Biographical Sketch

Dr. Peggy Dunn Bailey is Professor of English and Chair of English, Foreign Languages, and Philosophy at Henderson State University. British Romanticism is one of her primary areas of teaching and research, and she has published on Romantic-era authors as diverse as Anna Letitia Barbauld and Ann Radcliffe. Her essay on Elizabeth Barrett Browning’s female epic, *Aurora Leigh*, appears in *Approaches to the Anglo-American Female Epic* (published by Ashgate in 2006).

The Effect of Parent’s Education on the Educational Aspirations of College Students

Kayla Smoke
(Mentor: Allison Vettor, Ph.D.)

Abstract
This study examines the relationship between parents’ education and their children’s educational aspirations. During the fall of 2013, 360 full-time, undergraduate students at a southern college participated in a survey. The analysis revealed that males students whose parents’ highest level of education is high school or lesser are more likely to choose a major in a mathematics or science program than male students whose parents’ highest level of education was some college or more, that students whose parents’ highest level of education is some college or higher are more likely than students whose parents’ highest level of education is high school or lesser to continue their education past a two or four year degree, and that there is not a relationship between parents’ education level and student GPA.

Literature Review
Predictors of college students’ academic choices include their parents’ level of education. Studies have shown significant relationships between student and parent academic success and aspirations.

Socio-Economic Status
Parents of higher academic standing, and usually high-socioeconomic status, often influence their children to further their education after high school. Data from the 2003 Parent and Family Involvement in Education Survey (PFI, 2003) show that 88% of students whose parents had earned a bachelor’s degree or higher had parents who expected them to finish their college education, while only 44% of students whose parents highest education was high school or less
had parents who expected them to finish. Kao and Tienda (1998) found sufficient evidence to conclude that eighth graders’ decision to attend college was primarily influenced by their parents’ education level and family background. Children of highly educated parents might feel pressured to go to college to meet what they perceive to be their parents’ expectations. Rockwell (2011) found that children of college-educated parents often feel they are expected to attend college as well (Rockwell, 2011).

While there are college students whose parents have lower levels of education (first-generation college students), these individuals tend to not do as well. First generation college students find it difficult to graduate on time due to lack of financial support, lack of familial experience, and lack of commitment (Sparkman, Maulding, and Roberts, 2009).

Children of low-income families are disadvantaged in many areas, especially in academia. Low-income families often do not have the resources to save for their children’s college education and lack information about financial aid options other than scholarships. Parents who expect their children to attend college encourage them to maintain good grades in order to obtain scholarships. In most cases, however, scholarships are not enough (Rockwell, 2011).

A study conducted by Drummond and Stipek (2004) examined the educational support of low-income parents for their children. Of the 234 low-income families that were interviewed, the majority said that the best way to help their children succeed academically was to provide for them, offer support, and teach them social skills. Parents were more focused on providing for their children’s basic needs than helping them with homework or being involved in their children’s school (Rockwell, 2011). Parents with low SES who want to be involved in their children’s schooling face disadvantages such as inflexible work hours that prevent them from being available (Rockwell, 2011). This is very different from high SES parents. Parents who have a college education tend to encourage their children to attend college by talking about their own college experience (Rockwell, 2011). High-income parents are more likely to have frequent discussions with their children about college and take them on college visits. They also have the funds to start saving money for their children’s college education as well (Rockwell, 2011).

ROLE OF GENETICS

It is questioned whether genes or environment contributes more to academic success of a student. There are many differences between parents whose highest level of education is high school or less (often of low-socioeconomic status) and parents whose highest level of education is some college or more (often of high-socioeconomic status). One reason why children with academically high achieving parents also have high academic success is that the parents are highly involved in their child’s academic life. Parental involvement usually includes helping with homework, meeting with their children’s teachers as well as participation in school functions and activities (Bachman, Nokali, and Votruba-Drzal, 2010). de Haan suggests that the causal relationship between highly educated parents and highly educated children cannot be interpreted because highly educated parents are different from lower-educated parents. Higher-educated parents are likely to be of higher ability, which results in genetic transmission of
endowments (de Haan, 2011). The simplest explanation for the relationship between children and parents’ education is that higher educated parents could place higher academic demands on their children, which pushes their children to work harder (Steinmayr, 2010). Children of higher educated parents also have more cultural capital, which may contribute to certain personality traits such as openness to experiences that children of highly educated parents tend to have (Steinmayr, 2010).

GPA
One factor that contributes to academic success is GPA. In a study by Astin (1993), the most reliable predictors of a student’s college GPA were the student’s high school GPA and standardized test scores. However, high school GPA and ACT scores are unrelated to prediction of college graduation (Sparkman, Maulding, and Roberts, 2009). Nelson (2009) found GPA and degree aspiration to be highly correlated. However, when gender was isolated as a variable, male students had lower GPAs than females, but higher degree aspirations (Nelson, 2009).

GENDER AND ETHNICITY
Teachmann and Paasch (1998) reported a positive correlation between mothers’ expectations and their children’s GPA and that only about 40% of the variance of educational success within families can be explained by socioeconomic standing (Nelson, 2009). Additionally, Bourdarbat and Montmarquette (2009) found that weight put by a student on initial earnings depends on the education level of the parent of the same gender. However, lifetime earnings are not significantly related when the same-sex parent has a university education (Bourdarbat, and Montmarquette, 2009). A study conducted by Spera, Wentzel, and Matto in 2009 examined student academic success in relation to ethnicity and parents’ education. Data were gathered through a survey given to 13,577 middle and high school parents. Caucasian parents whose highest level of education was high school had significantly lower aspirations for their children’s education compared to parents of other ethnicities who also did not have a college degree (Spera, Wentzel, and Matto, 2009). Results from a 2009 study suggest those most likely to graduate in 4 years are white females, who are not dating, who live on campus their first semester, and have at least one parent who has a 4-year degree (Sparkman, Maulding, and Roberts, 2009).

MAJOR CHOICE
One pattern in choice of field study that has been studied is gender-related selection. Studies suggest that women are more likely to choose social fields and men are more likely to choose technical fields (Zawistowska, 2011). Studies have suggested that parents influence their children’s choice of major or choice to have two majors: one major to please their parents and another major in something that interests them (Zafar, 2012). Students tend to believe that their parents are more approving of majors associated with high social status (Zafar, 2012). Using a sample of 69 students, Zafar (2012) found the mean belief of gaining parents’ approval for majoring in Engineering was 0.87 (on a scale of 0-1) compared with 0.59 for Literature and Fine Arts (Zafar, 2012). Although studies have demonstrated that familial social status is relatively insignificant where choice of fields of study is concerned, students from upper class
families are more likely to study prestigious fields such as medicine or law and students from families of lower status are more likely to choose social, economics, or engineering courses (Zawistowska, 2011). It seems that students from upper class families are likely to choose these fields of study because they are social fields and in their professions they would have to express themselves “elegantly” as opposed to the “commoner” students in “fields such as biology or chemistry, i.e. fields that place few demands on students with respect to elegant thought formulation” (Zawistowska, 2011: 336).

It seems that parents, especially their educational background, would have an impact on their child’s educational aspirations. This study examines the relationship between the two focusing on student’s choice of major (math and science versus other), GPA, and final degree being pursued. Hypotheses being tested are:

1. Students whose parents’ highest level of education is high school or less are more likely to choose a mathematics or science major.
2. Students whose parents’ highest level of education is some college or higher are more likely than students whose parents’ highest level of education is high school or less to continue their education past a two or four year degree.
3. Students whose parents’ highest level of education is some college or higher are more likely to have a high GPA than students whose parents’ highest level of education is high school or less. (low < 3, high ≥ 3)

METHODS

Sample
A sample of 900 full-time undergraduate students, age 18 and over, at a small, public University in the South was obtained from the office of Institutional Research. Males accounted for 33.2% of the sample and females accounted for 66.8%. International students (due to cultural differences and misunderstandings) and Social Research and Senior Thesis students (students conducting the survey) were removed from the study. The total number of respondents (n) was 360.

Variables
The sample was contacted via email about the survey. Students were provided a link to the survey which was available for approximately 3 weeks. These surveys asked students information about their parents’ education as well as their own. Independent variables in this study included gender (male, female); level of education of mother (1= highest level of education is high school, 2= highest level of education is greater than high school); level of education of father (1= highest level of education is high school, 2= highest level of education is greater than high school); the highest level of education between both parents (1= highest level of education is high school, 2= highest level of education is greater than high school). Dependent variables included choice of major (1= math/science major, 2= non math/science major), GPA (1= low (<3.00), 2= high (≥3.00)), highest degree being pursued by the student (1= no more than 2 or 4 year degree, 2= degree past 2 or 4 year degree).
FINDINGS

Choice of Major
Table 2 shows a cross tabulation of student’s choice of major (controlled on gender) and parents’ highest level of education. The Fisher’s Exact test was used instead of Chi-Squared because less than 80% of the expected counts were 5 or more. A significant result was found for the male students but not the female students. Male students whose parents’ highest level of education is high school or less are more likely to choose a major in a mathematics or science program than males whose parents’ highest level of education is higher than high school. Approximately 30% of male students whose parents’ highest level of education was high school or less chose a math or science major compared to the 11.9% of male students whose parents’ highest level of education was some college or more. However, female students whose parents’ highest level of education is high school or less are equally likely to choose a major in a mathematics or science program than females whose parents’ highest level of education is higher than high school. Approximately 10.6% of female students whose parents’ highest level of education was high school or less chose a math or science major compared to the 16% of female students whose parents’ highest level of education was some college or more.

GPA
Table 3 shows a cross tabulation between parents’ highest level of education and student’s approximated GPA. The Chi-Squared test was used to test the relationship which resulted in a non-significant result. Students whose parents’ highest level of education was high school or less were equally as likely to report higher grades than students whose parents’ highest level of education was some college or higher.

Final Degree Objective
Table 4 shows a cross tabulation between parents’ highest level of education and student’s final degree objective. A significant result was found using the Chi-Squared test. There is sufficient evidence to suggest that students whose parents’ highest level of education is some college or higher are more likely than students whose parents’ highest level of education is high school or less to continue their education past a two or four year degree.

DISCUSSION AND CONCLUSIONS
These findings suggest first generation college students and students whose parents have a college education make different academic choices. Whether it is spoken expectations from the parents based on their educational experiences or children’s perceived expectations from their parents’ educational achievement, the education level of parents affects their children’s academic choices while in college.

Parents’ level of education has an impact on children’s choice of major. In this study, first generation male college students were more likely than non-first generation male college students to choose a mathematics or science major. This is similar to Zafar’s (2012) study in which first generation college students were more likely to choose a mathematics or science major because those majors led to more technical professions. These technical professions are
seen as less prestigious compared to highly social professions which are typically pursued by children of college educated parents (Zafar, 2012).

Students whose parents had gone to college were more likely than first generation college students to pursue an education past a two or four year degree. Students whose parents have attended college might choose to continue their education past a two or four-year degree to meet the expectations of their parents. In Nelson’s (2009) study, 88% of college-educated parents expected their children to finish their college education. Those children probably felt pressured to continue on to graduate school since their parents expectations were high. If a similar study were to be performed observing people of all ages, we might find that individuals would pursue the same level or at least one degree higher than their parents.

Not all attributes of student life are affected by parents’ education level. Both first generation college students and students whose parents went to college were equally likely to earn a high GPA. This could be due to monetary needs of the students. A student who is receiving scholarships must achieve a specified GPA to retain his or her scholarship. A student who is paying out of pocket or has taken out a loan might work hard to achieve high grades (or at least pass classes) so that he or she does not have to pay to take a class again. Furthermore, students who have exceptionally low grades might choose to drop out or fail too many classes to retain the requirements to stay enrolled.

More research on the relationship between parents’ education level and student’s academic choices can be performed to form predictors of academic success of college students. Students whose parents have a college education tend to have more advantages, such as knowledge of scholarships, when entering college. With more research, the academic deficits of first generation college students can be found and aided so that those students will have the same opportunities as students whose parents have a college education.

**TABLES**

Table 1: Frequency distribution of all variables

<table>
<thead>
<tr>
<th>Major Sorted into Two Categories</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Math/Science</td>
<td>48</td>
<td>14.50%</td>
</tr>
<tr>
<td>Non Math/Science</td>
<td>282</td>
<td>85.50%</td>
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<tr>
<td>Total</td>
<td>330</td>
<td>100.00%</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Student's Final Degree Objective</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two or Four Year Degree</td>
<td>160</td>
<td>46.78%</td>
</tr>
<tr>
<td>More Than a Four Year Degree</td>
<td>182</td>
<td>53.22%</td>
</tr>
<tr>
<td>Total</td>
<td>342</td>
<td>100.00%</td>
</tr>
</tbody>
</table>
### Table 2: Student’s Choice of Major

<table>
<thead>
<tr>
<th>Sex of respondent</th>
<th>Major</th>
<th>Parents' Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School or less</td>
<td>More than high school</td>
</tr>
<tr>
<td>Male</td>
<td>Science/Math</td>
<td>30.00%</td>
</tr>
<tr>
<td></td>
<td>Non Science/Math</td>
<td>70.00%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>Female</td>
<td>Science/Math</td>
<td>10.60%</td>
</tr>
<tr>
<td></td>
<td>Non Science/Math</td>
<td>89.40%</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>

### Table 3: Approximate GPA of Student

<table>
<thead>
<tr>
<th>Student's GPA</th>
<th>Parents' Highest Level of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School or Less</td>
</tr>
<tr>
<td>Low (&lt;3.00)</td>
<td>29.40%</td>
</tr>
<tr>
<td>High (≥3.00)</td>
<td>70.60%</td>
</tr>
<tr>
<td>Total</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

### Table 4: Student’s Final Degree Objective

<table>
<thead>
<tr>
<th>Student's Final Degree</th>
<th>Parents' Level of Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High School or Less</td>
</tr>
<tr>
<td>Two or Four Year Degree</td>
<td>47.90%</td>
</tr>
<tr>
<td>More Than a Four Year Degree</td>
<td>52.10%</td>
</tr>
<tr>
<td>Total</td>
<td>100.00%</td>
</tr>
</tbody>
</table>

**REFERENCES**


Biographical Sketch

Kayla Smoke is an undergraduate student at Henderson State University pursuing a B.S. in Statistics. She is a member of the university’s honors college and math club. She expects to graduate in May 2015.

Carrie Ford’s BarBQ

Linda G. English, Ph.D.
Professor of Counselor Education

Carrie Ford made the best barbecue in town; in Prescott, Nevada County and southwest Arkansas. In the early 60’s, I was not quite school age and could usually get Daddy, (owner and operator of Brown’s Grocery and Station); to take me to Miss Carrie’s for a sandwich. The much anticipated sandwich was chopped pork, probably loin or shoulder; with a sweet Carolina-style Sauce. The treasure was served on white bread, what Miss Carrie called, “light bread”, with coleslaw on top. Miss Carrie would always cut mine in quarters; and supplied a fork lest a stray morsel escape.

The roasting and smoking wood had to be aged hickory and the sauce was a multigenerational, family secret; known only to Carrie Ford. I happen to know the sauce was vinegar based and the most precious ingredient was Jack Daniel’s Black Label. I know because Daddy always slipped Miss Carrie a fifth; each time she asked. What I remember most is the joy of sharing food that Miss Carrie had lovingly prepared and visiting with the characters who frequented the dining establishment located just on the edge of a dangerous part of town.

There was no telling who would be there when we arrived; whether city or county officials, police officers or just plain ole community folks. If I couldn’t get Daddy to take me to Miss Carrie’s, Mother’s only brother and my favorite uncle, Loyd, would. Uncle Loyd was retired military, a twenty-year man with a medical discharge. He moved home to live with his mother and my grandmother, Mabel Dickerson Arnold as his years in the Service ended. Uncle Loyd had a wonderful scandalous past, allegedly having been married five times and having lived with numerous women. He was a rounder; but a safe rounder, who could be trusted with a young and impressionable child. They lived next door to the store and our home. He and