Gender Gap in Education and the Effect of Parental Expectations

INTRODUCTION

Looking at data over the years, studies show that “the large gap in educational attainment that once existed between men and women has in most cases been eliminated” (Bae et al. 2000). The gender gap in education was a gap that once favored males and within the last decade has shown to shift more toward females. Common efforts to try and explore the factors affecting this change include looking at socio-demographic indicators, such as race, social class, and gender. Building on previous findings, this research will examine the link between gender gaps in education and parental educational expectations. The main questions this research examines are: how is the gender gap in education affected by parental educational expectation and how does parental educational expectation differ across race?

Parental educational expectations are well-defined and realistic future educational trajectories established by the parents or guardians of students. Evidence suggest that there is a direct correlation between educational expectation and the enrollment and completion of college (Cheng and Starks 2002; Ma 2009; Hill and Taylor 2004). Some previous research has connected race to college enrollment, gender to college enrollment, and educational expectations to college enrollment. While these factors are very important, they do not fully explain the change in the gender gap in education. There has been little research done on the educational expectation for females vs. the educational expectation for males and how these expectations vary according to race (Diprete and Buchmann 2006; Southworth and Mickelson 2007). For this research, I will be combining parental educational expectations, gender roles, and racial differences to explore how these factors influence college enrollment.
Gender Gap in Education

Researching non-monetary factors such as race, educational expectation, and gender is important for better understanding the change in the education gender gap. Understanding this social phenomenon is important to the improvement of public policies, college recruitment, and further exploration into gender systems and social structures for future research (Ridgeway and Correll 2004). Previous researcher have used secondary longitudinal data drawn from national databases, such as the National Education Longitudinal Study (NELS) and the Current Population Survey (CPS), and then conducted their own survey to analyze (Cheng and Starks 2002; Southworth and Mickelson 2007; Diprete and Buchmann 2006). This has allowed for researcher to use a larger number of data in their analyses. For this research, the surveying of recent high school graduates will offer the data needed for this cross-sectional quantitative research looking at whether they enrolled in college or not.

LITERATURE REVIEW

Research done by Rowan-Kenyon (2007) suggests that less than 70 percent of high school graduates enroll in college as “traditional” students. Traditional students are characterized as high school graduates who enroll in 2- or 4-year colleges or universities immediately following graduation (Cabrera and La Nasa 2001). According to the National Center for Education Statistics (2012), women account for 55 percent of traditional college enrollees in 2010 while males accounted for 47 percent. Over the last two decades the gender gap in college enrollment and completion has made a shift towards women. Research shows that the shift over the decades is not the result of one factor or event but a combination of changes in social processes, changes in the labor market, and changes in family resources (Rowan-Kenyon 2007; Diprete and Buchmann 2006).

Theoretical Considerations
Theories are used in research to help social scientists develop questions that are important to ask and focus on the important features of the social world (Schutt 2012). In examining college enrollment, researchers make use of the human capital, cultural capital, and social capital perspectives. For example, Diprete and Buchmann (2006) reference the human capital theory when analyzing gender-specific trends in education. The human capital theory – measured by academic achievement and college preparation – argues that individuals make decisions about enrolling in college by weighing their positive returns on wages, skills, and knowledge versus their other alternatives (Beattie 2002). Hao and Bonstead-Bruns (1998) use the social capital theory to show that “both parents’ and children’s educational expectations are spurred by between-family social capital and within-family social capital and that agreement between parents and children on educational expectation facilitates children’s achievement” (175).

According to Hao and Bonstead-Bruns (1998), social capital – measured by parental involvement, high school support, and student-teacher relations — is the investment individuals put into relationships in order to gain networks, information, and resources that can be used to a person’s advantage. Finally, cultural capital (measured by parental expectations) is when values and norms are passed from one-generation to the next that can influence an individual’s choice to enroll in college. Cheng and Straks (2002) reference cultural capital when looking at educational expectation across different races. Some researchers use a combination of the theories in their research. For example, Rowan-Kenyon (2007) and Cabrera and La Nasa (2001) used a conceptual model of the previous theories in their research looking at predictors and critical stages that affect college enrollment. By using these theories in combination with demographic information researchers are able to determine what variables to look at and are able to answer their research questions.
Gender Gap in Education

Socioeconomic Status

Studies base socioeconomic status on annual family income, parental occupations, and parental education attainment (e.g. Perna 2003; Rowan-Kenyon 2007; Sirin 2005; Cabrera and La Nasa 2001). Parental income reflects the potential social and economic resources available to individuals (Sirin 2005). Income has been linked to whether one can afford to attend college and the types of high school a student attends. Because parental education is established at an early age Sirin (2005) describes it as the most stable indicator of socioeconomic status. It is this indicator that determines the amount knowledge a parent possess about the proper channels and resources available to prepare students for higher education. Finally, parental occupation helps to establish social and economic status but also establishes prestige (Sirin 2005).

Socioeconomic status (SES) is an indicator that cannot be ignored when examining rates of college enrollment and completion. According to research done by Cabrera and La Nasa (2001) socioeconomic status is the “preferred yardstick” for measuring one’s potential for college enrollment, social mobility, and future economic status. SES has a well-documented positive association with educational attainment, as an individual’s SES increases so does their chances of enrolling in college (Crosnoe et al.). Research suggests that socioeconomic status has been linked to child development, standardized tests scores, and college readiness (through the access to college resources and information). For example, individuals of higher-SES backgrounds tend to score higher on standardized tests and are more likely to grow up in households and attend schools that offer quality, up-to-date reading materials and resources compared to individuals from lower-SES backgrounds (Beattie 2002; Cabrera and La Nasa 2001; Rowan-Kenyon 2007).

Race and Ethnicity
Researchers have noted that, all things being equal, race does not have a significant effect on college enrollment (Cheng and Starks 2002; Beattie 2002). Instead, race is correlated with college enrollment, socioeconomic status, parental involvement, educational expectations etc. According to Southworth and Mickelson (2007) race is one of the three most enduring source of social inequality in American society. The existence of discrimination in the labor market and the racial stratification in education continues to have an effect on the segregation in the school systems and the labor market. Schools that are more racially diverse or majority white are more likely to be staffed with qualified teachers with high expectations, offer several college prep tracks, and offer updated and adequate learning materials (Southworth and Mickleson 2007). These schools have a significant effect on the readiness of students for college.

**Gender**

Like race, gender is another enduring source of social inequality in American society (Southworth and Mickleson 2007). According to Ridgeway and Correll (2004), gender is an institutionalized system for which society organizes roles, relations, and practices along. Several social movements, events, and policies have altered the cultural beliefs of the gender system, resulting in the re-conceptualization of key components of the gender system (Ridgeway and Correll 2004). Events such as the Great Depression and movements such as modern-girl power, influence the gender gap in education through a form of educational egalitarianism (Diprete and Buchmann 2006; Ridgeway and Correll 2004). In an egalitarian society individuals have equal access to resources, including education. Ridgeway and Correll (2004) project that this change has and will continue to alter the discrimination in the labor force, institutional support for family structure, and ultimately gender inequality.
Throughout history women have been underrepresented in the percentage of students enrolling in college. Hossler and Stage found that “the college enrollment patterns of women have undergone a period of transition” (1992:434). According to the National Center for Education Statistics, women have gone from being the minority group in college to the majority, accounting for over 50 percent of new college enrollees and collecting the majority of bachelor degrees.

**Parental Involvement**

According to research done by Driessen, Smit, and Sleegers (2004), parental involvement is seen as an important and high valued strategy for the advancement of quality education for children. In research, parental involvement is seen as social and/or cultural capital that influences college enrollment (Rowan-Kenyon 2008). Parental involvement activities can include things done at home – such as preparing for standardize test, choosing courses to take, and discussing grades and GPAs with students – and activities performed at school – such as being an active volunteer in the classroom and on the school board. Parental involvement helps to establish and promote relationships between the teacher and the child and relays the importance of education to the child (Grolnick and Slowiaczek 1994).

Parental involvement is another factor that research has shown to vary according to socioeconomic status. According to research parents from higher-SES backgrounds are more likely to raise their children in environments that promote development and learning in children and tend to have flexible jobs that allow for them to be active in their child’s learning in and out of school (Griessen et al. 2004). These parents tend to have higher levels of education and are more apt to assist their child with complicated homework. Parental involvement has a positive
association with educational expectations. Parents who are very involved in the education process of their child are more likely to have higher educational expectations for their child.

**Educational Expectation**

Educational expectations are well-defined and realistic future educational trajectories established by significant others. Cheng and Starks (2002) define significant others as “persons who exercise major influence over the attitudes of individuals” (307). Significant others include parents, teachers, peers, and extended family members. Prior to the 1980s researchers focused a lot of attention on understanding how significant others’ educational expectations affected individuals’ education aspiration (Buchmann and Dalton 2002). Since then there has been a decline in research done on this topic because some felt as if the question had been answered. Researchers have come to the conclusion that educational expectations from parents, teachers, and peers have a direct impact on individual’s education outcomes (Buchmann and Dalton 2002; Cheng and Starks 2002). According to data archived by the U.S. Department of Education, the likelihood of enrolling in college increases by 260 percent when the expectation is to receive a bachelor’s degree.

According to Hossler and Stage (1992) parents’ education, student gender, high school GPA, and high school experience contribute significantly to students’ aspirations, but parents’ expectations exerted the strongest influence. Significant others educational expectations have been seen to differ across race (Cheng and Starks 2002). After conducting their research, Cheng and Starks (2002) found that minority parents have higher expectations for their children but have less influence on their children’s education aspirations (Cheng and Starks 2002). Research also found that mothers influence their children’s educational expectations more than fathers (Cheng and Starks 2002; Davis and Pearce 2007)
The limited research on educational expectations according to gender is both mixed and contradicting. Some research found that while women were encouraged to enroll in college they had little support (Davis and Pearce 2007; Hossler and Stage 1992; Beattie 2002). Other research found that gender did not impact parental or significant others’ educational expectations for student (Cheng and Starks 2002). Building on previous research, this research will examine the social phenomena of the gender gap in education by analyzing how parental expectations for females differ from parental expectations for males and what effect this has on the gender gap in education.

**DATA AND METHODS**

For this research, data is collected using a paper survey. Because I am interested in factors that lead to college enrollment, I screen for individual who have graduated from high school within the last six months. Based on the response of “yes” the survey taker would be eligible to continue with the rest of the survey. Using previous research and surveys I was able to compile several variables in which I focused on.

*College Enrollment*

To establish current college enrollment status two questions are asked. First question is “are you currently enrolled in college”. This question includes a simple yes or no response. Based on the response of yes the survey taker will continue to the next question about the type of college they attend. Responses include two options – 2-year community college, online college, or 4-year college/university. If the response to the first question is no the survey taker will have then completed the questionnaire.

*Socioeconomic Status*
Gender Gap in Education

Previous research and database base socioeconomic status on parental education attainment, family income, and parental occupation. For this study, the socioeconomic variable is defined using a combination of only two indicators – annual family income and parental education attainment. I avoid including parental occupation as an attempt to save time that would be spent coding different occupations and education attainment is an accepted indicator for socioeconomic status. Annual family income is established using the response to a standard family estimated yearly income question. The responses included (1) under $24,999; (2) $25,000 - $49,999; (3) $50,000 - $74,999; (4) $75,000 - $99,999; (5) $100,000- $124,999; and (6) over $125,000. Parental education attainment is based on the responses of the highest level of education complete by parent(s) or guardian(s). The responses include (1) didn’t finish high school, (2) high school diploma or GED, (3) vocational or trade school, (4) associate’s degree, (5) bachelor’s degree, (6) master’s degree or higher, and (0) not applicable/don’t know. Combining the selected items from each category gives a possible range of 1 to 12 which is then separated into three status categories lower (1-3), middle (4-9), and upper (10-12).

Race/Ethnicity

Race was used as a variable in this research to examine if educational expectations differ across racial groups. Race is the racial or ethnic group that an individual identifies with or belongs to. It is measure based on the responses to a standard “which category best describes your race” question from a basic demographic survey. The responses include American Indian or Alaskan Native, Asian, black or African American, Hispanic or Latino, white or Caucasian, Non-Hispanic white, Native Hawaiian or other Pacific Islander, biracial or multiracial, and other. I include a wider range of races because research commonly focuses on four common races (Non-Hispanic whites, Non-Hispanic blacks, Hispanics/Latinos, and Asian).

Comment [18]: Interesting operationalization of the variables. We could also create dichotomous variables and run cross tabs.
Gender

Gender was used as a variable in this research for background information and to examine if parental educational expectations differ for female children compared to male children. For this variable I used the question and answer options taken from a basic demographic survey. The responses are male or female. I do not offer a “prefer not to answer” option as an attempt to force people to choose one or the other.

Parental Involvement

Parental involvement is the amount of time a parent or guardian spends participating in the learning and schooling process of their child. To measure parental involvement variable I look at responses to involvement in the education process and involvement is specific areas of education. The response for how involved parents/guardians were in the education process include (0) not applicable/don’t know, (1) not at all involved, (2) fairly not involved, (3) fairly involved, and (4) very involved. Responses for parental involvement in specific areas of education, such as talking to teachers, visiting your classroom, and discussing topic like grades, going to college, future career choices, schoolwork, preparation for SAT/ACT test, and college major, include (0) never, (1) sometimes, and (2) often. Combining the selected items from each question gives a possible range of 0 to 20 which is then collapsed into four categories of not involved (0-6), somewhat involved (7-13) and involved (14-20).

Educational Expectation

This variable was measured using a question taken from previous research done by the Department of Education and Cheng and Starks (2002). The question asked the survey taker to identify the highest level of education each parent or guardian wants them to complete. The response include (1) high school diploma or GED, (2) vocational or technical school, (3)
associate’s degree, (4) bachelors degree, (5) master’s degree or higher, and a (0) don’t know option is included. Response will differ depending on the number of parents present in the child’s life. To account for this, the responses will be averaged depending on the number of parents or guardians.

DISCUSSION and LIMITATIONS

The survey was distributed to 14 individuals not for data collection reasons but as a way to receive feedback about the survey design. For this survey I had to instruct the respondents to ignore the screening question because several of the respondents did not graduate from high school within the last six months. Many respondents found the survey to be pretty simple and straight-forward. I did receive a red flag on the original survey question asking about high school academic track. Some found the answer options to be slightly confusing for this question. I also received feedback from one of my respondents about including the questions for the second parent in households with two-parent homosexual parents. Some of the respondents pre-judged the length of the survey because the survey is five pages long. Ideally, this survey would be taken online so that respondent would only see the questions one-by-one to deter them from opting out. One of the biggest problems I faced with designing this survey was constructing and compiling enough questions that would answer my research questions. Using secondary data along with my survey, like previous researchers, would have been a lot more efficient. The uses of secondary data would have also allowed for a larger sample group and for the uses of more variables. This along with survey feedback will be taken into consideration for future research.

Comment [19]: Good. If the respondent was w/in the 6 month period, would they be even more confused?

Comment [110]: What if you were to use survey questions from prior research and incorporated your measures.
Gender Gap in Education

APPENDIX

SURVEY

1) Screening Question: Within the last six months have you graduated from high school?
   ○ Yes  ○ No

If you answered “Yes” please continue with the rest of the survey. If you answered “No” you have completed the survey.

Thank you

A. BACKGROUND

2) Are you Male or Female?
   ○ Male  ○ Female

3) What is your age?

4) Which of the following categories best describes your race?
   ○ American Indian or Alaskan Native
   ○ Asian
   ○ Black or African American
   ○ Hispanic or Latino
   ○ White or Caucasian
   ○ Non-Hispanic White
   ○ Native Hawaiian or other Pacific Islander
   ○ Biracial/Multiracial
   ○ Other, please specify:

5) What is your family’s estimated yearly income?
   ○ Under $24,999
   ○ $25,000 - $49,999
   ○ $50,000 - $74,999
   ○ $75,000 – $99,999
   ○ $100,000 – $124,999
   ○ Over $125,000
6) For the majority of your childhood (ages 5-15) you lived in what type of household?
   ○ Two-parent
   ○ Single-parent (Mother)
   ○ Single-parent (Father)
   ○ Other (Grandparents, Foster-parents, Sibling-Headed, Extended Family)

B. Answer Questions 7-10 only if you marked “Two-parent” or “Other” for Question 6. Otherwise please skip to section labeled C.

7) Which of the following best describes the highest level of education completed by your mother (or primary female guardian)?
   ○ Didn’t finish high school
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelors degree (4 years of college)
   ○ Master’s degree or higher
   ○ Not applicable/Don’t know

8) What is the highest level of education your mother (or primary female guardian) wants you to complete?
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelors degree (4 years of college)
   ○ Master’s degree or higher
   ○ Not applicable/Don’t know

9) Which of the following best describes the highest level of education completed by your father (or primary male guardian)?
   ○ Didn’t finish high school
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelors degree (4 years of college)
   ○ Master’s degree or higher
   ○ Not applicable/Don’t know

10) What is the highest level of education your father (or primary male guardian) wants you to complete?
    ○ High school graduate or GED
    ○ Vocational or technical school
    ○ Associate degree (2 years of college)
    ○ Bachelors degree (4 years of college)
    ○ Master’s degree or higher
    ○ Not Applicable/Don’t know
Gender Gap in Education

*If you have completed this section please continue to the section labeled E: Parental Involvement. Thank you.

C. Answer Questions 11 and 12 only if you answered “Single-parent (mother)” for Question 6. Otherwise please skip to section labeled D.

11) Which of the following best describes the highest level of education completed by your mother (or primary female guardian)?
   ○ Didn’t finish high school
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelor’s degree (4 years of college)
   ○ Master’s degree or higher
   ○ Not applicable/Don’t know

12) What is the highest level of education your mother (or primary female guardian) wants you to complete?
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelor’s degree (4 years of college)
   ○ Master’s degree or higher
   ○ Not applicable/Don’t know

*If you have completed this section please continue to the section labeled E: Parental Involvement. Thank you.

D. Answer Question 13 and 14 only if you answered “Single parent (father)” for Question 6.

13) Which of the following best describes the highest level of education completed by your father (or primary male guardian)?
   ○ Didn’t finish high school
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelor’s degree (4 years of college)
   ○ Master’s degree or higher
   ○ Not applicable/Don’t know

14) What is the highest level of education your father (or primary male guardian) wants you to complete?
   ○ High school graduate or GED
   ○ Vocational or technical school
   ○ Associate degree (2 years of college)
   ○ Bachelor’s degree (4 years of college)
   ○ Master’s degree or higher
   ○ Don’t know

*If you have completed this section please continue to the section labeled E: Parental Involvement. Thank you.
E. PARENTAL INVOLVEMENT

15) How would you describe your parent(s)/guardian(s) involvement in your education?
   - Very involved
   - Fairly involved
   - Fairly not involved
   - Not at all involved
   - Not applicable/Don’t know

16) How often did your parent(s)/guardian(s) visit your class room?
   - Never
   - Sometimes
   - Often

17) How often did your parent(s)/guardian(s) discuss your education with your teachers?
   - Never
   - Sometimes
   - Often

18) How often did you discuss your grades with your parent(s)/guardian(s)?
   - Never
   - Sometimes
   - Often

19) How often did you discuss going to college with your parent(s)/guardian(s)?
   - Never
   - Sometimes
   - Often

20) How often did you discuss your future career goals with your parent(s)/guardian(s)?
   - Never
   - Sometimes
   - Often

21) How often did you discuss your schoolwork with your parent(s)/guardian(s)?
   - Never
   - Sometimes
   - Often

22) How often did you discuss preparation for ACT/SAT test with your parent(s)/guardian(s)?
   - Never
   - Sometimes
   - Often

23) How often did you discuss college majors with your parent(s)/guardian(s)?
   - Never
   - Sometimes
   - Often
F. EDUCATION

24) What type of high school did you attend?
   - Private
   - Public
   - Home school

25) Which best describes the racial makeup of your high school?
   - Mostly White/Caucasian
   - Mostly Black/African American
   - Mostly Hispanic/Latino
   - Mostly diverse

26) Which best describes your academic track in high school?
   - College prep
   - Tech prep
   - Career prep/vocational
   - Other, please specify:

27) Are you currently enrolled in college?
   - Yes
   - No

*If you answered “Yes” please continue to the next question. If you answered “No” you have successfully completed this survey. – Thank you.

28) Which best describes the current college you attend?
   - Online college
   - 2-year community college
   - 4-year college/university

THANK YOU
REFERENCES


