A Decade's Difference: Research Revisited on Family Influence of Rural High School Students' Postsecondary Decisions

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This study is a quantitative descriptive research design which compared 1995 and 2005 data regarding family influence on rural Pennsylvania high school seniors' postsecondary decisions. A chi-square analysis at $p < 0.05$ determined that there was (a) an increase in students planning college attendance, (b) a decrease in students not planning postsecondary education or unsure of postsecondary plans, (c) an increase in students planning college attendance who did not have parents with postsecondary schooling, (d) a decrease in students not planning postsecondary education or unsure of postsecondary plans who did not have parents with postsecondary schooling, (e) an increase in lower-middle class students planning to attend college, and (f) a decrease in lower-middle class students not planning postsecondary education or unsure of postsecondary plans. There was no significant difference in students' postsecondary plans when siblings' pursuit of postsecondary education was considered.

Introduction

In the spring of 1995, the influence of family on the postsecondary decisions of rural Pennsylvania high school seniors was examined (and subsequently published in the Winter 1998 edition of *The Rural Educator*). The research methods utilized in that study were reapplied a decade later (in the spring of 2005) to another sample of rural Pennsylvania high school seniors to determine whether or not there was a change in family influence on rural students' plans after high school.

Four primary areas were examined: (a) The postsecondary decisions of all students in the sample, (b) effect of parent education on student postsecondary decision, (c) effect of sibling education on student postsecondary decision, and (d) effect of perceived family financial/class standing on student postsecondary decision.

Methodology

The same research design, quantitative descriptive (survey) research, was implemented in both 1995 and 2005. Twelfth-grade public school students who resided in rural Pennsylvania communities completed a multiple choice questionnaire. For the purposes of establishing selection criteria, (a) counties with total resident populations less than 200,000 were considered to be "rural", and (b) high schools selected had total student enrollments less than 500 students in grades 9 through 12 and averaged between 75-135 students per grade. The participants in spring 1995 were 285 students from one school in McKean (north), Fulton (south), Schuylkill (east), Lawrence (west), Centre (central), and Wyoming (northeast) counties, and participants in spring 2005 were 254 students from one school in Fulton (south), Schuylkill (east), Clarion (west), Centre (central), and Wyoming (northeast) counties. Pearson's chi-square analysis was used to compare the 1995 and 2005 categorical data).

Results

Postsecondary decisions

The data contained in Table 1 illustrates the results of a chi-square analysis of students' postsecondary decisions in 1995 and 2005. The number of students who planned to attend college after graduation increased by 11%, from 54% to 65%. Also, the number of students who either did not plan to continue their education or were unsure of postsecondary plans decreased by 12%, from 27% to 15%. These findings were statistically significant between years at the $p < 0.01$ level.

Parents' education

The data contained in Table 2 illustrates the results of a chi-square analysis of parents' education and student postsecondary decision in 1995 and 2005. The number of students planning to attend college after graduation who did not have any parents with postsecondary schooling increased by 28%, from 38% to 66%. The number of students who either did not plan to continue their education or were unsure of their postsecondary plans and did not have any parents with postsecondary schooling decreased by 23%, from 35% to 12% (a 23% decrease). These findings were statistically significant between years at the $p < 0.001$ level. Also, although not found to be statistically significant, the number of students planning to attend college after graduation that had both parents with postsecondary schooling increased by 12%, from 71% to 83%.

Table 1

Chi-square Analysis of Students' Postsecondary Decisions in 1995 and 2005

	Planning to Attend College	Other Postsecondary Schooling	Not Continuing Education or Unsure of Postsecondary Plans
1995	54%	19%	27%
2005	65%	20%	15%

Note. Pearson's $\chi^2 = 11.61$. Accepted $\chi^2 = 5.99$. df = 2; $\alpha = 0.05$.
$p < 0.01$. This distribution is significant.

Table 2

Chi-square Analyses of Parents' Education and Student Postsecondary Decision in 1995 and 2005

	Planning to Attend College	Other Postsecondary Schooling	Not Continuing Education or Unsure of Postsecondary Plans
Category 1: Both Parents had Postsecondary Schooling			
1995	71%	12%	17%
2005	83%	11%	6%
Category 2: At Least One Parent had Postsecondary Schooling			
1995	67%	17%	16%
2005	65%	24%	11%
Category 3: No Parents had Postsecondary Schooling*			
1995	38%	27%	35%
2005	66%	22%	12%

Note. For each category, the accepted chi-square = 5.99, df = 2, and $\alpha = 0.05$.
Category 1: Pearson's chi-square = 4.17.
Category 2: Pearson's chi-square = 1.45.
Category 3: Pearson's chi-square = 19.32. *$p < 0.001$. This distribution is significant.

Siblings' education

The data contained in Table 3 illustrates the results of a chi-square analysis of siblings' education and student postsecondary decision in 1995 and 2005. Although the findings were not found to be statistically significant, (a) the number of students who planned to attend college after graduation increased, regardless of whether or not they had an older sibling continuing education beyond high school; and (b) the number of students who planned to pursue some other form of postsecondary schooling after graduation increased, regardless of whether or not they had an older sibling continuing education beyond high school.

Family financial situation

The data contained in Table 4 illustrates the results of a chi-square analysis of students' perceived family financial situation and student postsecondary decision in 1995 and 2005. The number of students who believed they came from lower-middle class families that planned to attend college after graduation increased by 21%, from 55% to 76%, and the number of students who believed they came from lower-

Table 3

Chi-square Analyses of Siblings' Education and Student Postsecondary Decision in 1995 and 2005

	Planning to Attend College	Other Postsecondary Schooling	Not Continuing Education or Unsure of Postsecondary Plans
Category 1: Older Sibling(s) Continuing Education Beyond High School			
1995	68%	14%	18%
2005	71%	18%	11%
Category 2: Older Sibling(s) not Continuing Education Beyond High School			
1995	50%	21%	29%
2005	53%	33%	14%

Note. For each category, the accepted chi-square = 5.99, df = 2, and $\alpha = 0.05$.
Category 1: Pearson's chi-square = 2.26.
Category 2: Pearson's chi-square = 5.03.

Table 4

Chi-square Analyses of Financial Situation and Student Postsecondary Decision in 1995 and 2005

	Planning to Attend College	Other Postsecondary Schooling	Not Continuing Education or Unsure of Postsecondary Plans
Category 1: Upper Class			
1995	48%	23%	29%
2005	65%	21%	14%
Category 2: Upper-Middle Class			
1995	61%	19%	20%
2005	69%	21%	10%
Category 3: Lower-Middle Class*			
1995	55%	20%	25%
2005	76%	17%	7%
Category 4: Lower Class			
1995	48%	19%	33%
2005	71%	29%	0%

Note. For each category, the accepted chi-square = 5.99, df = 2, and $\alpha = 0.05$.
Category 1: Pearson's chi-square = 2.33.
Category 2: Pearson's chi-square = 5.97.
Category 3: Pearson's chi-square = 8.97. *$p < 0.05$. This distribution is significant.
Category 4: Pearson's chi-square = 3.11.

middle class families that either did not plan to continue their education or were unsure of postsecondary plans decreased by 18%, from 25% to 7%. These findings were statistically significant between years at the $p < 0.05$ level. Also, although considered to be not quite statistically significant by conventional criteria (with $p = 0.0505$, and a Peterson's chi-square of 5.97 and an accepted chi-square of 5.99), students who believed that they came from upper-middle class families (a) that planned to attend college after graduation increased by 8%, from 61% to 69%; and (b) that either did not plan to continue their education or were unsure of postsecondary plans decreased by 10%, from 20%.

Discussion

Irrespective of family influence, more students are planning to attend college to a significant degree in rural Pennsylvania than their counterparts of a decade earlier.

There was a notable inverse relationship between parents' educational attainment and planned college attendance. This time, the students with both parents having high school as their highest educational attainment were much more likely to choose college attendance after graduation, suggesting that the family values a higher education and/or an educational opportunity not previously afforded to them. The number of students going to college who did have both parents in postsecondary education also rose by a large percentage, which likely reinforces an already existing belief system that college attendance is advantageous.

Statistically speaking, the influence of older siblings stayed the same. Identical modest gains of 3% were realized for students who chose to attend college regardless of whether or not older siblings were continuing their education beyond high school.

Finally, the number of lower-middle class students opting for college attendance after high school graduation rose significantly, supporting the belief that higher education is a vehicle for upward social mobility. Consequently, students in the lower-middle class who decided that they were not going to college declined sharply. There were also modest gains in the number of upper-middle class students deciding to attend college, and with that rise a resultant drop in those students who were unsure or opting to not pursue postsecondary education, further supporting the rural students' conviction in the value of obtaining a college degree.

Conclusion

The results of this study bode well for college administrators and admissions counselors throughout the commonwealth. As rural families on the whole become more formally educated, they are sending their children to follow in their own footsteps within the hallowed halls of academe. As rural families on the lower side of the financial scale witness their own fiscal insolvency, they also are encouraging their children to pursue higher education as a means to improve upon their present situations. Both scenarios ensure that students from rural communities are willing and viable constituents on college campuses, should the present trend continue.

References

Greatschoools.net. (n.d.). Retrieved February 4, 2006, from http://www.greatschools.net/

The Pennsylvania manual. (1989). Harrisburg, PA: Department of General Services.

United States Census Bureau. (n.d.). *State & county quickfacts.* Retrieved February 4, 2006 from http://quickfacts.census.gov/qfd/