/117
Total N's	353/516	624/664	418/334	237/125	82/86	32/-	1756/1725

*Age data is available only for the first four children per family. When parents are asked general questions about their children, they may be responding for subsequent children as well. Data for ages when parent left college: 0-5=unborn to 5; all children 24 and over are grouped. Some missing data accounts for the difference in N's. Percentages should be added horizontally.

Table 6 reveals the importance of these shifts among all the children in the sample from both ages at parents' college entry and exit, to the present. Attention is called to the fact (see, totals) that nearly half of all children were under five (or unborn) when their parents began school, 30% were still so when the parent left college and 20% were in that age group at the time of the survey.

Table 6
SHIFTS OF CHILDREN BETWEEN AGE GROUPS

If Current Age Is:	Age Distribution When Parents Entered College (When Parents Left College)				
	up to 5	6-11	12-17	18-23	24+
0-5	100 (100)				
6-11	70.8 (29.3)	29.2 (70.7)			
12-17		85.2 (53.5)	14.6 (46.5)		
18-23			82.3 (59.1)	17.7 (40.9)	
24-29				76.8 (34.1)	23.2 (65.9)
% at: Entry	46.8	31.2	14.8	6.1	1.1
(Exit)	(30.4)	(39.2)	(19.7)	(7.4)	(3.2)
Now	19.9	36.5	24.4	13.9	4.8

Age transitions--and these are exacerbated by being multiple within each family--represent only one complicating factor. Others include heterogeneity in the number of years the parent studied, in the time of overlap when parent and child were both in school (and whether the child's schooling began or ended the overlap) and in the time from when the parent left college to 1980. The number of permutations of these factors is substantial.

Notes on Reporting

Seven questions, in which missing values ranged from 6-8% of the responses, were checked for any pattern which might skew results. The primary reason for which answers were not given appears to be that the parents felt the children were too young (and sometimes too old) for the effects being measured to be appropriate (e.g., changes in grades, reaction to the parent being in college). If the oldest child is of school age, the missing response rate was only 1-3%. There was no consistent pattern linking job category, race or graduation of the parent to missing values. In the absence of any apparent bias, missing values were excluded from all computations. So, too, in general, were the responses, "does not apply".

Some results are reported using the multiple response procedure of SPSS (as was the case in Table 6) to demonstrate data for all children regardless of birth order. The paired option was used when two multiple response groups were compared (again, Table 6) so that each subject (child, not parent) appears only once in the table. Percentages are based on responses; that is, they are to be read as the per cent of children who exhibit a certain characteristic. This procedure has the advantage of condensing information and of allowing inclusion of data which would otherwise suffer from small N's in a crosstabulation with several categories. For example, there were few fourth-born children and it would be difficult to treat them separately and use control variables. It is recognized that the method sacrifices the independence of observations (a given parent may contribute more than once to the same table), but there is evidence that parents are evaluating their children discretely. This evidence, and birth order effects, are treated elsewhere in detail. The other disadvantage is that no statistics can be computed from the output of the multiple response procedure.

Unless otherwise indicated, all values reported in tables are percentages. Tables are often compiled from many crosstabulations and identifying all N's became impractical. When N is low, this fact is usually noted in the narrative or in a table footnote.

The variables: general attitude toward school and learning, conduct in school and grade average, are referred to collectively as "static" variables. Those such as: change in attitude toward learning or change in grades, are called "change variables".

Rather than giving proper names to variables (and requiring a glossary), the names are written into the narrative. Since a strict wording is not respected, the variables (or value labels of variables) are often identified for clarity by being written in *script*.

QUESTIONNAIRE RESPONSES AND PRIMARY ANALYSIS

Opinions about Education

In the first section of the questionnaire, parents were asked their opinions about the quality of the education to which they or their children may have access and about the importance of education. Table 7 presents the results for both the total sample and after controlling for race. Except as mentioned below, job category and graduation status did not affect the answers.

More than half the sample feels local schools are good to excellent, but blacks take a dimmer view and they are much more likely to believe their schools are short of money. This distinction in judgement does not apply to the quality of Michigan's colleges; however, graduates give the colleges a higher rating (R=0.15) than non-graduates. Blacks are more convinced than non-blacks of the importance of doing well in school (R=0.15) and of going to college (R=0.21) to success in later life. These data suggest motivations for subsequent data on responses according to racial background. Graduates somewhat share the opinion concerning college (R=0.12), but blue collar workers tend to the opposite view (R=-0.11, compared to white collar workers), a correlation which drops somewhat (R=-0.08) after controlling for graduation.

Much later in the questionnaire, parents were asked if they felt more inclined to vote for school bonds since attending college. One-third said "yes" (Table 8), not especially because of the quality of the schools or of how well or poorly their children were doing in them (no significant correlation with grade averages), but according to the financial status of the schools, belief in the importance of school and, most significantly, in line with the changes in educational attitudes of their children as a result of the parent's going to college. Blacks were more likely to give increased support for schools bonds (R=0.18) and veterans who were unable to complete college, less likely.

This information on an effect of college attendance is introduced prematurely, but it shows that people are willing to act on their opinions and do so on both objective grounds (financial need) and as a function of impact the College has had on them.

Table 7
OPINIONS OF RESPONDENTS

Rating	Total Sample	Race	
		black	non-black
EDUCATION QUALITY IN LOCAL SCHOOL DISTRICT			
Excellent	13.3	5.0	15.5
Good	41.0	31.9	42.7
Fair	27.5	38.3	25.3
Poor	15.2	21.3	13.6
Don't know	3.0	3.5	2.9
EDUCATION QUALITY IN MICHIGAN'S COLLEGES			
Excellent	26.7	31.2	25.6
Good	58.2	58.0	58.2
Fair	9.3	8.0	9.6
Poor	0.5	0	0.5
Don't know	5.3	2.9	6.0
FINANCIAL SITUATION OF LOCAL SCHOOL DISTRICT			
Needs more money .	34.2	57.9	28.9
Has enough money .	50.3	27.1	55.7
Has too much money	5.4	1.4	6.4
Don't know	10.0	13.6	9.1
IMPORTANCE OF CHILD'S SCHOOL PERFORMANCE TO SUCCESS IN LATER LIFE			
Very important . .	71.0	87.9	67.6
Fairly important .	26.8	8.5	30.7
Not very important	2.2	3.5	1.7
Not important . .	0	0	0
IMPORTANCE OF COLLEGE EDUCATION TO SUCCESS IN LIFE			
Very important . .	49.9	70.5	44.8
Fairly important .	44.3	28.8	48.8
Not very important	4.7	0.7	5.6
Not important . .	0.8	0	0.9

Table 8
GREATER WILLINGNESS TO VOTE FOR SCHOOL BONDS
AFTER BEING IN COLLEGE

Rating of Variable	Yes
LOCAL SCHOOL QUALITY	
Excellent	33.7
Good	36.9
Fair	37.7
Poor	20.8
MONEY NEEDS OF LOCAL SCHOOLS	
Needs more	50.2
Has enough	26.8
Has too much . . .	11.1
IMPORTANCE OF SCHOOL TO SUCCESS IN LIFE	
Very important . .	38.9
Fairly important .	24.2
Not very important	0
IMPROVED LEARNING ATTITUDE OF OLDEST CHILD*	
Much improved . .	55.2
Improved	37.5
Not affected . . .	26.8
LOSS OF VA BENEFITS FORCED WITHDRAWAL FROM COLLEGE	
Yes	29.8
No	38.9

*As a result of the parent attending college. Results were similar for children two to four.

School-Related Data on Children

The parents' perceptions of their children's school attitudes, conduct and grades are presented in Table 9, controlled for children's ages, race and the job category and graduation status of the parents.

Table 9
HOW PARENTS CHARACTERIZE CHILDREN'S SCHOOL PERFORMANCE

Assessment by Parents	Total Sample	Age Group				Graduate		Race		Job Category	
		0-5	6-11	12-17	18-23	yes	no	non-black	black	blue collar	white collar
ATTITUDE OF CHILDREN TOWARD SCHOOL AND LEARNING											
Excellent	40.3	50.4	41.2	34.1	38.0	42.8	39.0	35.2	41.8	39.0	42.2
Good . .	39.3	42.0	42.0	37.3	37.0	38.1	39.9	43.5	38.1	39.5	38.3
Fair . .	15.2	6.9	13.1	20.3	18.5	14.3	15.7	16.2	15.0	15.4	15.4
Poor . .	5.2	0.7	3.7	8.2	4.9	4.8	5.4	5.1	5.2	6.2	4.0
CONDUCT OF CHILDREN IN SCHOOL											
Excellent	39.4	35.4	41.2	39.9	38.0	38.4	40.0	34.4	41.0	38.2	41.2
Good . .	42.8	57.6	45.6	36.5	34.6	43.8	42.3	41.0	42.7	43.7	40.8
Fair . .	13.9	6.9	11.4	17.0	21.4	13.1	14.4	20.3	12.6	14.7	13.4
Poor . .	3.8	0	1.8	6.6	6.0	4.7	3.4	4.3	3.7	3.4	4.5
GRADE AVERAGES OF CHILDREN											
A	23.8	24.1	28.4	21.8	18.7	26.1	22.7	18.0	25.5	22.6	26.0
B	49.4	68.4	51.6	44.7	45.1	46.7	50.8	44.3	50.3	50.7	47.1
C	23.1	7.6	18.4	27.9	28.9	24.3	22.4	33.0	20.7	22.5	23.7
D	3.7	0	1.7	5.6	7.2	2.9	4.1	4.7	3.5	4.3	3.1

There are no differences of great magnitude among the control variables, but there are trends toward poorer *attitudes toward learning*, poorer *conduct* and poorer *grades* with age, and the end of primary school seems to be the turning point. Blacks evaluate *conduct* and *grades* more negatively than non-blacks. Parents do not, however, differ in their perceptions according to job category and graduation status.

Except that parents were to estimate past grade averages of children now out of school, these are current observations; that is, they are meant to have reckoned with the changes contributed by college attendance. This question will be addressed after the change variables have been introduced.

A general question was asked about the *chances of all children going to college* (Table 10). Among all the respondents, 80% think all or some of their children will attend college and hardly any think none will. The optimism runs more strongly among graduates, blacks and white collar workers. Looking only at graduates, the percent believing all children will attend college rises to 65% for blacks and 52% for non-blacks, and to 59% for white collar workers and 47% for blue collar. Of course, these answers are not entirely speculative because many of the parents have children who have attended college.

Table 10
EXPECTATIONS THAT CHILDREN WILL GO TO COLLEGE

Parent believes:	Total Sample	Graduate		Race		Job Category	
		yes	no	black	non-black	blue collar	white collar
All will go	45.2	54.2	40.5	58.6	42.3	40.4	52.9
Some will go	35.0	32.2	36.6	25.7	37.0	36.1	33.3
None will go	2.1	1.2	2.5	1.4	2.3	2.4	1.4
Don't know .	17.7	12.4	20.4	14.3	18.4	21.1	12.3

Job Prospects of the Children

The parents were presented with a list of six types of occupations (and several examples of each) and asked to state which job category they would prefer and which they thought probable for each of their first four children.

The responses (Table 11) are a confrontation of desire with reality. A professional level job is wished for more than half the children, but just over one-fourth are seen likely to achieve this. Even the preferences are adjusted with age, dropping off for children over five, and more significantly as the working age is reached. Graduates and white collar workers have greater hopes and expectations. It is curious that despite the growth of the tertiary sector almost no parents wish their children to work in sales and service jobs.

Perhaps the most extraordinary result here is that blacks and non-blacks express both identical preferences and probabilities, something which could hardly have been expected even a few years ago. This is true regardless of the jobs held by the parents. In fact, blacks who are blue collar workers are somewhat more likely to think their children will have technical (32.5% of children) or professional (26.5%) jobs than non-blacks in the same job category (technical=28.3%; professional=23.4%), while blacks who are white collar workers are less likely to see their children as becoming professionals (24.8% of children) than non-blacks who have white collar jobs (32.3%).

Expectations and Outcomes of College Attendance

Parents were asked to state the importance of three factors regarding their children at the time they decided to enter college: 1) a desire to be better equipped to help with schoolwork; 2) the wish to encourage children by setting an example; 3) a need to "keep up" with children because school subjects have changed. These were general questions and were not applied to each child in the family. The responses are in Table 12.

Half the sample saw some importance in *being able to help their children*, fully 70% wanted to *set an example* and over 40% admit to *wanting to "keep up"* with their children. Interestingly, graduates were less motivated by the first and third items--perhaps their own success made them feel already competent--but they were more likely than non-graduates to feel very strongly about being an example. Blue collar workers seem more inclined to the first and third items, but the difference with white collar workers is not large and it is diminished when controlling for graduation. On the other hand, differences by race are more marked, they apply to all three questions and they persist when controlled for graduation.

The parents were then asked about changes which occurred with respect to one or more of their children after studies in USWC had commenced (Table 13). The strongest positive response came on the question about *increased*

Table 11
HOW PARENTS SEE THE WORKLIVES OF THEIR CHILDREN

Job Category	Total Sample	Age Group				Graduate		Race		Parent's Job Type	
		0-5	6-11	12-17	18-23	yes	no	black	non-black	blue collar	white collar
JOBS PARENTS PREFER FOR THEIR CHILDREN											
Unskilled/ semi-skilled	1.3	0.3	0.7	2.7	1.8	0.9	1.6	2.2	1.1	1.9	0.6
Skilled trades . . .	11.8	9.9	7.8	14.3	20.6	8.7	13.5	11.1	11.7	13.8	8.8
Office/ clerical . .	4.4	3.8	3.7	2.7	9.2	2.6	5.3	3.5	4.6	5.2	2.9
Service/ sales . . .	2.2	2.4	1.8	1.5	1.3	2.6	2.0	2.9	2.1	2.0	2.2
Technical	26.8	19.1	28.5	28.1	30.3	25.0	27.7	28.3	26.4	28.3	24.0
Professional	53.5	64.5	57.5	50.7	36.8	60.2	49.9	52.1	54.2	49.0	61.5
JOBS PARENTS THINK PROBABLE FOR THEIR CHILDREN											
Unskilled/ semi-skilled	7.9	4.9	5.2	9.0	14.8	6.0	9.0	10.0	7.2	9.1	6.3
Skilled trades . . .	20.1	20.5	20.2	23.3	16.2	17.2	21.7	18.3	20.6	23.9	14.8
Office/ clerical . .	9.0	11.9	9.2	5.8	10.5	6.8	10.3	9.0	9.0	10.0	7.7
Service/ sales . . .	5.8	3.7	5.6	6.3	6.7	6.2	5.6	3.5	6.4	4.7	7.2
Technical	30.2	26.5	35.3	26.7	27.6	29.9	30.3	32.5	29.5	28.7	32.2
Professional	26.9	32.5	24.5	28.8	24.3	33.9	23.1	26.6	27.3	23.6	31.8

This table combines data for all children in the sample.

Table 12
INTENTIONS OF PARENTS WHEN DECIDING TO ENTER COLLEGE

Importance	Total Sample	Graduate		Race		Job Category	
		yes	no	black	non-black	blue collar	white collar
TO BE BETTER ABLE TO HELP CHILDREN WITH SCHOOLWORK							
Very . .	20.3	16.8	22.1	37.2	16.3	23.5	16.1
Fairly .	29.3	24.1	32.0	37.2	27.6	29.0	29.1
Not very	50.4	59.1	45.9	25.6	56.0	47.5	54.8
TO ENCOURAGE CHILDREN BY SETTING AN EXAMPLE							
Very . .	37.3	43.9	33.9	57.5	32.8	35.2	39.6
Fairly .	32.2	28.7	34.1	24.4	33.9	35.7	27.2
Not very	30.5	27.4	32.1	18.1	33.2	29.1	33.2
TO "KEEP UP" WITH CHILDREN							
Very . .	14.7	9.9	17.3	27.9	11.7	17.8	10.1
Fairly .	27.2	24.0	29.0	32.0	26.3	29.5	25.3
Not very	58.2	66.1	53.7	40.2	61.9	52.7	64.6

parent-child conversation about school matters (63.5%: "yes") and nearly half of the parents said they were *more able to help with schoolwork*, that their children *care more about education* and that they feel *more respect from their children*. A minority said there was *grade competition* between the generations or that the children had *changed career goals* in response to the parent having gone to college.

Being a graduate seemed to elicit a somewhat stronger response for a few variables (*caring more*, *respect* and *competition*); job category did not seem to matter much. Again, however, the consistent differences were exhibited by race, with blacks always reporting more affirmatively. Mindful of the fact that 22% of the blacks in the sample are women, all these variables and the ones in the previous table were controlled for sex of the respondent when partial correlations with race were calculated. There were very slight effects on a number of the variables, but the only ones to be meaningfully affected were respect for the parent, and new career goals of the child.

Table 13
EFFECTS OF COLLEGE ATTENDANCE REPORTED BY PARENTS
(per cent answering, "yes")

After I began to study:	Total Sample	Graduate		Race		Job Category	
		yes	no	black	non-black	blue collar	white collar
My children seemed to care more about education because of my example . . .	45.2	52.2	41.7	54.0	43.2	44.3	45.8
I was better able to help my children with their schoolwork	46.5	47.0	46.4	70.5	41.0	48.8	41.8
My children and I talked more about what they learn in school	63.5	66.7	62.1	78.2	60.1	63.9	62.5
My children began to "compete" with me to get good grades	20.7	31.4	15.2	31.0	18.5	16.3	25.6
My children seemed to respect me more because of my going to college . . .	46.1	53.7	42.2	59.8	43.7	44.9	48.6
My children seemed to be changing their occupational or career goals .	17.0	19.0	16.0	26.5	15.2	14.8	20.6
I found I was more inclined to vote in favor of school bond issues . . .	34.2	35.9	33.4	52.4	30.5	35.8	31.8

In three other questions about changes, parents were to respond for each of their (first four) children. The first question requested an assessment of the net *reaction of the child to the parent being in college*, balancing positive and negative repercussions (e.g., respect vs. resentment of the time demands of study). The data (combined for all children) in Table 14 are controlled as before for graduation, race and job category. Since the answers were child-specific there is also a control for age; and because the interest here--unlike the questions about attitudes, conduct and grades--is to observe effects of college, the data are compiled for the children's current ages and also their ages when the parent began and terminated studies.

Positive reaction is reported for 63% of the children and the magnitude increases with age, as seen most clearly in the trend of children ranked, "very positive". The positive reactions of even the youngest children are more pronounced when classified according to ages at the parents' college entrance or exit. Graduates and blacks report more very positive and fewer neutral reactions than non-graduates and non-blacks, respectively, so again there is the now familiar link with race and a more clear sign that the academic success of the parent is (in their eyes) finding a response in the children. Blue collar workers claim a somewhat lower degree of positive reaction than white collar workers. Most of that difference is contributed by assessment of children after the first-born, and the difference is diminished after controlling job category by graduation.

For all the competition that a heavy educational commitment could be expected to pose to other aspects of family life, including time to attend to the children, there are remarkably few children who are said to have reacted negatively.

Table 15 turns to changes involving the children's education. Parents were asked how their enrollment in college affected their children's attitudes toward learning and their grades in school.

About 42% of all children were said to have improved their attitudes and, among those scored as "much improved", there was again age-dependence. Graduates and blacks are even more affirmative than for the previous variable, while the blue collar/white collar difference, although in the same direction, is less distinct. To the extent that it exists, it is still eliminated by controlling for graduation.

When the effect on grades is assessed, the percentage of children said to have improved drops to 29%, very few are

Table 14
HOW PARENTS THINK CHILDREN REACTED TO THEIR BEING IN COLLEGE

Assessment by Parents	Total Sample	Children's Ages current (when parent entered college) [when parent left college]				Graduate		Race		Job Category	
		0-5	6-11	12-17	18-23	yes	no	black	non-black	blue collar	white collar
Very positive	26.8	9.5 (16.9) [12.2]	19.9 (26.3) [23.9]	29.6 (35.7) [30.7]	36.3 (49.5) [45.1]	36.5	21.5	40.8	23.5	20.6	34.0
Positive	36.2	20.7 (34.0) [27.0]	41.8 (40.8) [42.7]	37.9 (37.3) [38.0]	36.8 (38.8) [36.9]	35.3	36.7	36.0	36.2	38.2	33.5
No reaction	32.5	62.5 (44.3) [55.1]	33.3 (29.1) [28.5]	28.8 (22.5) [27.7]	23.1 (11.7) [13.9]	23.3	37.5	22.0	34.9	36.5	28.0
Negative	4.4	7.4 (4.8) [5.7]	5.0 (3.8) [4.9]	3.6 (4.4) [3.6]	3.8 (0) [0]	4.9	4.2	1.3	5.3	4.6	4.3

Table 15
EFFECTS OF COLLEGE ATTENDANCE ON ATTITUDES AND GRADES

Degree of Change	Total Sample	Children's Ages current (when parent entered college) [when parent left college]				Graduate		Race		Job Category	
		0-5	6-11	12-17	18-23	yes	no	non-black	black	blue collar	white collar
CHILDREN'S ATTITUDES TOWARD LEARNING											
Much improved	12.6	6.2 (8.5) [5.3]	10.0 (12.6) [12.1]	14.4 (14.6) [15.4]	15.3 (26.5) [21.5]	17.3	10.0	26.2	9.6	10.8	14.6
Improved	29.1	17.8 (25.3) [19.2]	30.2 (34.3) [33.2]	31.5 (29.7) [28.4]	30.1 (20.4) [37.2]	37.1	24.7	35.4	27.6	28.5	29.6
Not affected	58.1	76.0 (66.1) [75.5]	59.6 (52.9) [54.4]	53.8 (55.3) [55.9]	54.1 (43.1) [41.3]	45.6	65.0	38.0	62.7	60.5	55.6
CHILDREN'S GRADES IN SCHOOL											
Much improved	6.5	5.2 (5.7) [4.6]	5.7 (5.3) [5.0]	4.3 (8.2) [7.1]	10.0 (11.7) [11.4]	9.8	4.8	14.4	4.8	5.0	8.0
Improved	22.3	5.2 (19.5) [12.6]	21.6 (25.1) [23.1]	27.3 (21.3) [24.8]	18.5 (24.7) [23.8]	27.5	19.6	30.9	20.5	23.1	21.8
Not affected	70.3	89.7 (74.0) [82.9]	62.0 (68.6) [70.6]	67.3 (69.7) [67.1]	70.7 (63.6) [64.8]	62.0	74.7	53.5	74.0	71.4	68.9

classified as "much improved" and the age dependence is slight. Academic success of the parents and racial background remain important, but the job category differences are gone.

The age dependence of the children's reactions to the parent being in college and of their attitudinal changes is of interest, in part, because of its direction: adult children are said to be more affected than those of school age. It also appears that as one moves closer to the period when the parents were in college (by grouping the children according to their ages at entrance and exit), the impacts increase for the younger children. It is important to know how early children can be affected by their parents' educational endeavors and it takes no prodigious feat of intuition to assume that a child who was six when the parent was in college will manifest greater consequences than one who is six now and whose parent stopped school some years ago. Unfortunately, few parents in this sample are still in school, so a contemporary college-child interaction cannot be measured and the only recourse is manipulation of the ages.

There is a problem in doing this, of course, in that the resulting data as so far presented are contaminated because the percentages shown for each age group, constructed according to the college entry or exit of the parent, are a hybrid of the contributions of children still in that age group and those of children who, today, are in the next highest age bracket. Since effects appear to increase with age, the latter group will inflate the apparent results "downstream" from their current age to an extent which is a function of whether the parent is answering the questions for the child as of the present, or as of the period when the parent was closer to the college experience. In order to resolve the two contributions, the data were recalculated controlling for the current age groups of the children, and are presented in Tables 16 and 17.

The first kind of information which can be obtained is a measure of the "contamination" described above. For any age group at any current age, that contribution is made by the data on the children immediately below (in the next current age bracket) on the table. Thus, for example, children who were 0-5 when the parent entered or left college, but are now 6-11, are said to have reacted more positively than children who were (and still are) 0-5 at the time of entrance (or exit)--and, ipso facto, the corresponding percentages in Tables 14 and 15 (for children 0-5 at college entry or exit) are "inflated" by the contribution of children no longer 0-5.

Table 16
EFFECT OF AGE ON HOW CHILDREN REACT TO PARENTS GOING TO COLLEGE

Reaction to College	Children's Ages: When Parent Entered College					When Parent Left College				
	unborn to 5	6-11	12-17	18-23	24 up	unborn to 5	6-11	12-17	18-23	24 up
CHILDREN NOW 0-5										
Very positive	9 6					10.0				
Positive .	20.9					21.5				
No reaction .	63.0					61.8				
Negative . .	6.5					6.8				
Distribution	100.0					100.0				
N	230					220				
CHILDREN NOW 6-11										
Very positive	18.7	23.0				15.3	21.9			
Positive . .	40.5	45.5				34.4	45.1			
No reaction .	36.5	26.4				47.2	27.9			
Negative .	4.3	5.1				3.1	5.1			
Distribution	70.1	29.9				27.5	72.5			
N	417	178				163	430			
CHILDREN NOW 12-17										
Very positive		28.0	40.4				28.5	31 1		
Positive . .		38.3	36.8				38.8	37.4		
No reaction .		30.5	17.5				29.9	27.4		
Negative .		3.2	5.3				2.8	4.2		
Distribution		85.9	14.1				53.0	47.0		
N		347	57				214	190		
CHILDREN NOW 18-23										
Very positive			34 4	46 3				30.4	45.3	
Positive .			37.5	34.1				39.1	33.7	
No reaction .			24.0	19.5				28.3	15.8	
Distribution			82.4	17.6				59.2	40.8	
N			192	41				138	95	
CHILDREN NOW 24-29										
Very positive				51.6	78.9				44.4	64.8
Positive . .				41.9	15 8				48.1	29.6
No reaction .				6.5	5.3				7.4	5.6
Negative . .				0	0				0	0
Distribution				76.5	23.5				33.3	66.7
N				62	19				27	54

All children are included in this table regardless of birth order.

Table 17
EFFECT OF AGE ON HOW CHILDREN'S ATTITUDES TOWARD LEARNING CHANGE AS A RESULT OF PARENTS' ATTENDING COLLEGE

Change	Children's Ages: When Parent Entered College					When Parent Left College				
	unborn to 5	6-11	12-17	18-23	24 up	unborn to 5	6-11	12-17	18-23	24 up
CHILDREN NOW 0-5										
Much improved	6.2					6 5				
Improved . .	17.8					18.1				
Not affected	76.0					75.4				
Worse	0					0				
Distribution	100.0					100.0				
N	225					216				
CHILDREN NOW 6-11										
Much improved	9.8	10.6				3.7	12.5			
Improved . .	27 4	37.4				20.7	33.9			
Not affected	62.9	52.0				75.6	53.3			
Worse	0.2	0				0	0 2			
Distribution	70.1	29.9				27.5	72.5			
N	420	179				164	433			
CHILDREN NOW 12-17										
Much improved		13.6	19.3				11.3	18.0		
Improved . .		32.8	24.6				31.9	31 2		
Not affected		53.3	56.1				56.3	50 8		
Worse		0.3	0				0.5	0		
Distribution		85.8	14.2				53.0	47.0		
N		346	57				213	189		
CHILDREN NOW 18-23										
Much improved			13.2	25.0				11.9	20.2	
Improved . .			31.2	25 0				24.4	38.3	
Not affected			55.0	50.0				63.0	41.5	
Worse . . .			0.5	0				0.7	0	
Distribution			82.5	17.5				59.0	41.0	
N			189	40				135	94	
CHILDREN NOW 24-29										
Much improved				27.4	44.4				25.9	34.0
Improved . .				33.9	16 7				33.3	28.3
Not affected				38 7	38.9				40.7	37.7
Worse				0	0				0	0
Distribution				77.5	22.5				33.8	66.3
N				62	18				27	53

All children are included in this table regardless of birth order

In other cases this is not true. Such cases seem numerous in both tables and an example is the near identity of results reported on children's reactions who are or were 12-17 when the parent left college (Table 16).

The second comparison to make is horizontal, to observe in each age bracket whether parents give different answers according to whether their children are or were a given age at the time of college entry or exit. Rather consistently (and always in the "very positive" or "much improved" categories), the rating for reactions or attitude changes are lower for the children who were younger.

Together these results indicate that parents are differentiating to some degree according to their children's ages at the time of college entry and exit, and that younger children can experience the greater effects represented by the adjusted age data. It is no doubt also true that parents are answering as well for the present attitudes of their children. To what extent is not known, but this is not only inevitable, it was not precluded by the wording of the questions--especially the one on changes in learning attitudes. It was asked whether change occurred as a result of college, not when in relation to college attendance the change manifested itself.

*

Now that all the child-specific variables have been introduced, their interactions can be summarized--but first, it is necessary to do a housekeeping chore. The previous data have been consolidated across all birth orders so as to limit the number of tables. As previously stated, this is done at the sacrifice of independent observations. It is worth knowing, on the one hand, whether this causes a distortion because parents are truly trying to distinguish their children and combining the data blurs such distinctions (including birth order effects); and, on the other, whether merging the data is justified because the birth order differences are minimal--but that the data are tainted because parents are responding similarly for all children (in which case, not only are parents not making independent observations, but large families would dominate by, in essence, being granted multiple entries).

Table 18 shows the correlations for each variable across birth order. It is clear that the variables fall into three groups:

1) The single "objective" variable, children's grade averages, shows almost no correlation across birth order and is the best evidence that parents are reporting distinctly on each child. This means that

Table 18

CORRELATIONS OF CHILD-SPECIFIC VARIABLES ACROSS BIRTH ORDER

Birth Order	Correlations with Birth Order: 2	3	4
CHILDREN'S GRADE AVERAGES			
1	0.12	0.05	0.10
2		0.07	0.04
3			0.26
ATTITUDE OF CHILDREN TOWARD SCHOOL AND LEARNING			
1	0.19	0.15	0.22
2		0.11	0.31
3			0.18
CHILDREN'S SCHOOL CONDUCT			
1	0.31	0.22	0.11
2		0.22	0.15
3			0.38
JOBS PARENTS PREFER FOR CHILDREN			
1	0.38	0.25	0.25
2		0.33	0.20
3			0.37
JOBS PARENTS THINK PROBABLE FOR CHILDREN			
1	0.33	0.18	0.27
2		0.22	0.18
3			0.21
CHILDREN'S REACTIONS TO PARENT BEING IN COLLEGE			
1	0.64	0.57	0.60
2		0.66	0.70
3			0.79

Table 18 (continued)

Birth Order	Correlations with Birth Order: 2	3	4
CHANGE IN CHILDREN'S LEARNING ATTITUDES			
1	0.66	0.54	0.57
2		0.66	0.64
3			0.89
CHANGE IN CHILDREN'S GRADES*			
1	0.70	0.53	0.56
2		0.65	0.68
3			0.83

* *Children scored,"does not apply", (too young or too old) are excluded.

the combined data on grade averages in Table 9 would be distributed differently if there were a table for each birth order. (It does not change the fact that, for example, the given percentage of all children of a certain age had a certain grade average.)

2) The "static" school variables (attitude and conduct) and the job preference and probability variables show a modest correlation across birth order, but without any consistent pattern. This is further evidence that parents are distinguishing their children. It is not surprising that parents see similarities in the attitudes and conduct of their children, similarities which may be greater than those in academic performance. Note, too, that the strongest correlations in this group are for job preference, and it is not unexpected that these parental desires should be comparable for all offspring, while correlations for job probability (which is less in control of parents) is lower.

3) All three variables measuring changes in the children as a result of the parent going to college are highly correlated across birth order. This is a strong statement by the parents that the impacts of college were felt by the entire family and one can have more confidence in that assessment because of by the previous evidence that the parents are treating their children individually.

It is not remiss to note here that the sum of these observations is what one would expect if what happens in the family is more important to children's attitudes about education than what happens in school; that is, it is an action by the parent--going to college--which has brought about high correlations among the offspring in relation to education.

The correlations among the variables for which child-specific answers were requested are given in Table 19, for each birth order. The partial correlation coefficients, controlling for current age, are also shown.[15]

The general pattern is that the "static" variables (*school attitude, conduct, grade average*) correlate strongly with each other, as do the college-related variables (*reaction to parent in college, changes in attitude and grades*). The correlations between the non-college and college-related variables are weaker. This is to be expected since the baselines prior to the parents' college attendance (for example, the *general attitude toward school*) are unknown and differ among the children, and because measurements are capped by maximum values ("excellent" attitude, "A" average) which may have existed before the college effect. For example, the grades of 72% of the (first-born) children with "A" averages were said to have been unaffected by the parents' college.

There are some differences across birth order but the only trends seem to be stronger correlations between *attitude changes* and *grade changes* with the *attitude toward school*. The strength of the relationship between *grade average* and *reaction to the parent going to college* appears to decrease with birth order, but the decline disappears when the effects of age are removed. Otherwise, age does not seem to be too important.

The correlations between non-college and college-related variables in all birth orders are somewhat weaker after controlling for race, job category and graduate status (especially the latter two, which themselves correlate strongly)--in particular, the correlations between *grade average* and *attitude or grade changes*. But if these differences are small, there are almost no differences among the college-related variables themselves when controlled for race, job and graduation; that is, once a parent reports on, say, the child's *reaction to college*, the social characteristics will not determine the rating of attitudinal and grade changes.

---

[15]Partials are calculated using pairwise deletion of missing data. Children scored, "does not apply", for grade changes are excluded.

Table 19
CORRELATIONS OF CHILD-SPECIFIC VARIABLES WITHIN BIRTH ORDER

Variables	Zero Order Correlations (Partials, Controlling for Age)				
	School Conduct	Grade Average	Reaction to College	Attitude Change	Grade Change
FIRST-BORN CHILDREN					
School attitude	0.57 (0.57)	0.67 (0.66)	0.26 (0.31)	0.19 (0.20)	0.16 (0.17)
School conduct		0.48 (0.48)	0.24 (0.26)	0.13 (0.14)	0.14 (0.14)
Grade average			0.19 (0.23)	0.10 (0.11)	0.08 (0.09)
Reaction to college				0.46 (0.45)	0.39 (0.40)
Attitude change					0.68 (0.68)
SECOND-BORN CHILDREN					
School attitude	0.60 (0.60)	0.65 (0.64)	0.19 (0.23)	0.21 (0.23)	0.21 (0.22)
School conduct		0.57 (0.57)	0.12 (0.16)	0.10 (0.13)	0.18 (0.19)
Grade average			0.16 (0.22)	0.15 (0.17)	0.18 (0.19)
Reaction to college				0.51 (0.48)	0.40 (0.39)
Attitude change					0.68 (0.67)
THIRD-BORN CHILDREN					
School attitude	0.63 (0.62)	0.68 (0.67)	0.18 (0.26)	0.24 (0.28)	0.22 (0.24)
School conduct		0.57 (0.56)	0.13 (0.21)	0.07 (0.11)	0.09 (0.11)
Grade average			0.11 (0.20)	0.10 (0.15)	0.10 (0.13)
Reaction to college				0.47 (0.42)	0.43 (0.42)
Attitude change					0.77 (0.77)

Table 19 (continued)

Variables	Zero Order Correlations (Partials, Controlling for Age)				
	School Conduct	Grade Average	Reaction to College	Attitude Change	Grade Change
	FOURTH-BORN CHILDREN				
School attitude	0.64 (0.61)	0.57 (0.53)	0.18 (0.28)	0.30 (0.38)	0.30 (0.32)
School conduct		0.51 (0.46)	0.22 (0.32)	0.17 (0.23)	0.28 (0.30)
Grade average			0.07 (0.21)	0.09 (0.19)	0.06 (0.08)
Reaction to college				0.54 (0.51)	0.43 (0.43)
Attitude change					0.73 (0.74)

It is helpful to see some of the results presented in this section in more detail. Table 20 is a crosstabulation of attitudinal and grade changes as functions of how children *reacted to their parent's attending college* (with data for all children in the sample combined). There is the peculiarity that some children improved their *attitudes toward learning* even though their *reaction to college* was negative, but the numbers are so small--only 4.4% of the children were said to have a negative reaction--that there is no point in speculating on the reasons.

Table 21 displays two breakdowns which relate *reactions of the children* to whether parents intended to *set an example* by going to college and whether the intent was supported by interaction with the children--in this case, *more conversation about school matters*. In the breakdown on the left, the dependent variable is one answered in general for all children in the family, whether they *care more about education*. The dependent variable in the righthand breakdown is child-specific, whether there was a *change in attitude toward learning*, and the results are shown for first-born and second-born children.

The results are comparable in both instances. The greater the desire to *set an example*, the more likely the report that the children *care more about education* or improve their *attitudes toward learning*, and within each level of importance for *setting an example*, increased communication with the children makes the outcomes more posi-

Table 20
LEARNING ATTITUDE AND GRADE CHANGES AS A FUNCTION OF REACTION TO THE PARENT'S COLLEGE ATTENDANCE

Degree of Change	Reaction to Parent Being in College			
	Very Positive	Positive	No Reaction	Negative
CHANGE IN CHILDREN'S ATTITUDES TOWARD LEARNING				
Much improved	36.0	8.0	0.8	0
Improved	34.4	42.9	9.0	31.4
Not affected	29.6	49.1	89.8	67.1
Worse	0	0	0.4	1.4
CHANGE IN CHILDREN'S GRADES				
Much improved	17.8	3.3	0.3	1.8
Improved	35.1	26.1	5.5	5.5
Not affected	47.1	69.4	93.1	85.5
Worse	0	0.6	1.1	7.3

Table 21
BREAKDOWN OF OUTCOMES BY PARENTS' INTENTIONS
AND PARENT-CHILD INTERACTIONS

Children CARE MORE about Education[1] BY Wanted to Set an EXAMPLE BY More TALK about School Matters			Changed LEARNING ATTITUDES of Children[3] BY Wanted to Set an EXAMPLE BY More TALK about School Matters			
Broken Down by:	Value Labels	Mean[2]	Broken Down by:	Value Labels	Mean[4] First Child	Mean[4] Second Child
Population		1.53	Population		2.37	2.52
EXAMPLE	Very important	1.29	EXAMPLE	Very important	2.12	2.18
TALK	yes	1.21	TALK	yes	1.96	2.07
TALK	no	1.56	TALK	no	2.65	2.63
EXAMPLE	Fairly important	1.56	EXAMPLE	Fairly important	2.43	2.60
TALK	yes	1.49	TALK	yes	2.31	2.55
TALK	no	1.69	TALK	no	2.67	2.70
EXAMPLE	Not very important	1.79	EXAMPLE	Not very important	2.63	2.81
TALK	yes	1.70	TALK	yes	2.48	2.72
TALK	no	1.86	TALK	no	2.74	2.87

[1]CARE MORE: 1=yes; 2=no

[2]EXAMPLE: F=52.4 Significance≤0.0001 eta=0.405 eta^2=0.164

[3]LEARNING ATTITUDES: 1=much improved; 2=improved; 3=not affected; 4=worse; 5=much worse

[4]EXAMPLE: F=25.4 Significance≤0.0001 eta=0.293 eta^2=0.083 (first child); F=39.9 Significance≤0.0001 eta=0.384 eta^2=0.148 (second child)

tive. The eta squared for *setting an example* indicates that this variable accounts for about 15% of the reported changes in attitude.

Breakdown tables with other variables show similar results; for example, *changes in grades* as a function of the desire *to be better equipped to help with schoolwork* and *helping with schoolwork*. (Here the eta squared for *wanting to be able to help* is 0.12 for first-born and 0.06 for second-born children.) Also, the same consistent pattern of means occurs when the dependent variable is *ability to help with homework* and the independents are, *wanting to be better equipped* to do so and the *importance to success in life which parents give to school performance*. (Eta squared for *wanting to be better equipped*=0.23).

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Finally, a reverse perspective is to characterize further the people who answer a question in a particular way by using that answer as an independent variable. This is done for the outcome, *changes in attitudes toward learning*, as shown in Table 22. This table was generated by creating three subsamples. The first was of all people who gave the answer "much improved" at least once. The second and third subsamples included all those who answered, "improved" or "not affected" at least once, respectively. Then frequencies of the responses on other variables were calculated for each subsample.

The results show that the less positive the response about *changed learning attitudes* of children, the less likely the parents are to be graduates, or blue collar workers, or black or willing to be interviewed. They also differ somewhat in their opinions, especially on the *importance of college education to success in life*. There is little difference in the "static" variables (only data for the first child are shown) or in job preferences, but there is a decreasing probability of professional job status and likelihood of going to college if learning attitudes have not improved significantly.

There is considerable consistency in that parents who respond very positively to this question also do so on other college-related variables, and vice versa. Also, the change across response categories for the college-related variables is greater than can be accounted for by the change across categories for the demographic and socioeconomic variables. The extreme cases are *changes in grades* and *changes in career goals*, which vary much more than that of racial makeup, the most volatile among the first set of variables.

In general, then, parents see changes in their children if intentions with regard to them formed part of their

Table 22
CHANGE IN ATTITUDE TOWARD LEARNING AS AN INDEPENDENT VARIABLE

Dependent Variables*	Population			
	Total Sample	Change in Learning Attitude		
		much improved	improved	not affected
Graduate: yes	34.5	46.6	39.9	30.0
Job category: blue collar	59.6	55.4	60.1	63.3
Union member: yes	65.8	68.4	61.3	66.5
Race: black	19.5	39.8	23.3	13 8
Spouse's education: some college & higher	37.9	38.6	35.0	33.9
Willing to be interviewed: yes	40.8	64.1	44.7	36.5
Local school quality:excellent	13.3	13.6	10.0	12.5
State colleges quality: excellent	26.7	35.3	26.1	24.0
School performance very important to success	71.0	83.1	72.0	70.2
College education very important to success	49.9	66.4	56.6	43.8
Attitude toward school: excellent	38.2	49.6	38.2	42.8
Conduct in school: excellent	41.5	46.9	41.5	41.0
Grade average of child: "A"	24.3	25.0	21.0	25.8
Job preferred for child: professional	57.5	55.4	57.9	53.7
Job probable for child: professional	27.4	32.0	29 6	23.6
Think all children will go to college	45.2	61.5	47.5	36.5
Reaction of child to college: excellent	29.5	68.6	30.6	21 0
Child's grades: much improved	5.0	31.2	2.0	0.5
Setting an example: very important	37.3	67.9	40.1	28.6
Being better able to help with homework: very important	20.3	34.0	21 0	15.4
Keeping up with children: very important	14.7	27.4	12.2	12.0
Children care more about education: yes	45.2	85.0	69 4	32.6
Can help more with homework: yes	46.5	64.3	53 7	37.9
More conversation about school matters: yes	63.5	86.7	76 2	55.0
Competition with children for grades: yes	20.7	50.6	29.1	12.6
More respect from children: yes	46.1	77.6	59.6	37.5
Children changing career goals: yes	17.0	48.1	24.3	9.8
More inclined to vote for school bonds: yes	34.2	54.2	40.2	30.1

*Reading the table: "Total sample" refers to the percentage in the sample which has the given value on each variable. For example, 34.5% of the total sample are graduates. For "change in learning attitude" read, "Of those who said attitude was much improved (improved, not affected), X% had the value Y on the dependent variable." For example, of those who said attitude was much improved, 46.6% were graduates. Only the most positive values for the variables are shown (e.g., very important, excellent). For child-specific variables, only the percent for the eldest child is given under both "total sample" and "change in learning attitude".

reasons for, or expected benefits from, enrolling in college and if they did something about those intentions via increased school-related interactions.

The Time Factors

Earlier, there was allusion to the myriad calendar permutations possible between the schooling of children and the college attendance of parents, and the complicating effects these might have. In order to test for such influences, correlations were computed between several time factors and the variables related to changes in the children, both general and child-specific, with the following results:

1) The total *length of time* the parent spent *in USWC* correlated positively[16] only with *improved learning attitudes* of first (0.10) and second (0.07) children, with *improved grades* for the first child (0.09), with whether children *care more about education* (0.09), with *more parent-child talk about school* (0.08), and with the *greater inclination of parents to vote for school bonds* (0.12). Because longer times in college are characteristic of those who stay until graduation, partial correlations controlling for graduation were calculated. The correlations with *improved grades and learning attitudes* and with *more parent-child conversation* disappeared. The coefficient for *caring more about education* fell to 0.06, but the correlation with *bond voting* was unchanged.

2) *The length of time since the parent last attended* USWC was matched with the same variables and it correlated significantly with *grade improvement* of all four children (0.08, 0.17, 0.16, 0.21), with the desire *to "keep up"* with the children (0.08) with *competition for grades* (0.10), and with *more parent-child conversation about school* (0.08). Only the last relationship remained after controlling for college graduation.

3) For each child the length of time there was *overlap* between his/her schooling[17] and the parent's college attendance was calculated and then correlated with *reaction to the parent being in college* and with *changes in attitudes or grades*. The *reactions* of the second and third-born children correlated with

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[16]The significance of correlations reported in this section are ≤0.05.

[17]Pre-college.

the length of *overlap* (0.13 and 0.15, respectively) and so did the *improvement in learning attitudes* of all children, (0.08, 0.22, 0.21, 0.23, by birth order)--but *grade improvement* only of second-born children (0.15) showed a positive relationship with schooling *overlap*. Again, length of overlap is likely to be longer for graduates and, when controlling for this, the only significant correlations which remained were between *overlap* time and the *reaction to college* of the second-born (0.11), the *attitude improvements* of second- (0.17) and third-born (0.14), and the *grade improvements* in second-born (0.12), children.

All in all, none of these time factors seem to be very important to the positive changes parents report in their children and this is a bit unexpected because, a priori, one might suppose that more would happen (for better or worse) the longer the exposure to this new element in family life. The explanation came in two meetings with (a total of over 100) new students in the programs in Detroit and Los Angeles. They had only been studying a few weeks when they were asked if there had been responses in their children; yet, most raised their hands and began to tell stories. So, in part at least, the reaction of children to parents being in college is a threshold effect and results can be observed soon after studies begin.

On the other hand, the impact of graduation as a control on the correlations with the time factors suggests that the academic success of the parent is important to the perceptions he or she has of the children. But--like starting college--this, too, appears to have to do with a transition, because among the non-graduates there are almost no significant correlations with the number of credit hours earned (progress) and the child change variables, and when the grade average (academic success) of the parent in college is used as a measure (controlled for graduation), there are positive correlations only with the *reactions of the children to college*.

Comparison of the Detroit and Kansas City Samples

Of the 75 respondents from Kansas City, 59 have at least one child. In many ways this group differs from the one in Detroit. They are 75% women[1*], 7% black, 33% union members and 73% white collar workers. While all the subjects in Detroit had completed at least one academic year, 45% of the Kansas City group had done so, although another

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[1*] 28% are divorced and 10% widowed, similar to the Detroit women.

25% were about to complete their second semester. None, of course, in Kansas City hold the baccalaureate, but 16% were about to receive an associate's degree. A major difference is that all in Kansas City were currently in college.

The Kansas City parents rate their local schools somewhat better than the Detroit parents (72% say, "excellent" or "good", vs. 54%), but 63% believe those schools need more money (vs. 34% in Detroit). The two groups rate the importance of school performance to success in life similarly and the Kansas City group gives only slightly more importance to college (56%=very important) than do people in Detroit (50%).

Answers to a number of the questions about the children were correlated with the origin of the respondent. Higher order partial correlations were calculated, controlling for the variables by which the Detroit and Kansas City groups differ. Because of the small size of the Kansas City sample, only eldest children were included in the child-specific variables. These results are in Table 23. Negative correlations mean a more positive response was given by the Kansas City sample, and vice versa.

It is readily apparent that the differences between the two cities are slight and generally not very significant, although it must be remembered that the independent variable (city or origin) is a dichotomy and so are some of the dependent variables (yes/no answers), so that a small coefficient may mask larger differences.[1']

Controlling for the sex of the respondent alone decreases the significance of most of the coefficients and sometimes introduces a change in sign. Race and job category influence fewer coefficients and are not shown as first order partials. When the major differences between the groups--sex, race and union membership--are combined, the only third order partials wh. e P≤0.15 are *grade changes* and *more talk about school matters* (to which the Kansas City sample responds more positively) and *help with homework* and *competition for grades* (with the opposite sign).

This comparison is not quite proper, however, because it has already been shown that graduates give more positive responses and such people are only found in the Detroit sample. When the effect of graduation is removed, the only changes, besides minor ones in value, are the addition of

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[1']For example, although Pearson's R for parents helping more with homework is only 0.094, a crosstabulation shows 46.5% of the Detroit sample saying "yes" to this question while only 25.7% of those in Kansas City do so.

Table 23
COMPARISON OF RESPONSES FROM DETROIT AND KANSAS CITY: ZERO AND HIGHER ORDER CORRELATIONS*

Variable which was correlated with city:	Zero Order	Controlled by:		
		sex	sex, race, union	sex, race, union, graduate
School attitude**	-0.055 (0.063)	-0.034 (0.174)	-0.025 (0.250)	-0.039 (0.140)
Grade average**	-0.031 (0.205)	-0.005 (0.450)	0.016 (0.333)	0.005 (0.451)
Reaction to parent in college** . . .	-0.085 (0.010)	0.028 (0.225)	-0.003 (0.466)	-0.026 (0.246)
Change in attitude**	-0.015 (0.346)	0.067 (0.035)	0.031 (0.200)	-0.012 (0.376)
Grade change**	-0.081 (0.020)	-0.045 (0.130)	-0.086 (0.016)	-0.108 (0.004)
Chances children go to college . .	-0.052 (0.073)	0.010 (0.387)	0.006 (0.434)	-0.017 (0.318)
Wanted to help with schoolwork .	0.034 (0.180)	0.040 (0.138)	-0.013 (0.368)	0.016 (0.333)
Wanted to set an example . .	0.009 (0.406)	0.065 (0.040)	0.030 (0.213)	0.004 (0.460)
Wanted to "keep up"	-0.038 (0.157)	0.065 (0.040)	-0.029 (0.224)	0.002 (0.476)
Children care more about education .	-0.008 (0.417)	0.044 (0.119)	0.027 (0.235)	-0.005 (0.443)
More respect for parent	-0.075 (0.023)	0.057 (0.066)	0.038 (0.159)	0.016 (0.340)
Children have new job goals . .	-0.084 (0.013)	0.031 (0.209)	0.010 (0.395)	0.005 (0.445)

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Table 23 (continued)

Variable which was correlated with city:	Zero Order	Controlled by:		
		sex	sex,race, union	sex,race, union, graduate
Parents help more with homework . .	0.094 (0.015)	0.132 0.001)	0.089 (0.020)	0.083 (0.028)
More talk about school matters . .	-0.067 (0.049)	-0.015 (0.359)	-0.044 (0.145)	-0.060 (0.072)
Competition for grades	-0.030 (0.240)	0.095 (0.014)	0.078 (0.036)	0.033 (0.225)
Parents vote more for school bonds .	-0.032 (0.195)	0.019 (0.309)	-0.015 (0.346)	-0.021 (0.294)

*Significance (P) is in parentheses.

**Child-specific variables shown for first child only.

school attitude (P≤0.14) and the loss of parent-child *grade competition*.

From these data it appears that adults following the same college program in two cities cannot be distinguished by the perceptions they have of the effects of their studies on their children[10] (and especially not when there has been control for the socioeconomic variables which differentiate them) and that former and current students give comparable answers to the questions asked. The length of time spent in college is not a major contributor to how the questions are answered.

[10]When controlled for sex, race, union membership and graduation, the differences in opinions about school quality lose significance but the greater perceived need for increased school financing in Kansas City persists.

DISCRIMINANT ANALYSES[21]

In the previous section, a number of changes in children--as perceived by their parents--were reported, along with an initial effort to understand the relative presence or absence of these changes by controlling for certain variables, usually one at a time: ages of children, race, and the parents' academic success and job category. In this section, the analysis is further refined with the intent of determining which variables, whether college-related or not, are the best predictors of whether changes in the children will occur (or will at least be reported by the parents as having occurred).

The method chosen for this purpose is discriminant analysis. The aim of discriminant analysis is to distinguish between two (or more) groups of cases statistically; for example, children whose attitudes have changed from those whose attitudes were unaffected. From a set of variables selected with the expectation that they will measure characteristics on which the groups are thought to differ (the independent variables), a function is generated which attaches a weighting coefficient to each variable. The larger the coefficient of a variable, the greater is the contribution that variable makes to distinguishing between or among the groups.

While the coefficients measure the contribution of each variable, the overall ability of the discriminant function can be judged by the size of the canonical correlation associated with the function, and the square of that correlation can be interpreted "as the proportion of variance in the discriminant function explained by the groups".[22]

The second use of discriminant analysis is classification. Once the discriminant function has been determined, one can test to see how well the variables which were used will classify the original cases into groups, and cases with unknown group membership can also be classified into the group for which they have the highest probability of membership.

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[21]Discriminant analysis in this report is based upon the description by William R. Klecka, "Discriminant Analysis", in: N. H. Nie, et.al, SPSS, second edition, McGraw-Hill, New York, 1975.

[22]ibid.

There are basically two procedures for discriminant analysis. Either all the independent variables can be entered at once (direct method) or they can be entered one at a time (stepwise method). The idea of the latter is to begin with the variable in the set which discriminates best, then to pick from the remaining variables the one which, in combination with the first variable, adds the most to the discriminating power of the equation--and so on, until there are no variables remaining whose inclusion will add discriminating power (at a predetermined minimum level of significance). This method avoids excess or redundant information.

Changes in Attitudes and Grades

Of all the variables in the questionnaire, there are just two which measure school-related changes in the children and are child-specific: the parents' assessments of effects on attitudes toward learning and on grades. Discriminant analysis was used first on these dependent variables, one attitudinal and one behavioral.

The first problem was to select the independent variables. Five kinds of factors were identified which could reasonably be expected to affect parental perceptions of changes in their children:

1) Socioeconomic and demographic characteristics of the parent;

2) The parent's attitudes, values and motivations;

3) Factors reflecting participation in college and changes in behavior resulting from it;

4) Attributes of a child which might exert an influence;

5) Real changes in a child's attitudes or grades--of which there is no direct measure in the questionnaire.

There are, however, measures of the first four sets of factors and, in order to arrive at a final list of variables, the possible predictors were first culled by doing crosstabulations and correlations of them with each of the two dependent variables, separately for each of the first three birth orders. The initial criterion for inclusion of an independent variable in the final list was that it have a pattern of association with at least one of the dependent variables, across the birth orders and at a statistically significant level ($P \leq 0.15$). This criterion eliminated a

number of variables, including the college grade averages of the parents.

The second criterion for inclusion was two-fold. First, the correlations with the dependent variable should be consistent in direction across birth order; second, an independent variable could be included only if it did not correlate too highly with another independent variable ($R \geq 0.50$).[23]

The final list of independent variables was:

- sex of the parent
- race
- number of children in the family
- opinion of the importance of college education to success
- wanting to encourage children by setting an example
- sex of the children
- age of children when the parent left college
- parents' views of children's probable job categories
- inclination of parents to vote for school bonds
- more parent-child conversation about school matters
- graduation status of the parents

The two dependent variables, *changes in learning attitudes* and in *grades*, were scored by parents on a five-point Likert scale ranging from "much improved" to "much worse". The categories, "worse" and "much worse", were checked by so few people they were dropped from the analysis. Furthermore, in order to have a sufficient number of cases in each category, "much improved" and "improved" were aggregated so that both *attitude changes* and *grade changes* became dichotomous variables with the categories, "improved" and "not affected".

Again for reasons of numbers, the analyses were done only for the first two birth orders. The cases selected for inclusion were parents with first and/or second children aged 6-17 at the time the parent left college.

There were 518 parents who fit this description. In socioeconomic and demographic characteristics and in answers to questions about child-related motivations for attending college, as well as outcomes, this group was nearly identical to the total sample of 740 parents. The only differences in the subsample were that there were more males (94.8% vs. 90.8%), more blue collar workers (66.9% vs. 59.6%) and fewer graduates (30.1% vs. 34.5%).

In this subsample for discriminant analysis there were 487 first-born and 319 second-born children aged 6-17 (at

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[23]This would cause multicollinearity problems.

Table 24
CHILD-SPECIFIC VARIABLES IN THE SUBSAMPLE OF PARENTS FOR DISCRIMINANT ANALYSIS

Rating by Parent	Birth Order	
	First	Second
JOBS PARENTS PREFER (THINK PROBABLE) FOR THEIR CHILDREN		
Unskilled/ semi-skilled	1.5 (9.1)	2.6 (8.5)
Skilled trades	8.2 (11.4)	9.7 (12.0)
Office/ clerical	4.7 (15.7)	7.7 (17.3)
Service/ sales	1.1 (6.4)	1.9 (7.4)
Technical	26.8 (32.3)	32.6 (28.5)
Professional	57.7 (25.1)	45.5 (26.4)
REACTION OF CHILDREN TO PARENT IN COLLEGE		
Very positive	27.1	22.8
Positive	44.0	41.5
No reaction	25.2	31.8
Negative	3.7	3.9
CHANGES IN ATTITUDES TOWARD LEARNING		
Much improved	12.8	11.6
Improved	33.9	32.3
Not affected	53.1	55.8
Worse	0.2	0.2
CHANGES IN CHILDREN'S GRADES		
Much improved	4.7	5.4
Improved	25.4	21.4
Not affected	68.5	72.7
Worse	1.3	1.0

college exit). Two-thirds in each birth order were 6-11 years old and so these are primarily children who were in elementary school when their parents were in college. They are 52% male. The only notable difference in the ratings parents give on child-specific variables (Table 24) is the lower preference of professional jobs for second children. The *reaction* of the second-born children *to the parent being*

in college is also a bit more neutral than for eldest children.

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The set of discriminating variables previously identified as all having statistically significant bivariate associations with either *changes in attitudes toward learning* or with *changes in grades* were "regressed" stepwise[24] on each of these variables, separately by birth order. The results (showing standardized discriminant function coefficients) are in Table 25.

In the equation for *changes in attitudes* of oldest children, there are six variables with statistically significant coefficients and three of these are college-related while the others are demographic or child-related. The best discriminator is the variable indicating that the parent *talked more about educational matters* with his children as a result of attending college: parents who said they *talked more* were also more likely to say their children improved their learning attitudes than parents whose discussions did not increase. This factor was a much stronger predictor of *changes in learning attitudes* than any other.

Next in importance are *probable careers* for the children and the *number of children* in the family. The *probable job status* of children in the "improved" category of *learning attitude* was reckoned by parents to be higher than that for children whose attitudes did not change. As for *family size*, eldest children from smaller families were more likely to have improved their attitudes than eldest children from larger ones. These two variables have somewhat more effect than the parent's desire to *set an example* by going to college and whether he has graduated; however, both variables are significantly related to attitude changes. The poorest predictor of change is race, and it is significant at the 0.09 level, not 0.05. Blacks were more likely to report positive changes in their children than non-blacks.

The significant discriminators of *changes in grades* for the eldest children are the same as for attitudes, with the exception of *family size*, but there are other differences to

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[24]Using the Wilks criterion, allowing only variables with $P \leq 0.10$ to remain in the equations and with priors=size (that is, the proportion of "improved" and "not affected" answers are "known" when the discriminant function is constructed). Note that discriminant analysis uses listwise deletion for missing values so not all children (cases) in the subsamples will be included.

Table 25
RESULTS OF DISCRIMINANT ANALYSES ON CHILD-SPECIFIC CHANGE VARIABLES

Variable in the Discriminant Function	Standardized Coefficient
LEARNING ATTITUDE CHANGES OF FIRST-BORN CHILDREN	
More parent-child conversation about school*	0.71
Job type parent thinks probable for child	0.45
Number of children in the family	-0.31
Parent wanted to set an example*	0.29
Parent graduated from college*	0.24
Race	0.18
Canonical correlation squared=0.28	
LEARNING ATTITUDE CHANGES OF SECOND-BORN CHILDREN	
More parent-child conversation about school*	0.65
Parent wanted to set an example*	0.53
Parent graduated from college*	0.29
Job type parent thinks probable for child	0.15
Canonical correlation squared=0.24	
CHANGES IN GRADES OF FIRST-BORN CHILDREN	
Parent wanted to set an example*	0.50
More parent-child conversation about school*	0.48
Race	0.42
Parent graduated from college*	0.29
Job type parent thinks probable for child	0.27
Canonical correlation squared=0.16	
CHANGES IN GRADES OF SECOND-BORN CHILDREN	
Sex of parent	0.57
Parent wanted to set an example*	0.56
Number of children in the family	0.43
More parent-child conversation about school*	0.40
Race	0.38
Parent graduated from college*	0.36
Canonical correlation squared=0.20	

*Variables related to college attendance.

be noted. First, the discriminant function accounted for less of the variance in the score on *grades* than in the score on *attitudes*. Second, *wanting to set an example* (a motivational variable) became as strong a discriminator as *more conversation about school* (a behavioral outcome). Third, *race* gained strength as a predictor while *probable job status* was less important.

There are some changes, but not major ones, in the predictors for *attitude changes* in second-born children. School-related *conversation* is still most important and socioeconomic and demographic factors recede. In fact, the three best predictors are college-related.

The situation for *grade changes* in second children is rather different. The best predictor is the sex of the parent. Part of the reason may have to do with the sample. Among the 518 people in the original subsample, only 27 were women and no women said their second-born children's grades improved (there were only 12 responding to this question)--so sex became an excellent discriminator. The direction of the influence of *family size* on second children's grades is opposite to what it was for learning *attitude changes* of eldest children; that is, second children were said to have improved their grades if they came from a relatively larger family.

Altogether, ability to account for variance in attitudes is greater than that to account for variance in grades. In one sense this is unexpected because grades are less susceptible to subjective judgement and there should be less "error" variance. At the same time, parents are probably more likely to influence their children's attitudes than their grades. There must be other determinants of grades than the enthusiasm transmitted by parents, and those were not measured here.

The three college-related variables--*talking more about school*, wanting to *set an example* and *graduation*--consistently appeared as significant discriminating variables for both dependent variables and for both birth orders. *Talking more* was a better discriminator of *changes in learning attitudes* than *setting an example*, but the relative sizes of the coefficients were reversed for *grade improvement*.

Children of graduates were more likely than children of non-graduates to have been perceived as improving attitudes and grades. Graduation of the parent may be a particularly effective example for children. The parent is likely to feel satisfied with his accomplishment and to transmit that sense of achievement and enthusiasm to his child, who then sees success in school as a worthwhile goal.

Of the non-college variables, *probable job category*--as will be seen later--is, to a large extent, a proxy measure of a child's academic ability and so it may be that children who do well in school are seen as being responsive to the parent's educational participation. The effect of family size cannot be explained and is probably complex. It can be noted that in the study by Raby and Walford,[25] there were no correlations between family size and career related variables--except in a subgroup of West Indians, in which parents' interest in their children's education and the career aspirations parents had for them decreased as family size increased. In fact, the situation here is also ethnically related. When the discriminant analysis for learning attitude change in eldest children was run separately for blacks and non-blacks, family size entered only the equation for non-blacks.

As already mentioned, the SPSS discriminant analysis subprogram can also derive classification functions and classify cases with both known and unknown group memberships. The advantage of the former is that it provides a check on the ability of the discriminating variables to distinguish between groups. Table 26 shows the percentage of cases correctly classified by the functions for each value of the dependent variables as well as the total percentage of cases correctly classified.

Overall, the functions predicted group membership correctly 72-76% of the time; however, prediction was superior for changes in attitudes than for changes in grades. Birth order made little difference in the percentages.

The classification functions were equally good in their predictions of who would be scored as improving attitudes and who would be scored as unchanged. The equation was rather poor at identifying grade improvement, though for this variable it correctly identified about 90% of the cases in which parents said grades were not affected.

Children Said to Care More About Education

In the questionnaire, parents could answer "yes" or "no" to a series of questions which were to apply to <u>one or more</u> of their children. One of these was, "After I began to study, my children seemed to care more about education because of my example." Discriminant analysis was used to distinguish between the two possible responses.

First, sets of factors were selected which might be expected to influence either the parent's judgement or the

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[25] op.cit.

Table 26
CLASSIFICATION RESULTS: CHANGES IN ATTITUDES AND GRADES*

Dependent Variable	Correct Classification of Children:		
	improved	not affected	overall
FIRST-BORN CHILDREN			
Change in learning attitudes	72.8	73.6	73.2
Change in grades	35.7	88.9	71.9
SECOND-BORN CHILDREN			
Change in learning attitudes	72.0	71.8	71.9
Change in grades	38.6	89.6	76.1

*The classification functions were derived using the group covariance matrices of the canonical discriminant functions, rather than the polled within-group covariance matrix. This was done because a test using Box's M statistic revealed that the covariance matrices of the improvers and the not affected differed significantly.

child's likelihood to *care more*. These included variables related to:

- the parent as a student (length of studies, grade average)
- encouraging behavior (more school-related conversation, helping with homework)
- attitudes about education (wanting to set an example, thinking education is important)
- characteristics of the children (sex, grade average, age)
- demographics (race, sex of parent, marital status)

Each variable was tested for the statistical significance of its association with children being said to *care more about education*. An obvious problem encountered was that no specific child was implied in the question and, hence, it did not seem appropriate to correlate *caring more* with child-specific variables. A solution was to average the values of a variable across birth order, and this was done for *children's ages* and *probable job categories*. For these variables, the same relationships with *caring more* are

obtained whether the average value or the value for each birth order is used.

As before, the variables statistically related to the dependent variable were eliminated if they were redundant by virtue of strong intercorrelations--or if their significant relationships to *caring more* were believed to be spurious.

The final list of independent variables was:

- sex of parent
- averaged probable job category
- college credit hours earned
- parent's college grades
- more parent-child conversation about school matters
- helping with homework
- wanting to set an example
- belief in the importance of college education to success
- averaged age of children

When cases with missing data on any of the discriminating variables or the dependent variable were eliminated, 419 cases remained and 187 (44.6%) had been scored "yes" to the question. (Note that, unlike the previous analyses, all age groups are included this time.) The results of the discriminant analyses by both the direct and the stepwise methods are shown in Table 27.

Irrespective of method, the predictors appear in the same order and *wanting to set ar example* is the strongest. This variable correlates with *wanting to be better equipped to help with homework* (0.63) and with *wanting to keep up with children* (0.55) as motivators for attending college. The behavior variables related to such intentions, *talking more with children* and *helping with homework*, are also important discriminators for the dependent variable, the children *caring more about education*.

It seems reasonable that parents characterized by this combination of intentions and behaviors would foster a positive feeling about education in their children, but such people may also be reluctant to admit that one of their children had shown any effects and this reason for the discriminating power of *wanting to set an example* must at least be acknowledged.

If college-related variables are the key variables using the direct method of analysis, the stepwise method shows even more clearly that demographic and socioeconomic characteristics are not relevant predictors. These have all been excluded, and yet the canonical correlations squared for the two methods are nearly the same; that is, virtually the same amount of variance in the discriminant function is accounted for with both methods. Again, it is recalled that

Table 27
RESULTS OF DISCRIMINANT ANALYSES ON THE VARIABLE:
CHILDREN CARE MORE ABOUT EDUCATION
(reporting standardized coefficients)

Variable in the Discriminant Function	Method	
	Direct	Wilks
Parent wanted to set an example* . . .	0.57	0.59
More parent-child talk about school* .	0.39	0.40
Probable job type for children** . . .	0.33	0.33
Parent could help more with schoolwork*	0.29	0.28
Total credit hours parent earned* . . .	0.16	0.19
Age of children**	0.14	....
Importance of college to success . . .	0.10	....
College grade average of parents* . . .	0.10	....
Sex of parent	0.09	....
Race	-0.08	....
Canonical correlation squared	0.24	0.23

*College-related variables.

**Values averaged over all children in family.

probable job category reflects grade averages of the children and so it is not surprising that it is related to *caring more* (or at least caring) about education.

*

The classification results using direct and stepwise methods are in Table 28. Overall, about 70% of cases are correctly classified, but the function is weaker in placing "yes" answers into the proper group than the "no" answers.

Table 28
CLASSIFICATION RESULTS: CHILDREN CARE MORE ABOUT EDUCATION

Method	Correct Classification of Children		
	yes	no	overall
Direct	65.8	72.4	69.5
Wilks	67.2	72.4	70.0

COMMENTS OF PARENTS

Comments by Category

At the end of the questionnaire, parents were invited to make written comments about how their enrollment in college may have affected their children and, in particular, the schooling of their children. The instructions for the comments made suggestions to trigger responses and indicated that both positive and negative effects were sought:

> "Tell us any stories or incidents (even small ones) which may have occurred. For example, do they ever tease you about 'how you did in school today', or 'compete' with you for grades, or sit with you to do homework or get angry because you seem too busy to be with them, etc.?"

There were 270 people who wrote some comment, but twenty of these reflected on the parents' college experiences and did not refer to the children. What the parents said could be roughly grouped under nine categories, plus "other". These are shown below, together with the number of people who wrote something within each category. Some parents appear more than once because what they wrote spanned two or more of the categories.

1) Children participated in some manner in the college activities of the parent. (21)

2) Children demonstrated pride or respect for the parent or gave encouragement to the parent. (50)

3) The attitudes of the children toward learning were changed. (36)

4) The parent set an example for the children. (24)

5) There was more conversation about school matters or there was interaction with regard to homework. (31)

6) There was competition for grades between parent and child. (11)

7) The children were too young for there to be any effects. (38)

8) The children's educational plans were affected. (14)

9) There were negative reactions because of the time consumed by college studies. (26)

10) Other (27)

The sample statements from each category, which follow, are paraphrased. In some cases, they are annotated with current ages of one or more children, with whether the parent is a blue collar worker(BC) or with whether the parent dropped out of college(D)--almost always because VA benefits were lost.

This selection of remarks by the parents helps to clarify why they reported effects across the entire age spectrum of their children. Even the very young try to mimic their parents when they see them studying, while adult children sometimes change their own educational aspirations after observing the parent's example--and also demonstrate a reverse effect: enccuraging their parents in school

It is also possible to see the reality of the variable, *more parent-child conversation about school matters*. The parents who take time to explain to their children, or even involve them in their courses, report effects on offspring as young as three or four.

It is interesting that of the 38 parents who wrote that their children were too young to be affected, twelve qualified this assessment, either somewhat contradicting it, or saying that the effects would manifest themselves in the future or saying that college was a help to understanding their children.

Similarly, twelve of the 26 people who mentioned a negative reaction attenuated the statement with a qualification. Most negative effects were temporary, sometimes single instances; few were long-term or applied to the entire family--but several were outright pathological, and if college attendance was not the underlying cause, it seems to have been a contributing factor.

It should be said that forcing parents to stop attending college seemed to produce negative consequences as serious as those brought about by participation and this is clear, implicitly or explicitly in the (sometimes plaintive) comments of students who dropped out when they lost their entitlements.

1. Children participated in college activities.

I took children to class when there was no babysitter. They saw it as a treat. (3,8)

I took my child to classes and to the library--and checked out books for the child, also. (8,BC)

I took them to the library and to museums and explained the exhibits until they understood them. (2,4,BC)

My daughter watched the TV courses. (9)

I took them to the conference courses; now they want college. (12,14,BC,D)

The whole family watched the TV courses and discussed the programs at dinner. (16,22,BC,D)

I took my daughter to our class at the science museum. Then she did her own research on the exhibits. (8,BC,D)

I took the kids to class. It had a good effect; they related my study to reality. (BC)

My child taped my TV programs for me and got interested in some of the topics. (8,BC,D)

My pre-schooler watched the TV courses--is now 9 and still remembers.

I took the children to classes. They were impressed with the higher level subject matter and with the fact that the class was not unruly. It made me realize how bad the schools are. (10,14,BC,D)

My oldest came along to the library and checked out books, too. Now he's an avid reader. (13,BC,D)

They all asked to go to classes with me. One daughter has been coming along since she was 18 months old. Now she's 8 and can read and discuss some of my texts.

I take her to class. She's anxious to start school. (4)

2. Children showed pride, respect, encouragement.

I received high respect and recognition. (9.10.12; prison inmate)

I got an encouraging send-off before exams. (2,4)

They respect my need for privacy when I study. (2,4,7)

The children proofed and typed my papers, helped me with homework and helped with chores. (27,28)

They were proud and told their friends. (21,22)

Child took my graduation picture to school and was very proud. (6)

They tell the kids in the neighborhood I'm going to have homework. (5,8)

I have 22 foster children. They're proud to know somebody who's been to college. (BC,D)

They see me differently after graduation; they're proud.

They say I'm smarter than their mother.

They wonder if their dad could become a teacher now. (6,8,BC)

They're glad I went, sorry I had to quit. (8,14,BC,D)

My 6 year-old asks about college, has a university jacket like his dad. (D)

My oldest daughter hoped we'd graduate at the same time. (20,BC,D)

Very proud. (5)

They were proud; there was a common bond of understanding. (6,8,10,BC,D)

Proud I was in school, interested in knowing what went on in college and in my grades. (10,14,16,BC,D)

Ask me when I'll return; they want me, to finish. (12,16,BC,D)

Surprised at first, very supportive and proud, their self-awareness increased. (17-29)

They loved the idea. It makes us compatible. Now they think I know what I'm talking about. (1,8,11,BC,D)

My whole family enjoyed my going to school. I want to go back. (2,7,BC,D)

They told their friends when I had a good report card. (2,8,10)

They want me to become a teacher in their school. (7,9,11,BC,D)

They're proud. They know it's hard work but that good grades are within reach. (6,7,D)

My son [mentally handicapped] wrote a paper on his mother as the person he most admired because of my going to college.

3. The learning attitudes of the children changed.

I attribute my daughter's interest in reading and writing to seeing me do it. (5)

The children's grades have improved since I attended college and they go to summer school. Their attitudes have improved substantially. My wife also started college. (9,10,12; prison inmate)

I explain the implications of college to my son. He's proud of his pre-school "homework". (4)

The kids got interested in studies. (17,18,19,20)

The youngest is proud to be in pre-school classes. School is a part of life in our house. (BC)

My son learned the benefits of schooling. If you have to work, why not with your head instead of your hands? (10,BC,D)

4. The parent set an example.

I wanted to show the personal and career values of education. (2,4,7)

The intellectual stimulus of college made parenting easier.

The sacrifice of time and energy led to strains, but now they understand the importance of education by example. (11,15)

They're too young to understand now, but I'll tell them about it and give an example I never had in my own family. I can keep them from having the fear of college that I had. (5,7,BC,D)

My sacrifices taught them self-discipline. (BC,D)

They realize learning doesn't stop after high school; they're impatient to learn new things. (5,7,BC,D)

I showed them that learning is fun and set the basis for future discussions. (3,5)

I have no children, but I believe my fellow students were setting a good example for theirs.

They saw the obstacles I faced and understand the importance of sticking to something you want.

They see that education ends only when you reach a goal. Then you should set a new goal. (5,7)

It finally struck my daughter one day. "You've got a teacher!" I use this as an example to show there are rules, and people we should listen to, like my instructor.(5,BC)

I set an example by going to all my classes, doing my homework and getting decent grades. (6,7,8,9,BC,D)

I explain how education relates to the quality of life. (11,BC)

They have better study habits because of my example. (17,18,20,21,BC,D)

First, my sons thought I was crazy. Then they understood and their own attitudes improved. But when I had problems with the university bureaucracy, their attitudes worsened.

They knew how badly I had done in high school. Now I was going to college and getting good grades. It made their own attitudes better. (BC,D)

My son has more confidence in his ability to learn, knowing that I studied in college.

My 3 year-old is more interested in going to school.

He learned you don't go to school just because you're forced to and I taught him the difference between learning and education. (12,BC,D)

My working and going to school showed education is important. It gave him a reason to try more. (11,BC,D)

They learned that college is not a dream beyond their grasp. (16,20,D)

Because of me, my daughter wants to be best in her class. (6,BC,D)

My youngest didn't see why I went if I wasn't forced. Her attitude changed and now she's very positive about school. (13,BC,D)

My girlfriend's child wanted to follow my example. (5)

It was a "shot in the arm". Now they dig deeper into classes and take an interest in other subjects as well. (8,10,BC,D)

My oldest was a fair student, now is excellent--partly because of my going to college. But this isn't true of all the children. (7,10,11,17)

My one year in college made me want my children to take advantage of the opportunities available to them. (8,12,14,BC,D)

At first I came for the VA money. Then I realized I could set an example for my children to aim at.

They feel if I can, so can they. (20,21,24,27)

5. Conversation and homework.

Often when I studied, the kids would sit around the table and do homework. The two youngest would pretend to have homework and would play school.

My 10 month-old [sic] saw me writing, took a crayon and tried to copy it.

My twins read my senior essay. (14)

They drew, read or did homework when I did. (6,10)

Even when she didn't have homework, she'd find schoolwork to do when I was doing mine. (9)

We were all in school and helped each other and had debates and discussions. (24,25)

Conversation about school seemed to bridge the small gap between my stepchildren and me. We discussed schooling and its effects on all of us. (3,19,20,21,BC,D)

They read and criticized my papers and we argued about the course content. (20,21,BC,D)

I stress school to my daughter and she reads books while I study. (6,BC)

The kids loved it and always talked about it. I enjoyed it, but the money factor drove me out. (6,10,13,BC,D)

My oldest helped me with homework. My wife criticized my papers. (20)

We'd all discuss our "day at school". (6,8,10,BC,D)

We'd coordinate our homework and discuss our grades and teachers. We understood each other's pressures and moods. (10)

When I start to read, the baby gets her books. (2)

My son often sat with me when I studied and asked questions about the courses and my study habits. It helped develop his own. (13,BC,D)

My daughter and I had conversations about why I was going to college. (4)

6. Competition for grades.

They found it hard to compete with my high grades and finally stopped trying. (14,15)

We competed about who had the most or the hardest homework. The person who did usually tried hardest and ended up with the best grades. For some reason, my children seemed more interested in school after I graduated than while I was attending, including my daughter's decision to go to college. The greatest impact was the night of graduation.

The kids rushed to see my first report card, ready to "razz" me if the grades were bad. Fortunately, they were good. The College showed me how foolish I'd been not to continue school when I was young and reawakened my interest in education. (16,18,20,BC,D)

We always compared grades and I think it caused them to work harder. I want to go back and finish my degree. (16,17,18,21,BC,D)

When I went to college, first they were amazed and thought it comical at my age, then competition for grades developed, then came admiration, respect and support. (7,21,23)

7. The children were too young.

They were too young to be affected, but they cooperated and they understood that school is a place for adults as well as children. Two have learning problems and my experience helped me understand their situation better.

They were too young to understand the importance of college study, but my enthusiasm for school was highly visible to them and they were very excited when I graduated. (8,10)

They were too small to realize it then. Now they're impressed, but I don't think it affects their own studies. (5,10,14)

Only two were in school then and it had no impact. They'd boast that their dad was in college, but that's all. (7,11,13)

They're too young to understand the importance of school to their future, but that's something I'll be able to teach them. (2,4,6,10)

My son was too young to be concerned, but he used to ask why I was still going to school and I'd explain that you're never too old to learn. (11)

They were too young for any effect, but they did used to ask if I got a "star" in class. (10,11)

My child was too young, but she asks if I went to college. I wish I'd taken the classes more seriously. (10,BC,D)

They're too young to understand college, but they knew I was going to school. (4,6)

She's too young to be influenced by college, but it's helped me answer her questions. (5)

8. Children's educational plans were affected.

Learning disabled son sees further education as possible someday. Daughter who dropped out of college to marry has returned to school and wants a higher degree.

When I graduated, my oldest child became more determined to finish his degree and my youngest decided he wanted to attend college.

When I enrolled, my daughter decided that instead of a two-year secretarial course, she'd complete a four-year business course. Now she's an executive secretary.

My second child completed high school because I was in college. When I had to quit, my third child dropped out of high school shortly afterward. We had cohesion and pride as a family when I was enrolled because I was making an effort to improve myself. My wife even mentioned completing her high school education. (BC,D)

My son wants to return to school. (26)

My oldest was a high school drop-out, but she went back and finished. (BC,D)

Our son has decided he wants college, too. (9)

I think it caused my second child to go to college. (BC,D)

My oldest daughter is thinking of going for her master's. She knows she's not too old.

My son wants his wife to enroll in college. I think it's because he believes it was a good experience for me.

9. Negative reactions.

My oldest was four then and always reacted negatively when I went to class because I couldn't spend more time with Him.

It sometimes interfered with my job as a father, but the children tended to be cooperative.

My son and I were both excited when I started and we compared notes about our learning experiences, but as time passed his problems at school increased. I wasn't with him enough and he lost interest in home, school and himself. College increased my

knowledge and self-esteem, but it destroyed our relationship. He said, "You should have finished school before you had me. People shouldn't have kids if they don't have time for them."

She gets angry if I'm too busy to help her with homework. (12)

There were times while I was writing my senior essay that I got angry and scolded them for no reason. (6,8)

The oldest resented my leaving for school, but he accepted it. (5,7)

They all resented the time I spent at weekend conferences. (9,10,14)

The older ones aren't happy when I miss their soccer games because of school. My son complains that all week I'm either in school or studying, but he knows how important it is to all of us that I get good grades. I can't leave out my sweet little A..., because she has all the patience in the world. She just asks if I have school this weekend and if I say no, her face lights up and here comes the can-we-do-this-or-that. She gets a bigger thrill than anybody when we get to do something special.

They and I resented my spending so much time away from home in pursuit of the so-called better life. Your questionnaire doesn't allow for honest answers...like all of us who attended just to collect the VA money.

My youngest seemed to resent the lost time, but she got the message that education was important to her parents. (10,BC)

They laugh about it now, but they didn't like waking up so early to the TV course.

My oldest son had negative feelings when I did my senior essay because of the time I spent in the library. The sight of the typewriter made him cry. But I let him come to a meeting with my essay advisor and he got a better understanding of why I needed this time. (3)

The children were proud, but the oldest had a backlash, feeling he wasn't following my role model. He dropped school, attempted suicide, entered the military, took drugs, etc. (13,17,19,20,BC,D)

There was once a conflict between watching my course or watching cartoons on TV, but I explained it was an assignment. (4,8,11,BC,D)

They were jealous of the time then, but now they'd be old enough to understand the importance of college. (13,15,BC,D)

She was upset when I had to miss a father/daughter dance, but her grandfather substituted. (10)

10. Other comments.

I'm a single, working parent and I felt my children were getting away from me socially. I saw many younger people in class and it opened my eyes about contemporary life. I learned that my own children were pretty average and I guess we've all turned out quite well.

I've worked afternoon shifts for ten years, so I don't think going to classes registered on my kids.

I went to trade school, design school, community college and the university. By the time my children knew where I was at nights, I decided to quit college and pay attention to them. (10,13,15,BC,D)

My career is settled and I just wanted the degree for the satisfaction, So, I'd recommend college to my children but I wouldn't be disappointed if they chose technical careers. (3,5,18,BC)

My father has a degree and a management position, so he may influence my son more than I do.

They thought it was funny that their father had homework, too. (7,10,11,11,BC,D)

They saw me reading, listening to tapes and writing papers, but I don't think they could see much in what I was doing and they didn't ask questions. Later, when I took a drafting class, they could see what I was doing and why--and they asked some questions. (7,13,BC,D)

I don't have children, but my younger brothers and sisters were proud.

My children are older and they helped me with homework. I compare grades with my grandchildren.

It had little influence because my children are self-starters. (6,9,12,13,BC,D)

It didn't affect my children (they were young), but it did affect my wife. She attended classes with me and helped me accomplish what I did. She encouraged, supported and helped me to comprehend. She was very angry when I didn't finish my last year. (7,9,12,BC,D)

They weren't interested in my educational advancement. (11,12,13,14)

More questions should have been asked about the spouse's reaction.

What is important is the home environment and the attitudes instilled, not whether the parents go to college.

Instead of my affecting them, it helped me understand them and my spouse better.

My oldest thought I was crazy to go at my age. (20)

They asked what I wanted to be when I grew up. (25,26,27,30)

Complete Excerpts

Below are more complete excerpts from some of the questionnaires which contained more extensive comments.

The entire family must get involved when one (or both) parents are in continuing education. The "kids" (17,18,19,20) were

extremely proud of my achievement. We had an open house for me and my oldest son who was graduating from high school.

It amazed both my wife and me how much the kids became interested in our studies. There was definitely a challenge for grades among us. A couple of weekends we took one or more of the kids with us. They really enjoyed it and found it interesting. (My wife was also enrolled.) --an office manager who graduated.

*

During the time I was enrolled in USWC, my children were too young to realize what college is. But one of my biggest reasons for originally entering the program was so that I could tell my children as they were growing up that I had gone to college. I hope this will spur their desire for higher education, which is something I never had. The biggest reason was because my whole family--father, mother, uncles and cousins--had never been to college and only two of my relatives have ever finished high school. I feel that my children are also at a disadvantage because of this. I strongly feel that society has progressed so rapidly that my family, in terms of education, may never catch up. We are, in a way, merely producing more unskilled factory workers.

This is not to say I have given up hope or taken a defeatist attitude; it merely means I understand what I feel the reality of the problem is. As for the College itself, I feel it helped me very much because it took a lot of fear I had about college away from me and, hopefully, that fear will not be transferred to my children. --a welder who dropped out because of conflict with his work schedule. Children are now 5 and 7.

*

My children were all junior or senior high school students at the time. They were keenly aware I was in a similar learning experience as they, so each one had an interest in my progress as to content, assignments, reading material, etc. The children would read most of my written

assignments and pass judgements (sometimes painfully honest).

I think they were surprised when some of their literature assignments involved reading books I had completed for humanities courses (Faust, Melville, Kesey, etc.) We were able to discuss and dispute content. I thought at the time, and more so now, that two of my children have better study habits because I had work to do and did it to impress them with the fact that adults (even parents) can have common experiences in education. --an automobile die maker who lost VA benefits and dropped out.

*

I cannot in all honesty say the role I played while attending college always set a good example for my children to follow in their schooling. I constantly waited until the last minute to do my school assignments, the result of which caused some bad domestic scenes and were always my fault.

The children soon figured out that going to college was something I had difficulty with. I would take out my frustrations on the family when they did not cooperate by being quiet and not bothering me during the tense times I had trying to finish my schoolwork. Like the time I pushed the desk partly through the wall. Another time, after spending fruitless hours writing, I went into the bathroom and lost my self-control when I saw towels scattered around. After berating the wife and children about the virtues of neatness, they looked at me and said, "What's the matter, can't you handle your schoolwork? Is that what they teach you in college, to act like an animal toward us?" They had my number from then on.

When my grades came in the mail, the oldest child would be interested in the marks. She would be proud if I got all "A's". The younger children didn't show much interest since their marking system is not the same.

I would say taking the children to campus, and once in awhile to class where they could meet other students and the instructors, had a good effect on them. It seemed to balance

out what I was doing at home locked up in my room. They could relate my studying to reality by seeing other students my age and by seeing the physical presence of the College. They always talked about the experience afterwards. Whenever we drive past the university the children always say, "That's where Dad goes to school."

The children would get angry if the TV course interfered with something they wanted to watch. They would make fun of me by saying something like, "You probably don't even understand what they are talking about." They were right some of the time. Occasionally, we would sit at the dining room table to do our homework. It was rare, since I would make it uncomfortable for them when they started their horseplay. --an automobile worker who graduated (and is known for his mild temper). The children are 5, 8, 10 and 15.

*

All my children were affected by my return to school. My oldest daughter, who is married and has two children, began to seek a higher education. My second daughter completed high school, whereas before she had wanted to quit. Now she's taken some community college courses. My son had a difficult adjustment period. First he tried competing with me, lost interest, dropped out of school and got involved with drugs and in trouble with the law. Eventually, he went back to get his G.E.D. and went into the military. He has a renewed interest in higher education and I feel he'll eventually return to it. My youngest was the most negatively affected. She was deeply resentful of the time I spent studying. Rather than compete for higher grades, she allowed her schoolwork to slip. She would deliberately interrupt my study time, get into my notes and mislay them while I was at work and otherwise make my studies more difficult. I felt torn between my own needs and my responsibility to her. I finally dropped out of school to spend more time with my family.

My children who were home were in their teens and this might have had a lot to do

with how they were affected. Another reason might have had to do with my ex-husband's attitude. He thought higher education was a waste of time and money and whenever my children talked of college he would do everything in his power to discourage them.

My children are all adults and married now, and although I saw few positive results while I was going to school, every one of them now has a different attitude towards higher learning. Even my youngest has gone back for her high school diploma and plans to get an associate's degree. --an automobile worker.

*

I feel that my enrollment in college did have an influence on my son's feelings toward going to school and getting an education. With me going to school and working, I feel that it gave him a reason to at least try to do better. It made him feel that an education was important. Also, it made me have more interest in how he was doing. But yet, I feel that with me continuing my education, it made my wife feel somewhat inferior and was partially the cause of our divorce. So I guess I could say my education brought my son and me closer and caused my wife and me to drift farther apart. --an automobile worker who lost VA benefits and dropped out. The son is 11.

*

My daughter once asked me, what was college like? I replied to her that college was a good experience for me. It has helped me understand a great deal about life and has helped me to understand others. I also told my daughter nothing is always correct or wrong, but college has given me a perspective on life that gives me the tools to solve many problems. As my daughter and I talked, I told her that life isn't complete unless you have a good education. Having an education makes a person knowledgeable. Education is what the quality of life is all about. --an automobile worker who graduated. His daughter is 11.

*

My oldest daughter (when asked on the phone): "I was very proud of what you were doing and amazed at how it had changed you--you seemed more alive and interested in everything. Now it has changed how I feel about maybe going to get a master's sometime if I have a special interest, no matter what age I am."

Comments from the Kansas City Sample

Below are some of the comments made by the students in the PACE Program in Kansas City.

I no longer have to push my eldest son to do his homework. He brings it to my room and studies with me. (11)

*

My 16 year-old quit school because of emotional problems, not because of her grades. She visited my classes and was very interested, even felt like volunteering information concerning a psychology lecture. I was shocked when she actually wanted to speak before the group as a visitor. I feel that she could "make it" in this type of classroom situation.

*

My child has asked me not to use all of the money for college because she wants to go, too. She tells all of her friends and mine that I go to college. (17)

*

My youngest child seems to have taken a more serious interest in her studies and doesn't depend so heavily on me for help with homework.

*

When I started back to school my three oldest children were not in school. They didn't know what they were going to do. They were working at any job they could get. After they found out that I was going to

school and working full-time, they began to really sit up and take notice. They began to ask questions about how they could get back in school. They wanted to know how to go about getting a grant for college. I helped them to get grants and to fill out forms. Now they are getting G.E.D.'s and getting ready for college or technical school.

*

My 14 year-old son delights in telling me to put my book up or turn off the TV and do my homework. Or he will say, "You can't go out until you finish your assignment." He helps me locate information needed for school and has made the remark, "If my school was as interesting as yours, I would never miss school." Last grade period he was absent 28 days from his civics class. His only excuse is how dull, boring school is. My 5 year-old granddaughter asks me if I am going to school today.

*

My grandson, 10, was discussing school with me one day. He asked me, "Why are you going to school?" At his age it is hard for him to understand why anyone would volunteer to go to school and study, especially someone my age. I replied that there was still too much in the world to learn about, and I wanted to prove that we are never too old to learn, providing we have average or above potential.

*

My children want me to watch TV with them instead of spending four hours a night studying.

*

My youngest child (4) seems to occasionally resent my time spent away at school. I feel guilty about spending this time away from both my children (especially since I work full-time), but I feel it is something I need to do for myself. My oldest child (7) seems to enjoy the idea that "Mommy is going to school". He seems to be empathetic and

asks me (as I ask him), what I did at school and what I learned that day.

*

My 14 year-old son and I have a better relationship since I started going to college, conversation-wise. He talks to me about more things than he used to, but he is not doing any better in school because of it.

*

I'm divorced and have one daughter. We're very close and share an awful lot. She's a good student and I have very little trouble getting her to study, but she does have a hard time keeping me in line. She will tell me to turn off the TV, she'll do the dishes--she really helps. She'll go to college next fall and must work extra hard to keep her grades up because she does want to compete with me, more so to encourage and support than actual competition. (18)

*

My three older children seem somewhat resentful that I am being taken away from them in terms of class time and time I have set aside for study. They show this by excessive rowdiness when I am away from home and excessive noise when I am home trying to study. It seems they feel the louder they become, the more attention I'll give them. (9,10,12)

INTERVIEWS OF CHILDREN

Sample Selection

Until now, the focus has been on the perceptions parents have of changes in their children resulting from college enrollment. The other side of the story is what the children themselves remember and perceive as effects.

Gathering that information posed two problems. The first was that the parents were, in their questionnaire, reporting as mature adults--and they were so over the entire period of time from pre- to post-college. Furthermore, they had, and always from an adult perspective, knowledge of their children's attitudes and behavior prior to college becoming a factor; they had a vantage point from which to observe change.

In contrast, from the time their parents enrolled in college to the present, the children probably passed through one or more stages of development in their schooling and maturation and are to that extent different people as reporters than they were while undergoing the experience. Then, too, the younger children will not have the same perspective on the pre-college period as their parents. They may not be able to report change because either their memories of themselves in that period are not accurate or because having a parent who has been to college is part of their conscious heritage.

The second problem is related and concerns the present age of the children and the implications for how well they can articulate their observations. This problem is at least amenable to some solution by resorting to interviews in the place of a written questionnaire.

Overlying all of this is the fact that, if the parent sample presented an exquisite variety in terms of the time relationships between the college experience and the children's exposure to it, the children's sample preserves those complications and adds its own heterogeneity by comprising two generations: There are children in the sample to be interviewed who are the same age as the offspring of other members of the sample

Two decisions were made in selecting the sample:

1) Parents had been asked in the questionnaire if they themselves would be willing to be interviewed.

Taking a negative answer as a wish not to be approached further, no interview requests were made except to families where the parent had answered "yes" to that question.

2) Families were contacted only if one or more of their first three children were aged 11 or over in 1981. This was arbitrarily designated as the cutoff point below which articulate responses were unlikely without using intensive and probing interviews. In such families, an attempt was made to interview all of the (first three) children 11 or over.

The imposition of these criteria resulted in a sample different from the original one in certain respects, and the distinction is brought about by the willingness or not to be interviewed. Of the 477 parents with at least one child of the requisite age, 178 said they would accept being interviewed themselves and their families formed the population for the interviews of the children. The characteristics of this population are presented in Table 29 and are compared with those of the equivalent population which differed in the answer to the question about being interviewed.

Table 29
CHARACTERISTICS OF THE POPULATIONS
WILLING OR NOT TO BE INTERVIEWED

Characteristic	Willing	
	yes	no
Race: black	29.5	18.0
Job status: unemployed	11.6	7.0
Job category: blue collar	53.3	64.6
Graduate: yes	44.9	28.8
Dropped out because VA benefits lost	44.9	60.2
Last attended college in 1976	26.4	41.3
School performance very important to life success	73.6	70.5
College education very important to life success	62.5	52.0
Setting an example very important	49.1	33.2
More conversation about school matters: yes	72.0	58.3

Evidently, the people not willing to be interviewed include many of those who lost their educational benefits and dropped out of college. The differences in composition are significant and it would be risky to apply what the children interviewed said to the entire original sample. Still, when some attempt was made to use discriminant

analysis on willingness to be interviewed and the variables shown in Table 29--along with eight others--were employed, there was very little success in finding good predictors. The best canonical correlation squared achieved was 0.09 and only 64% of cases were classified correctly, so some other factors may be determining the agreement to interviews.

A goal was set of interviewing approximately 200 children. In the end, it required attempted contacts with 140 families to interview 211 children in 118 of them. Of the remaining 22 families, fourteen had moved or had disconnected telephones and could not be reached. In five cases, the children had moved--usually out of state--and were not available by telephone. There were two refusals by children in one family (but a third child was interviewed), and two interviews were terminated by the wives of the student parents, one of these too early in the interview for that contact to be at all useful.

Six experienced, trained interviewers carried out this task in late Autumn, 1981--one year after the administration of the parent questionnaire. Nearly all the interviews were arranged by telephone, usually via a parent, but sometimes directly with the child. The interviews themselves were done by telephone or in person and the method depended upon age: 90% of eleven year-olds were interviewed in person--as were 73% of twelve year-olds, 64% of thirteen year-olds and 44% of fourteen year-olds. This progression continued, and only 7% of those twenty and over had face-to-face interviews. The instrument was a series of closed questions, but interviewers were instructed to prompt for additional comments. An open-ended question concluded the interview.

Of the children interviewed, 91 are currently 11-14 years old, 59 are 15-19 and 61 are 20 or over; 55% are male. In the oldest group, 20% were not in school at all when the parent was in college, 48% were in school, 20% were in college and 12% attended both during that time. After the parent left college, 77% of the 15-19 year-olds attended school, 10.5% went to college and 10.5% were in both. In the group twenty and over, 8% went to school, 43% attended college, 11.5% were in both and 38% attended neither.

Responses to Closed Questions

The children were asked a series of multiple choice questions and another set of true/false questions which concerned their opinions, their schooling and the influence of their parent's college attendance. Many of these questions are cognates of those asked of the parents.

The answers given are in Table 30 and are controlled for age and sex of the children, race, and the graduate status and job category of their parents. The ages shown

are those of the children when the parents left college and they have been grouped differently from the five year intervals used in reporting the parent questionnaires. To take account of the maturation of the children, there is a finer division during the primary school years, plus the groupings of adolescents and adults. This table reports the responses from all children, so that some families are represented more than once.

Looking at the first part of the table (multiple choice questions), there is a consistency between what these children said and the responses of the total sample of parents, and often the similarities hold in the patterns of controlling variables as well as on the overall percentages. For reference, one can consult Table 7 (opinions on the importance of school success and of college education), Table 9[2] (attitudes toward school and grade averages) and Table 15 (changes in attitudes and grades).

There are several interesting trends related to age. The older children were when the parent left college, the more likely they are to have very positive feelings about school. This question was field-coded and the result may simply reflect the ability of older children to articulate the essential value of school, shorn of the kinds of complaints heard from younger children (too much homework, mean teachers, stupid rules, etc.). In fact, counter to this positive attitudinal trend with age, children beyond primary school (at the parent's exit from college) think school and college are less important to success in life than do the younger children. Of course, many of these older children are now working and have the experience of knowing what education can or cannot provide. The older groups also are less likely to claim they are "A" students, but whether this reflects different grading standards or the emergence of modesty cannot be divined.

The sex of the children does not play a role in most of the variables, except that girls claim higher grade averages and give college attendance of the parents more credit for improving those grades than boys do.

The children of graduates and non-graduates do not differ in attitude toward school, initial opinions about the value of education and grade averages. They are distinct, as the parents stated, with respect to changes in attitudes toward learning (offspring of graduates were more positively affected), and graduation seems to change the opinions of children toward the value of college more than does attendance by parents who do not graduate. Unlike the parents,

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[2]Note, however, that Table 9 reports according to children's current ages.

Table 30
RESULTS OF INTERVIEWS WITH CHILDREN OF STUDENTS*

Response of Child	Total Sample	Characteristics of Children						Race		Characteristics of Parents			
		Age When Parent Left College				Sex				Graduate		Job Category	
		6-9	10-12	13-18	19 up	male	female	black	non-black	no	yes	white collar	blue collar
FEELINGS ABOUT SCHOOL AND SCHOOLWORK (ATTITUOE TOWARO SCHOOL)													
Very positive . . .	35.7	25.5	35.0	37.3	47.5	30.4	42.1	37.5	35.2	36.1	35.2	35.7	36.8
Mildly positive . .	33.3	31.4	33.3	39 0	27 5	36.5	29.5	37.5	32.1	34.5	31.9	31.6	34.0
Neutral	22.4	31.4	25.0	16.9	15.0	26.1	17.9	18.8	23.5	21.8	23 1	22.4	21.7
Negative	8.5	11.7	6.7	6.8	10.0	7.0	10.6	6.3	9.3	7.6	9.9	10.2	7.5
GRADE AVERAGE: CURRENT OR WHEN IN SCHOOL (GRADE AVERAGE)													
A	20.1	29.4	23.3	15.5	10.0	15.8	25.3	10.6	22.8	21.2	18.7	21.6	19.8
B	55.0	47.0	45.0	63 8	67.5	53.5	56.8	51.1	56.2	53.4	57.1	53.6	55.7
C	23.0	23.5	28.3	17.2	22.5	28.1	16.8	34.0	19.8	23.7	22.0	21.6	23.6
D	1.9	0	3.3	3.4	0	2.6	1.1	4.3	1.2	1.7	2.2	3.1	0.9
IMPORTANCE OF GOOD GRADES TO GETTING A GOOO JOB (SCHOOL PERFORMANCE AND LIFE SUCCESS)													
Very important . . .	67.1	86.3	83.3	47.5	47.5	67.0	67.4	70.8	66.0	68.1	65.9	71.4	64.2
Somewhat important .	31.0	13.7	16.7	49.2	47.5	31.3	30.5	25.0	32.7	30.3	31.9	26.5	34.0
Not very important .	2.0	0	0	3.4	5.0	1.8	2.2	4.2	1.2	1 7	2.2	2 0	1.9
IMPORTANCE OF COLLEGE EDUCATION TO SUCCESS IN LIFE (COLLEGE AND LIFE SUCCESS)													
Very important . . .	63.5	78.4	77.0	47.5	47.5	64.7	62.1	58.3	65.0	62.2	65.2	63.3	64.2
Somewhat important .	34.1	21.6	23.0	47.	47.5	32.8	35.8	35.4	33.7	34.5	33.7	33.7	40.0
Not very important .	2.3	0	0	5.1	5.0	2.6	2.2	6.3	1.2	3 4	1.1	3.1	1.9
DID YOUR PARENT'S GOING TO COLLEGE CHANGE THAT OPINION?													
Yes, more important	29.4	29.4	39.3	27.1	17.5	28.4	30.5	54.2	22.1	24 4	35.9	32.7	26.4
Yes, less important	1.4	2.0	1.6	1.7	0	1.7	1.1	0	1.8	1.7	1.1	1.0	1.9
No, no change . . .	69.2	68.6	59.0	71.2	82.5	69.8	68.4	45.8	76.1	73 9	63.0	66.3	71.7
DID PARENT'S COLLEGE CHANGE YOUR FEELINGS ABOUT SCHOOL AND LEARNING? (ATTITUDES TOWARD LEARNING CHANGED)													
Yes, much better . .	12.4	9.8	15.0	10.2	15.0	9.6	15.8	16.7	11.1	11.8	13.2	13.3	10.4
Yes, a little better	22.9	19.6	21.7	27.1	22.5	24.3	21.1	37.5	18.5	17.6	29.7	27.6	17.9
No, unchanged . . .	64.8	70.6	63.3	62.7	62 5	66.1	63.2	45.8	70.4	70 6	57.1	59.2	71.7
ARE YOUR GRADES DIFFERENT BECAUSE PARENT WENT TO COLLEGE? (CHANGES IN GRADES)													
Yes, much better . .	8.1	5 9	5.0	13.8	7.1	3.7	13.3	23.7	4.4	8 8	7.2	7.9	8.7
Yes, a little better	13.2	17 6	16.7	6.9	10.7	11.2	15.6	21.1	11.3	13 1	13.3	11.2	15.4
No, unaffected . .	77.2	72.5	78.3	77 6	82.1	82.2	71.1	52.6	83 0	77.2	77.1	78.7	75.0

Table 30 (continued) TRUE/FALSE QUESTIONS

Response of Child	Total Sample	Characteristics of Children						Race		Characteristics of Parents			
		Age When Parent Left College				Sex				Graduate		Job Category	
		6-9	10-12	13-18	19 up	male	female	black	non-black	no	yes	white collar	blue collar
COLLEGE CLASSES KEPT MY PARENT FROM SPENDING ENOUGH TIME WITH ME (REACTION TO PARENT IN COLLEGE)													
True	15.4	18.6	20.7	12.3	6.7	15.5	15.3	15.8	15.3	10.3	21.1	19.8	10.9
IT WAS HARD NOT TO BOTHER MY PARENT WHEN HE HAD HOMEWORK (REACTION TO PARENT IN COLLEGE)													
True	41.2	48.5	55.2	34.5	12.5	37.9	45.3	50.0	39 7	34.4	48.7	35.8	45 8
IT'S NOT UNUSUAL FOR PARENTS TO GO TO COLLEGE													
True	74.4	70.0	83.1	72.4	70.0	71.9	77 4	91.7	69.2	76.9	71.1	77.1	72.4
MY PARENT TALKED TO ME MORE ABOUT SCHOOL MATTERS AFTER GOING TO COLLEGE (MORE PARENT-CHILD TALK ABOUT SCHOOL)													
True	61.4	63.4	56.1	65.5	61.3	65.3	56.6	80.0	57.0	60.4	61.9	61.4	62.6
MY PARENT COULD GIVE MORE HOMEWORK HELP BECAUSE OF COLLEGE (MORE ABLE TO HELP WITH HOMEWORK)													
True	64.6	85.4	66.7	54 2	44.0	64.1	65 2	89.7	58.2	64.0	65.4	67.1	63 4
I WANT TO GO TO COLLEGE MORE BECAUSE MY PARENT WENT (CHILDREN CARE MORE ABOUT EDUCATION)													
True	48.9	63.3	49.2	43.4	33.3	49.0	48.8	66.7	44.7	50 5	47.0	46.4	51.5
I HAD MORE PRESSURE TO DO SCHOOLWORK BECAUSE MY PARENT WENT TO COLLEGE													
True	39.3	44.9	39.3	37.3	31.8	36.2	43.0	50.0	36.6	37.8	41.3	38.4	41.0
I THINK MY PARENT WAS TRYING TO SET AN EXAMPLE FOR ME (WANTED TO SET AN EXAMPLE)													
True	35.9	55.8	27.1	37.9	21.9	36.9	34.8	83.8	24.5	36.4	35 3	35.2	36 4
WE SOMETIMES DID HOMEWORK TOGETHER													
True	42.6	57.8	40.7	37.3	32.0	45 5	39.1	48.6	41.2	42.6	42.5	42.5	43.2
I THINK MY PARENT WILL SOMEDAY GET A BETTER JOB BECAUSE OF GOING TO COLLEGE													
True	84.4	95.6	85.5	76.9	79.4	81.0	88.9	96.8	81.9	78.6	90.1	89.8	78.3
WE SOMETIMES HAD A CONTEST TO SEE WHO WOULD GET BETTER GRADES (COMPETITION FOR GRADES)													
True	16.3	11.9	11.9	20.3	25.0	17.5	14.8	24.2	14.6	14.2	19.2	16.7	16.8
IT WAS EASIER TO DISCUSS SCHOOL PROBLEMS, MY PARENT COULD UNDERSTAND BETTER (MORE TALK ABOUT SCHOOL)													
. . . . .	59.8	81.4	56.1	50.9	51.7	63.6	55.3	57.1	60.3	64.4	53.8	59.8	58.3

Table 30 (continued) TRUE/FALSE QUESTIONS

Response of Child	Total Sample	Characteristics of Children						Race		Characteristics of Parents			
		Age When Parent Left College				Sex				Graduate		Job Category	
		6-9	10-12	13-18	19 up	male	female	black	non-black	no	yes	white collar	blue collar
I THINK MY PARENT READS MORE THAN OTHER PARENTS BECAUSE OF COLLEGE													
True	56.5	54.2	59.6	55.6	55.9	61.3	50.6	71.0	53.7	50.9	63.2	55.6	55.2
MY GRADES ARE (WERE) MORE IMPORTANT TO MY PARENT BECAUSE OF COLLEGE													
True	66.3	78.7	68.4	57.9	58.6	72.5	59.1	90.0	60.0	65.1	67.9	66.3	69.3
IT WOULD BE A GOOD IDEA IF MY OTHER PARENT WENT TO COLLEGE, TOO													
True	65.1	72.1	69.4	61.2	53.6	62.5	68.5	96.4	58.9	71.0	57.9	64.9	67.0

*All answers, "don't remember" (which was usually given by younger children), and "does not apply" (usually given by older children) were excluded from the calculations. For each question, the approximate cognate from the parent questionnaire (if there is one) is given in parentheses.

however, the children do not believe any effects on their grades are related to the parent's having completed college. As for job category, the children of blue collar and white collar workers can hardly be distinguished according to any of these variables.

The true differences are found by race. To begin with, black children agree with the parents that their grade averages are lower than those of non-blacks. In terms of changes for which parental college attendance is responsible, black children are much more inclined than non-blacks to say their attitudes toward learning and their grades have improved and that their feelings about the importance of college are much stronger.

Similar results pertain to the questions the children could answer "true" or "false". Two questions treated what might correspond to negative reactions to the parents' college attendance: the competition of studies for time with the children, and the incursions children feel they make on the parents' studying. Few children (15%) complained of lost time with their parents, but more (41%) seemed to feel they might be a hindrance when the parent was trying to do homework. This may be as much an indication of consideration as of a negative reaction. Both reactions decrease with increasing ages of the children. Children of graduates are more likely to feel there was a denial of time with their parents, perhaps because the graduates spent a longer period in college. These children also said more frequently that they might be intruding on the parent.

About 60% of the children responded affirmatively to the two questions about increased parent-child conversation about school, the same as the percentage of parents in the total sample who answered this way. The second of these, *ease of discussing school problems*, seemed to have most impact on the youngest children.

The children are even more positive (65%) than the parents (47%) about the *help* parents could give *with homework*, another age-dependent variable in which the younger children were the greater beneficiaries. If 40% of the children said they felt *more pressure to do their schoolwork*, the interviewers reported that this was apparently a caring pressure, not an imposing or threatening one. This may be why the question phrased in a different way ("my grades were more important to my parent") elicits an even more positive response (66%).

The same percentage of children (36%) said they thought their parents *wanted to set an example* as parents in the total sample who stated that *setting an example* was "very important" (37%), and if *wanting to go to college more* represents at least in part the parent questionnaire vari-

able, *cares more about education*, there is again an agreement in the percentages: 49% of the children *want college more*, 45% of the parents said their children *care more*.

Another question in which there is concurrence is *competition for grades*. Both children (16%) and parents (21%) give this a low positive response. It is also the only question in which affirmative answers by the children increase with age, which makes sense if the competition depends at all on the parent and child being at similar levels of courses.

Over half the children feel their parents *read more* than other parents do, and the percentage holds constant across age groups. On the other hand, while two-thirds of the children would like to see their *other parent also go to college*, the positive answers decrease with age. One wonders why? Still, this question may be another measure of the positive reaction children have to a parent being in college. If family life were disrupted by the commitment, one would not expect such readiness for further sacrifice--and note that because of the nature of the sample, the other parent would in almost all cases be the mother.

The most curious answers were those given to whether it is *unusual for parents to go to college*, curious because three-quarters of the children said it is not; yet, half of the parents of the interviewed children transferred 0-11 (quarter) credit hours into USWC, and 70% transferred fewer than 48. In other words, half the parents had essentially no previous college and a good part of the remainder had earned about one year's worth or less. The question, stated in the negative, was surely badly worded, but adult children would have seen through that. Are the children talking about parents in a more general way (which would explain why children of blue collar workers are as positive as the others), or has college for adults become "normal" to them because of their parents' participation, or do they believe college is simply accessible to anybody now? The last hypothesis is at least supported by the fact that of the children interviewed who have not already been to college, 55% are sure they will go and another 28% think they will.

Of the control variables, the sex of the children is often not a factor in their answers. The exceptions worth noting are that boys give more "true" responses to *increased talk about school matters*, *ease of discussing school problems* and *doing homework together*--all of which involve interaction, and may be important because (again, given the composition parent sample) they imply greater contact with fathers about education. The boys also say their *grades became more important to the parent* who went to college.

There are few differences between children of graduates and of non-graduates, and those there are hint at some ambivalence. Allusion has already been made to the two questions concerning competition for the parents' time. Graduates' children are also less likely to say it is *easier to discuss school problems* with their parent or that they *would like the other parent to go to college*, too. These children agree with graduates in the total parent sample that there was more *competition for grades*, but not that their parents are *more able to help with homework*. (Compare with Table 13.) The differences in the responses of children of blue collar and white collar workers, are, on the whole, negligible.

Once again, in this set of questions, the differentiation is by race--significantly so in thirteen of the fifteen questions listed. In some, blacks answer almost unanimously to affirm positive outcomes of their parents' college attendance.

Attention should be called to the footnote in Table 30. Exclusion of missing values (answers such as, "does not apply") results in a weaker age dependence for a number of school-related variables (for example, *help with homework*) since many adult children took themselves out of the calculation of percentages. Younger children who "don't remember" are also removed. There are missing values among the intermediate ages as well. These sometimes occur because the children did not live with the student parent (separation, divorce) and, in a few cases, several missing values are recorded in one family because more than one child was interviewed.

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In written comments, some parents said they took their children to the library and to museums in connection with course assignments, or that the children sometimes accompanied them to the university. Because such excursions are objective events, it was decided to ask children about their occurrence before and since college attendance.

Two questions were posed: 1) Before your parent went to college, did he ever take you to...?; 2) Does he take you more now? The categories were museums, movies, the library, ethnic festivals[27], sports or other events on the university campus and music concerts. The answers of the children are in Table 31.

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[27]These are popular outdoor festivals held in Detroit during the summer months and generally well-attended.

Table 31
PARENT-CHILD ACTIVITIES BEFORE AND SINCE COLLEGE I.

Activity with Parent	Before going to college, my parent took me to: (My parent takes me more often now to:)						
	Total Sample	Graduate		Job Category		Race	
		no	yes	white collar	blue collar	black	non-black
Museums .	58.5 (21.7)	57.0 (22.9)	60.2 (20.3)	66.7 (23.8)	51.1 (21.4)	75.0 (33.3)	54.3 (19.0)
Cinema . .	89.6 (40.1)	92.9 (47.2)	85.6 (30.4)	92.7 (43.2)	86.9 (40.4)	91.1 (56.8)	89.1 (36.2)
Library .	58.7 (27.2)	57.4 (28.7)	60.2 (25.0)	65.2 (28.2)	53.6 (25.3)	79.1 (27.0)	52.6 (27.4)
Ethnic festivals	38.1 (30.2)	33.3 (31.7)	43.7 (28.2)	34.8 (30.8)	42.6 (30.6)	53.7 (40.5)	34.0 (27.8)
Campus events .	8.5 (10.7)	11.5 (12.8)	4.8 (7.7)	7.9 (14.8)	9.8 (7.1)	21.1 (16.2)	5.4 (9.4)
Music concerts	24.4 (11.8)	14.2 (9.3)	36.8 (15.2)	26.1 (15.0)	22.3 (9.0)	43.2 (13.5)	19.4 (11.5)

Only "yes" answers to these questions are interpretable; they mean that something, or more of it, happened. "No" answers can have several meanings. Before college, they could imply that the child was too young for certain activities or, on the contrary, already too old to be taken by the parent. A "no" answer to the second question may mean that the parent never did and still doesn't take the child to the activity mentioned, or that the parent used to and still does but not "more" than before, or that the child now attends such activities on his own.

The table shows a reasonable level of common activities between parents and children, with going to the cinema the most prevalent, as might be expected. If there is a surprise, it is that parents were more likely to take their children to museums or the library than to the ethnic festivals, which are often thought of as meant for family outings. The post-college percentages of "yes" answers indicate that there has been an increase in all the categories of excursions. The one which stands out is "campus events"; it is the only one for which the percentage is greater

after, than before, college--suggesting that some children were taken to the university for the first time after their parents went to college. Unfortunately, the question did not mention classes as one of the "events" or the positive response may have been higher.

These results are broken down by graduate status, job category of the parent and by race. One way to analyze the outcome is to compare the ratio of the percentages in each of these dichotomies before and after college. Doing so indicates that the gap between the children of graduates and non-graduates has been narrowed (or reversed) for museums, the library, ethnic festivals and concerts. In all of these cases, the parents who eventually graduated were more likely, prior to college, to take their children to these institutions than parents who were not to complete their degrees, and this may imply an indirect benefit of "successful" participation in higher education.

The gap between white collar workers (who seemed to do more with their children in most of these categories) and blue collar workers was similarly narrowed for museums and the library, but widened for concerts. It became even for ethnic festivals and reversed for campus events. For the latter, blue collar workers seemed more inclined to attend such events with their children prior to college, but this decreased afterward. One explanation may be that among the parents whose children were interviewed, 60% of the blue collar workers were forced out of college by loss of VA benefits, compared to 34% of the white collar workers.

The most clear-cut of the dichotomies is the racial one. Black parents are said by their children to have participated more with them in all of these activities than white parents are by their children. Here, too, the gap narrows (non-blacks become more sociable with their children) after college for the library, campus events and concerts--but it widens for museums and the cinema.

Another way to view the data is to directly compare the answers given to the two questions (before and after college). This will show which children answered "yes" to both but, more importantly, it measures whom among those who answered "no" to the first question answered "yes" to the second. Logically, this would eliminate those who responded negatively because they were already too old, prior to the parents' college, to be taken places--and, therefore, it is a better way to observe real change. This has been done in Table 32.

Roughly one-fifth of children not taken to museums, the cinema, the library and ethnic festivals before their parents went to college are now--and one can presume that this might be higher if children who first said "no" did not

Table 32
PARENT-CHILD ACTIVITIES BEFORE AND SINCE COLLEGE II.

Parent takes me [more] now to: (recording "yes" answers)	Parent used to take me before college:	
	yes	no
Museums	18.7	19.7
Cinema	39.5	17.6
Library	26.3	25.3
Ethnic festivals	38.7	21.0
Campus events .	46.7	7.2
Music concerts .	32.4	4.5

age beyond the point when such parental behavior was likely. Campus events and concerts don't show the same trend; children not taken before are not now, either. To varying degrees, children who said "yes" to the first question also claim the common activities have increased.

In sum, there are many factors which might affect what families do together, but there is enough evidence here and in the comments of the parents to suggest that parental college attendance plays a stimulating role.

*

For all the effects college attendance may have on children, why do they believe their parents went to college in the first place? Do the children conceive of college as a place to go in order to "get ahead", or do they envision other reasons?

Children were asked the following question:

> There are many reasons why people go to college: to prepare for a different job, to learn new things, to keep up with their children or to understand the world better. What do you think was the most important reason your parent went to college?

The answers to this question were open-ended, although some guidance was obviously given in its phrasing. When the

children gave an answer, they were asked if there was also any other reason their parent went. The responses were categorized into five groups: job advancement, education and to learn more, self-fulfillment and enjoyment, helping the children or setting an example, and "other". The results in Table 33 are given for both the first and second *reasons* stated by the children, and are broken down by the age of children when the parent left college, race, and graduate and job status of the parents. There were no differences in the answers of male and female children. Although 192 children gave one reason (the rest said they didn't know), only 87 gave a second.

Most conspicuous, is the fact that nearly two-thirds of the children do not see the reason for going to college as job advancement--at least as it is relevant to their parents. The number citing the career reason as primary decreases with age of the children but, even among the youngest, is fewer than half. Blacks are seen as substantially less job-motivated than non-blacks, blue collar workers somewhat more so than white collar, and graduates and non-graduates as equally so. Some of the racial effect has to do with age, the fact that a larger percentage of older children are black.

The reasons, *to learn more* and *self-fulfillment*, tend to be reciprocal in the frequencies with which they are cited by age. While they are similar as motives, *self-fulfillment* is a more sophisticated response and it was given more by older children--something which demonstrates what was discussed at the beginning of this section on the articulateness of the children interviewed according to their ages. Of course, the older children probably have older parents, for whom job change may be less of a stimulus for going to college than self-satisfaction. Blacks report *self-fulfillment* nearly twice as often as non-blacks, for some reason non-graduates are said to want *to learn more* while graduates are said to attend for *fulfillment*. White and blue collar workers differ only in the self-fulfillment category, with the latter scored lower.

A rough idea of agreement on reasons within families can be had by calculating correlations. For the primary reason, the correlation coefficients between the first, and the second and third children, respectively, are: 0.18 and -0.23; between second and third children it is 0.64. When controlling for the age of the oldest child (and using pairwise deletion), the partial coefficients between the first, and the second and third children are: 0.07 and -0.45; between second and third children it is 0.56. Thus, there is no great uniformity within families, except among later-born children (younger), and younger children in a given family are more likely than their older siblings to cite the

Table 33
REASONS CHILDREN GIVE FOR THEIR PARENTS HAVING GONE TO COLLEGE*

Reason	Total Sample	Age When Parent Left College				Race		Graduate		Job Category	
		6-9	10-12	13-18	19 up	black	non-black	no	yes	white collar	blue collar
Job advancement	37.0	47.6	33.9	39.3	26 3	27.1	40.6	36.6	37 4	32.6	41.5
	(32.2)	(22.0)	(48.0)	(32.0)	(20.0)	(20 0)	(35.8)	(30 0)	(35.0)	(32.5)	(31.1)
Education, to learn more	33.3	47.6	42.9	35 7	0	31.3	34.3	40 6	25.3	32.6	35.1
	(27.6)	(29 6)	(20 0)	(28 0)	(40 0)	(40 0)	(23 9)	(28 0)	(27 0)	(27 5)	(28.9)
Self-fulfillment enjoyment	25.0	2 4	21 4	17 9	65.8	37 5	20.3	18 8	31.9	31.5	18.1
	(12.6)	(7 4)	(12 0)	(12.0)	(30 0)	(15 0)	(11.9)	(8.0)	(18.9)	(15 0)	(8.9)
Help children, set an example	0 5	0	0	1.8	0	0	0.7	1 0	0	0	1 1
	(20.7)	(33.3)	(20.0)	(16 0)	(0)	(20 0)	(20.9)	(28 0)	(10 8)	(17.5)	(24.4)
Other	4 2	2.4	1 8	5 4	7.9	4 2	4 2	3.0	5 5	3 3	4.3
	(6.9)	(7.4)	(0)	(12.0)	(10.0)	(5.0)	(7.5)	(6.0)	(8 1)	(7 5)	(6.7)

*Top row represents the first reason given by children; (bottom row), the second

reason with the lowest value: *job advancement* (which is the reason for the negative correlation).

The secondary reasons given by children have some similarity to the primary ones, but there is some evening out within categories; for example, wanting *to learn more* by graduate status, and *job advancement* by job status. The big difference is that while only one child gave *helping children and setting an example* as a primary reason, 21% of the children mention it as a second reason.

There are some meaningful trends when one looks at the first and second reasons given by the same children (N=87), and these are shown in Table 34.

Table 34
WHY PARENTS GO TO COLLEGE (ACCORDING TO CHILDREN):
SECOND REASON AS A FUNCTION OF THE FIRST REASON

Second Reason	First Reason		
	Job Advancement	Learn More	Self-Fulfillment
Job advancement	0	61.1	33.3
Learn more . . .	45.5	5.6	41.7
Self-fulfillment	21.2	8.3	0
Help children .	27.3	19.4	16.7
Other	6.1	5.6	8.3

It really seems as though there is a hierarchy among *job advancement*, *to learn more* and *self-fulfillment*. Children who said *job advancement* the first time make *learning more* next in importance. Those who said *self-fulfillment* pick the most similar variable (*to learn more*) as their second choice most often, then *job advancement*. Those who said *to learn more* first move to *job advancement* as a second reason. Interestingly, the *helping children* selection benefits most from those who gave the materialistic reason (*job advancement*) first, not the more altruistic ones.

How valid is the judgement of the children? An answer is not available for the majority of the parent sample, but the graduates among them completed a second questionnaire at

the same time as this study (the parent portion) was conducted. When these graduates[28] were asked for the most important benefit of the degree, 33.6% said the satisfaction of having it or the enjoyment of learning, 34% said using it as a "stepping stone" for more education, 25.7% said it was a credential for job advancement or that it improved work performance. The remainder gave other reasons or cited no benefit. So it does appear that the children are on the mark.

Discriminant Analyses of Interviews

In the parent questionnaire, discriminant analysis was used to find the best predictors of changes in attitudes and grades. Since parallel questions were asked of the children, it was of interest to perform the same analysis and to compare the types of variables which discriminate change and no change. Recall that the responses of the children to whether their learning attitudes and grades changed as a result of a parent going to college strongly resembled the responses given by the total parent sample. Would the predictors, as well?

The object here is to discriminate using exclusively the characteristics of the children and their answers in the interview; that is, there are no parent variables (except race). The procedure resembles the one used before. All variables which correlate significantly (this time, $P \leq 0.10$) with *change in learning attitudes* or *change in grades* were entered into the analysis stepwise in order to determine the best predictors.

There were 25 variables which correlated with attitude change, and 34 with grade change. None of these had intercorrelation coefficients greater than 0.50. The reason for this is probably the fact that all children are in the analysis. Siblings do not always agree with each other and there are also the differences by age which have been reported. A sample by birth order or a more homogeneous sample by age may have produced higher correlations among some variables. Also, for these discriminant analyses, the answers, "does not apply" were allowed to remain. The responses, "much better" and "a little better" were, as before, combined into one group to be compared with "unchanged". The results for both dependent variables are in Table 35.

A substantial number of variables entered into the discriminant functions for both variables, eleven for *attitude*

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[28] Referring to all graduates in the sample, not just those whose children were interviewed.

Table 35
DISCRIMINANT ANALYSES OF INTERVIEWS WITH CHILDREN: CHANGES IN ATTITUDES TOWARD LEARNING AND IN GRADES

Discriminating Variable	Standardized Coefficients	
	Attitude Changes	Grade Changes
My mind was changed about going to college	0.46	0.22
Think college more important to success	0.44	.....
Race	0.40	0.37
Easier to talk about school problems	0.29	0.26
Parent used to take to ethnic festivals	0.25	.....
My grades more important to parent	0.22	0.22
College reduced time with parent	0.21	.....
My job goals were changed	0.18	0.48
I want college more now	0.18	.....
Parents in college is not unusual	-0.16	.....
Parent could help more with homework	-0.15	.....
My parent reads more than others now	.....	0.35
I think parent will get a better job	.....	-0.34
Parent takes to concerts more now	.....	0.32
My attitude toward learning changed		0.29
More pressure to do homework	.....	0.26
Think parent was setting an example	.....	0.24

Table 35 (continued)

Discriminating Variable*	Standardized Coefficients	
	Attitude Changes	Grade Changes
Child's grade average	.....	0.24
Parent-child competition for grades . . .	.....	-0.20
Sex of child	.....	-0.17
Parent takes to museums more now.	.....	-0.15
Canonical correlation squared	0.39	0.43

*Variable descriptions are abbreviated. Phrases like, "since parent went to college" or "because of parent going to college", are implied in most cases.

change and fifteen for *grade change*. Five were good predictors for both. Caution must be exercised in interpreting some of the coefficients because the "does not apply" option was allowed to remain in the variables with true/false dichotomies. For example, children who get more help with homework do tend to say their attitude improved. In a case like this, the function has picked a variable whose answers ("true", "false" or "does not apply") make it a good predictor, but the sign does not have its usual meaning. The sign is indicative for still-dichotomous variables. For example, blacks are more likely than non-blacks to say that attitudes improved.

In the parent questionnaire, the predictors which appeared for attitude and grade changes were *more parent-child conversation*, the parent *wanting to set an example*, *probable job status* of the child, *race* and *graduation status* of the parent. Except for graduation status, which is unknown here, some comparisons can be made.

Several variables which discriminate for attitudes may be surrogates for the parent *setting an example*: the child *changing his mind about going to college*, *thinking college is important to success* and *wanting to go to college more*--all because the parent went. Possible surrogates for *more parent-child talk* are: more *ease in talking about school problems*, more *help with homework* and *being taken to festivals* (a form of interaction). The *changes in job goals* relate to the *probable* job variable which discriminated

parents' views. Race is an important discriminator here, as well as for parents. That leaves only three variables unaccounted for: *reduced time with the parent, greater importance of grades* and whether *parents being in college is unusual*--although the first two speak to interaction, and the third to *setting an example.*

The pattern shifts somewhat for grade changes. Among the discriminating variables are some directly pertinent to such an effect: the *children's grade averages, competition for grades, grades more important to the parent* and *more pressure to do homework.* The last three related to interaction--as do *easier talk about school problems* and *being taken more to concerts and museums.* The parent *setting an example* is important; in the first place, the exact parallel in the interview now appears, as does the children's having their *minds changed about going to college.* The *parent reading more* and *having a chance at a better job* may also stand for *setting an example.* The latter, plus *change in job goals,* are the occupationally related variables which discriminate, with *job goals* being much stronger as a predictor of grade than of attitude change.

Race appears again with a high coefficient, so does sex (girls answer more positively). It is interesting that of the two variables which ask directly about more parent-child conversation, the more specific one, *easier talk about school problems,* discriminates, while the more generally phrased question does not appear. Note, too, that the variable, *attitude change,* is a predictor for grade change. The children's ages do not appear in either equation.

The canonical correlations squared are rather high for both groups: 0.39 for *attitude change,* 0.43 for *grade change.* The classification results were also fairly successful (Table 36), with 83% of cases correctly classified for attitude change and 89% for grade change. The classification functions were moderate in their ability to classify positive change, but excellent in classifying "unchanged" cases.

Table 36
CLASSIFICATION RESULTS FROM INTERVIEWS WITH CHILDREN: CHANGES IN ATTITUDE AND GRADES

Dependent Variable	Correct Classification		
	improved	not affected	overall
Changes in learning attitudes	66.2	92.2	83.0
Changes in grades	67.5	95.1	89.1

COMMENTS OF CHILDREN

The children interviewed were encouraged to make comments which further explained the answers they gave, and were also given an open-ended question at the end. The paraphrased answers to selected questions are presented first. The grouping is by the current ages of the children (1981). Many of the comments are coded with characteristics of the parent: graduate(G) or non-graduate(NG), black(B) or non-black(NB), white collar worker(WC) or blue collar(BC).

Reasons for Which Children Think Parent Went to College

The statements below are taken from both the primary and secondary reasons children gave for their parent's going to college.

11-14

didn't have much to do after work (G,NB,BC)
to finish something (G,NB,BC)
wanted to see what school was like again (G,NB,BC)
help kids with homework
so us kids could go to college (NG,NB,WC)
to help me learn (G,B,BC)
so I'd want to go to school (NG,NB,BC)
set an example so we'd go (NG,NB,BC)
so he could understand my problems more (NG,NB,BC)
because we wanted better things (G,B,BC)
learn something he'd missed (NG,B,WC)
people would look up to him (G,NB,BC)
to get a degree

15-18

to get a degree
better himself
make life easier and say he went to college (NG,NB,WC)
to refresh himself
to broaden himself
he's a bookhound, values education (NG,B,WC)
improve himself intellectually (NG,NB,WC)
dropped high school and wasn't getting anywhere (G,NB,WC)
help us with our work

get smarter and do more things (NG,NB,WC)
wants us to have better education for the future (NG,B,BC)
would want me to go, pattern myself after him (G,B,BC)
set a good example for me (NG,B,WC)
always wanted to finish (G,NB,WC)

19-23

something he always wanted to do
a socializer when he was young, is mature now (G,NB,WC)
better himself, know he could accomplish it
get a doctorate and help black children (G,B,WC)
didn't finish high school, always thought education important (NG,NB,BC)
likes to learn
had time on his hands (NG,NB,WC)
self interest, a challenge
GI benefits (NG,NB,BC) [sibling of child, above, who said, "didn't finish high school"]
is laid off, to become more marketable, something to do while not working (NG,NB,BC)
keep himself busy and his mind active (NG,NB,BC)
for status as a businessman (G,NB,WC)
be a better person, more well-rounded and educated (G,NB,WC)
had everything but a good education (G,NB,BC)
set a good example for us
likes to go to school

24 up

bored with the house, to prepare for the future (NG,B,WC)
always in school, likes to explore, enjoys learning (G,B,WC)
personal growth (G,NB,WC)
something to accomplish, couldn't when younger (G,NB,BC)
self esteem, feel better about herself
set a goal and wanted to reach it (G,B,WC)
just enjoyed it (G,NB,WC)
get a degree
self-improvement
fulfill a dream to go to college (G,NB,-)
an achiever, more she learns the happier she is, sense of satisfaction
something for herself after raising a family (G,NB,WC)
great respect for education, wanted to pick up

what she missed (NG,B,BC)
loves education, had time now to better herself (NG,B,BC)
self-esteem, her own identity (NG,B,BC) [last three are siblings]

The above comments are not a representative sample. They show the tone and style of some of the remarks and they include many of those classed as "other" in the previous section. They do, however, reveal a certain trend with age.

The statements of the youngest children have a kind of vagueness and a tendency to be self-focussed. In the 15-18 year-old group, the emphasis shifts to the parent and many answers were some version of, "to better himself". The 19-23 group continues this, but becomes more explanatory about "bettering" and is sometimes specific about what use could be made of education. The oldest children complete the shift and express the reasons more in terms of self-actualization.

How Parents Changed Children's Minds About Going to College

Children were asked if the fact that their parents went to college changed their minds about going themselves and, if so, whether the change was positive or negative. While most said there was no change and that they felt just as positive as before, some did state that they were more enthusiastic. Most of the comments below are from that group.

11-14

He told me it's good for me. I can learn and have fun, too. (NG,B,BC)

I want to see the inside, meet the teachers and learn more. (G,B,WC)

I want to learn all about stores and become a good store manager. (G,B,BC)

I'm proud of her degree hanging on the wall. Someday, I'd like to have more than one. (NG,B,BC)

No, I've always wanted to go in order to get a good job. (NG,NB,BC)

I want to go because he says it's good for me, but we may not have the money. (NG,B,BC)

I always wanted to go, but because I know he went I think it'll be good for me to go. (G,B,WC)

If I know my dad, I'll have to go. It's not left up to me. (NG,B,WC)

I want to go and learn as much as I can. (G,B,BC)

I thought high school was enough before. Now I realize college is important. (G,NB,BC)

15-18

I saw how happy she was with herself and how eager to learn more. (NG,B,BC)

If I can get through high school, I'll have more faith in myself. I wish I could be as smart as Daddy. (G,B,BC)

It could help me improve myself. (NG,NB,WC)

I want to set my own goal, do what's best for me. (NG,B,BC)

There's no big change. I know I have to do as well as he did, that's why I want to go. (NG,B,BC)

I want a degree so that I can do more than work with my hands. (G,B,BC)

I'm inspired by Dad. I know now I want to get ahead. (NG,B,BC)

Dad is always thinking of ways to improve. He took a big step going to college and I can take that step, too. (NG,B,WC)

I have college on my mind now more than ever. I've had first and second thoughts; now I'm more sure. (NG,B,WC)

19 up

When I see his degrees, I want [even] more. (G,B,WC)

College is not for everyone. It's not for me, but I might end up there. (NG,B,WC)

After I saw how skillful he's become, yes. (NG,B,WC)

It didn't change my mind, but it may have had a little influence. (NG,NB,BC)

It would be good for my ego and my pockets. (G,B,WC)

I wanted to continue after Ma went, but I can't afford it. (NG,B,WC)

Not for a few years. (G,NB,-)

Now that I'm older, it made me want to go more, a lot more. She sure has set an example. (NG,NB,BC)

I knew I could do better. Mom knew I could do better. I wanted to prove myself. (G,B,WC)

I had already graduated. (G,NB,-)

I was going before she was. (NG,NB,BC)

We went together. I learned educational values from her going. (G,B,WC)

I'd really like to back again. (G,NB,-)

There are things I can only accomplish by going further and she's behind me 100%. (G,B,WC)

Changes in Attitudes Toward Learning

Much of this study has had to do with the analysis of the variables, *changes in attitudes toward learning* and *changes in grades*, as function of parents attending college. These two sections present the children's comments about these effects, beginning with attitude changes. Recall that in the parent questionnaire, the positive effects on attitudes toward learning increased with age. That is well demonstrated here in the comments of the older children.

I started to know more when I was younger than other kids. (G,NB,BC)

He went to school when he was old and that inspired me. (G,NB,WC)

I was around when Dad was in school. He taught me what school is like. (G,NB,BC)

I work more to get things done. (G,NB,WC)

No, because I don't remember. (NG,B,BC)

I try harder because Dad had to go another year to make up a grade. He didn't do well the first time. (NG,NB,WC)

I don't know any dads who went to college, so I want to do like my dad. (G,B,WC)

I like to see Dad go to school. I thought grown-ups didn't, except to teach kids. (G,B,BC)

I want college more. It sounds like fun because Dad went. (NG,NB,BC)

Because we have study time, there's no TV, play or company. (NG,B,BC)

You have to go to school to get a good education, to do something important. I didn't feel that way before Dad went. (NG,NB,BC)

The more you know, the better job you get--like Dad. (G,NB,WC)

I feel more like doing the work to pass, not just loaf. (G,NB,WC)

He said, no college--no job you want. (NG,NB,BC)

Because I see how he is. He knows how to handle his business. (NG,B,BC)

He tells me to study hard and learn so I can make good money. (G,B,WC)

He always tells me, to get ahead you need college. (G,NB,BC)

He gets on us for bad grades. He's more strict. (G,NB,WC)

I'm glad he went; he can help me. (G,B,BC)

If he can learn, get good grades, graduate with honors--me, too. (NG,NB,BC)

I like the idea. My friends think school is for fun and play. (NG,B,BC)

A little. I used to be a dummy. Now I listen and try harder. (NG,NB,-)

I thought I should try harder because he made the effort to go to college. Because he tried harder. (NG,NB,WC)

I didn't appreciate school before. He put in my head how important it is and I agree. (G,NB,BC)

Because he had to go back and get his degree. (G,NB,WC)

When he got his degree I wanted one, too. I know success takes hard work. (G,B,BC)

Because he had good grades, I had to have them, too. (G,NB,WC)

Looking at him, how he worked hard and studied at the kitchen table, made me realize I could work hard, too. (NG,NB,WC)

15-18

Because we had to study every evening, I soon forgot to go out and play so much. (NG,B,BC)

I understand "C's" are not enough to get the job you want. (NG,NB,BC)

I always wanted college. Now I see how important a good education is. (NG,B,WC)

It wasn't as important before; now, it's a first priority. (NG,NB,BC)

I'm glad he went for his sake, but it had no effect on me. (NG,B,BC)

A little more [positive] because it helped him, he has more knowledge and it makes him want to know more. (G,NB,BC)

I think I can do the same thing my father did. (NG,B,BC)

Now I'm more eager to learn and enjoy school. (NG,B,WC)

When I see his effort, and coming out a winner, I want to press on. (NG,B,WC)

I didn't have a good attitude in high school. Dad's going helped me change. (G,NB,WC)

I compete. He's 50, I'm 18. If he can, I can. (G,B,WC)

19-23

If he can, I can. (G,NB,WC)

Seeing his progress in school makes me want to. (NG,B,WC)

It made me make it through high school. (NG,NB,BC)

I really want to do great things. (NG,B,BC)

He showed me you never stop learning. (G,NB,WC)

If he could, I could. He showed me the way.

I figured if he could put all that into it while working, it motivated me to put more into it. (G,NB,WC)

I know now how to better pursue what I want to do. (NG,B,WC)

I have more interest because of my parents. They pressured. I can't get away with as much. I see them interested, so I am. (NG,NB,WC)

My play periods included study. It was made family fun time around our house. Everybody read together. (G,B,WC)

24 up

I wish I continued my education. I can see so much good in my mother and how happy she is with her life. (NG,B,WC)

I wish I was more ambitious. (G,B,WC)

I think it's a lot more possible to go back. I never thought she'd go back and get totally what she wanted. (G,NB,-)

After high school, I had a chance but didn't take it. But Mom was plugging away and I admire it. I saw her trying and decided some day I'll do the same. (NG,NB,BC)

Now I feel like I want to study, to be educated. (G,B,WC)

It was a working example for me. I could see that college worked. (G,NB,WC)

I have more interest in learning. (G,B,WC)

It renewed my interest in school. I was getting apathetic, thought I'd gone as far as I wanted. She made me want to expand, seeing her so much more fulfilled. (G,NB,-)

After seeing what she's done, I've a better outlook on life, education and the total person. (G,B,WC)

Changes in Grades

In the previous section, changes in attitude were almost exclusively explained by the example parents set, rather than by increased direct communication. A few of the younger children mentioned more pressure, encouragement or help; otherwise, the answers were more about inspiration gained from the parents. The picture changes in the explanations for changes in grades. Most of the comments are about how the parent helps with homework or takes time to explain.

11-14

In social studies, when we talk about a place, I know about it because I went to class with Dad and saw films. (G,NB,BC)

We both went. It made me think more seriously about schoolwork, because it's important. (G,NB,WC)

I pay more attention to my grades. (NG,NB,BC)

Maybe better because he can help me. (NG,B,BC)

He explains things I don't know. (G,B,WC)

Sometimes I worked with him. (NG,NB,BC)

Because she helps me, things I don't understand. (NG,B,BC)

Now he can help me more. (G,NB,WC)

I work harder. (NG,NB,BC)

I have more enthusiasm about school. I think it's more important. (G,NB,WC)

My grades changed because he went. He helped me study. (G,NB,WC)

He helps me. If the teacher doesn't explain, he does. (G,NB,BC)

When I don't know, he helps and I get a better score. (NG,B,BC)

They're better because he can help. I read and do math better. (G,B,BC)

They improved because he helped me. (NG,NB,BC)

Because he helps. (NG,NB,BC)

Because I realized the importance. You must put in effort. (G,NB,BC)

No change, but I try harder. (G,NB,WC)

15-18

He learned more and then he could explain things. (G,NB,WC)

When we sat down to study, she took time to check my work and explain my faults. (NG,B,BC)

I get more "A's" now, have more interest in school. (NG,B,WC)

Because I learn things at home I wouldn't have learned in school. (NG,NB,BC)

He helped me more and I was more interested in what I was doing. (G,B,WC)

I don't get "E's" anymore. I go, and try to be on time. (NG,B,WC)

I do more. I want to impress him. (NG,B,WC)

Because he got "A's" and I wanted to catch up. (NG,NB,BC)

I saw education is good for people, learning and improving your mind. I'm more serious now--maybe just older. (NG,NB,WC)

He wants us to get better grades and take harder classes to be better prepared for college. (NG,NB,BC)

19-23

My average is higher than his now because of his influence. (G,B,WC)

Dad will stop what he's doing and help me. He can give me more than a book, and it stays with me. (NG,B,WC)

Because of his grades, he pressured me to do better. (NG,NB,BC)

I put forth effort now. I want to prove myself and show Dad how proud I am of him. (NG,B,BC)

He showed me how to be enthusiastic and that you can get good grades if you try. (G,NB,WC)

He goes to school so he knows how it is. I have to do my best because he knows when I'm not. (NG,NB,WC)

I'd bring home "A's" just to show her. I'd buckle down because of the fact she was doing it. (NG,NB,BC)

He could help me more. (G,NB,WC)

My father was somewhat of a teacher. Books were always available to us. (G,B,WC)

24 up

The standard was higher because she went. (G,NB,WC)

Yes, in high school. She made sure we did homework. She was more aware. (NG,NB,BC)

It was embarrassing that she had a 3.9 [average] and me, 2.8. I'd help her, but her awe of my being in college changed when she did better. (G,NB,-)

We went to campus together. That helped me a lot. (G,B,WC)

Open-Ended Questions

At the end of the interview, children were asked the following question:

> What other kinds of changes happened to your family or to you as a result of your parent going to college? For example, did your parents get more involved in your school activities or PTA, or did members of your family pitch in on household chores to give your parent time for school? Do you remember any special stories or incidents which happened? Did your parent try to "make up" the weekends spent away at conferences? If your parent wasn't able to finish and graduate, how do you think he/she felt about that? How did you feel?

Interviewers tried to cover all of these points and then asked if there was anything else to add. The comments are therefore presented in the categories of the various parts of the question.

School Activities

11-14

Mom joined the PTA for the first time after Dad went to college.

They were going to more things at my school.

He helps my sister with science.

He helped me with schoolwork. (Three said this.)

Dad could explain things to me. It helped me understand a lot, his going to college, because if he can learn, so can I.

Mom is more involved in school; she bakes for raffles. Dad coaches baseball.

He had to write a thick paper, a thesis, and that inspired me. I like to write and that inspired me more.

They seem more interested in my school now.

They went to more school activities.

No, Dad had his mind on his school and asked Mom to help me with mine.

15-18

I'm in chorus and they're in the parents group.

Very, in the PTA. Mom was class mother partially because of his going.

Dad got more involved.

More involved in wanting me to improve my education. He explained about college, getting better grades.

Mom is president of the PTA and teaches English to foreign students since Dad went to college.

Not more active in the PTA, but more concerned and aware.

We made sure the table was clean so he could work.

15-18

We all had to clean the den where he would study after dinner.

Everybody gave a little more. We were quiet. We divided his chores so he could study.

We pitched in a little harder.

We helped around the house more.

We all had jobs before and we did more.

We did what he had done.

Yes, more chores.

Yes, we did more of the things he used to do.

I took care of the yard and cars because Saturday was Dad's study day.

We tried to make things as easy for him as possible.

He'd leave notes telling us what to do.

19 up

If there was a test, we'd do errands the day before so he could study.

Everything was the same, except my father was so happy.

We did things for him prior to when he had to study.

We'd help in the apartment buildings he managed.

It put a certain strain on the family. The older ones had extra responsibilities.

Our father had to do more routine chores.

Yes, they went to more meetings and activities.

No, and I'm glad. Nothing can help our schools. What difference would it make?

19 up

Yes, both are in the PTA and Mom helped him with studies.

My father became a board member.

While few children mentioned specific activities at school in which their parent became involved, the ripple effect of those who did is interesting. In ten of the above comments, the non-student spouse is implicitly or explicitly said to have become more involved since the other parent went to college.

Helping with Chores

11-14

We all did things do give Dad more time.

We did his work, mowing the lawn and raking leaves.

We started using the dishwasher more. We all had to help more. I did the laundry, my brother vacuumed. All pitched in and didn't have to be hollered at.

We surprised him by cleaning the yard.

My brother did my dad's stuff and I helped.

Actually, I think he tried to help more with chores.

I had to help Mom so she could do things for him.

Mom would have things ready so he could study.

When he had to study we'd help in the house.

Mom assigned jobs to everyone and we were quiet so he could study.

My sister had more duties. Father did the shopping and laundry; it was role reversal.

The workload was put on my father.

Since children often have their tasks to do in the house, it might be difficult to distinguish what was normal from what was added; however, most of the remarks are specific enough to indicate that the rest of the family really was picking up the student's burdens. One gets the feeling that some families were mobilized around the parent's studies.

*

Only seven children were at all specific about the parent trying to make up for time with the family lost to studies, and even they are not precise about any effort which might be other than normal activities. Those comments are not repeated here.

*

Special Stories

When children were asked for any special anecdotes, most that they told dealt with reorganization of family life brought about by college or with new contacts within the family the student parent built around education. The latter seem to exemplify the variable, *more parent-child talk about school matters*, and it is not only the children's schooling, but the parent's, which are the subject of communication. Note the one person (19 up) who was very bitter about the parent being in college. This is somebody recovering from a bad accident and having emotional sequellae. School, in this case at least, is an additional destabilizing force in a family which has already experienced a trauma.

11-14

His special assignment: to watch cartons and write about violence in them. I thought it odd to watch cartoons for college.

Mom went to school, too. She went because Dad went. My brother started liking school better.

I once went along to his instructor's house to turn in a paper. It was neat. He'd come home and tell us what happened in class.

Dad changed his work hours to accommodate Mom's school. With bills for school and the house, we couldn't afford a sitter so my brothers and sisters had to stay home. We didn't like that.

We didn't get out as much. We kept the house quieter so Dad could study.

He had the TV course every evening. I didn't like it. We had to keep quiet when he studied. He was in a bad mood from long classes.

He can help me with math. He told me he wasn't good in math before.

My sister went to one of his classes and she thought it was exciting.

I went to the atomic energy plant with him; it was fun.

I went to some of his classes, but I couldn't understand. I was in the fourth grade.

He used to talk about his teachers and his friends at school. They used to go to the bar after school.

When he was in school, he was more into school than the family. We couldn't bother him because he was concentrating on his studies. Afterwards, he was part of the family again.

15-18

We had a fight over using animals for research. He argued for, and explained why. He had that in class.

He told me about Greek mythology he was learning about.

He'd come home and tell us about his work. He'd take us to class, show us his papers and grades.

He was having a good time going and learning a little bit more.

I lost sleep when Dad was in college because I got up with him to watch the [early morning] TV classes.

We both wrote papers on energy and nuclear power at the same time.

He helped us choose classes, more social sciences, like he majored in.

We had to adjust to the time element. We'd forget when he was home or gone.

He didn't like his social sciences instructor. He always wrote papers at the last minute. Me,too.

We all did more homework because we sat together and did it.

19 up

I hated him going to school. No parent should do it. He was grouchy. He only studied.

I used to watch the morning TV class with him.

He bragged about his report cards. He was proud of himself for going to school.

Mom said he loved his school and books more than her.

Sometimes we'd watch TV classes with him.

He told about people from all walks of life he was meeting.

He failed the first class, but kept on going.

The gas man was going to explain solar heating to her, but she already knew about it. It set him down.

If Parent Didn't Graduate

A majority of the children gave some answer (other than, "I don't know") to the question about how they and their parents would feel about not finishing college and

graduating. A selection of these is reproduced below. The first statement is how the child said the parent would (did) feel, and the statement in parentheses is how the child felt.

11-12

It would be unfair, he really tried hard. (I'd feel bad for him because he felt bad.) (G,NB,WC)

Disappointed because he said he really liked school and wants to go back. (Disappointed, it meant a lot to him.) (NG,NB,WC)

He might feel bad. (It doesn't bother me as long as he learned a lot of stuff.) (NG,NB,BC)

He might get mad. (I don't know because it didn't happen.) (NG,B,BC)

He just can't take it. He wishes he could go back but the job won't let him. There's not enough time. (We're kind of mad he can't finish.) (NG,NB,BC)

He tried as hard as he could and that's all he could do. (He tried and did the best he could.) (NG,NB,WC)

He wouldn't feel very good. He wants the best for him and for us. (I'd just think about how he felt.) (NG,NB,WC)

He would have liked to finish. (Not too good. I wanted him to finish.) (NG,NB,WC)

He wants to go again. (I think it's a bummer.) (NG,NB,BC)

Unsatisfied with herself. (I feel she could always try again.) (NG,B,BC)

I think he wants to go back, and plans to, but not now. (I thought it was good to want to go back, not just give up and say that's it.) (NG,NB,BC)

Disappointed, because if he finished he could get a better job. (I wish he could have finished, but I can't tell him what to do.) (NG,NB,BC)

He's got a good job now so I guess it doesn't matter to him. (It doesn't really matter to me.) (NG,NB,WC)

He would have died. (I'd feel sorry for him.) (NG,B,WC)

I didn't know he didn't graduate. (I don't know.) (NG,NB,BC)

13-14

Not that happy. He wishes he did. (I wish he did graduate.) (NG,NB,BC)

I think he was just happy to go as far as he did. (I didn't understand it then, so I don't know.) (NG,NB,-)

I think he'd like to graduate because he did all that work, to feel he succeeded. (I don't know why he didn't graduate. I wish he would have.) (NG,NB,WC)

He'd have been embarrassed. (I'd have felt sorry for him. He's smart enough; it wouldn't have been his fault.) (G,NB,WC)

He would have been disgusted. (I'd have felt a little hurt for him.) (G,B,BC)

Probably sad. (I'd feel sorry because he tried and just couldn't make it.) (NG,NB,BC)

15-18

He was disappointed. He says as he gets older he realizes the importance of education. (...) (NG,NB,WC)

He wishes he could have, tried hard and was upset. (I wish it, too. There wasn't enough money and time.) (NG,NB,BC)

I don't think it bothers him. (It doesn't matter to me. He has a good-paying job so it doesn't matter.) (NG,NB,BC)

Very embarrassed because everybody knew he was going. (I'd have laughed because he was supposed to be setting an example for us.) (G,B,BC)

I'm sure he'd like to go back. If he had the time, he'd finish. (If that's what he wanted, it's OK with me.) (NG,NB,BC)

I don't think he's too upset. We never discussed it. (It doesn't really affect me.) (NG,NB,WC)

He'd have felt bad because he tried hard and kept his job, too. (I'd have felt let down because he always stressed education to us.) (G,B,BC) [The older brother of the child who would have "laughed", above.]

He'd be disappointed. I never talked to him about it. (I would if it were me. It didn't make me disrespect him.) (NG,NB,WC)

He did graduate. No, I'm not sure he did. He probably wishes he did. (I wish he did, too--for a better job and more money.) (NG,NB,BC)

19 up

The money ran out, so he couldn't. He was bugged. (...) (NG,NB,BC)

I was glad for the time he went. (It didn't bother me.) (NG,NB,BC)

He would have been infuriated and frustrated. (I'd have felt he wasn't interested.) (G,NB,WC)

He graduated. (I felt proud, like I was the parent.) (G,NB,WC)

She would have felt a failure. (She's got more determination than me and if she couldn't, I couldn't.) (G,NB,WC)

Would have been really disappointed. (I'd have been embarrassed and worried. So many people were behind him.) (NG,B,WC)

He wouldn't quit. (It would make us feel bad if he quit, as if something were wrong.) (NG,NB,WC)

He'd be upset probably. (Then he couldn't tell me not to quit if I decided to.) (NG,NB,BC)

It didn't bother him. He didn't go to graduate, just to be in school awhile. (It didn't bother me any.) (NG,NB,BC)

It bothered her, but she'll be back. (I feel the same way. I know my Ma.) (NG,NB,BC)

She wasn't intending to finish. It was for self-improvement. (It doesn't affect me.) (NG,NB,BC) [This child and the previous one are siblings.]

She would have been hurt and sick. (I knew she had the ability. I never thought of her as a failure.) (NG,B,BC)

She would have felt terrible. (I'd have felt bad because of how she would have felt.) (NG,B,BC)

She would have been crushed. (I would bleed for her.) (NG,B,BC) [The last three children are siblings. Their mother is a few credit hours from graduation.]

The children's feelings about whether their parents completed school run the gamut from the many who didn't know or remember how the parent would (did) feel--and sometimes didn't care themselves--to the passionate and empathetic. Those who care, feel effort should be rewarded and they are quite supportive, believing their parents could succeed if conditions were different, or that something worthwhile came from the experience even if it was interrupted.

The surprise is the number of children who don't know whether their parents graduated or not, or are mistaken about it--even older children. It does not seem as if they are trying to hide the non-graduation from the interviewers. The answers to this question probably reflect how much the parent exploited college attendance to influence his children (by more conversation, etc.) or, in contrast, kept it a private matter. It is possible that some parents were deliberately vague about the outcome of their studies if they didn't finish.

It is also probable that some of the answers are misleading. Interviewers did not know the graduation status of the parents and they phrased the questions in the conditional. Some children, answering likewise, may have given the impression of incorrect knowledge of the college outcome of their parents. It is possible that some parents transferred to, and completed, a program in another college after

leaving USWC, or that children were, in some cases, referring to associate's degrees held by their parents.

Other

11-14

I wonder why you want to talk with me.

It's interesting, people interviewing kids. It helps us plan our future.

Mom shortened her hours at work to fit school in. She got up a 4:30am for homework so as not to disrupt the kids.

I think it's good my dad goes to college. It puts an example for us that he went.

He tries to understand our point of view as kids rather than as adults would see it. It's good to have this so people can go back and further their education. It helped him to want us to expand our knowledge and learn. He tries to get us to watch educational TV programs and he's more interested. It's nice to take time to get kid's views. (NG,NB,BC) [The child is 12.]

[At USWC] you can get an education and still be a father or mother to your family. (G,NB,BC)

It's good to ask the kids. It lets everybody know the family does stuff at home while the father is in school. (G,NB,WC)

Nice of you to ask these question to see how we feel about our parents going to college. (NG,NB,BC)

15-18

I think the interview is absolutely terrific. Now I feel important. I feel my opinion didn't mean much when Dad was in school. (NG,NB,BC)

There were no changes except that we all know what my father was trying to do for himself and the family. (NG,B,BC)

USWC is great. It makes parents realize what they missed and encourage their children to attend college. The interview is good. It gives kids a chance to express how they feel about parents going to college. (NG,NB,WC)

We had to limit our activities. There was not enough money and time. We're pleased and proud. It gave the family a reason to form better relationships. (NG,B,BC)

I feel we developed a strong tie in the family. Yes, he was more involved in my schooling. It was important to me as a whole. (NG,B,WC)

I always planned college, but it made me see I really should. He went twenty years after high school, so it was really important for him. (G,NB,BC)

19 up

We became more independent of her. It frustrated my father. She became less the good housewife. (G,NB,WC)

He'd take me to class to enrich me and we became closer because of it. (G,NB,WC)

I was proud. He's the only father among my friends who went to college and graduated. (G,NB,WC)

She'd say, I'm doing it, you should too. Laying the guilt trip. It worked sometimes. When I quit school to go to [another state] and came back, it set in how important it was to her. It helped me understand the importance for me to finish high school and was a big part of the reason I went back. I'm glad to tell someone about this. She'll be back. She's a fighter. (NG,NB,BC)

There was a new perspective. She wasn't just Mom anymore. She was smart. After high school, I had enough, but I watched her, went to some classes and it inspired me, made me want to learn more. My older sister also has a thirst for knowledge she got from Mom. She made us all believe: go for it (NG,NB,BC)

She helped my brothers and sisters more with homework. With me, it was sharing learning experiences--literature, ethnic studies. (NG,NB,BC) [The last three children are siblings.]

Comparisons in One Family

This section closes with extensive excerpts from the interviews of three children in one family. They are older (25, 28 and 29), and not typical of the rest of the sample in their volubility. They tend to agree more in their perceptions than many other sets of siblings, but the nuances show the different ways they saw the effects on their family. For example, from the youngest to the oldest the reason given for their mother going to college changes from a career goal, to a career goal plus self-enrichment, to fulfilling a dream. Their mother graduated. In the parent questionnaire, she commented on the strong moral support she received from both her husband and her children. The excerpts begin with the youngest child of the three.

*

[reason for going] I'd have to say advancement in job placement. She was basically a professional secretary and she wanted to get more into management.

[changed attitude toward learning] I think it's a lot more possible to go back and get what you want. I never thought she'd go back and get totally what she wanted. [I had] more respect for my mother.

I'd have to say [there was a] certain strain on the family. It put certain responsibilities on the older ones that they might not have had. My older sister had to do most of the cooking evenings and weekends. But my mother always worked so it was just a question of degree, making sure someone was there to watch the younger ones.

*

[reason for going] I would have to say primarily for a better job and secondarily to expand as a person, gain more self-confidence. She was a clerk-typist and because of education and high grades, she was able to go into a managerial position.

[changed attitude toward learning] The fact that in her case and for most people it has broadened their knowledge and sometimes appreciation for the arts, being more open-minded. It teaches you how to reason.

[changed grades] I would have to say that although she didn't have the same courses, it was a little embarrassing that she had a 3.9 average and I had a 2.8. A lot of times, though, she would come and ask my help. She used to be in awe that I was in college and then that changed when she started doing well.

Five of the six kids she raised before she went to college had married. At the time she was in, she had a teenaged daughter and it took a lot away from her and my father. She was also working 50 hours a week so it was hard all the way around. It didn't affect the other kids as much.

With my mother going to college I began to appreciate her more as a person than just as a mother figure. We can discuss things more, things I never knew she knew about or cared about. She has gotten involved in quite a few civic things.

[household chores] Mostly my sister, a majority of the housework and cooking. My father took over shopping and laundry. He was retired so a little role reversing went on. You have to remember that she was also working full-time.

I think these follow-up calls are excellent to get some feedback from the family. You don't have much chance to say, hey my mother just graduated, or this is the effect it had on me, what it did to my family. All in all, my experience with her going to school has been positive and hers has been very positive.

*

[before interview started] I think it's terrific you're getting the reactions of kids. My mom is exceptional. I don't think I could have handled it as well as she did, although now I see that if she could do it, perhaps I could, too. She set such an

example for me and for all of us. She was such an exceptional student and even managed to spend more time with us than before, although it was more planned, less spontaneous.

[reason for going] I think it was to fulfill the dream she had at 18 to go to college. She had wanted to be a teacher, but of course with the market the way it is that is not practical now. But she always had that dream.

[parent's college changed job goal?] Not at the present time. But because of what she's been able to accomplish and the variety of skills she's acquired that enlarge the range of her choices, I see that I can go back and do the same.

[changed attitude toward learning] I think it's renewed my interest in school. I think I was getting apathetic, thinking I had gone as far as I wanted. But seeing what she's done has stirred my interest, made me want to expand. I think part of that is seeing she is so much more fulfilled.

I've noticed a change in the marriage. My mother has become more dynamic and my father, partly because of health, has retired. They seem to have lost a common element. My mother goes out and pursues new interests while my father is content to stay home. My father supported my mother wholeheartedly, but I think sub-consciously he may be threatened by it.

The household responsibilities changed. My mother assumed less of them and they were divided among other people.

My mother's personality changed. She also became more assertive, not only professionally but also in her personal life. It was a little hard to see Mom go through the metamorphosis. Sometimes I liked the way she used to be. She seemed a little softer. I think that was because she had to schedule her time. She became a little more selfish with her time. You could feel that. I kind of missed the old Mom sometimes.

I remember the night she graduated. My husband and I flew up from [another state] and as a family we went to see her graduate. It was a moment of pride for all of us to be able to share in that.

I can see where USWC is a positive program and I'm awfully glad my mother could participate...I can see where positive school experiences for parents can perpetrate positive feelings in the kids. I've really enjoyed the interview. By asking some of the questions you did, it made me feel closer to my mom. And it's given me another chance to think about my goals. You asked if I wanted to go back to college, but I really had to think beyond a simple yes or no to what I really want to do. I'm glad you called.

COMPARISON OF PARENTS' AND CHILDREN'S RESPONSES

In discussing the interviews of children, comparisons of their responses were always made to the total sample of parents. This precaution was taken because direct comparisons within families are much more elusive. This is true for a number of reasons.

In the first place, there are only a few child-specific variables in the parent questionnaire and only four (of those so far discussed) have exact parallels in the interview: grade averages, learning attitudes, and changes in both. Even among these, the first is subject to error and the last two to different interpretations. The second, *general attitude toward learning*, has two problems associated with it. First, it was (for the interviews) the net result of a discussion with the children about the positive and negative aspects of school--and it was sometimes field-coded. Second, older children often answered in the present, not according to how they felt while still in school. There some who had severe difficulties and negative reactions at that time, but now have a positive attitude.

The second issue is the large number of variables in the parent questionnaire which were not child-specific. Some attention was paid earlier to showing that in the child-specific variables there was good evidence that the children were being distinguished from one another by their parents. The interviews represent the diversity among the siblings directly. Furthermore, not all the children in most families were interviewed and the "one or more children", specified in the questions asked the parents, and who were responsible for producing the "yes" answers, may not always been among those who were interviewed.

Third, the key variables by which children express change could differ from those used by parents so that comparison of cognates in the two instruments might not reveal similarities between parents and children.

Finally, neither memories nor the importance given to events will necessarily be the same, or be expressed by the same standards (on a Likert scale, for example), for parents and children.

These qualifying statements precede a discussion which may be less conclusive than heuristic for future studies by identifying the kinds of questions which need to be improved.

Child-Specific Variables

The most objective of the child-specific variables is, of course, grade averages of the children, and agreement between parents and children about those averages probably represents the maximum accord possible.

The actual correlations between what the parents and the children answered for grade averages were 0.53, 0.47 and 0.45 for the first, second and third children, respectively. While these are strong, one might expect them to be even higher. Some of the divergence is explained when the assertions are crosstabulated (Table 37). All children in this and following tables with crosstabulations are grouped using the multiple response procedure, and parents and children are paired.

Table 37
GRADE AVERAGES OF CHILDREN: COMPARISON OF PARENTS' AND CHILDREN'S ASSESSMENTS

Grade Average According to Children	Grade Average According to Parents			
	A	B	C	D
A	52.5	9.4	3.6	0
B	35.6	72.9	52.7	33.3
C	11.9	17.6	40.0	44.4
D	0	0	3.6	22.2

There are two reasons apparent for the differences between parents and children. At one end, the children seem more modest than their parents. Only half the children claimed to be "A" students agree, while the others say their grades are lower. The reverse is true at the other end of the scale. Children who are "C"--and even more, "D" (N=9)--students according to their parents, claim higher averages.

The situation for *general attitude toward school and learning* becomes even more complicated. The correlations between the parents' and children's assessments are 0.15, 0.39 and 0.33, again by birth order. The crosstabulation of the full sample is in Table 38.

Table 38
ATTITUDES TOWARD LEARNING: COMPARISON OF PARENTS' AND CHILDREN'S ASSESSMENTS

Attitude According to Children	Attitude According to Parents			
	Excellent	Good	Fair	Poor
Very positive .	41.3	33.3	37.8	0
Mildly positive	40.0	37.5	13.3	45.5
Neutral	15.0	22.2	33.3	36.4
Negative . . .	3.8	7.0	15.5	18.2

The trend to agreement is present, as predicted by the coefficients, but diversity shows up, especially at the low end of the scale where parents affirmed "fair" or "poor" attitudes. Of the group labeled "fair" by the parents, 38% of the children said their attitudes were, in fact, very positive. There is similar disagreement among children said to have poor attitudes. It is noteworthy that the lowest correlation was with eldest children. As a group, they will have a higher average age than children in lower birth orders and might be expected to express their opinions using criteria more similar to their parents', but this group also includes more of those adult children who have "reformed" and now have more positive attitudes than when they were of school age. It must also be remembered that younger children used this question to declare all manner of grievances which may loom large in their daily encounter with school but which may not figure in the parents' overall assessments.

The change variables, attitudes and grades, present a different picture. The correlations between the parents and the first three children for *attitude changes* were 0.15, 0.39 and -0.06. Those for *grades* were 0.18, 0.25 and 0.48. It is somewhat comforting that the *grade changes* are consistent in direction and that, in sum, these correlations are greater than those for *attitude changes*. Grade changes are, after all, more measurable. The differences in the coefficients for *attitude change* suggest that the parents and children may be giving different interpretations to this phrase. The two crosstabulations are in Table 39. In both, it can be seen that children distinguished by their parents as improved or not affected give almost identical answers.

Table 39
CHANGES IN ATTITUDES AND GRADES: COMPARISON OF PARENTS' AND CHILDREN'S ASSESSMENTS

Change According to Children	Change According to Parents		
	Much Improved	Improved	Not Affected
ATTITUDE TOWARD LEARNING			
Much better . .	21.3	9.7	10.3
A little better	23.4	23.6	21.8
Unchanged . . .	55.3	66.7	67.8
GRADES			
Much better . .	18.2	9.5	6.7
A little better	18.2	11.9	13.3
Unaffected . .	63.6	73.8	80.0
Worse	0	4.8	0.8

Non-Specific Variables

The results with child-specific variables hint at the even greater heterogeneity to be anticipated when children's responses are compared with the answers parents gave to questions which were not child-specific. The problem is to determine whether children and parents give the same answers to parallel questions. If not, is the agreement to be found instead in closely related questions; or, are the key questions by which parents and children measure change substantially different?

Correlations between parents' and children's answers will be discussed first, and these will help to explain the diversity in the crosstabulations which follow. One difficulty is that the focus must be on the size of the coefficients, especially for third-born children. After discounting missing values, the maximum number in this group is 28, so that it requires a coefficient of about 0.25 to achieve P=0.10, and of 0.33 for P=0.05. A selection of correlations is in Table 40.

Table 40
NON-SPECIFIC VARIABLES: CORRELATIONS BETWEEN
PARENTS' AND CHILDREN'S RESPONSES
(Cut-in headings name parent variables)

Child Variables	Birth Order		
	First	Second	Third
MORE PARENT-CHILD CONVERSATION ABOUT SCHOOL MATTERS			
Parent talked more about school	0.14	0.08	0.07
Easier to talk about school problems .	0.33	0.18	0.14
Reason parent went to college	0.19	0.02	0.38
WANTED TO SET AN EXAMPLE			
Think parent was setting an example . .	0.03	0.07	-0.22
Want college more	0.12	0	0.20
WAS MORE ABLE TO HELP WITH HOMEWORK			
Parent could help more with homework .	0.25	0.10	0.09
Grades improved	0.08	0.24	0.21
Think college more important to success	0.24	0.12	0.27
Parent talked more about school	0.32	0.14	-0.20
Learning attitude changed	0.32	0.12	-0.04
Think parent was setting an example . .	0.28	0.20	-0.22
WANTED TO BE ABLE TO HELP WITH SCHOOLWORK			
Grades more important to parent	0.13	0.14	-0.02
Parent talked more about school	0.19	0.14	0.05
SCHOOL PERFORMANCE IMPORTANT TO SUCCESS IN LIFE			
Grades important to success	0.11	0.06	0.14
Grades more important to parent	0.14	-0.09	-0.11
Parent could help more with homework .	0.17	0.30	0.26
Grades improved	0.10	0.30	0.41
PARENT-CHILD COMPETITION FOR GRADES			
Competition for grades	0.08	0.20	0.03
Learning attitude changed	0.16	0.20	-0.04
Reason parent went to college	0.17	0.22	0.14

Table 40 (continued)

Child Variables	Birth Order		
	First	Second	Third
CHILDREN CARE MORE ABOUT EDUCATION			
Learning attitude changed	0.12	0.13	-0.12
Want college more	0	0.15	0.09
College important to success	0.17	0.02	-0.24
Think college more important to success	0.11	0.06	0.03
Job goal changed	0.18	0.04	0.26
CHILDREN'S OCCUPATIONAL GOALS CHANGED			
Job goals changed	0.19	0.19	0.12
Want college more	0.27	-0.05	0.41
Parent talked more about school	0.24	0.23	0
Think college more important to success	0.21	-0.07	0.17
Learning attitude changed	0.17	0.24	-0.09
Reason parent went to college	0.30	0.05	-0.26

The variable, *more parent-child talk about school matters*, which was so important in the parent questionnaire does not correlate well with its replica in the interview. Instead, there is a much better correlation with the related variable, *more ease in talking about school problems*, and this recalls that only the latter was a predictor for discriminating changes in attitudes and grades as reported by the children (Table 35). For first and third children, there is also a relationship between *more talk* by the parent and the *reasons for which children think parents go to college*. Specifically, children who experienced more conversation about educational matters are more likely to give the reasons, *to learn more* and *self-fulfillment*, and less likely to say, *job advancement*.

Parents who intended to *set an example* find no echo that the children understood this. Rather, their (first and third) children are more likely to say they *want college more* now as a result of the parent's going.

There is agreement about *help with homework*, which diminishes with birth order (age), but the action of helping has even stronger consequences--though not always equally dispersed across birth order. Later-born (younger) children say grades improved and *college is thought more important to success* in all birth orders. *More talk about school* and a *better learning attitude* are reported by eldest children,

and by second children to a lesser extent. Deeds also count in the fact that *help with homework* brings out the response in children that parents were *setting an example*. Third-born children go against the trend, however, for the last three variables.

The intent alone *to be better equipped to help with homework* gets some response from first and second children, who say there was *more conversation* and that their *grades improved*.

The opinion of parents as to the *importance of school performance* does not correlate well with the children's, but parents who feel strongly about this apparently do something about it. Children say they get more *homework help* and that their *grades improve*.

Only second children agree that there was *competition for grades*. A stronger response for parents who said this happened is that first and second children say their *attitudes improved*, and all birth orders again lean more to educational and personal reasons, rather than job advancement, as the primary reason the parents went to college.

It is difficult to discover in the interviews any cognate to *caring more about education* which is consistent across birth order and has any strength. The only one may be *changed job goals of the children* as a result of the parent's college. It applies to first and third children, but that question was only answered positively by 15% of the total child sample.

The cognates for *occupational change* are related consistently in sign across birth order. There are also correlations between the parents' reports of *new goals* and the children *wanting college more, more talk about school, thinking college is more important to success* and *improved learning attitudes*--but none of these applies to all birth orders. It is interesting that what parents observe as job-related appears in the children as a stronger desire for college. Eldest children also think their parents went to college for other than career reasons if the parent thought they had *new job goals*. Third-born children think the contrary. There is at least the suggestion here that this variable, concerned with careers, is a more sensitive measure of *changes in learning attitudes* than variables directly related to education.

A selection of crosstabulations, with children of all birth orders grouped, are in Tables 41 and 42. The limited agreement between cognate variables in the questionnaire and the interview is evident, ranging (in the column of positive answers) from 23.5% for *job goal changes* to 68.7% for *help*

with homework. But children also answer affirmatively quite often when parents do not.

Table 41
CROSSTABULATIONS BETWEEN PARENTS' AND CHILDREN'S RESPONSES I.

Child Variables	Importance to Parent		
	Very	Fairly	Not Very
WANTED TO SET AN EXAMPLE			
Think parent was setting an example True	37.1	33.9	36.4
Want college more True	51.8	50.9	40.4
SCHOOL PERFORMANCE IMPORTANT TO SUCCESS IN LIFE			
Parent could help more with homework True	71.1	46.0	0
Grades changed			
Much better	9.9	3.8	0
A little better	15.5	7.7	0
Unchanged	74.6	88.5	0

Comparative Discriminant Analyses of Attitude Change

The results just presented suggest that the determinants for parents' and children's responses are different. As a whole, children are as positive about the effects on them as their parents are, but agreement within families--between parents and offspring and among siblings--is lacking.

One way to check the proposition that the determinants are different is to compare the predictors for a dependent variable which exists in both the parent questionnaire and in the interview. That is done here for *change in attitude toward learning* and, in order to have sufficient numbers, it is confined to the eldest children in the interview sample.

The process has three steps. First, the best predictors of attitude change in the total sample, according to

Table 42
CROSSTABULATIONS BETWEEN PARENTS' AND CHILDREN'S RESPONSES II.

Child Variables	Parent's Answer	
	yes	no
MORE PARENT-CHILD CONVERSATION ABOUT SCHOOL MATTERS		
Parent talked more about school		
True	65.6	51.2
Easier to talk about school problems		
True	65.9	39.5
Reason parent went to college		
Job advancement	30.7	55.0
To learn more	36.5	25.0
Self-fulfillment	27.7	5.0
Help children and other	5.1	5.0
WAS MORE ABLE TO HELP CHILDREN WITH HOMEWORK		
Parent could help more with homework		
True	68.7	51.5
Think college more important to success		
More important	36.8	19.4
Less important	2.8	0
No change	60.4	80.6
Learning attitude changed		
Much better	16.2	8.3
A little better	26.7	13.9
Unchanged	57.1	77.8
CHILDREN'S OCCUPATIONAL GOALS CHANGED		
Job goals changed		
True	23.5	10.9
Want college more		
True	62.3	41.9
Learning attitude changed		
Much better	17.4	10.2
A little better	27.5	19.0
Unchanged	55.1	70.8
Parent talked more about school		
True	75.0	53.0

parents, are tested on this smaller sample. The same variables are then also tested for how well they predict attitude change according to the children. The results of the first step are shown in Tables 43 and 44.[2]

Table 43
DISCRIMINANT ANALYSES OF ATTITUDE CHANGE IN ELDEST CHILDREN USING VARIABLES DERIVED FROM THE TOTAL PARENT SAMPLE

Discriminating Variable	Coefficients for Attitude Change According to:	
	Parents	Children
More parent-child talk about school	0.58	.....
Job type parent thinks probable . . .	0.70	-0.34
Number of children in the family .	....	-0.44
Parent wanted to set an example . .	0.46	-0.48
Parent graduated from college . . .	....	-0.40
Race	0.39	-0.69
Canonical correlation squared . . .	0.32	0.15

Table 44
CLASSIFICATION USING VARIABLES DERIVED FROM THE TOTAL PARENT SAMPLE

Cases Classified by Whether Attitude Changed According to:	Correct Classification of Children:		
	improved	not affected	overall
Parents	81.0	66.7	74.7
Children	40.0	82.0	66.7

The discriminating variables obtained from the total parent sample retain much of their predictive ability when used with this smaller sample of parents. The canonical

[2]Stepwise inclusion of variables is used for all analyses, and priors=size.

correlation squared is even higher (0.32 instead of 0.28) and, overall, the same percentage of cases are correctly classified (nearly 75% vs. 73%), but there is less ability to classify cases reported as not affected.. The changes are that two variables, *family size* and *graduation*, do not enter the equation and the magnitude of the coefficients is different, with *probable job type* now most important.

When the same (parent) variables are used to discriminate whether children say their attitude changed, the variable measuring *more parent-child talk about school* does not enter, *race* becomes most important and *probable job type* has the smallest coefficient, all the signs are changed and the canonical correlation squared drops to 0.15. Only 66.7% of cases, overall, are correctly classified and classification of children who said they improved is very poor.

In the second step, the best predictors of change according to parents of interviewed children are determined. Then these, too, are tested for their ability to predict attitude change according to the children. Potential discriminating variables were selected as usual; that is, those which correlated significantly ($P \leq 0.15$) with how the parents in this reduced sample assessed *attitude change* in their eldest children were determined and those which intercorrelated too strongly were eliminated. Only the variables which entered the discriminant function with parents' assessments of attitude change as the dependent variable were used to derive a function for the children's assessment of change--consistent with the procedure used in step one. The results are in Table 45.

For the parents, nine variables entered the equation. Only two are the same as for the total sample, though one other--*number of children at home*--resembles *family size*. *More talk about school matters* and *probable job type* for the children remain the best predictors, along with the *number of children at home*. They are joined by *changed job goals* observed as a result of the parent's college participation. Interestingly, in this group of more enthusiastic parents, two other job variables enter: *employment status* and *union membership*. Also present are the parents' opinions on *college quality* and their belief about *whether all their children will attend college*. Finally, *increased respect for the parent* is a predictor. The canonical correlation is a high 0.54.

On the other hand, these parent questionnaire variables are useless for determining a discriminant function for the children's assessment of *attitude change*. Only *changed*

Table 45
DISCRIMINANT ANALYSIS: BEST PREDICTORS OF ATTITUDE CHANGE REPORTED BY PARENTS OF INTERVIEWED ELDEST CHILDREN*

Discriminating Variable	Standardized Coefficient
Number of children living at home	-0.53
More parent-child talk about school matters	0.52
Job type parent thinks probable for child .	0.51
Parent observes occupational goal change**	0.49
Parent is a union member	0.39
Likelihood children will go to college . .	0.33
Employment status of parent	0.33
Parents believe children respect them more	0.27
Parent's opinion of state college quality .	0.19
Canonical correlation squared=0.54	

*CORRECT CLASSIFICATIONS: improved=92.3%, not affected=84.2%, overall=88.9%.

**Only this variable entered the equation when groups were defined by the children's reports of changed attitude toward learning. Its coefficient is, therefore, 1.0.

occupational goals, as seen by the parent, enters.[10] The canonical correlation squared is just 0.02. For the parents' statements of *attitude change*, classification of improved, not affected and total cases is excellent. For the children's, the classification functions correctly identify all not affected cases, but the functions have merely put all cases into that category.

The third step, of course, is to find out which parent variables are, in fact, the best predictors of attitude change reported by the children. From a list of thirteen which correlate with this dependent variable ($P \leq 0.15$), the five which remain after stepwise inclusion are shown in Table 46. Three are demographic, and, of the two related to college attendance, a longer *period of enrollment* seems to imply less *change of attitude*. Also, race reverses its usual sign. These anomalies may be clarified by the fact that the classification functions are much more adept at placing unaffected cases than those in which attitude

[10]When the direct method was used, all variables entered the discriminant function--by definition--but the canonical correlation squared was only 0.06.

improved. The canonical correlation squared for the function is a modest 0.23

Table 46
DISCRIMINANT ANALYSIS: BEST PARENT VARIABLES WHICH PREDICT ATTITUDE CHANGE REPORTED BY ELDEST CHILDREN*

Discriminating Variable	Standardized Coefficient
Sex of parent	0.66
Race	-0.60
Length of time spent in college	-0.56
Wanted to be able to help with schoolwork	-0.52
Number of children living at home	-0.39
Canonical correlation squared=0.23	

*CORRECT CLASSIFICATIONS: better=51.3%, unchanged=86.8%, overall=73.4%

All this evidence points to the possibility that parents and children mean different things when they declare a change in attitude toward learning. It may be, however, that the "wrong" dependent variable from the interviews was selected to be compared with the parent dependent variable. If this is true, the "correct" variable has not been found; that is, the best predictors for *attitude change* from the sample of parents whose children were interviewed were tested as discriminators for thirteen other dependent variables in the interview and no canonical correlation squared exceeded 0.14--except for *wanting college more* (0.18). A *greater desire for college* is a respectable surrogate for a *changed attitude toward learning*, and it is worth noting that the other variables whose canonical correlations squared hovered around 0.14 all dealt with parent-child interaction: *more talk about school, easier talk about school problems, more help with homework, competition for grades* and the feeling the parent was trying to *set an example.*[11]

A perusal of the parents' comments helps to explain differences with the children. In that section of this report, one parent was quoted who vividly described the com-

[11]This is not to imply that all nine variables in the list entered each of the functions for these dependent variables.

petitive spirit which prevailed around studies within the family, but both his interviewed children answered "no" to the question about a contest for grades. And the parent who recounted the tantrums which issued from his frustrations with college can take comfort in the fact that his children did not exhibit even a hint of that tension. These comparisons will not be treated in detail here. It suffices to say that when the experience is past, each version of what was important is a matter of individual taste and memory.

*

Lest the impression be left that nothing the children say can be predicted from the parents' answers, *wanting college more* is at least one exception. The discriminating parent variables which do this are in Table 47.

Table 47
DISCRIMINANT ANALYSIS: BEST PARENT VARIABLES WHICH PREDICT WHETHER ELDEST CHILDREN WANT COLLEGE MORE*

Discriminating Variable	Standardized Coefficient
Number of children in family	0.65
Parent's opinion of local school quality .	-0.54
Parent's opinion of state college quality	0.53
Parent's opinion of school financial needs	-0.50
Age of child	-0.49
Parent wanted to set an example	0.28
Parent thinks grades improved	0.26
Parent observed occupational goal change .	0.43
Sex of parent	0.35
Canonical correlation squared=0.34	

*CLASSIFICATION RESULTS: yes=77.3%, no=72.9%, overall=75.0%

The Parent Questionnaire

Only brief reference has been made to the questions parents were asked about the job categories they *preferred* and thought *probable* for their children. In this section, those responses will be considered in detail, for their intrinsic interest and because they are related to college attendance in several respects.

Table 11 showed, separately, job preferences and probabilities. The starting point for the discussion here is Table 48, which is a crosstabulation of *probabilities* by *preferences* representing combined data on over 1,500 children. The advantage of this table is that it shows what categories of jobs parents think children who do not achieve (or who exceed) preferences will have. For example, of the few parents who prefer the unskilled category, over 70% think they will be correct (perhaps the preference is a prediction), while those who prefer skilled trades believe their children will often not make this grade.

There are many insignificant correlations between the career variables and others in the questionnaire, but these only mask the interesting results obtained when focussing on the professional category alone. Nearly all of this discussion will be based upon the three figures underlined in Table 48: the total percentage of children in any sample for whom the professional category of job is preferred, the total percentage of children for whom that is considered probable and the percentage of children preferred professional for whom that category is probable (the success ratio). These figures will be seen to vary, sometimes together, sometimes independently of each other.

First, to introduce the series of observations, a different breakdown will be more illustrative. Table 49 is concerned with sex stereotyping and it shows, separately, the job preferences and probabilities parents have for their male and female children, controlled for age.

Quite clearly, males have the advantage in their parents' eyes, for professional careers--both in preference and probability. What is interesting is that the two sexes start off equally (ages 0-5). Is this because parents don't make these distinctions between sexes for very young children, or because this group is benefitting from the changes in social mores? As one might expect, the per-

Table 48

JOB CATEGORIES PARENTS PREFER AND THINK PROBABLE FOR THEIR CHILDREN

Probable Category	Preferred Category						
	Unskilled, Semi-skilled	Skilled	Clerical	Sales, Service	Technical	Professional	Total
Un/Semi-skilled	71.4	30.7	9.7	3.6	4.7	4.2	7.8
Skilled	14.3	47.9	2.2	3.6	8.4	12.2	13.7
Clerical . . .	0	5.0	65.6	7.1	21.2	9.4	15.5
Sales/Service .	0	3.6	6.5	71.4	4.9	4.5	5.8
Technical . . .	14.3	7.1	12.9	14.3	55.4	24.3	30.1
Professional .	0	5.7	3.2	0	5.4	45.4	27.1
Total	0.9	9.3	6.2	1.9	26.9	54.9	100.0

Table 49
PROFESSIONAL JOB PREFERENCES AND
PROBABILITIES FOR CHILDREN BY AGE AND SEX

Sex of Children	Age Groups			
	0-5	6-11	12-17	18-23
PROFESSIONAL CATEGORY PREFERRED				
Male	65.0	68.4	54.8	42.9
Female	64.3	47.1	45.1	30.6
PROFESSIONAL CATEGORY PROBABLE				
Male	30.2	30.1	33.2	26.2
Female	34.8	18.6	22.5	22.5

centages decline with age as preferences and expectations of a professional life are adjusted to reality when the working years approach, but males do not decline so quickly and their divergence from females begins with the 6-11 age bracket.

Table 50, which summarizes most of the occupational data, begins with a further examination of stereotyping, showing how fathers and mothers rate the prospects of their male and female children. Fathers clearly show a stronger preference for professional jobs for their sons and think that, overall, they will be more successful at reaching that category, but they give roughly equal chances of success to those sons and daughters whom they prefer to be professionals. Mothers have equal preferences by sex but see their daughters as more successful. It must be cautioned that because there are few women in the sample, they speak for only 143 children, men for 1,433.

Fathers see their sons who are preferred professional, but won't succeed, as likely to have technical (21%) or skilled trades (21%) jobs, while their daughters in the same situation will get technical (29%) or clerical (22%) positions. Mothers are more likely to think their sons (preferred professional, but not succeeding) will become technicians (27%) and less likely to become skilled workers (16%), while they place daughters in technical (28%) or service (8%) positions--and only 5% in clerical.

Parents who have graduated from USWC have higher aspirations for their children than non-graduates, and think

Table 50
PREFERENCE AND PROBABILITY FOR THE PROFESSIONAL JOB CATEGORY

Parent Characteristic	Child Characteristic	Total % Professional: Preferred	Total % Professional: Probable	Probable Professional \ Preferred Professional
BY SEX OF PARENTS AND SEX OF CHILDREN				
Male	Male	61 4	30.4	45 5
Male	Female	46 2	22.2	43 6
Female	Male	58 4	27.3	44 4
Female	Female	59.1	34 8	53 8
PARENTS ARE GRADUATES OF THE COLLEGE				
No		51 6	23 2	40.2
Yes		60.7	34 1	53 5
JOB CATEGORY OF PARENTS				
White collar		61.6	31 8	47 8
Blue collar		51.2	24.3	43 3
GRADUATION STATUS AND JOB CATEGORY OF PARENTS				
Non-graduate				
White collar		62 1	27 7	39.5
Blue collar		47 8	21 4	40 2
Graduate				
White collar		61 3	35 4	54 9
Blue collar		62 2	34 0	51 5
RACE OR ETHNICITY				
Black		54.9	26 4	41.7
European		63 1	33 8	51 4
White		53.4	26.9	46 5
Non-black		55 3	27.7	46 7
RACE AND CHILDREN'S SEX				
Black	Male	60 4	28 2	42 2
	Female	48 8	24.4	40 3
Non-black	Male	62 2	31.1	46 6
	Female	47 3	23 4	46 0

Table 50 (continued)

Parent Characteristic	Child Characteristic	Total % Professional: Preferred	Total % Professional: Probable	Probable Professional / Preferred Professional
JOB CATEGORY AND CHILDREN'S SEX				
White collar	Male	65 1	34 6	48 8
	Female	56.4	29 0	47.3
Blue collar	Male	59 5	27 7	43 1
	Female	42.0	19.2	40.9
UNION MEMBERSHIP				
No		62.9	34.4	51 3
Yes		50 7	23.3	41.4
CHILDREN'S GRADE AVERAGES				
	A	68.2	44 3	62.6
	B	56 5	26 9	42 4
	C	37.4	10 9	25 5
RACE/ETHNICITY AND CHILDREN'S GRADE AVERAGES				
Black	A	68 9	35 6	45.2
	B	63.7	36 3	50.0
	C	34 9	13.3	27 6
European	A	78.3	53.3	66 0
	B	64 3	32.5	48 1
	C	37 3	9.8	21 1
White	A	66.8	44.9	65 6
	B	51.6	23.9	40.2
	C	40 3	11.5	28.6
PARENTS' JOB CATEGORY AND CHILDREN'S GRADE AVERAGES				
White collar	A	75.0	50.8	65.6
	B	61 6	29.9	42.8
	C	45 1	14.2	29 4
Blue collar	A	63 4	39 4	59 5
	B	54 0	25 4	42 4
	C	33.5	9 4	22 8

Table 50 (continued)

Parent Characteristic	Child Characteristic	Total % Professional		Probable Professional / Preferred Professional
		Preferred	Probable	
CHILDREN'S SEX AND GRADE AVERAGES				
	Male	60.0	30 5	47 1
	A	80.0	56 6	65.8
	B	65 4	33 3	46 3
	C	42 7	14.0	28 9
	Female	47.1	23 0	44 8
	A	55 8	35 4	58.4
	B	46 3	19 0	35 3
	C	27.8	5 6	16 7
LEARNING ATTITUDE CHANGE AND GRADES				
	Much improved	58 6	40 2	65 7
	A	75 0	55.8	71 8
	B	54 4	40 5	69 8
	C	36 7	16 7	45 5
	Improved	55 4	31 6	52 7
	A	65 2	52 2	76 7
	B	60 3	32 4	48 8
	C	34 1	11 4	26 7
	Not affected	53 3	21 4	36 3
	A	67 5	35 0	5 9
	B	54 5	21 4	33 1
	C	39 2	9 6	21 5
REACTION TO PARENT IN COLLEGE AND GRADES				
	Very positive	54 1	35 2	63 0
	A	67 8	52 9	76 8
	B	55 6	32 0	55 3
	C	30 3	15 2	45 0
	Positive	54 4	28.0	45 6
	A	67 9	45 9	62 2
	B	55 7	29 5	46 9
	C	38.3	11.3	25.0
	No reaction	53.3	18 1	30 6
	A	67 6	30 9	45 7
	B	56.3	17.2	24.5
	C	39 8	8 2	17 9

Table 50 (continued)

Parent Characteristic	Child Characteristic	Total % Professional		Probable Professional Preferred Professional
		Preferred	Probable	
NON-GRADUATES OF USWC BY SPOUSE'S EDUCATION				
Some high school		43 5	17 4	38 3
High school		50 5	22 0	37 5
Some college		56 1	28.6	47.3
College degree		63 9	32 8	46 2
GRADUATES OF USWC (NO POST-BACHELOR'S STUDY) BY SPOUSE'S EDUCATION				
Some high school		54 2	22 0	40 6
High school		56 6	33.0	57 3
Some college		62 0	36 0	53.2
College degree		65.4	40.7	58 5
GRADUATES ONLY. GREATEST BENEFIT OF DEGREE				
Satisfaction		63 4	41.5	61 5
Use for graduate studies		67 2	34 4	51 2
Job credential		52 8	28 1	48 9
GRADUATES ONLY. NEW JOB EXPECTED/HAPPENED AS A RESULT OF DEGREE				
Expected				
Yes		63 8	32 2	49 5
No		58 3	39.6	65 4
Happened				
Yes		59 6	33 7	53 2
No		62 1	35.6	57.3
CHILDREN CARE MORE ABOUT EDUCATION				
	Yes	53 7	31 8	54.5
	No	54 6	22.4	37 3
CHILDREN CHANGED CAREER GOALS BECAUSE OF PARENT'S COLLEGE				
	Yes	54.6	30 9	53.8
	No	54 1	25 5	42.7

*People could check, "European (e.g., Polish, Italian)", or, "White, and I claim no ethnic background"

them more likely to succeed. White collar workers express the same sentiments, compared to blue collar workers. What is more interesting is that the white collar/blue collar difference is virtually erased among graduates. It should also be noted that where there is a spread between white and blue collar workers, it is mainly confined to overall preferences and probabilities for professional jobs. The gap between them is narrower for the chances of success of those children preferred professional.

Union members express lower preferences and probabilities than non-union workers, but this is not just a reflection of job category since unionized white collar and blue collar employees have about the same percentages on all three measures (not shown).

It was remarked much earlier that blacks and non-blacks manifest the same aspirations and expectations for their children to have professional careers. Here, it is seen that blacks are slightly less confident of the success of the specific children preferred to be professional than are non-blacks, but it is the similarities which retain attention for what they say about the perceptions of social change in recent years.

Note, too, that people who chose to identify themselves as European ethnics, rather than as "white", express greater aspirations and expectations for their children in the world of work.

The sex stereotyping for occupation occurs among blacks and non-blacks, although it seems a little less for blacks--and among white and blue collar workers, though less for white collar.

When one looks at the relationship between children's grade averages and the job prospects parents see, the decline of chances with grades is almost drastic. Even a "B" student has lost considerable ground, and "C" students don't have much hope. Not only do probabilities decrease, but parents adjust their preferences as well.

Table 51 shows the details of the grade phenomenon by age, where the most compelling data are in the 0-5 group. Because age groups were calculated using year of birth, 75 children were placed in that first bracket who had apparently already started school. Of those, 18 were "A" students and 51 had "B" averages. What is surprising is the decrease in preference and probability for professional jobs for these young children across the two grade averages. The numbers are too small to be conclusive, but the trend is for parents to adjust the career prospects of their children even at the first grade. If this is true, parents are acting even earlier than school systems in countries which

track children at early adolescence, and one wonders if there is any behavioral manifestation of the level of the parents' aspirations which the children might detect.

Table 51
PROFESSIONAL JOB PREFERENCES AND PROBABILITIES FOR CHILDREN BY GRADE AVERAGE AND AGE

Grade Average	Age Group			
	0-5	6-11	12-17	18-23
PROFESSIONAL CATEGORY PREFERRED				
A	83.3	66.1	70.8	53.5
B	68.6	60.3	52.0	42.2
C	....	41.3	38.3	24.2
PROFESSIONAL CATEGORY PROBABLE				
A	55.6	37.4	53.8	44.2
B	26.0	24.2	30.1	30.1
C	....	9.0	15.4	6.9

In the 0-5 age group there are 18 "A" students, 51 "B" students and 6 with "C" averages.

Returning to Table 50, a series of crosstabulations were performed seeking the factors which might "save" the children from the outlook posed by lower grades. Looking at race and ethnicity, blacks do not seem to diminish the prospects for their children because they have "B", instead of "A", averages as non-blacks do. Being a child of a white collar or blue collar worker, however, does not make any difference; children of both show the gap in prospects according to grades. Neither is there any advantage to being a male or female child so far as the descent in job outcomes between "A" and "B" grades but, whatever the grade level, males always have superior chances to females.

Two college-related variables do, however, have an ameliorating effect: *change in attitude toward learning* and *reaction to the parent going to college*. Attitude change as a result of the parent's college attendance does not change the preferences parents have and it does not close the gap between "A" and "B" students, but both "B" and "C" students have greater probabilities and higher success ratios (if preferred professional) in proportion to the degree of attitude change. The same relationships hold for the reac-

tion to the parent in college, and with even more regularity.

This study has focussed on how adult participation in a particular program has affected children, and it has ignored the total educational background of parents. Information on spouse's education was gathered, but there were no meaningful correlations discovered--except with children's occupational possibilities. The table shows that both the preferences and the probabilities for children having professional careers increase with the educational attainment of the spouse of the USWC student. Furthermore, the percentage at each level of education of the spouses of USWC graduates is higher than the corresponding level for spouses of non-graduates. It is as if there is a cumulative effect of both parents' educations. There are similar increases in the success ratio within and between groups of graduate and non-graduate parents, but they haven't the same regularity.

Advantage was taken of the availability of the survey of graduates, previously mentioned, to test two other variables. When graduates were asked to name the *most important benefit of their degree*, three answers were given in significant numbers. Two had to do with education, personal satisfaction and the possibility for advanced studies, and the third was the degree's value for job purposes. It is interesting that people who cited the first two reasons had higher career aspirations and expectations for their children than people who chose the career option for declaring the worth of their own college education.

Graduates were also asked whether certain career changes were *expected* and *happened* as a result of earning a degree, one of which was getting a different job. Keeping in mind that this sample of parents feels strongly that college education is important for success, it is again noteworthy that whether or not higher education was expected to, or did, change their own jobs, the possibilities seen for children to have professional careers are similar--and is even seen as a bit better by parents who did not anticipate, or who did not get, a new job themselves.

Finally, two other college-related questions are tested with the occupational variables, whether children *care more about education* and whether they have *new occupational goals*, both as results of the parents' participation in college. In both cases, parents have the same preferences for professional careers whether the questions were answered "yes" or "no", but the probabilities are higher if the answer to either question was "yes".

Discriminant Analyses of Probable Job Category

The preceding discussion was limited to one job category, professional, and results were controlled for no more than two variables at a time. It is also of interest to do a multivariate analysis and to include the rest of the career hierarchy. Other limitations are required or were imposed in order to accomplish this using the discriminant procedure.

Statistical analysis, other than crosstabulation, can only be performed separately on each birth order because cases are parents--not children--in the questionnaire, and this reduces numbers. Also, very few children were expected to have unskilled or service type jobs and the skilled and clerical slots tended to be filled by males and females, respectively. Together, these facts mean that four categories suffer from both small numbers and bimodal distribution. The solution was to make a trichotomous dependent variable of *probable job categories*: professional, technical and "other"--the last being a combination of unskilled, skilled, clerical and service.

The second restriction was to limit the analysis to children between the ages of six and seventeen, eliminating those who may already have defined an occupation and those too young to provide information on school performance. Finally, only eldest and second-born children were studied. The respective N's were 359 and 262.

It seems reasonable that a parent's choice of probable job type would be influenced by the characteristics of the child (intelligence and academic ability, age, sex, professed occupational desires), by psychological characteristics of the parent (what is valued as important to success), demographic and socioeconomic features of the family (race, parent's education and occupation) and interaction (such as communication about schoolwork). The questionnaire has measures about most of these, though it does not ask what parents believe to be the career goals of their children.

A series of bivariate correlations were run with *probable job category* dependent. While these are not displayed here, it is worth commenting on variables which were not significantly related to job type but were important in the analysis of *attitude and grade changes* and of whether children *care more about education*.

Most notably, neither *more parent-child talk about school* nor *more help with homework* were associated with *probable job category* in either birth order. This was true despite the fact that *probable job category* itself was

strongly associated with *attitude and grade changes.*[32] It had been surmised that more interaction around education would be an indication of greater interest in school on the part of children which might lead parents to reassess job possibilities. While the first link holds, interaction and school-related changes, the second does not.

The *number of children in the family* was also a discriminator of *attitude and grade change* in some cases, but the relationship between *number of children* and *probable job category* was not linear for eldest children and was negligible for second children. When, however, *number of children* and *job category of the parent* were combined into one variable, the effects of job category alone were accentuated. This relationship is shown for eldest children in Table 52. The combined variable, which may reflect financial status or pressure, seems to have less influence on blue collar than on white collar workers.

Table 52
PROBABLE CAREERS OF CHILDREN: INTERACTION OF FAMILY SIZE AND PARENT'S JOB CATEGORY

Parent's Job Category	Number of Children	Probable Job Category		
		Other	Technical	Professional
White collar	≤2	22.6	44.1	33.3
	≥3	40.8	30.6	28.6
Blue collar	≤2	47.0	32.1	21.0
	≥3	51.4	25.7	22.9

The ages of children and race might be expected to play a role in the job categories parents think probable and so they were used in the discriminant analyses, but, in reality, the relationships were weak.

Independent variables with significant association to *probable job category* were located and those which intercorrelated too strongly were eliminated in order to avoid redundancy--as before.

[32]While *helping with homework* does not appear in all tables for previous discriminant analyses, this was generally because it correlated so strongly with *more talk about school* that it was not ertered into the function.

Interpretation of discriminant analysis with a trichotomous dependent variable is more difficult than with a dichotomous one. This is because two functions are derived, independent of each other, and the second may not add a statistically significant amount of discriminating power--in which case, it may even be dropped from consideration. It is sometimes possible to "name" the functions according to the variables in them with the highest coefficients. For example, one function may be strong in socioeconomic variables and the other in variables representing another factor. The contribution of a function can be determined by the size of its canonical correlation and the associated chi square.

These data on *probable job category* of children were analyzed in several ways on both birth orders (first and second). The list of associated independent variables were entered into the discriminant function by the direct and by the stepwise methods. Since *preferred job category* was one of the predictors, the analyses were also repeated with this variable omitted (only by the direct method). Table 53 combines all the results.

Using the direct method on eldest children, function 1 accounts for much more variance (29%) than function 2 (4%), and the latter function is barely significant at the 0.05 level ($p \leq 0.0508$). The two variables contributing most to the first function are *preferred job category* and children's *grade average*. To a lesser extent, the parent's judgement of what is probable is influenced by the *child's sex* and the perception of whether *attitude toward learning has changed* as a result of the parent's college attendance. The first three of these variables also dominate the second function, joined by *spouse's education*, with all four having about equal weight, repeating in a sense that parents take their cues from their own preferences, the children's school performance and the children's sex.

For second children, *grade average* and *preferred job category* were again the best predictors, followed by *attitude change*. *Spouse's education* is important in the first function, but the *child's sex* is not. The canonical correlation squared for the first function is 0.30, about the same as for eldest children, but this time the second function also adds a significant amount of discriminating power, accounting for 14% of variance. The second function is primarily measuring the influence of children's sex on the parents' choice, followed at some distance by the parent's job category and race.

Using the stepwise method, the conclusions about best predictors remain essentially the same. For both first and second children, the variables with the largest coefficients are the *preferred job category* and *grade average*, with

Table 53
DISCRIMINANT ANALYSES OF PROBABLE JOB CATEGORY

Discriminating Variables	Standardized Coefficients preferred job category included (preferred job category excluded)							
	Birth Order							
	First				Second			
	Method				Method			
	Direct		Stepwise		Direct		Stepwise	
	Function		Function		Function		Function	
	one	two	one	two	one	two	one	two
Parent's job category	0.18 (0.32)	0.24 (-0.13)	0.19	0.36	0.04 (0.12)	0.33 (-0.32)	.....	.....
Level of spouse's education .	-0.04 (-0.14)	-0.41 (0.38)	.....	.....	-0.26 (-0.35)	-0.00 (-0.10)	-0.28	0.13
Graduate of the college . . .	-0.07 (-0.11)	-0.19 (0.19)	.....	.....	-0.11 (-0.12)	0.20 (-0.24)	.....	.....
Race	0.06 (0.05)	-0.02 (0.02)	.....	.....	0.11 (0.19)	0.27 (-0.22)	.....	.....
Learning attitude improved .	0.32 (0.39)	-0.12 (0.29)	0.35	-0.14	0.36 (0.33)	-0.11 (0.17)	0.43	0.13
Grade average	0.55 (0.79)	0.45 (-0.13)	0.54	0.69	0.63 (0.85)	0.12 (0.14)	0.59	-0.12
Job category preferred . . .	-0.60	0.39	-0.60	0.39	-0.58	0.17	-0.60	-0.16
Age group (6-11 or 12-17) . .	-0.05 (0)	0.33 (-0.36)	.....	.....	-0.14 (-0.11)	0.09 (-0.12)	....	.....
Sex of child	0.39 (0.46)	-0.40 (0.65)	0.39	-0.49	0.02 (-0.03)	-0.87 (0.93)	0.04	0.93
Canonical correlation squared	0.29 (0.21)	0.04 (0.04)	0.30	0.13	0.30 (0.23)	0.14 (0.14)	0.30	0.13

attitude change at a lower level, *sex* still important for eldest but not second-born children, and *job category of the parent* a predictor for eldest children and seemingly replaced by *spouse's education* for second children (first function). Both *job category* and *spouse's education* can be thought of as indicators of socioeconomic status. *Grade average* is the main variable in the second function for eldest children, while *sex* is for second children.

The single best predictor of *probable job category* is the *category preferred* by parents, but it is not very descriptive since so little is known about its determinants (although it, too, is related to grade average). To see whether the results might be different, the analyses were rerun without this variable.

The main differences without the *job category preferred* for eldest children are that *grade average* is relatively stronger in the first function and the coefficient for the *parent's job category* also increases, *sex* becomes the best discriminator in the second function and *grade average* there is much diminished, and the canonical correlation squared for the first function is eight points lower (but unchanged for the second function).

Parental preference may play less of a role in the probabilities for second children since the magnitudes of the coefficients in the two functions are similar, with and without the *preferred category* variable, except that *grade average* in the first function is substantially larger. Despite the absence of major changes, the canonical correlation squared for the first function dropped from 0.30 to 0.23, but remained the same for the second function.

*

The results of classification for both birth orders, by both methods of variable inclusion, and with or without *preferred job category* present in the discriminant function, are shown in Table 54.

With the *preferred category* included, classification is better for second children than for eldest and the direct method results in a higher percentage of cases being correctly classified than the stepwise method. Prediction is very poor for placing eldest children in the technical group. One reason for the differences by birth order could be that sex of the children provides a statistically significant second function for the second-born, but not the eldest, children. Examination of the sex composition as parents placed children into the three probable job groups showed that for eldest children the "other" and technical categories were both about 55% female, compared to only

Table 54
CLASSIFICATION RESULTS: PROBABLE JOB CATEGORY OF CHILDREN*

Birth Order	Method	Correct Classification			
		Other	Technical	Professional	Overall
PREFERRED JOB CATEGORY INCLUDED					
First	Direct	61.9	34.5	74.2	56.0
	Stepwise	63.1	36.7	67.3	55.4
Second	Direct	69.7	63.5	60.9	65.6
	Stepwise	67.2	53.2	56.9	60.4
PREFERRED JOB CATEGORY EXCLUDED					
First	Direct	67.3	29.8	53.8	51.4
Second	Direct	71.4	60.0	52.2	63.1

*It was specified that the classification procedure use the group covariance matrices of the canonical discriminant functions rather than the pooled within-group covariance matrices because the covariance matrices for the three groups differed significantly from each other.

about one-third females in the professional category. In contrast, second-born children were one-third female in the "other" and professional categories, but 74% female in the technical category, thus demonstrating sex as a more powerful discriminator of probable job category among second-born than among eldest children.

Interviews of Children

Children were also asked their preferred and probable occupations, but because many of them were young it was thought better to have them choose from lists of jobs rather than to name categories. Three lists were prepared, each containing a sample occupation from the six categories, unskilled to professional. These are shown in Table 55.

For each list, the children were asked to pick the job they would like to have if there were a free choice, the job they thought they could probably achieve, the job their (student) parent would like them to have if there were a free choice and the job their parent would believe it possible for them to achieve. The multiple response procedure

Table 55
OCCUPATIONAL LISTS IN THE CHILD INTERVIEWS

Category*	List 1	List 2	List 3
Unskilled/semi-skilled	factory worker	auto mechanic	bus driver
Skilled	electrician	jewelry maker	dressmaker/tailor
Clerical	letter carrier	bank teller	bill collector
Service	barber/hairdresser	policeman/woman	restaurant cook
Technical	hospital laboratory technician	computer operator	physical therapist
Professional	social worker	lawyer	pharmacist

*The order of the categories was different in each list as presented in the interviews.

was used to combine the answers from the three lists and the results are in Table 56.

The percentages for the total sample resemble those given by the parents, although more children are willing to choose unskilled or semi-skilled jobs and their preferences for the professional category are not nearly so high as their parents'. The children also see their expectations falling short of their aspirations and they recognize that their parents' aspirations are higher for them than their own. The combined technical and professional preferences of the children represent 62% of the responses, while the same combination represents 73% of their responses about their parents' preferences. (In the parent questionnaire, this combination accounted for 82% of answers.) The children also see the parents' expectations for them as greater than their own. In fact, the percentage probabilities for technical and professional categories which they impute to their parents are almost identical to those in the parent questionnaire (see, Table 48). The children also seem to know their parents' aversion to service jobs, the preference for such jobs they assign to their parents being less than half of their own.

The interviewers reported that the younger children were somewhat haphazard in their choices and perhaps did not grasp the conventional wisdom that the lists were a gradient from less desirable to more desirable jobs. In that case, it is hard to understand the uniformity across age groups. Adult children have somewhat greater preference for a professional career, but not by much, and the progression begins to break down in the reports of what children believe probable for themselves. There is no pattern left by age in the preferences and probabilities the children assign to parents.

The children also engage in stereotyping but, overall, the direction is opposite to that of their parents and females do better at the technical and professional levels than males. The sex variable is sensitive to the specific jobs found on each list, especially the first one, in which "electrician" claimed 47% of male responses. The gamma values for the crosstabulation of *preference* by *sex* were 0.51 for list 1, 0.07 for list 2 and 0.01 for list 3. The importance of sex returned to all lists, however, when children ranked the jobs they thought *probable*, and the gamma values for the crosstabulation of this variable by *sex* were 0.64, 0.24 and 0.18 for lists 1 to 3, respectively.

The multiple response procedure was rerun combining only the data from lists 2 and 3 to remove the strong effect of the choice, "electrician", in the first list. (Table 57.) Now, males and females are equal in their preferences for professional jobs, but females believe both

Table 56
OCCUPATIONAL ASSESSMENTS BY CHILDREN

Job Category	Total Sample	Current Age			Sex		Race		Grade Average		
		11-14	15-19	20 up	Male	Female	Black	Non-Black	A	B	C
JOB CATEGORY CHILDREN PREFER											
Unskilled .	5.2	5.5	4.5	5.5	7.5	2.5	9.7	3.9	2.4	5.5	6.9
Skilled . .	14.4	12.2	15.8	16 4	18 5	9 5	16.7	13.8	12.7	13.9	17.4
Clerical . .	5.2	6.6	2.8	5.5	4.3	6.3	10.4	3.7	1.6	4.3	9.7
Service . .	12.4	16.6	12.4	6.0	13.3	11 2	10.4	12.9	9.5	12.5	13.9
Technical .	29.5	28.4	31.1	29.5	26.3	33.3	24.3	31.0	40 5	29.0	20.8
Professional	33 3	30.6	33.3	37 2	30.1	37.2	28.5	34.7	33.3	34.8	31.3
JOB CATEGORY CHILDREN THINK PROBABLE											
Unskilled .	15 2	18 1	14.1	12.0	24 9	3 5	20 1	13.8	11 1	14.8	15.3
Skilled .	11.4	11.4	11.3	11.5	14.2	8.1	13.2	10.9	5 6	11.3	17.4
Clerical . .	10.9	13.3	6.2	12.0	7.5	15.1	12.5	10.5	6 3	12.5	11.8
Service . .	15.4	18.8	14.7	10.9	15.9	14.7	17.4	14.8	15.9	14.2	18.1
Technical .	24.6	19.2	26.6	30.6	20.5	29 5	20.8	25.7	34.9	24.6	17.4
Professional	22.5	19.2	27.1	23.0	17.1	29.1	16.0	24.4	26.2	22.6	20.1
JOB CATEGORY CHILDREN THINK PARENT WOULD PREFER FOR THEM											
Unskilled	5.4	6.1	6.4	3.3	9.2	0.7	8.3	4.5	4 0	4 1	8.9
Skilled . .	12.0	10.3	12.3	14.2	14.8	8.6	13.2	11.7	11.9	11.2	14.1
Clerical . .	3.9	4.6	1.8	4.9	2.7	5.4	9.0	2.3	2.4	4.1	4.4
Service . .	5.4	5.4	4.7	6.0	5.6	5.0	9.0	4.2	3.2	5.6	6.7
Technical .	35.4	36.0	39.8	30.6	32.0	39.6	31.3	36.7	41.3	36.4	27.4
Professional	37.9	37.5	35.1	41.0	35 6	40.6	29.2	40.6	37.3	38.5	38.5
JOB CATEGORY CHILDREN THINK THEIR PARENT WOULD BELIEVE PROBABLE FOR THEM											
Unskilled .	11.6	13.8	10.7	9.3	18 9	2.9	18.1	9.6	4.8	11.0	17.0
Skilled . .	11.3	8.0	13 1	14.2	15.6	6.1	11.1	11.3	10.3	11.0	14.1
Clerical . .	7.7	8.8	6.5	7.1	6.9	8.6	12.5	6.2	4.0	8.4	8.9
Service . .	10.9	13.0	10.1	8.7	9.9	12.2	9.0	11.5	9.5	11.0	11.9
Technical .	31.2	29.1	31.5	33.9	26 6	36.7	26.4	32.7	39.7	31.9	23.7
Professional	27.3	27.2	28.0	26.8	22 2	33.5	22.9	28.6	31.7	26.6	24.4

Data from the three lists of occupations have been grouped so that cases upon which percentages are based are job category declarations, not children. (The 211 children in the sample made 627 declarations.)

technical and professional categories more probable for themselves than males do. Parents are granted a slightly greater *preference* for males having professional careers, but parents are thought to believe their daughters have greater *probabilities* for technical and professional occupations than their sons.

Table 57
OCCUPATIONAL ASSESSMENTS BY SEX FOR JOB LISTS 2 AND 3

Job Category	Sex		Job Category	Sex	
	Male	Female		Male	Female
Children Prefer			Children Think Probable		
Unskilled . .	8.7	2.1	Unskilled . .	27.0	3.7
Skilled . . .	3.9	10.0	Skilled . . .	2.6	10.0
Clerical . .	5.2	9.5	Clerical . .	8.3	20.0
Service . . .	19.1	8.9	Service . . .	19.6	12.6
Technical . .	25.7	31.6	Technical . .	23.0	27.9
Professional	37.4	37.9	Professional	19.6	25.8
Think Parents Prefer			Believe Parents Think Probable		
Unskilled . .	8.5	1.1	Unskilled . .	19.8	3.2
Skilled . . .	3.1	5.4	Skilled . . .	3.2	5.9
Clerical . .	4.0	7.5	Clerical . .	7.2	12.9
Service . . .	8.5	6.5	Service . . .	14.0	9.1
Technical . .	28.1	36.6	Technical . .	26.6	36.0
Professional	47.8	43.0	Professional	29.3	32.8

The children do not share the feeling of racial equality in the job market held by the total parent sample. The aspirations of blacks tend to be reciprocal to those of non-blacks and they feel their parents share these assessments.

The children adjust their preferences and probabilities to their grade averages and seem to think their parents do as well, but to a lesser extent. Nowhere do the children make the correlation between careers and grades so strongly

as their parents did, and the absence of this correlation is most striking in the preferences for professional jobs. Since children, like their parents, feel that good grades (school performance) are very important (67%) to getting a good job, there is a contradiction here, and one wonders what sort of counseling children receive in order to understand the academic requirements for different occupations.

Children do, however, make one other concession to the importance of school by adjusting their job preferences and probabilities to their *attitude toward school and schoolwork*. The more positive they feel, the more likely they are to see themselves higher in the occupational pyramid. On the other hand, they do not seem to believe that the aspirations and expectations which their parents have for them are very much related to this attitude gradient.

School attitude is the only variable in the interview which seems to have any consistent correlation with occupation, and it is also difficult to find any in the parent questionnaire which relate strongly to the job variables in the interview.

A comparison can be made between the two sets of career questions (questionnaire and interview), but it is awkward. Parents pronounced themselves specifically for each child and so birth order must be respected in the comparison. The problem is that only 28 third-born children were interviewed, so it is hard to achieve meaningful levels of significance. The correlations are in Table 58.

It does appear that there are stronger correlations between what the eldest child thinks the parent prefers and what the parent really prefers than between what the child and parent prefer. This is also true for second-born children, but only for list 1 (and marginally for list 3). Third-born children do not seem to be able to assess their parents' preferences at all.

The eldest children's beliefs about what the parents think probable for them (using list 1) is closer to the category chosen probable by the parents than the relationship between the children's and parent's choices of probability. The differences using the other two lists are marginal. For second-born children, what the parents and children think probable are more related than what the parents believe and the children think they believe. Third-born children, who didn't know what the parents wanted, seem much better at predicting what they expect.

For the reason given above, and the fact that parents were selecting from job categories and children from lists of jobs, little faith can be put in these results--except that these correlations, such as they are, represent the

Table 58
OCCUPATIONAL CORRELATIONS BETWEEN QUESTIONNAIRE AND INTERVIEW

Parent Variable	Child Prefers			Thinks Parent Prefers			Child Thinks Probable			Child Believes Parent Thinks Probable		
	List 1	List 2	List 3	List 1	List 2	List 3	List 1	List 2	List 3	List 1	List 2	List 3
FIRST-BORN CHILDREN												
Prefers	0.22	0.26	0.05	0.30	0.30	0.10						
Probable							0.07	0.24	0.25	0.27	0.21	0.28
SECOND-BORN CHILDREN												
Prefers	0.16	0.33	0.06	0.28	0.24	0.09						
Probable							0.36	0.21	0.09	0.20	0.19	0.07
THIRD-BORN CHILDREN												
Prefers	0.30	-0.30	-0.10	-0.14	-0.22	-0.09						
Probable							0.23	0.29	0.11	0.49	0.21	0.28

only substantial connection between the occupational variables in the interview, and the questionnaire. Of a number of others tested by crosstabulation, *more parent-child talk about school, caring more about education, help with homework* and a parent who is a white collar worker favor success in the professional job category--as reported by the children--by several percentage points, but the differences are not major.

CONCLUSIONS

The hypothesis of this study was that college attendance by working adults would have positive effects on the educational motivations of their children, perhaps even on the children's achievement. The basis for this belief was the accumulated anecdotal history harbored by adult educators, including those in the college from which the primary sample in this study came. The antithesis would be that adult college participation could have a negative effect because the time and attention it requires disrupts family life.

The sample selected for this project is extreme in several respects. First, all the students are (or were) pursuing a college degree, placing them at the tip of the adult education pyramid. Second, this sample is not even typical of the usual adult college student who has a record of repeated engagement in formal learning. Instead, USWC represented the first college experience for many in this group, especially for the blue collar workers among them. Third, the (Detroit) sample is composed of those who continued to graduation and those who withdrew from studies, usually after loss of financial aid. Whichever the reason for no longer studying, the college experience is, for the parents and their children, at a relative distance in time.

The negative results reported by these parents are negligible, despite the demands placed on them by adding full-time study to full-time work. Rather, the people are divided between those who saw positive reactions and those who observed no effects, with graduates leaning somewhat more to the former than non-graduates. Comparing blue and white collar workers, the news is perhaps the relative absence of differences, and in a number of variables where differences are present, they disappear with graduation.

If the sample can be partitioned at all, it is on the basis of race. Blacks see their children encumbered by poorer schools and weaker academic performance, but are as optimistic as non-blacks about future career prospects for their offspring. They are consistently more emphatic about the positive role played by their college attendance as it regards their children.

As a whole, the children agree that seeing their parents return to formal education made a favorable impression on them and set an example to follow. The racial correlations are even stronger among them, but they do not tend

to respond differently according to the job category or graduation status of their parents. The latter seems important because it means the children are not being judgmental and placing an onus on their parents. The educational institution may calculate its "success" rate by the percentage of graduates, but the children--almost unanimously in their comments--believed it was the attempt which counted, and they retained full confidence in their parents, regardless of what happened in college. Their attitude helps to explain why the time factors related to the parents' college attendance (duration of studies, overlap with the children's schooling, etc.) were so unimportant.

The key question is whether positive changes in the children can be explained by the parents' going to college, to the exclusion of other influences? Support for such an assertion comes from the fact that all the questions were phrased with that condition ("...as a result of your college attendance", "...since you attended college", etc.), and from the dominance of college-related variables as predictors in discriminant analyses. This is unfair, however, because questions about other possible influences simply weren't asked.

Better evidence comes from the comments of the parents and children. The feelings about the college effects and the particular stories told must be accepted as true, but such specificity came from a minority of the sample.

Perhaps a more useful approach would be to recall that the most important variables were those involving parent-child interaction: more school-related conversation, help with homework and other activities in common. These questions, answered affirmatively, were strong predictors of change while, on the other hand, there were families in which interaction did not seem to increase, parents saw no change and children couldn't remember--or didn't care much about--the college experience of their parents. This suggests that what has really been examined here is not a parameter, but families, and that where relationships and interactions are already substantial, college attendance by parents has the best chance of being a catalyst for positive change in the children. One kind of evidence for this view is that parents who were alert to their children's reactions discovered effects even in pre-schoolers, while other parents believed that children five or six years older were too young to remember or understand.

For some of those who reported that children had little knowledge or interest in their college studies, another explanation is possible. When there were many blue collar veterans at USWC, it was often assumed that large numbers among them came only to reap the financial benefits, and the students--in each other's company--sustained that idea. It

was a convenient way to justify attendance to peers and, perhaps, a camouflage for insecurity.[33] There are few instructors in the College, however, who cannot recall being drawn aside for a private conversation to be told by such a student that he really liked the program and what he was learning--but not to tell the others he said so. It is not impossible that this same self-protection was used at home and explains the vague recollections of some of the children.

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The data here should at least justify further research. Refinement of the survey instruments and in-depth interviews are the least that are required to better understand the phenomenon. The investigation should be pursued in other types of adult education programs because, after all, no evidence here limits the effects on children to a single model. It is not easy to ask parents how their lack of participation in education has affected their children--but, still, some suitable control instrument should be developed. It would also be advisable to pursue this research in an area with frequent and uniform testing of school children, so that behavioral as well as attitudinal change might be measured.

Gathering more information is worthwhile, but even these embryonic results warrant two recommendations. First, adult students should be informed about the potential they have for using their own learning involvement to influence their children. At a minimum they should know the factors which play a significant role in bringing about positive outcomes, that these can happen to both the very young and to adult children, etc. At a second level, workshops to help parents translate their experience into benefits for their children could be designed. Adult educators could also be alerted to these possibilities because they might devise assignments in which parents could, at their option, engage their children's participation. (The effectiveness of all these proposals should, of course, be the subject of evaluative research.)

Second, given the general recognition and concern about the quality and effectiveness of children's schooling, serious consideration should be given to intervention by means of greater support of adult education at all levels. Too often, programs for adults must be self-sustaining, bereft of public subsidy, and potential participants are

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[33] A valuable discussion of this question is found in: Richard Sennett and Jonathan Cobb, The Hidden Injuries of Class, Vintage Books, New York, 1972.

excluded by the cost. If, as so much evidence indicates, the home is the primary motivator of children, the way into the home may very well be via educational institutions--but those whose commitment is to the parents.