Miller and Barreto (2017) “The Role of Distance in College Undermatching”

DePauw University IRB approved on December 14, 2016.

**Appendix Survey Questionnaire**

Consent Form

The research in which you are about to participate will ask you to answer questions about your high school academic achievement, family income, and college choice process.

The procedure in the study is very simple, and participation will not take long. The questions will take about 10 minutes to answer.

As a volunteer participant in research at DePauw University, you should understand that the following rights and conditions apply.

* Your participation is voluntary, and you may withdraw your participation at any time without penalty.
* To qualify for participation, you must be 18-25 years old, have attended or currently be attending college, and remember and be willing to report your SAT/ACT scores
* If you qualify for this survey and pay sufficient attention when responding to questions, you will be compensated $1.00 for completing the survey. You will not be compensated if you don't qualify or if you don't complete the survey.
* There are no foreseeable risks associated with completing this survey.
* The researchers have provided their phone numbers and email addresses below. This is to enable you to contact someone should questions or complaints arise. After April 10, 2017 you may contact one of the following to receive a full description of the nature, purpose and results of this study:

Lois Miller  
loismiller\_2017@depauw.edu  
937-750-3186

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hbarreto@depauw.edu  
765-658-4531

The results of the study will be confidential and anonymous. The data will not be recorded or reported in any manner that could reveal individual identity. No one, not even the researchers will be able to link your name with your responses. This study has been approved by the DePauw Institutional Review Board to insure that the study conforms to ethical principles in the conduct of research with human subjects. You may contact the IRB with questions or concerns at IRB@depauw.edu.  
  
By consenting to participate in this survey, I verify that I am 18 years or over and have read and understood and agree to the conditions and rights listed above.

Q2 Do you consent to participate in the survey?

* Yes (1)
* No (2)

If No Is Selected, Then Skip To End of Survey

*This consent form was designed based on a template provided by DePauw University’s Institutional Review Board (Sample Informed Consent Form). It was submitted along with a proposal of the research project to DePauw’s IRB, and then adjusted based on comments from a member of the board.*

Q3 Are you between the ages of 18 and 25?

* Yes (1)
* No (2)

If No Is Selected, Then Skip To End of Survey

*The sample was limited to individuals aged 18-25 so that they had been through the college search process recently enough to remember it. Another reason for restricting the age range was to ensure that effects observed were happening in the same time period. Non-traditional students (those who enter college when they are older than 25) are not included in the sample, which is consistent with how previous literature has analyzed high school graduates (Lincove and Cortes 2016, 7).*

Q4 Are you currently or have you ever attended college?

* Yes (1)
* No (2)

If No Is Selected, Then Skip To End of Survey

*The sample must be limited to those who attended college in order to study their college choice process.*

Q5 Did you take the SAT or the ACT tests?

* SAT (1)
* ACT (2)
* Both (3)
* Neither (4)

If Neither Is Selected, Then Skip To End of Survey

*The SAT and ACT standardized tests are the primary measure of high school achievement used to determine if a student has undermatched. To participate in the survey, individuals must have taken and remember their scores from one or both of the tests.*

Display This Question:

If Did you take the SAT or the ACT tests?; SAT Is Selected

Or Did you take the SAT or the ACT tests?; Both Is Selected

Q6 What was your combined Critical Reading and Math SAT score (out of 1600)?

*If the student has taken the SAT, regardless of whether they have also taken the ACT, they are asked to report their SAT score, since this is the measure used in analysis.*

Display This Question:

If Did you take the SAT or the ACT tests? ACT Is Selected

Q7 What was your composite ACT score (out of 36)?

*If the student only took the ACT, they are asked to report this score, so that it can be converted it to an SAT score, as is consistent with the literature.*

Q8 What grades did you receive in high school?

* Mostly A's (1)
* Half A's and half B's (2)
* Mostly B's (3)
* Half B's and half C's (4)
* Mostly C's (5)
* Half C's and half D's (6)
* Mostly D's and below (7)

*As a secondary measure of high school achievement, students are asked to report their grades. The style of this question was based on the question from the National Longitudinal Survey of Youth 1997, used in Aughinbaugh’s (2008, 38) analysis.*

Q9 What is your gender?

* Male (1)
* Female (2)

*This question in included so that gender can be used as a controlling variable in the analysis.*

Q10 What is your date of birth?

Month (number) (1)

Day (2)

Full Year (3)

Condition: Full Year Is Less Than 1991. Skip To: End of Survey.

Condition: Full Year Is Greater Than 2000. Skip To: End of Survey.

*This question serves as an attention check, and a way to ensure that the respondent is between 18 and 25 years old. If they enter a birth year that ensure they are younger than 18 or older than 25, they will be excluded from the survey.*

Q11 Are you of Hispanic, Latino, or Spanish origin?

* Yes (1)
* No (2)

Q12 Regardless of your answer to the prior question, please select one or more of the following that best describe you.

* American Indian or Alaska Native (including all Original Peoples of the Americas) (1)
* Asian (including Indian subcontinent and Philippines) (2)
* Black or African American (including Africa and Caribbean) (3)
* Native Hawaiian or Other Pacific Islander (Original Peoples) (4)
* White (including Middle Eastern) (5)

*Similar to Q9, Q11 and Q12 are included so that race and ethnicity can be included as controlling variables. The wording of the questions is taken from the College Board Admitted Student Questionnaire (2015).*

Q13 Have you ever been eligible for the free- or reduced-price lunch program at school?

* Yes (1)
* No (2)

Display This Question:

If Have you ever been eligible for the free- or reduced-price lunch program at school? Yes Is Selected

Q14 During the years when you were in Kindergarten through 12th grade, how many years were you eligible for the free- or reduced-price lunch program? If you're unsure, please approximate.

* 1 (1)
* 2 (2)
* 3 (3)
* 4 (4)
* 5 (5)
* 6 (6)
* 7 (7)
* 8 (8)
* 9 (9)
* 10 (10)
* 11 (11)
* 12 (12)
* 13 (always eligible) (13)

*Since self-reported household income may be unreliable for low-income students, Q13 and Q14 about free- and reduced-price lunch have been included since they have been used as a proxy for poverty. It has been shown that the number of years that a student has been eligible for free- or reduced-price lunch is a way to separate out low-income students into levels of poverty (Dynarski 2016).*

Q15 Do you have knowledge of your family's total combined income (household income) to the nearest $10,000, for the year before you applied to college?

* Yes (1)
* No (2)

Display This Question:

If Do you have knowledge of your family's total combined income (household income) to the nearest thousand dollars, for the year before you applied to college? Yes Is Selected

Q16 The year before you applied to college, what was your family's total combined income (household income) before taxes?    Please round to the nearest $10,000, and enter only the number (ex: 40,000)

Display This Question:

If Do you have knowledge of your family's total combined income (household income) to the nearest thousand dollars, for the year before you applied to college? No Is Selected

Q17 Although you do not know your family's income, please select from the given ranges your best estimate of your family's income (household income) before taxes, for the year before you applied to college.

* Less than $30,000 (1)
* $30,000 to $39,999 (2)
* $40,000 to $59,999 (3)
* $60,000 to $79,999 (4)
* $80,000 to $99,999 (5)
* $100,000 to $149,999 (6)
* $150,000 to $199,999 (7)
* $200,000 or higher (8)

*Originally, Q16 and Q17 were separated so that a more precise measure of income could be used for respondents with knowledge of their household income to the nearest $10,000, and wider brackets could be used for individuals who were unsure (so that they would not guess incorrectly). However, in analysis, the two questions were collapsed into using the brackets so that all data could be analyzed together. Q17 was taken from the College Board Admitted Student Questionnaire (2015). Although the wording of Q17 was changed to account for the differing timeline of this survey (to ask about the year before applying to college), the responses were unchanged.*

Q18 Did your mother graduate from college?

* Yes (1)
* No (2)
* Unsure (3)

*Q18 was asked to measure family background.*

Q19 What is the value of 2 + 2?

* 2 (1)
* 4 (2)
* 5 (3)

If 4 Is Not Selected, Then Skip To End of Survey

*This was an attention check included to ensure that Mechanical Turk respondents were reading the questions and not just randomly selecting answers. If the respondent failed to answer this question correctly, they were immediately send to the end of the survey and not compensated.*

Q20 Did your father graduate from college?

* Yes (1)
* No (2)
* Unsure (3)

Q21 Are you currently in college?

* Yes (1)
* No (2)

Display This Question:

If Are you currently in college? No Is Selected

Q22 Did you graduate from college?

* Yes (1)
* No (2)

*Q22 is used to determine of the students who are not currently in college, how many graduated and how many have dropped out or stopped attending college for the time being.*

Q23 Have you ever transferred from one college to another?

* Yes (1)
* No (2)

Q24 Please answer the following questions in this survey in regards to the first time you applied to and enrolled in college.

*The thesis seeks to determine how students made their college decision immediately after high school, so if they have transferred institutions, they are asked to answer with regards to their first college search. If a student has not transferred, the Q24 instructions are not displayed.*

Q25 In what year did you first attend college?

*Q25 serves as another attention check. Assuming no respondents have started college before the age of 16, if a respondent enters a year less than 2007, they must be over 25 years old and ineligible for the survey.*

Q26 What was the zip code where you lived when you were applying to college?

*Q26 is used to determine the distance between the student’s hometown and the colleges they applied to.*

Q27 How many colleges did you apply to?

Display This Question:

If How many colleges did you apply to? Text Response Is Equal to 5

Q31 Please list the full names (e.g. enter "Ohio State University", NOT "OSU") of all colleges to which you applied.

College 1 (1)

College 2 (2)

College 3 (3)

College 4 (4)

College 5 (5)

*Respondents are asked to provide names of all colleges they have applied to, to determine how their SAT scores compared with the median SAT scores of colleges applied to (to measure undermatching) and to determine the proximity of the colleges to which the student applied to their home. Note: Q28-Q30 are omitted because they ask the same information, of students who applied to less than 5 colleges.*

Display This Question:

If How many colleges did you apply to? Text Response Is Greater Than 5

Q32 Of the colleges to which you applied, please list the full names (e.g. enter "Ohio State University", NOT "OSU") of the top 5 that you were most interested in attending.

College 1 (1)

College 2 (2)

College 3 (3)

College 4 (4)

College 5 (5)

*If a student applied to more than 5 colleges, they are asked to report the top 5 that they were most interested in. This follows the format of the College Board Admitted Student Questionnaire (2015).*

Q33 Did you apply early decision? Early decision is a binding admission plan. When you apply early decision, you sign a statement agreeing to enroll in the college if you're accepted. Because of this binding agreement to enroll, you can only apply to one school early decision.

* Yes (1)
* No (2)

*Q33 is asked to determine which students applied using early decision. Early decision has been shown to disadvantage low- and middle-income families (Bruni 2016).*

Display This Question:

If How many colleges did you apply to? Text Response Is Greater Than 5

Carry Forward Entered Choices - Entered Text from "Of the colleges to which you applied, please list the full names (e.g. enter "Ohio State University", NOT "OSU") of the top 5 that you were most interested in attending."

Q38 Please select all colleges to which you were admitted.

Display This Question:

If How many colleges did you apply to? Text Response Is Greater Than 5

Carry Forward Selected Choices from "Please select all colleges to which you were admitted."

Q43 What college do/did you attend?

*Q38 and Q43 give insight into which colleges the student was admitted to, and to which college they ultimately enrolled. Answer choices are carried forward, so that they can only select colleges to which they were admitted from the list of colleges to which they applied, and can only select which college they attended from the list of colleges to which they were admitted. Note: Q34-Q37 and Q39-Q43 have been omitted, since they provided the same information for students who applied to less than 5 colleges.*

Display This Question:

If How many colleges did you apply to? Text Response Is Equal to 1

Q44 What college do/did you attend?

*If a student indicated that they only applied to one college, they are not asked about which colleges they were admitted to.*

Q45 How often did you suffer from a fatal heart attack when making your college decision?

* Daily (1)
* 4-6 times a week (2)
* 2-3 times a week (3)
* Once a week (4)
* Never (5)

If Never Is Not Selected, Then Skip To End of Survey

*Q47 is the final attention check to ensure respondents are reading the questions.*

Q46 During the search process, how many colleges did you visit?

* 1 (1)
* 2 (2)
* 3 (3)
* 4 (4)
* 5 (5)
* 6 (6)
* 7 (7)
* 8 (8)
* 9 (9)
* 10+ (10)

*Visiting colleges may be easier and more common for high-income students, which could lead them to consider colleges further from home (McDonough 1997).*

Q47 What were the most important factors in choosing your college? Explain.

*This open-ended question is designed to determine what primarily drove the student’s college decision. It is placed before the specific questions about influential factors, so respondents could answer this before being primed with specific factors.*

Q48 Did you apply to any colleges that you would consider prestigious or elite?

* Yes (1)
* No (2)

Display This Question:

If Did you apply to any colleges that you would consider prestigious or elite? No Is Selected

Q49 Please rate the amount to which you agree or disagree with the following statements.   I did not apply to any prestigious or elite colleges because...

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree (1) | Somewhat agree (2) | Neither agree nor disagree (3) | Somewhat disagree (4) | Strongly disagree (5) |
| I did not think I would be admitted (1) |  |  |  |  |  |
| I did not think I would be able to afford elite colleges (2) |  |  |  |  |  |
| I wanted to go to college close to home (3) |  |  |  |  |  |
| I did not think I would be able to handle the academic rigor (4) |  |  |  |  |  |

Display This Question:

If Did you apply to any colleges that you would consider prestigious or elite? No Is Selected

Q50 Are there any other reasons you did not apply to any prestigious or elite colleges?

*Hoxby and Avery (2012) and Bowen et al. (2005) have shown that many students who could be admitted to selective colleges do not apply, but less attention has been given to why these students don’t apply. Q49 and Q50 are designed to determine what has stopped a student from applying to elite colleges, if they did not apply to any.*

Display This Question:

If Please rate the amount to which you agree or disagree with the following statements.I did not apply to any prestigious or elite colleges because... I wanted to go to college close to home - Strongly agree Is Selected

Or Please rate the amount to which you agree or disagree with the following statements.I did not apply to any prestigious or elite colleges because... I wanted to go to college close to home - Somewhat agree Is Selected

Q51 Please rate the degree to which you agree or disagree with the following statements. I wanted to go to college close to home because...

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | Strongly agree (1) | Somewhat agree (2) | Neither agree nor disagree (3) | Somewhat disagree (4) | Strongly disagree (5) |
| I wanted to be near my family (1) |  |  |  |  |  |
| I wanted to be near my friends (2) |  |  |  |  |  |
| I wanted to keep my high school job (3) |  |  |  |  |  |
| I wanted to be near my boyfriend/girlfriend (4) |  |  |  |  |  |

Display This Question:

If Please rate the amount to which you agree or disagree with the following statements.   I did not... I wanted to go to college close to home - Strongly agree Is Selected

Or Please rate the amount to which you agree or disagree with the following statements.   I did not... I wanted to go to college close to home - Somewhat agree Is Selected

Q52 Are there any other reasons you wanted to go to college close to home?

*Q51 and Q52 are displayed only if the respondent indicates that they “strongly agree” or “somewhat agree” with the statement that they did not apply to any prestigious/elite colleges because they wanted to go to college close to home. It aims to determine students’ primary reasons for wanting to be close to home.*

Q53 To what extent were the following people influential to your college decision?

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | No influence (1) | Minimal influence (2) | Moderate influence (3) | Strong influence (4) | Very strong influence (5) | N/A (6) |
| Parents (1) |  |  |  |  |  |  |
| Other family members (not parents) (2) |  |  |  |  |  |  |
| Friends (3) |  |  |  |  |  |  |
| High School Guidance Counselor (4) |  |  |  |  |  |  |
| Private Counselor (5) |  |  |  |  |  |  |

*Q30 is designed to measure a student’s social capital, and how they used that social capital in their college search. The higher of an influence the various significant persons had on the student, the higher their social capital in making a college decision.*

Q54 Thinking of your time in college, did/do you live on/near campus or did/do you commute from your family home? If both options apply, choose the one that was true for the majority of your time in college.

* Live on/near campus (1)
* Commute (2)

Q55 How important was the distance from home in your decision to attend your college?

* Extremely important (1)
* Very important (2)
* Moderately important (3)
* Slightly important (4)
* Not at all important (5)

Q56 When deciding colleges to apply to, what was the farthest distance you considered?

* <1 hour drive (commuting distance) (1)
* 1-3 hours drive (2)
* 3+ hours drive (3)
* flying distance/distance was not a concern (4)

*Q54-Q56 are designed to measure the influence of distance from home on the student’s college decision. The responses to question 56 were given in driving/flying time rather than miles because interviewees in McDonough’s (1997) talked about distance from home in time rather than miles.*

Q57 Did you receive a Federal Pell Grant?

* Yes (1)
* No (2)
* Unsure (3)

Q58 Did you receive need-based financial aid?

* Yes (1)
* No (2)
* Unsure (3)

Q59 Did you receive non-need-based financial aid by your college in recognition of your athletic, musical, artistic, or academic talent?

* Yes (1)
* No (2)
* Unsure (3)

Display This Question:

If Did you receive need-based financial aid? No Is Not Selected

Or Did you receive non-need-based financial aid by your college in recognition of your athletic, mus... No Is Not Selected

Q60 Did your financial aid package include

|  |  |  |  |
| --- | --- | --- | --- |
|  | Yes (1) | No (2) | Unsure (3) |
| Grants or scholarships? (1) |  |  |  |
| One or more student loans? (2) |  |  |  |
| A work package or campus job? (3) |  |  |  |

Q61 How important was the cost of your college and your financial aid package in your decision to attend your college?

* Extremely important (1)
* Very important (2)
* Moderately important (3)
* Slightly important (4)
* Not at all important (5)

*Access to college across income groups is related to financial aid, so Q57-Q61 were designed to determine what kind of financial aid the student received and how it affected their decision. Q58-Q60 were taken from the College Board Admitted Student Questionnaire (2015).*

Q62 Do you think you made a good college choice?

* Yes (1)
* No (2)

Q63 Do you think you would have been as satisfied at the other college(s) you considered but did not attend?

* Yes (1)
* No (2)

*Undermatching may not be a negative consequence for all students, and some students may be maximizing utility by attending a college that has much lower median SAT scores than their own. Q62-Q63 are designed to measure if, in retrospect, the student believes they made a good college decision.*

Display This Question:

If Have you ever transferred from one college to another? Yes Is Selected

Q64 Other than the first college you attended, please list all other colleges you have attended.

College 1 (1)

College 2 (2)

College 3 (3)

College 4 (4)

*If the student has transferred colleges, after they have answered all questions with respect to their first college search, they are asked to provide which college(s) they have transferred to.*