

INFLUENCE OF PARENT EDUCATION ACHIEVEMENT ON
COLLEGE MAJOR CHOICE AND GRADUATE SCHOOL INTENTIONS

LISA LAGROU GARVER

To the Graduate Council:

I am submitting herewith a thesis written by Lisa L. Garver entitled "Influence Of Parent Education Achievement on College Major Choice and Graduate School Intentions." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Arts, with a major in Psychology.



Dr. Anthony Golden, Major Professor

We have read this thesis
and recommend its acceptance:



Accepted for the Council:



Dean of The Graduate School

STATEMENT OF PERMISSION TO USE

In presenting this thesis in partial fulfillment of the requirements for a Master's degree at Austin Peay State University, I agree that the Library shall make it available to borrowers under the rules of the Library. Brief quotations from this thesis are allowable without special permission, provided that accurate acknowledgment of the source is made.

Permission for extensive quotation from or reproduction of this thesis may be granted by my major professor, or in his absence, by the Head of Interlibrary Services when, in the opinion of either, the proposed use of material is for scholarly purposes. Any copying or use of the material in this thesis for financial gain shall not be allowed without my written permission.

Signature Lisa Gawron

Date July 24, 1997

Influence of Parent Education Achievement on
College Major Choice and Graduate School Intentions

A Thesis
Presented
for the
Master of Arts
Degree
Austin Peay State University

Lisa LaGrou Garver

August, 1997

ACKNOWLEDGMENTS

I would like to thank my committee chairperson, Dr. Anthony Golden, for his patience, direction and for giving me the opportunity to conduct this study. I would also like to thank the other committee members, Dr. Nanci Woods and Dr. David Denton, for their energies and support in this process. My husband, Chris also deserves thanks. His emotional support and computer expertise helped me through the past two years. Recognition for understanding is given to my daughter, Madison. She allowed me to rest my eyes during morning cartoons after pulling many an all nighter. Finally, my most appreciative thanks to my friend and caregiver, Juliene Milani. She never hesitated to help care for my daughter, and always offered support.

Abstract

This study analyzed the relationship between college students and the educational achievement of their parents. Over 1000 graduating college seniors, nationwide, answered a survey about their undergraduate major, graduate school intentions, their parent's education level achievement, and the field of study of their parent's degree. It was predicted that students would plan to obtain the same amount of education as their parents and study in areas similar to what their parents had studied. The results did not support the hypotheses. Students did not plan to acquire the same education level as their parents. Students did not obtain baccalaureate majors in a field similar to their parent's baccalaureate major. Finally, students who intended to pursue graduate studies did not plan study in a field similar to their parent's field of study.

TABLE OF CONTENTS

CHAPTER	PAGE
I. INTRODUCTION	1
II. LITERATURE REVIEW	2
Education Influence	2
Testing Influence	5
Career Influence	6
Summary	10
Hypotheses	11
III. METHOD	13
Subjects	13
Questionnaire	14
Variables	14
IV. RESULTS	16
Do college students plan to acquire the same education level as their parents?	17
Do college students attain a baccalaureate degree in a field of study similar to their parents baccalaureate field of study?	19
Do students with post-baccalaureate intentions plan to receive their degree in a field of study similar to their parent's field of study, regardless of the amount of education earned by the parents?	22
V. DISCUSSION	24

LIST OF REFERENCES	27
APPENDICES	30
A. Questionnaire	31
B. Pilot Questionnaire	32
VITA	33

LIST OF TABLES

TABLE

PAGE

1. Student's Highest Intended Degree	16
2. Highest Degree Completed by Mother	17
3. Highest Degree Completed by Father	17
4. Subject's Field of Study (Major)	20
5. Field of Study Classifications	21

INTRODUCTION

Many studies have been conducted to determine what factors influence students' academic achievement and career choices. Some of the factors analyzed have been gender (Stricker & Rock, 1993; Gallagher, 1994; Blake, 1986; Burlin, 1976); race (Hawkins, 1993); number of siblings in the family (Blake); abilities in subject area (Nazier, 1993); interest and pay in the area, availability of jobs, peer, teacher and counselor influence (Dick & Rallis, 1991); and influence of parents (Blake; Burlin; Dick & Rallis; Dunlop & Canale, 1988; Gallagher; Hawkins; Nazier; Stricker & Rock; Tomlinson-Keasey & Little, 1990).

Parent influence has been the subject of studies involving student academic achievement and standardized test results. While some have included an analysis of the general influence of parents on academic preferences (Dick & Rallis, 1991), others have reported parent education level as an influence on academic choices (Gallagher, 1994) and academic achievement (Tomlinson-Keasey & Little, 1990; Blake, 1986). Parent education effects have also been seen on standardized test results (Hawkins, 1993; Stricker & Rock, 1993).

LITERATURE REVIEW

Education Influence

Gallagher (1994) studied various factors, including parent education level, that influenced children to pursue science course work. His study used data collected by the Longitudinal Study of American Youth (LSAY). The LSAY collected data from 50 middle schools and 50 high schools across the United States in reference to math and science classes taken by students. It spanned six years and included children beginning in the seventh grade. The study also gathered information on parent education level.

Gallagher (1994) found that the more education a parent had the more likely the child would be to continue to take science courses. Parent education level had a stronger effect than the gender of the student, the only two significant variables associated with science course work persistence. Gallagher did not differentiate between mother's education level and father's education level. He measured parent education level as the parent with the highest achieved education level.

In their study of gifted persons, Tomlinson-Keasey and Little (1990) found that parental education was positively correlated with many academic aspects of their

subjects' lives. The authors used data collected in a 60³ year longitudinal study, Terman's Genetic Study of Genius. Terman's data consisted of several factors collected by 21 questionnaires that were given to gifted persons between 1922 and 1986.

Tomlinson-Keasey and Little (1990) were interested in the variables that influenced intellectual skills, educational achievement and occupational achievement in the lives of the gifted subjects. The subject pool consisted of over 800 men and women. Among the variables studied, parent education level was found to effect the educational achievement, intellectual skills and occupational achievement of the subjects. The authors found that gifted persons whose parents had higher education were shown to have attained a higher education level and had higher intellectual skills than other gifted persons whose parents did not have as much schooling. The level of parent education was not defined and it is not clear how the authors measured their variables.

While studying the number of siblings and family background as influencing factors of educational achievement in men, Blake (1986) reported the importance of paternal education level. Blake cited research that indicated that a father's educational level effects the number of children in a family. Generally, the more

4

education a father has attained, the fewer children there are in the family. The number of siblings in a family is related to the educational achievement of the children. For the most part, the lower the number of siblings in a household, the more education is achieved by offspring.

Blake's study used data collected from three sources. The Occupational Changes in a Generation survey, both the 1962 and 1973 versions, the General Social Survey of 1973-1983, and the 1970 Fertility Study were used. Blake's subject pool consisted of 56,484 white males. Among the various variables measured were father's education level, father's socioeconomic index, number of siblings, and subject education level. The subject education level was analyzed in total years and was subdivided into grade school completion, high school completion, years of college completion.

The analysis indicated that paternal education level had the strongest influence on total education achievement. When the various levels of subject education were analyzed, father's education level was significant in influencing grade school and high school completion. The father's socioeconomic index was more of an influential factor in college study.

While Blake's subject pool is large, it failed to analyze non-whites and females. It also does not consider

mother's education level as a contributing factor for educational attainment in their children.

Testing Influence

Parent education levels have even been associated with the outcomes of standardized tests. Analysis of Scholastic Aptitude Test (SAT) scores (Hawkins, 1993) and Graduate Record Examination (GRE) scores (Stricker & Rock, 1993) have included parental education as an influence on achievement of the respective test scores.

Hawkins (1993) analyzed the racial differences among subjects taking the SAT and reported that SAT verbal and mathematics scores were consistently higher for students whose parents had a higher educational level. Respective test scores increased at every interval of parent education achievement level. Children whose parents had a graduate degree scored the highest on both verbal and math skills, followed by those students whose parents had earned a baccalaureate degree. This trend occurred all the way down to the lowest scorers, whose parent had not attained a high school diploma. This phenomenon occurred across all racial groups and all SAT takers as a whole.

Stricker and Rock (1993) found that parent education is a factor in GRE test results. They analyzed characteristics of test takers and GRE test scores to determine who scored higher on the verbal, quantitative

and analytic sections of the GRE. The subjects were 3,145 persons who took the GRE in October of 1988. The variables studied were divided into initial characteristics and college background variables. Initial characteristics were gender, race, father's education level, mother's education level, area of the United States in which the subject lived, and age. The college background variables included undergraduate college major, the type of college attended and the "Ph.D. productivity ratio."

The authors found that parental education had a more consistent effect on higher test results than did the other initial background characteristics. Parent education level had a direct effect on the verbal and quantitative sections of the GRE and an indirect effect on the outcome of the analytic section. Of the college variables analyzed Stricker and Rock report that along with parent education, the quality of college attended by the examinee influences test results.

Career Influence

While studying what influenced students to take math and science courses, Dick and Rallis (1991) found that parents were a motivating factor in student career goals as well. Over 2,200 senior high school students, from various social and socioeconomic backgrounds, answered a

survey in 1986 and reported what influences were involved⁷ in future college majors and career choices. The survey included future college plans and, if applicable, intended college majors and career goals. These goals included jobs related to the reported college majors, and jobs that were of service or skilled trade in nature and did not require a college degree. Students were asked to list the two most significant "socializer" factors chosen from among parents, teachers, counselors, or no one, that influenced their choosing the specified major and careers.

While most of the analysis concentrated on those students planning a career in engineering or science, a separate analysis was performed for all of the subjects responses. Male and female responses were also examined separately. Combining both those categories of students planning a career in science and engineering and those who did not plan a science or engineering career, and combining both genders, 57% indicated that their mother or their father was the most significant socializer factor that influenced them to choose their career path. This influence was stronger than that of a counselor (22%) or a teacher (16%).

Dick and Rallis (1991) used a large group of subjects from various areas of Rhode Island and a broad range of socioeconomic levels. However, it is unclear whether the

results would generalize to all areas of the United States. Dick and Rallis also included factors that influenced college major choice and career choice, however, data were not presented on which socializers influenced college major choice. It is only assumed that either mother or father influenced this decision as well as career choice. It is also unknown whether the high school subjects actually enrolled in the desired major or attended college at all.

Family influence was the second highest contributing factor in Nazier's (1993) study of science and engineering professors. He received 96 responses to a survey from professors in various science and engineering departments at a major university. The survey asked "What factor(s) in your life led you to choose science/technology as the career you would enter?" Responses were categorized into "Math/Science Hobbies," "Natural Curiosity," "Field Trips," "Career Awareness," "Family Influence," "Reading," "Math/Science Competition," "Math/Science Ability," and "Other." "Family Influence" (18.4%) was the second highest factor influencing career choice, following "Math/Science Hobbies" (25.6%). Family influences included father or close relatives being a scientist or engineer.

Burlin (1976) researched how parent education and mother's work and job status influenced their teenage daughters in career goals. A survey was answered by 139 eleventh grade girls that included questions on the jobs they planned to seek, parent education level, and mother's occupation. The career aspirations were broken down into categories of "innovative," "moderate," and "traditional." These categorizations were based upon the percentage of women occupying the job title in 1973. Education levels of the father and mother were categorized as high school and below, some college, college degree and graduate or professional degree.

The data analysis performed found a relationship between the father's education level and daughter's career goals. Daughters whose aspirations were to have a traditional career tended to have fathers with an education level of high school or below. Daughters who aspired to attain a moderate career tended to have fathers with a college degree. A similar relationship did not exist with mother's education level or occupational status and daughter's career ambitions.

Although Burlin's (1976) study is dated, and the subject pool is rather small, it shows that children's aspirations can be influenced by a parent's, in this case the father's, education level. Burlin's study did not

include an analysis of mother's education level.

10

Further, it did not report percentages of mother's education achievement versus daughter's career goals.

Parent education was a variable studied in Dunlop and Canale's (1988) research of factors influencing career goals of college students. A total of 110 freshman and 121 seniors, from six academic majors, were surveyed for this study. The survey collected demographic data, information about mother and father's education and occupation, occupational goals, and parent's perception of these goals.

The results of Dunlop and Canale's (1988) research is rather confusing and contradictory. They report that significance for father's job type was found. This variable influenced college freshmen and males in their career goals. However, later they acknowledge that both parent's career status and education level played a significant role in college student's goals. They do not differentiate between freshmen and senior students. Unfortunately a data analysis was not provided for the reader to determine how the contradictory results were obtained.

Summary

The reviewed research indicates that there is a relationship between parent education, student education

and career aspirations. Parent education has been shown ¹¹ to influence adolescent students and college students alike. Parent education effects course work taken, amount of schooling, standardized test score results, and career goals. While college students were the target of analysis of some of the cited research, no research has analyzed if parent education affects the type of college major earned and the intent to pursue post baccalaureate study. Further research is necessary to determine if there is a relationship between parental education, college major choice and graduate school plans.

Hypotheses

This study examined three possible effects of parent education on student education. First, the study determined if college students plan to acquire the same education level as their parents. Second, this study examined whether college students attain a baccalaureate degree in a field similar to that of their parents who have attained the same degree. Third, this study determined whether students who intend to attain a post baccalaureate degree plan to receive their advanced degree in a field similar to that of their parents, regardless of the education level the parents have achieved.

Because past research has shown that parents and parent's education level affect schooling and career

choices in students, it was predicted that parents would¹² have an effect in this study too. First, it was hypothesized that college students would plan to acquire the same education level as their parents. Second, it was hypothesized that students would major in a field of study similar to that of their parents who have attained a baccalaureate degree. Third, it was hypothesized that students would receive their advanced degree in a field similar to that of their parents, regardless of the amount of schooling the parent has achieved.

This study represents an improvement over past studies in that it addresses an unexplored area: whether parent education is an influence on college major choice and post baccalaureate study. It also uses a more diverse subject pool than most research reviewed. Both males and females were polled and all ethnic groups are included in the analyses. While many studies have polled high school students or below (Dick & Rallis, 1991; Burlin, 1976; Gallagher, 1994; Hawkins, 1993) the present study utilizes graduating college seniors from over 300 universities nationwide.

METHOD

Subjects

The subjects of this research were graduating male and female seniors from colleges and universities in the United States. The subjects answered a survey included in the Area Concentration Achievement Test (ACAT) (Golden, 1991) between October 1996 and March 1997. Of the 1003 subjects returning survey forms 642 were used for analysis. The 361 not included were not graduating seniors. Students from all geographic regions of the United States, and from every ethnic group, are included in the subject pool. The ACAT is designed for the following majors: agriculture; art; biology; criminal justice; literature in English; geology; history; mass communication; political science; psychology; and social work. This population was chosen for its representation of college seniors.

Questionnaire

A questionnaire designed specifically for this study (Appendix A) was used. It was administered to the subjects as an addition to the demographic section of the ACAT. The ACAT is an outcomes assessment test, given to graduating college seniors nationwide, and is a graduation

requirement for many colleges and universities.

Demographic data already obtained by the ACAT, such as student major, was not repeated on the questionnaire. Completion of the questionnaire was optional for the examinees.

While graduate school plans are included on the ACAT, demographic section analysis of 1989-1996 data of the ACAT finds that over 80% of those responding intend to go to graduate school. This plan to attend post-baccalaureate studies is responded to positively regardless of undergraduate grade point average or major grade point average. Questions 1 through 4 were asked to clarify graduate school intentions.

The majority surveyed were liberal arts majors. However, students were able to write in responses rather than being limited to certain graduate majors. If a parent had obtained a degree in a non liberal arts field, the subject could write in the appropriate field (questions 6 and 7). If a subject planned to pursue a post baccalaureate degree in a non liberal arts field, that information also could be written in (question 5).

Variables

The variables in this study were parental education level, parent field of study (major), student field of study at the baccalaureate level, intended graduate school

plans, and field of intended post-baccalaureate work. The parental education level analysis included high school diploma, associate's degree, bachelor's degree, master's and doctoral degrees. Data obtained from a pilot survey (Appendix B) indicated parental education at the graduate level. The graduate level response allowed subjects to indicate "Master's" or "Doctorate." However, the vast majority of subjects did not differentiate between the two degrees. The result is an "Unspecified Graduate Degree" which was also recognized in this study.

The parent's field of study was supplied by the subject. The student's major was supplied by the numeric code located at the top of the questionnaire. Further demographic data recorded by the ACAT project, such as gender and ethnicity, was also available to the researcher. Intended graduate school plan choices included master's degree, education specialist degree and doctoral degree. Too few subjects indicated the education specialist degree, thus it was not included in the analysis. The intended field of study was written in by the subject.

RESULTS

Do college students plan to acquire the same education level as their parents?

Table 1 Summarizes the students' intended level of education. Tables 2 summarizes the education level achieved by the subjects' mothers. Table 3 summarizes the education levels achieved by the subjects' fathers. Although not a specified category in the survey, subjects often indicated when a parent had not obtained a high school diploma. This was included in the two tables as a "less than high school" education level. The "other" category was created because subjects often indicated that parents obtained a degree from a technical or trade school.

Table 1

Student's Highest Intended Degree

Degree	Frequency	Percentage
Baccalaureate	176	27.4
Master's	274	42.7
Doctoral	72	11.2
Blank	120	18.7

Highest Degree Completed by Mother

Degree	Frequency	Percentage
Less than high school	23	3.6
High school/GED	341	53.1
Associate's	86	13.4
Baccalaureate	99	15.4
Master's	19	3.0
Doctoral	5	.8
Unspecified graduate	36	5.6
Other	16	2.5
Blank	17	2.6

Table 3

Highest Degree Completed by Father

Degree	Frequency	Percentage
Less than high school	22	3.4
High school/GED	301	46.9
Associate's	67	10.4
Baccalaureate	89	13.9
Master's	23	3.6
Doctoral	29	4.5
Unspecified graduate	56	8.7
Other	12	1.9
Blank	43	6.7

It is obvious that the majority of the parents acquired a high school degree or less. This result is supported by the U.S. Census Bureau records of historical educational attainment (1995). Between the years 1940 and 1991 the median age education attainment for 35-54 year old persons rose from 8.6 years to 12.9. The college

subjects of this study have parents with a higher educational level than the general United States population.

The first intent of this study was to determine whether bachelor's level college students planned to acquire the same education level as their parents. Because bachelor's level students and their intended pursuits were analyzed, only parents receiving a bachelor's degree or higher were included in the analysis.

Initially, a 3 x 3 chi-square analysis was performed to compare student intentions versus mother's acquired degree. This analysis included student intentions (baccalaureate degree, master's degree or doctoral degree) and mother's acquired degree (baccalaureate, master's or doctoral degree). Significance was found, $X^2 (4, N = 100) = 15.25, p < .01$. However, because a cell frequency of zero existed, the categories were collapsed and an analysis was performed on "same" versus "different" intentions. Thus, a 2 x 3 analysis was performed. Same versus different intentions were compared at the baccalaureate, master's and doctoral degree levels of the mother. No significance was found, $X^2 (2, N = 100) = 5.17, p > .05$.

Similarly, a 3 x 3 chi-square analysis was performed to compare student intentions with father's attained

degree. No significance was found, $X^2 (4, N = 121) = 4.05, p > .05$.

There is a discrepancy between reported parent education level and the number of parents used in the analyses. While 99 mothers and 89 fathers attained a baccalaureate degree, only 79 and 77, respectively, were included in the analyses. Similarly, 19 mothers attained a master's degree and 5 earned doctoral degrees, but only 17 master's level and 4 doctoral level mothers were counted. It was reported that 23 father's obtained a master's degree and 29 earned doctoral degrees, but only 21 and 23, respectively, were measured. This was because the students failed to report their own intended degree achievements in these cases. These missing cases were "blank" cases, and could not be used in the analyses.

Significance was not found when comparing student degree intentions with the parents' acquired degree. It would appear the students' intentions are independent of the amount of education their mothers or fathers have attained.

Do college students attain a baccalaureate degree in a field of study similar to their parents' baccalaureate field of study?

Table 4 summarizes the baccalaureate majors of the subjects. There is a large sample of psychology and

social work majors, and few mass communications, geology²⁰ and literature in English majors.

Table 4

Subject's Field of Study (Major)

Discipline	Frequency	Percentage
Agriculture	25	3.9
Art	12	1.9
Biology	42	6.5
Criminal Justice	81	12.6
Geology	6	.9
History	14	2.2
Literature in English	6	.9
Mass Communications	3	.5
Political Science	31	4.8
Psychology	234	36.4
Social Work	188	29.3

The surveyed subjects were attaining a baccalaureate degree in one of eleven possible majors. Subjects responded that their parents achieved a degree in at least 25 different fields of study. An analysis of such proportion was difficult. There were too few cases in this 11 x 25 cell design to permit a valid analysis.

To make this design more manageable the reference guide Occu-Facts (Handville, 1989, pp. v-vi) was used. Occu-Facts categorizes 565 jobs into the 20 classification groups used by the Standard Occupational Classification method. Of the 20 classifications used by Occu-Facts seven of these were used in this study to categorize the parents' fields of study and subjects' majors. The seven

categories used were: "Executive, Administrative and Managers," "Engineers and Architects," "Natural Scientists and Mathematicians," "Social Scientists," "Teachers and Librarians," "Writers and Artists," and "Medical and Allied Health Personnel." Table 5 summarizes the various fields of study in their new classifications.

Table 5

Field of Study Classifications

New Classification	Field of Study
Executive Administrative Managers	Business Computer Science Public Administration
Engineers and Architects	Engineering Architecture
Natural Scientists and Mathematicians	Math Biology Geology Agriculture
Social Scientists	Psychology Social Work Law/Criminal Justice Theology History Political Science
Teachers and Librarians	Education Library Science
Writers and Artists	Fine Arts Communications Literature in English
Medical and Allied Health	Medicine Occupational Therapy Nursing

The 11 majors categorized into three of the seven classifications: "social scientists," "writers and artists," and "natural scientists and mathematicians."

The parents field of study categorized into all of the seven groupings. A 3 x 7 chi-square analysis was performed to compare the baccalaureate degrees of the students with those of their mothers, $X^2 (12, N = 87) = 5.27, p > .05$. The same analysis was performed to compare the baccalaureate degrees of the students with those of their fathers, $X^2 (12, N = 92) = 10.88, p > .05$.

Generally, students do not receive a baccalaureate degree in the same field of study as their parents who also have a baccalaureate degree.

Do students with post-baccalaureate intentions plan to receive their degree in a field of study similar to their parents' field of study, regardless of the amount of education earned by their parents?

To answer this question the same seven classifications outlined previously were used. A 7 x 7 chi-square analysis was performed to compare those students planning to acquire a master's degree to their mother's field of study. The mother's field of study included all levels of achieved education past the high school diploma. The highest degree completed, including the associate's degree, bachelor's, master's and doctoral degree, was used for analysis. Significance was not found, $X^2 (36, N = 73) = 28.97, p > .05$.

23

A similar 7 x 7 chi-square was performed to compare students who intended to pursue a doctoral degree and the mother's field of study. No significance was found in this analysis either, $\chi^2 (36, \underline{N} = 22) = 3.56, p > .05$. Likewise, separate chi-square analyses were performed to compare students who intended to pursue master's degrees to their father's field of study, $\chi^2 (36, \underline{N} = 72) = 26.38, p > .05$.; and those with doctoral level intentions to the highest field of study of their father, $\chi^2 (36, \underline{N} = 30) = 27.6, p > .05$.

All four chi-square analyses found no significance ($p > .05$). As with the analysis of student baccalaureate majors and their parents with baccalaureate degrees, it would appear that the intended fields of study for hopeful graduate students varies across the fields of study of their parents. No one field of parent study influences graduate area of study.

DISCUSSION

What influences students to obtain a certain level of education? What influences students to study in a certain field? The results of this study would indicate that parent education is not an influence. Student intentions to attain a degree past the associate's level, the field of study of that degree and the baccalaureate field of study are independent of the mother's and father's achieved degree.

No significance was found when comparing the student's intended degree to the parent's attained degree. This analysis included the student's intended degree and the parent's degree at the baccalaureate, master's and doctoral level. Many of the parents of the subjects did not have a baccalaureate degree or higher. Only 19.2% of the mother's and 22% of the father's in this study had earned a degree higher than an associate's degree. Over 70% of the mothers and 60% of the father's had an associate's degree or less. While this trend in first generation students is slightly higher than the national average, it is still a small subset from which to draw conclusions.

Nearly 19% of the subjects failed to indicate what 25
post baccalaureate degree they planned to pursue. While
it was established that these students planned to obtain a
graduate degree from the demographic section of the ACAT,
120 students did not indicate whether they planned to earn
a master's or a doctoral degree. Surprisingly, only 2.6%
of the mothers' and 6.7% of the fathers' degree
information was blank. It is unclear whether the missing
student intentions would have altered the outcome of the
analyses.

No significance was found when comparing student
field of study to parent field of study. The father's
field of study most reported was business (21.3%) and the
mother's fields of study most reported were allied health
(22.6%) and education (22.1%). Neither parent's degree
specialty tended to influence students in their
undergraduate degree or intended post-baccalaureate
studies.

It is not known whether parents applied their degrees
to real life jobs. Not every psychology major finds a job
in a field of psychology. Nor does every literature in
English major become a great novelist. It may be that the
parent's occupation has a more influential role on
students than the college field of study.

Over 5,000 surveys were sent to subjects. Of these ²⁶ 5,000 surveys sent, only 1,003 were returned completed and only 642 of these were used for analysis. A gender summary shows that 70.3% of the respondents were female and the remaining 29.7% male. This division may be indicative of the usage of a mainly liberal arts subject pool. It may be that the majority of subjects tested by the ACAT are female. Or, it may be the case that females are more apt to complete surveys.

Post hoc analyses indicate that there are no gender differences when compared to parent education achievement. The same analyses outlined in the results section were performed comparing female students to their parents' education achievement and male students to their parents' education achievement. No significance was found.

Although significance was not found to support the prediction that parent education achievement influences student field of study or level of education, further research is necessary in this area. It is appropriate to determine what influences students to specialize in certain fields of study. If this variable can be determined students could be directed to areas of study in which there were low populations.

LIST OF REFERENCES

Blake, J. (1986). Number of siblings, family background and the process of educational attainment. Social Biology, 33, 5-21.

Burlin, F. D. (1976). The relationship of parental education and maternal work and occupational status to occupational aspiration in adolescent females. Journal of Vocational Behavior, 9, 99-104.

Dick, T. P., & Rallis, S. F. (1991). Factors and influences on high school students' career choices. Journal for Research in Mathematics Education, 22, 281-292.

Dunlop, L. L., & Canale, J. R. (1988, April). Factors Influencing Career Aspirations of Senior and Freshman College Students. Paper presented at the Annual Meeting of the Eastern Psychological Association, Buffalo, NY.

Gallagher, S. A. (1994). Middle school classroom predictors of science persistence. Journal of Research in Science Teaching, 31, 721-732.

Golden, A. (1991). A national project in cooperative major field assessment. In R. McCormick (ED.), The 1990 Montclair Assessment conference: Strategies and prospects for the decade (pp. 80-83). Upper Montclair, NJ: Montclair State College.

Handville, E. (Ed.). (1989). Occu-Facts (1989-90 29
ed). Largo, FL: Careers, Inc.

Hawkins, B. D. (1993). Socio-economic family
background still a significant influence on SAT scores.
Black Issues in Higher Education, 10, 14-16.

Naizer, G. L. (1993). Science and engineering
professors: Why did they choose science as a career?
School Science and Mathematics 93, 121-124.

Stricker, L. J., & Rock, D. A. (1993). Examinee
Background Characteristics and GRE General Test
Performance (GRE Board Research Report No. 89-07R. ETS
Research Report 92-80). Educational Testing Services,
Princeton, New Jersey.

Tomlinson-Keasey, C., & Little, T. D. (1990).
Predicting educational attainment, occupational
achievement, intellectual skill, and personal adjustment
among gifted men and women. Journal of Educational
Psychology , 82, 442-455.

United States Census Bureau (1995). Table 17. Years
of School Completed by Persons 25 Years and Over, by Age,
Sex: Selected Years 1940 to 1995. Available Internet:
WWW.Census.Gov/Population/Socdemo/Education/Table17.Txt.

APPENDICES

00 0 00000 The following information is being collected to support an extramural research project. Your participation is voluntary. You do not have to provide any of the information below to take the ACAT. At no time will you be identified by name in the research. All data will be reported only as a group. Thank you for your cooperation.

1. If you are pursuing an advanced degree (beyond the baccalaureate), have you applied to a program?
- | | |
|-----|----|
| YES | NO |
|-----|----|
2. If "YES," to how many programs have you applied?
- | | |
|-----|-----------|
| 1 | 2-3 |
| 4-8 | 9 or more |
3. Have you been accepted into an advanced degree program?
- | | |
|------------------|----|
| YES | NO |
| Not yet notified | |
4. If you have received notifications, by how many programs have you been accepted?
- | | |
|-----|-----------|
| 1 | 2-3 |
| 4-8 | 9 or more |
5. What advanced degree(s) will you be seeking?
- Masters (Area: _____)
- Ed.S. (Area: _____)
- Doctorate (Area: _____)
6. Which of the following is the highest degree your mother has earned?
- High School
- Associate (Area: _____)
- Bachelor (Area: _____)
- Masters (Area: _____)
- Ed.S. (Area: _____)
- Doctorate (Area: _____)
7. Which of the following is the highest degree your mother has earned?
- High School
- Associate (Area: _____)
- Bachelor (Area: _____)
- Masters (Area: _____)
- Ed.S. (Area: _____)
- Doctorate (Area: _____)

Appendix B

00 0 00000 The following information is being collected to support an extramural research project. Your participation is voluntary. You do not have to provide any of the information below to take the ACAT. At no time will you be identified by name in the research. All data will be reported only as a group. Thank you for your cooperation.

- | | | |
|--|--|----------------------|
| 1. If you are pursuing an advanced degree (beyond the baccalaureate), have you applied to a program? | YES | NO |
| 2. If "YES," to how many programs have you applied? | 1
4-8 | 2-3
9 or more |
| 3. Have you been accepted into an advanced degree program? | YES | NO |
| 4. If "YES," by how many programs have you been accepted? | 1
4-8 | 2-3
9 or more |
| 5. What advanced degree are you pursuing? | MA/MS
Ph.D.
Psy.D.
Other | MSW
Ed.D.
M.D. |
| 6. In what field are you pursuing your advanced degree? _____ | | |
| 7. What is the highest degree your <u>mother</u> has earned? | High School
Two Year
Four Year
Graduate (MA/Ph.D.)
Other _____ | |
| 8. If your mother's degree is an Associate degree or above, in what area is her degree? _____ | | |
| 9. What is the highest degree your <u>father</u> has earned? | High School
Two Year
Four Year
Graduate (MA/Ph.D.)
Other _____ | |
| 10. If your father's degree is an Associate degree or above, in what area is her degree? _____ | | |

VITA

Lisa LaGrou Garver was born in Detroit, Michigan in August, 1966. She attended elementary and junior high school in Fraser, Michigan, and graduated from Eisenhower High School in Washington, Michigan in June, 1984. She attended Western Michigan University and in April, 1988 received a Bachelor of Science degree in psychology. She took additional course work in psychology at the University of Colorado, Colorado Springs in 1990-1991. In August of 1995 she entered Austin Peay State University, Tennessee. Two years later she received a Master of Arts degree in psychological science. In May of 1997 she presented a poster, Parental Influence on College Major and Graduate School Intentions, at the meeting of the American Psychological Society in Washington DC.