

Survey Appendix to:
**Can Marginal Rates of Substitution Be
Inferred From Happiness Data?
Evidence from Residency Choices**

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In this document we describe in detail how we constructed our data. In section 1 we describe the timeline and methods of our sample recruitment. In section 2 we present screenshots of the web survey. In section 3 we explore evidence regarding sample selection.

1. Sample Recruitment

At the beginning of this project, we decided that we would only contact students after receiving permission from their medical school. This procedure had a number of advantages. Most importantly, by working directly with the medical schools we could also solicit their assistance inviting students to participate. We believed that having the invitation to our web survey come from a representative of the student's own school (instead of from a member of our research team, who is unfamiliar to the students) would increase survey participation, and would avoid the need for us to independently collect contact information. In addition, directly contacting students might have been disruptive to the medical schools and would have complicated the process of getting IRB approval.

We began the process by compiling a list of all 126 Medical Schools fully accredited by the American Association of Medical Colleges (AAMC). We excluded from our sampling universe four programs from Puerto Rico and one program with an exceptionally small class size. Contact with schools was primarily handled by three members of our research team: Alison Ettinger, Matt Hoffman, and Alex Rees-Jones. We identified the person responsible for permitting surveying of the students (typically the Associate Dean of Student Affairs), and emailed that person to request permission. Below is a generic example of one such request.

Dear Dean X,

Along with Professors Daniel Benjamin and Ori Heffetz at Cornell University, Professor Miles Kimball and Allison Ettenger at the University of Michigan, and Alex Rees-Jones at Cornell University, I'm working on a research project about how people make important life decisions like career choices. We're writing to you in your capacity as a dean in the hope that you would allow us to survey the medical students at University X about their choices in the National Resident Matching Program next February, shortly after they have submitted their residency preferences to the

NRMP.

From our point of view as researchers, the NRMP is a perfect venue to explore important life decisions because of the depth of thought that goes into the detailed rankings that students submit. We anticipate that the results from this study would provide useful information to medical schools about how students think about matching for residency programs and inform both the advising as well as residency programs at medical institutions.

We would greatly appreciate your participation in this survey, and we are open to incorporating your feedback into the survey. The survey should take only 15 minutes for students to complete and all responses would be kept strictly confidential. I have attached a draft of the survey for your reference.

If you have any questions about the survey, I would be happy to answer them over e-mail or schedule time for a brief phone conversation. In addition, a member of our research team will be at the AAMC annual meeting from Nov 4th-9th. If you or a representative of your school is in attendance, we would love the chance for a brief meeting to describe the project and see if you would be willing to participate. We will be surveying students from medical schools around the country including the University of Minnesota, Cornell University, and the University of Alabama, and would love to add University X to our list of participating medical schools.

Best,

Matt Hoffman
PhD Candidate, Economics
Cornell University

These emails were followed up with phone calls, further emails, and in some cases in-person meetings at the AAMC annual meeting. Ultimately, 23 schools agreed to participate. Survey appendix table 1 (at the end of this document) lists these schools, along with graduating class sizes and response rates.

We wanted our survey to take place within the time window that starts when students submit their preferences and ends when the match outcome is announced. In 2012, the deadline for submitting preferences was 9pm on February 22nd, and match day was March 16th. Starting shortly after the 9pm deadline on Feb 22nd, and continuing through March 1st, students at participating schools received an email requesting their participation. We sent this email to the school representatives, who forwarded it to the students:

Dear graduating medical student,

You are being contacted because your school is participating in a study on the decision making process of students in the NRMP match. We would greatly appreciate your participation in our brief, confidential survey. The results of this study will provide better information on how medical students select residency programs, and can assist in the advising and preparation of future generations of students.

The survey can be accessed here: <https://surveys.isr.umich.edu/collector/Survey.ashx?Name=residencysurvey&sch=12>

Responses may be submitted until 11:59PM on March 3rd, 2012.

We estimate that the survey will take 15 minutes to complete. As a token of our appreciation, participants will be entered in a raffle to win iPod nanos (with at least 1/50 chance of winning).

We thank you and deeply appreciate your time and participation.

Prof. Dan Benjamin, Cornell University
Prof. Ori Heffetz, Cornell University
Alex Rees-Jones, Cornell University

Some schools agreed to send reminder emails; these were sent near the end of the survey period. (As before we sent the email to the school representatives, who forwarded it.)

Between March 7th and March 9th respondents who gave permission to be re-contacted after the first-round survey received an email directly from Alex Rees-Jones. The date they received the email was randomly determined: the students were randomly split into three groups, and these three groups were emailed across the three days. The email stated:

Dear graduating medical student,

Thank you for participating in our survey last week. This is a reminder that you have been invited to take our follow-up survey. This second survey is extremely important to answering the scientific questions raised in these studies, so we would deeply appreciate your participation.

Part of this survey is the same as the survey you completed last week, but part of it is different. We hope that you will complete the entire survey, so we might see if your predictions about your experience in different residencies have stayed the same or have changed.

The survey can be accessed here: <https://surveys.isr.umich.edu/collector/Survey.ashx?Name=residencysurveywave2&id=1297>

Responses may be submitted until 11:59PM on March 11th, 2012.

We estimate that the survey will take 20 minutes to complete. As a token of our appreciation, participants will be entered in another (additional) raffle to win iPod nanos (with at least 1/50 chance of winning).

We thank you and deeply appreciate your time and participation.

Prof. Dan Benjamin, Cornell University
Prof. Ori Heffetz, Cornell University
Alex Rees-Jones, Cornell University

We closed the follow-up survey on March 11th, the beginning of “Match week.”

2. Survey Screenshots

The survey was written in Multimode Interviewing Capability (MMIC), an online survey programming software package developed by the RAND Corporation (see <https://mmic.rand.org>). The following pages present screenshots of the survey. For further description, see section 2 of the paper.

Residency Matching Survey

We have contacted you because administrators in your medical program have agreed to let us survey your program's current seniors in an effort to better understand how residency applicants form their NRMP rankings. Your participation is voluntary, and is greatly appreciated: while it will not benefit you personally, it will help inform our research on the experience of medical students as they go through this important process, and hence may benefit other medical students and medical programs in the future.

Throughout this survey you will be asked questions about your NRMP preference ranking and how you evaluate your chosen residencies. It is very important for our study that you complete this survey on your own and answer truthfully. You may withdraw from the study at any time, or skip questions you are not comfortable with.

Your privacy is very important to us. When information is transferred online there is a possibility that it may be viewed by a third party. To reduce the risk that an outside party could identify you or observe your responses, this survey employs 128-bit data encryption on par with that used for online banking. As a result, we anticipate that your participation in this survey presents no greater risk than everyday use of the Internet. Your responses will be used solely for research purposes and will be kept strictly confidential, shared only with the researchers named below.

If you agree to participate, please fill out this survey without discussing it with others. We anticipate that this survey will take 10 to 20 minutes.

Contact Information: This study is being conducted by Cornell University faculty: Daniel J. Benjamin, Ori Heffetz, and Alex Rees-Jones. If you have any questions or concerns about this survey, please contact Alex Rees-Jones at arr34@cornell.edu. In addition, you may contact the Cornell University Institutional Review Board for Human Participants with any concerns or complaints about this survey. They may be reached at irbhp@cornell.edu, 607-255-5138, or www.irb.cornell.edu. Concerns or complaints may be filed anonymously through Ethicspoint (www.hotline.cornell.edu) or by calling toll free at 1-866-293-3077.

Payment for Participation: In return for completing this survey, you will be entered in a drawing for an iPod nano. Your chances of winning are one in fifty; however, students in medical schools with a participation rate higher than 70% will have their chance of winning tripled.

Eligibility: To be eligible to participate in this survey, you must be a medical student participating in the 2012 NRMP match.

If you agree to fill out this survey, please click the "Next" button below to begin.

This study was approved by the Cornell Institutional Review Board on February 1, 2012.

Next »

Powered by DatStat

1. Please enter the top four programs from the preference ordering you submitted to the NRMP.

	Program	Specialty
First Choice	<input type="text"/>	<input type="text"/>
Second Choice	<input type="text"/>	<input type="text"/>
Third Choice	<input type="text"/>	<input type="text"/>
Fourth Choice	<input type="text"/>	<input type="text"/>

2. On what date did you submit your rank order list to the NRMP?

--Select Month-- --Select Day--

Next »

3. Are you registered with the NRMP for a dual match?

- Yes
- No

4. What is your relationship status?

- Single
- In a long-term relationship
- Married

Next »

For the following section, you will be asked to individually consider the top four programs you ranked. For each of these possibilities, you will be asked to report your predictions on how attending that residency program will affect a variety of aspects of your life. Please answer as carefully and truthfully as possible.

For some questions you will be asked to rate aspects on a 1-100 scale. Let 100 represent the absolute best possible outcome, 1 represent the absolute worst possible outcome, and 50 represent the midpoint.

Next »

Thinking about how your life would be if you matriculate into the residency program in **Anesthesiology** at **Johns Hopkins**, please answer the questions below.

5. On a scale from 1 to 100, how happy do you think you would feel on a typical day during this residency?

6. On a scale from 1 to 100, how satisfied do you think you would be with your life as a whole while attending this residency?

7. On a scale from 1 to 100, where 1 is "worst possible life for you" and 100 is "best possible life for you" where do you think the residency would put you?

8. On a scale from 1 to 100, how would you rate the prestige and status associated with this residency?

9. On a scale from 1 to 100, what would you expect the quality of your social life to be during this residency?

10. On a scale from 1 to 100, taking into account city quality and access to family and friends, how desirable do you find the location of this residency?

11. On a scale from 1 to 100, how anxious do you think you would feel on a typical day during this residency?

12. On a scale from 1 to 100, to what extent do you think your life would seem worthwhile during this residency?

13. On a scale from 1 to 100, how stressed do you think you would feel on a typical day during this residency?

14. On a scale from 1 to 100, how would you rate your future career prospects and future employment opportunities if you get matched with this residency?

15. On a scale from 1 to 100, how do you expect this residency to affect your control over your life?

16. On a scale from 1 to 100, how desirable is this residency for your spouse or significant other?

Next »

Now thinking about your income if you matriculate into the residency program in **Anesthesiology** at **Johns Hopkins**, please answer the questions below.

17. What do you estimate your income would be five years after your residency?

\$ per year

18. What is your best guess of the probability that your income would be above \$100,000 five years after your residency?

%

19. What is your best guess of the probability that your income would be above \$200,000 five years after your residency?

%

20. What is your best guess of the probability that your income would be above \$300,000 five years after your residency?

%

21. What do you estimate your income would be fifteen years after your residency?

\$ per year

22. What is your best guess of the probability that your income would be above \$100,000 fifteen years after your residency?

%

23. What is your best guess of the probability that your income would be above \$250,000 fifteen years after your residency?

%

24. What is your best guess of the probability that your income would be above \$400,000 fifteen years after your residency?

%

25. Ranked by total lifetime earnings over an entire medical career, how do you think your total lifetime earnings would end up ranking among all US medical students being matched this year? What percentile would you be in for total lifetime earnings, where 99th percentile is the highest and 0th percentile is the lowest?

th

Next »

For the following section, you will again be asked to individually consider the top three programs you ranked. For each of these possibilities, you will be asked to report your predictions on how attending that residency program will affect your happiness during different periods of your life. Please answer as carefully and truthfully as possible.

Next »

Powered by DatStat

Thinking about how your life would be if you matriculate into the residency program in **Anesthesiology** at **Johns Hopkins**, please answer the questions below.

26. On a scale from 1 to 100, how happy do you think you would be on average during the first ten years of your career?

27. During the first ten years of your career, what would you say is the probability that you would rate your average happiness for a typical week higher than 40 out of 100?

 %

28. During the first ten years of your career, what would you say is the probability that you would rate your average happiness for a typical week higher than 60 out of 100?

 %

29. During the first ten years of your career, what would you say is the probability that you would rate your average happiness for a typical week higher than 80 out of 100?

 %

30. On a scale from 1 to 100, how happy do you think you would be on average for the remainder of your career before retirement?

31. For the remainder of your career, what would you say is the probability that you would rate your average happiness for a typical week higher than 40 out of 100?

 %

32. For the remainder of your career, what would you say is the probability that you would rate your average happiness for a typical week higher than 60 out of 100?

 %

33. For the remainder of your career, what would you say is the probability that you would rate your average happiness for a typical week higher than 80 out of 100?

 %

34. On a scale from 1 to 100, how happy do you think you would be on average after retirement?

35. After retirement, what would you say is the probability that you would rate your average happiness for a typical week higher than 40 out of 100?

 %

36. After retirement, what would you say is the probability that you would rate your average happiness for a typical week higher than 60 out of 100?

 %

37. After retirement, what would you say is the probability that you would rate your average happiness for a typical week higher than 80 out of 100?

 %

Next »

Powered by DatStat

For the following section, you will again be asked to individually consider the top three programs you ranked. For each of these possibilities, you will be asked to report your predictions on how attending that residency program will affect your life satisfaction during different periods of your life. Please answer as carefully and truthfully as possible.

Next »

Powered by DatStat

Thinking about how your life would be if you matriculate into the residency program in **Anesthesiology** at **Johns Hopkins**, please answer the questions below.

37. On a scale from 1 to 100, what do you think your average life satisfaction would be during the first ten years of your career?

38. During the first ten years of your career, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 40 out of 100?
 %

39. During the first ten years of your career, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 60 out of 100?
 %

40. During the first ten years of your career, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 80 out of 100?
 %

41. On a scale from 1 to 100, what do you think your average life satisfaction would be for the remainder of your career before retirement?

42. For the remainder of your career, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 40 out of 100?
 %

43. For the remainder of your career, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 60 out of 100?
 %

44. For the remainder of your career, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 80 out of 100?
 %

45. On a scale from 1 to 100, what do you think your average life satisfaction would be after retirement?

46. After retirement, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 40 out of 100?
 %

47. After retirement, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 60 out of 100?
 %

48. After retirement, what would you say is the probability that you would rate your average life satisfaction for a typical week higher than 80 out of 100?
 %

121. When forming the ranking of residencies to submit to the NRMP, some candidates submit an ordering that is not the true order of how desirable they find the programs.

When forming your list, did you report the exact ordering of your true preferences?

- Yes
- No - I chose my list strategically
- No - I tried to report my true preferences, but I made a mistake
- No - Other reason

122. If you indicated "No - Other reason" above, please explain here:

123. If you indicated "No" above, please give your true preference order of these programs:

NRMP Order: Program, Specialty	True Preference
NRMP First Choice: New York Presbyterian, Internal Medicine	<input type="text"/>
NRMP Second Choice: NYU, Anesthesiology	<input type="text"/>
NRMP Third Choice: Mass. General Hospital, Radiation Oncology	<input type="text"/>
NRMP Fourth Choice: UCLA, Pediatrics	<input type="text"/>

124. If you indicated "No" above, what motivated the differences between your true preference order and the preference order you submitted to the NRMP?

125. During your interviews, did any school representative offer to rank you higher in exchange for a high position on your ranking?

- Yes
- No

Next ➔

Webpage Screenshot

In this final section we will ask you a few questions about yourself and your background. If you do not know an answer or do not wish to respond, you may leave the question blank.

Next »

Powered by DatStat

<https://surveys.isr.umich.edu/Collector/Survey.ashx>

126. Please enter your gender:

- Male
- Female

127. Please enter your age:

Next »

128. Please enter your college GPA:

129. Please enter your MCAT score:

130. Please enter your US Medical Licensing Examination step 1 score:

131. Please enter your US Medical Licensing Examination step 2 score:

Next »

Thank you for taking our survey.

Thank you for taking our survey; your participation will help us better understand the decision making process that future residents face. As a token of our appreciation, you will be entered in a lottery to win an iPod nano with a one in fifty (1/50) chance of winning.

We can learn the most about decision making in the match process if there is a high participation rate in this survey. For this reason, we ask that you please encourage your classmates to participate. If the response rate at your school meets or exceeds 70%, we will triple the chance of winning an iPod for every participant at your school (so you will have about a 1/17 chance of winning).

To be entered in the drawing, please enter your email address below. We will contact you at this address if you are selected. As a reminder, your email address and survey responses will be kept strictly confidential.

132. Email Address:

We will conduct follow up surveys in the coming weeks and after students have matriculated into their residencies. We would deeply appreciate your participation in our follow up surveys, it will help us better understand the full decision making process involved in residency choice.

133. May we contact you at the above email with an invitation to participate in these surveys?

- Yes
- No

Submit

3. Selection into survey participation

We explore selection into our sample in three stages: first, selection of medical schools into our sample of schools (comparing participating and non-participating schools); second, selection of respondents, within participating schools, into our main sample (comparing respondents with school averages); and third, selection of respondents, within our main sample, into our second-wave-survey sample (comparing respondents who did and did not participate in our second-wave survey). Survey Appendix Table SA1 presents a list of participating medical schools and basic response information.

First, using US News data, we examine the universe of 122 medical schools we approached, and we compare the 99 who did not participate in our study with the 23 who did. Survey Appendix Table SA2 shows that participating and non-participating schools are generally similar in terms of school size, school quality (measured either by US News's research ranking or by the school's acceptance rate), percent female, MCAT, and undergraduate GPA, and that none of the differences is statistically significant (based on two-sample *t*-tests). Participating schools on average have somewhat higher enrollment than non-participating schools (654 vs. 614 students), reflecting our targeting of big schools in our recruitment efforts; and participating schools are ranked slightly higher (research ranking 40 vs. 44) and have a slightly higher acceptance rate (8.3% vs. 7.6%). Survey Appendix Table SA3 reports a probit regression of participation on Table SA2's six variables among the 85 schools who reported all variables and were ranked by US News (of the 85 schools, 18 participated in our study and 67 were non-participating schools). None of the coefficients is statistically significant. Finally, Survey Appendix Figure SA1 provides a map of the U.S. showing the geographic distribution of participating and non-

participating schools.

Second, since our survey asks about gender, GPA, and MCAT, we can compare, within each school, our survey respondents with their school average (for the 20 schools participating in our study who reported these variables to US News). We find that the GPA our participants report is, on average, 0.04 points above their school's reported mean (one-sample t -test $p = 0.0005$), a very small difference that could result from our respondents "rounding up" their GPAs. We find no statistically significant differences on gender or MCAT (we do not report these tests).

Third, Survey Appendix Table SA4 reports a probit regression of participation in our second-wave survey on GPA, MCAT, age, and indicators for female, in a long-term relationship, and married. The sample is the 498 of our 561 main-sample respondents reporting all of these data. The table shows that females are 8 percent (average marginal effect) less likely to participate in our second-wave survey ($p < 0.05$). None of the other variables is statistically significant. For summary statistics of first- vs. second-wave survey participants, see Web Appendix Table A1.

Of course, our sample may be selected on unobservables such as busyness, curiosity, altruism, etc. While we cannot directly test this possibility—and indeed believe that some such selection is likely—we can explore the effect of such potential selection on our findings, under some assumptions. In particular, one crude approach is to compare, among our first-wave participants, those who did and those who did not participate in our second-wave survey. To extrapolate this evidence to the impact of selection into our first-wave sample on our findings, we will make two assumptions. First, we will assume that the characteristics affecting selection do so monotonically. For example, the busiest (or least altruistic, etc.) students do not participate, moderately-busy (or moderately altruistic) ones participate in first wave only, and the least busy

(or most altruistic) ones participate in both waves. Second, we will assume that these same characteristics that affect selection also affect outcomes monotonically. For example, choice-SWB differences in tradeoffs decrease with busyness (or increase with altruism). Given these assumptions, we can use in-sample differences in outcomes between the least busy and the moderately busy—i.e., between first-and-second-survey respondents and first-survey-only respondents—to potentially learn the direction of out-of-sample differences in outcome between the moderately busy and the busiest—i.e., between first-survey-only respondents and non-respondents. For example, if the choice-SWB differences in the paper’s Table 3 were smaller among first-survey-only respondents than among first-and-second-survey respondents, one might worry that they are still smaller (and perhaps even disappear) among non-participants. Reassuringly, this is not what we find. In an in-sample comparison of Table 3’s results (reported in the Web Appendix, pages 32–33), we find no evidence of such systematic differences between first-and-second-survey respondents and first-survey-only respondents.

Survey Appendix Table SA1: Participating Schools and Response Rates

State	Med School	Graduates in Class of 2011	Completed Responses	Approx. Response Rate (%)	Incomplete Responses
AL	Alabama	160	31	19	30
CA	UC Irvine	102	17	17	24
CT	Yale	82	9	11	4
DC	Georgetown	189	28	15	68
FL	Florida	127	16	13	21
GA	MC Georgia	179	41	23	43
GA	Mercer	65	11	17	19
IL	Southern Illinois	62	12	19	20
IN	Indiana	299	22	7	20
MA	Boston	158	31	20	32
MI	Michigan	180	20	11	21
MN	Minnesota	237	56	24	30
NY	Albany	148	22	15	25
NY	Cornell-Weill	93	27	29	34
NY	Mount Sinai	122	20	16	22
OH	NE Ohio	123	39	32	44
OH	Ohio State	206	46	22	50
RI	Brown-Alpert	100	9	9	26
SC	MU South Carolina	163	27	17	34
TN	East Tennessee-Quillen	60	6	10	7
TX	Baylor	176	40	23	50
TX	Texas A&M	99	39	39	26
WV	West Virginia	94	9	10	19
	Unknown		1		11
Total		3224	579	18	680

Notes: Approx. Response Rate: completed responses divided by number of graduates in 2011; the denominator approximates the number of eligible respondents (i.e., the number of students participating in the 2012 match). Incomplete responses: students who began our survey but did not complete it. Sources: graduates in 2011: AAMC Table 27 (2012); responses: authors' web survey.

Survey Appendix Table SA2: Characteristics of Participating and Non-participating Schools

		All programs	Not participating	Participating	<i>p</i> -value of difference by participation status
Total Enrollment	Mean	621.7 (22.5)	613.6 (24.3)	654.2 (56.8)	0.427
	NR rate	18.0% (3.5)	19.2% (4.0)	13.0% (7.2)	0.494
MCAT Composite	Mean	10.6 (0.1)	10.6 (0.1)	10.6 (0.2)	0.950
	NR rate	18.9% (3.6)	20.2% (4.1)	13.0% (7.2)	0.433
Average Undergraduate GPA	Mean	3.7 (0.0)	3.7 (0.0)	3.7 (0.0)	0.654
	NR rate	18.0% (3.5)	19.2% (4.0)	13.0% (7.2)	0.494
Acceptance Rate	Mean	7.8 (0.4)	7.6 (0.4)	8.3 (1.0)	0.422
	NR rate	18.0% (3.5)	19.2% (4.0)	13.0% (7.2)	0.494
US News Research Ranking	Mean	42.9 (2.7)	43.8 (3.1)	39.9 (5.4)	0.565
	NR rate	29.5% (4.1)	31.3% (4.7)	21.7% (8.8)	0.369
Percent Female	Mean	47.3 (0.5)	47.5 (0.5)	46.5 (0.8)	0.381
	NR rate	19.7% (3.6)	21.2% (4.1)	13.0% (7.2)	0.379
<i>N</i>		122	99	23	

Notes: Means are calculated after dropping schools with missing data; “NR rate”: the percentage of schools with missing data. Standard errors in parentheses. Right-most column: two-sample *t*-tests of differences by participation status. Of the 99 non-participating schools, we have data on all characteristics for 67 and data on only some characteristics for another 13 (on the remaining 19 we have no data on any of the six characteristics). Of the 23 participating schools, we have data on all characteristics for 18 and data on only some characteristics for another 2 (on the remaining 3 we have no data on any of the six characteristics).

Sources: US News and World Report 2013 Medical School Rankings.

Survey Appendix Table SA3: Predicting School Participation in our Study

	(1)	(2)
	Dependent variable: Participated in our study	
	<i>Probit coefficient</i>	<i>Avg. marginal effect</i>
Total Enrollment	0.00 (0.00)	0.00 (0.00)
MCAT Composite	-0.40 (0.45)	-0.11 (0.12)
Avg. Undergraduate GPA	0.25 (2.78)	0.07 (0.77)
Acceptance Rate	0.02 (0.06)	0.01 (0.02)
Percent Female	-0.03 (0.04)	-0.01 (0.01)
US News Research Ranking	-0.02 (0.01)	-0.00 (0.00)
Constant	4.24 (11.46)	
<i>N</i>	85	85

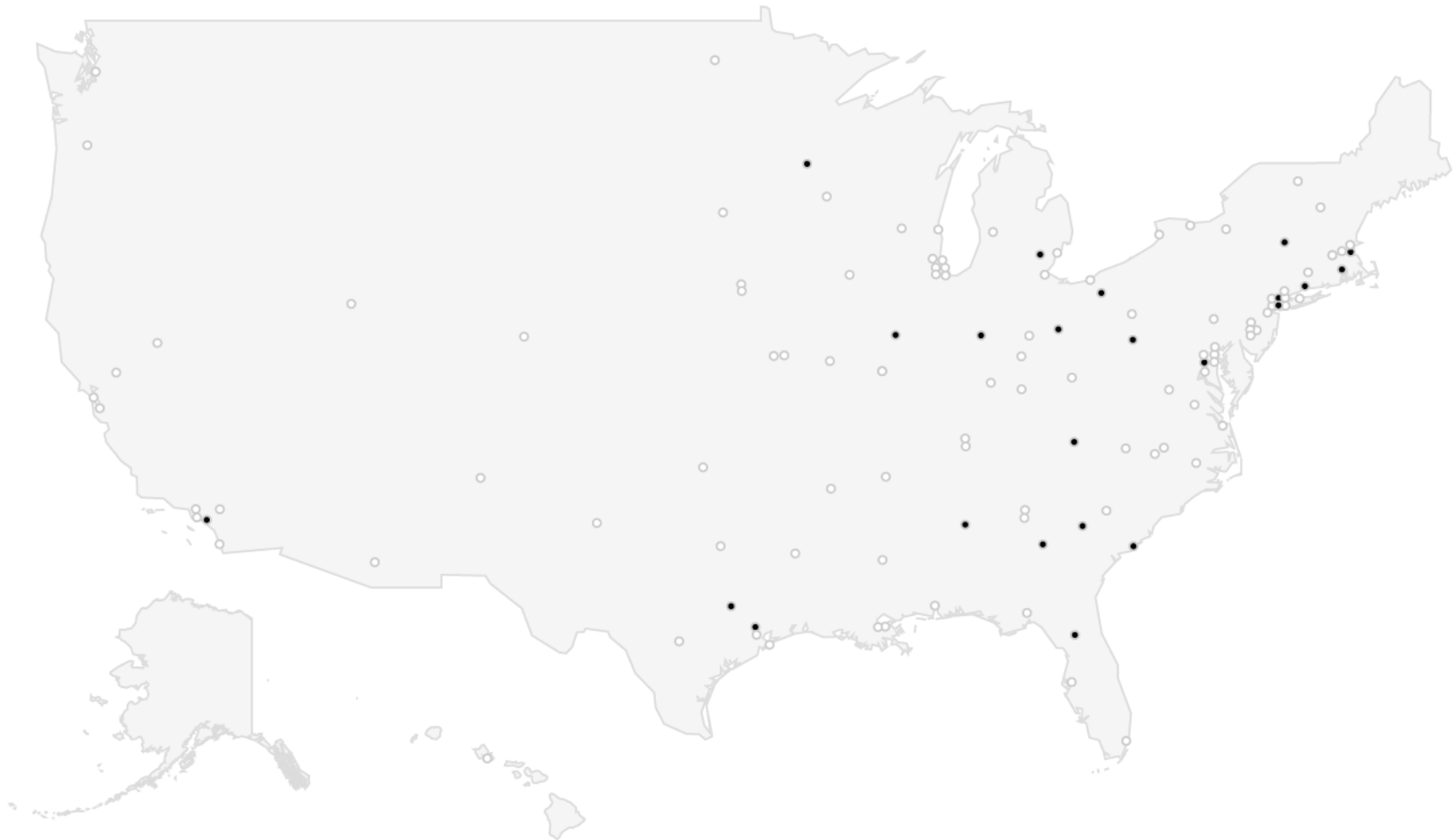
Notes: Probit regression coefficients, predicting a school's participation in our survey based on observed school characteristics. Sample: 85 schools with full data (of which 18 are participating schools). Standard errors in parentheses; standard errors for average marginal effects calculated with the delta method. Average marginal effects for binary variables assume a discrete change from 0 to 1. Data from US News and World Report 2013 Medical School Rankings. * $p < .1$, ** $p < .05$, *** $p < .01$

Survey Appendix Table SA4: Predicting Wave-2 Participation Among Wave-1 Respondents

	(1)	(2)
	Dependent variable: Completed wave 2	
	<i>Probit coefficient</i>	<i>Avg. marginal effect</i>
Female	-0.27** (0.13)	-0.08** (0.04)
Undergraduate GPA	-0.34 (0.27)	-0.10 (0.08)
MCAT	0.04 (0.05)	0.01 (0.01)
In a long-term relationship	-0.08 (0.15)	-0.02 (0.05)
Married	0.08 (0.16)	0.02 (0.05)
Age	0.02 (0.02)	0.01 (0.01)
Constant	-0.29 (1.39)	
<i>N</i>	498	498

Notes: Probit regression coefficients, predicting first-wave survey respondents' participation in our second-wave survey based on demographics. Sample: 498 first-wave respondents with no missing data. Standard errors in parentheses; standard errors for average marginal effects calculated with the delta method. Average marginal effects for binary variables assume a discrete change from 0 to 1. Data from US News and World Report 2013 Medical School Rankings. * $p < .1$, ** $p < .05$, *** $p < .01$

Survey Appendix Figure SA1: Geographic Distribution of Participating and Non-Participating Medical Schools



Notes: Circles represent the 122 U.S. medical schools with full accreditation from the Liaison Committee on Medical Education at the time of our study. Black: participating in our study; white: not participating. Map generated using Google Geocharts (some school locations are slightly modified to prevent circles from overlapping on the map).