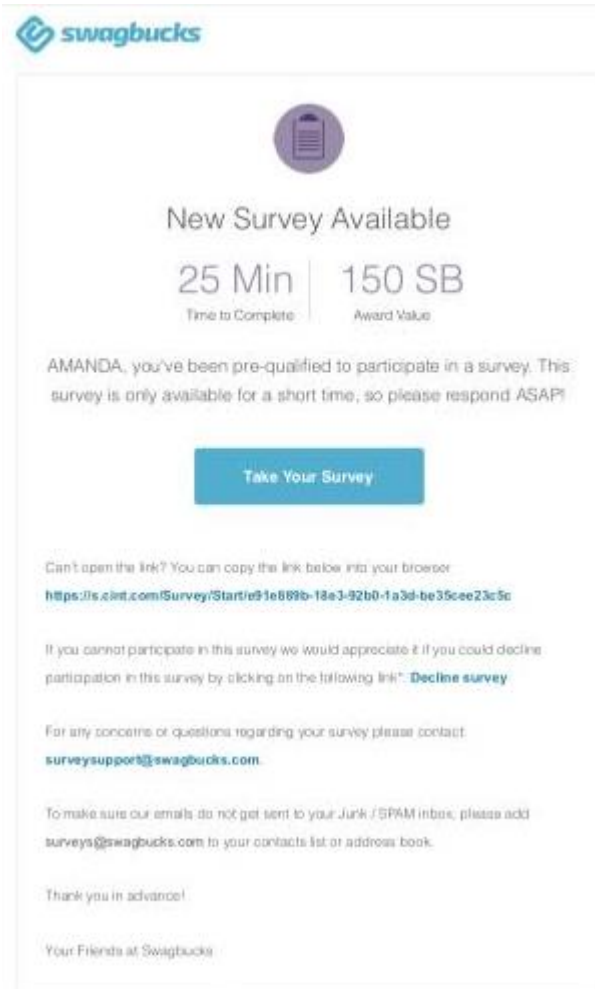


Appendices

Appendix A

Example Recruitment Message from Lucid Client



Appendix B

Survey Instrument

CONSENT MESSAGE: This study is being conducted by researchers at the Department of Leadership and Policy Studies at Vanderbilt University. This study is strictly for research purposes. The researchers are not affiliated in any way with any organization other than Vanderbilt University. Your participation in this study is completely voluntary, and it should take 9-10 minutes of your time. By consenting, you acknowledge that you may be unaware of the true purposes of the research and agree to participate under this condition. You may discontinue the study at any time.

CONTACTS FOR QUESTIONS OR PROBLEMS: Contact Information: If you should have any questions about this research study, please contact [Author] at [e-mail]. For additional

information about your rights as a research participant in this study, please feel free to contact the Vanderbilt University Institutional Review Board Office at (615) 322-2918 or toll free at (866) 224-8273

In consideration of all of the above, I give my consent to participate in this research study. By selecting "I agree to participate in this study" you signify consent. If you select "I do NOT agree to participate in this study" you will be taken to the final screen [Options: I agree to participate in this study., I do NOT agree to participate in this study.]

-
1. What is your age?
 2. How many children do you have? [Options: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10+, I do NOT have any children.]

3. PARTICIPANTS RANDOMLY SELECTED TO RECEIVE ONE OF THE FOLLOWING SIX MESSAGES:]

- a. Please read the following: One common category of courses in high schools today is known as "Career and Technical Education." Career and Technical Education courses (including Vocational Education courses) are designed to provide students with the knowledge, skills and training needed for specific career paths (such as Manufacturing, Health Sciences, Construction, and Information Technology (IT) Career and Technical Education typically has a hands-on component, as students often work with actual equipment, complete projects, and are trained by instructors with experience in the specific career.

Click here to confirm that you have read the above statement.

-
- b. Please read the following: One common category of courses in high schools today is known as "Career and Technical Education." Career and Technical Education courses (including Vocational Education courses) are designed to provide students with the knowledge, skills and training needed for specific career paths (such as Manufacturing, Health Sciences, Construction, and Information Technology (IT)). Career and Technical Education typically has a hands-on component, as students often work with actual equipment, complete projects, and are trained by instructors with experience in the specific career.

Education experts say that Career and Technical Education can provide individual students with greater choice, as they are better able to take courses that meet their own unique needs, interests, and goals after high school.

Click here to confirm that you have read the above statement.

-
- c. Please read the following: One common category of courses in high schools today is known as "Career and Technical Education." Career and Technical Education courses (including Vocational Education courses) are designed to provide students with the knowledge, skills and training needed for specific career paths (such as Manufacturing, Health Sciences, Construction, and Information Technology (IT)). Career and Technical Education typically has a hands-on component, as students often work with actual

equipment, complete projects, and are trained by instructors with experience in the specific career.

Education experts say that Career and Technical Education can create inequality in schools, as certain students may be tracked into different educational paths that set them up for different types of experiences after high school.

X Click here to confirm that you have read the above statement.

- d. Please read the following: One common category of courses in high schools today is known as "Career and Technical Education." Career and Technical Education courses (including Vocational Education courses) are designed to provide students with the knowledge, skills and training needed for specific career paths (such as Manufacturing, Health Sciences, Construction, and Information Technology (IT)). Career and Technical Education typically has a hands-on component, as students often work with actual equipment, complete projects, and are trained by instructors with experience in the specific career.

Education experts say that Career and Technical Education can prepare students to get jobs after high school, and that it can train students to fill the types of careers that are in-demand in the workforce.

X Click here to confirm that you have read the above statement.

- e. Please read the following: One common category of courses in high schools today is known as "Career and Technical Education." Career and Technical Education courses (including Vocational Education courses) are designed to provide students with the knowledge, skills and training needed for specific career paths (such as Manufacturing, Health Sciences, Construction, and Information Technology (IT)). Career and Technical Education typically has a hands-on component, as students often work with actual equipment, complete projects, and are trained by instructors with experience in the specific career.

Education experts say that Career and Technical Education can teach students a narrow set of technical skills that may become out-of-date or irrelevant as the economy and technology changes, which may limit students' job prospects later in life.

X Click here to confirm that you have read the above statement.

- f. Please read the following: One common category of courses in high schools today is known as "Career and Technical Education." Career and Technical Education courses (including Vocational Education courses) are designed to provide students with the knowledge, skills and training needed for specific career paths (such as Manufacturing, Health Sciences, Construction, and Information Technology (IT)). Career and Technical Education typically has a hands-on component, as students often work with actual

equipment, complete projects, and are trained by instructors with experience in the specific career.

Education experts say that Career and Technical Education can take the place of some college-preparatory and academic classes for students participating in Career and Technical Education, and may make these students less likely to attend college.

X Click here to confirm that you have read the above statement.

4. How significant of a role should Career and Technical Education courses play in high school education? [Options: Not significant at all, Very low significance, Slightly significant, Neutral, Moderately significant, Very significant, Extremely significant]
5. Imagine you are in charge of high schools in your state and that you are able to decide how much schools should emphasize each of the following types of classes. Over the course of students' time in high school, what percent of time do you think should be spent in each of the following types of classes (Total must add to 100):
Core Academic Courses (Math, English, Science, Social Studies) : _____
Career and Technical Education : _____
Other Electives (such as Fine Arts, World Languages, Physical Education, and ROTC) : _____
6. We know that sometimes people might fill out an online survey without reading the questions, which can make our results unreliable. Just so we can know you're paying attention, please select Mostly disagree for this question. Thank you for your attention! [Options: Very strongly agree, Mostly agree, Somewhat agree, Neither agree nor disagree, Somewhat disagree, Mostly disagree, Very strongly disagree]
7. What is the maximum annual increase in taxes you would be willing to pay if the money was used to expand Career and Technical Education in your school district? [\$0 (I would not be willing to pay an annual tax increase), \$50, \$100, \$150, \$200, \$250, \$300]

Next, we'd like to ask you a few questions about yourself.

8. What is your gender? [Options: Woman, Man, Non-binary or some other gender (please specify): _____]
9. Think about your oldest child. Relative to other children their age, how would you rank your child's performance in school? [Options: Far below average, Somewhat below average, Average, Somewhat above average, Far above average, N/A - None of my children have been in school.]
10. What is the highest level of school you have completed or the highest degree you have received? [Options: Less than high school degree, High school graduate (high school diploma or equivalent including GED), Some college but no degree, Associate degree in college (2-year), Bachelor's degree in college (4-year), Master's degree, Professional or Doctoral degree (such as JD, MD, PhD)]
11. Please indicate the income level that includes your entire household income last year before taxes: [Options: Less than \$10,000, \$10,000 to \$19,999, \$20,000 to \$29,999, \$30,000 to \$39,999, \$40,000 to \$49,999, \$50,000 to \$59,999, \$60,000 to \$69,999, \$70,000 to \$79,999, \$80,000 to \$89,999, \$90,000 to \$99,999, \$100,000 to \$149,999, \$150,000 or more]
12. Which of these most closely fits how you identify yourself? [Options: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino/a, Middle Eastern or

North African, Native Hawaiian or Pacific Islander, White, Something else (please specify): _____]

13. Which of the following best describes the area where you live? [Options: Urban, Suburban, Rural]
14. Generally speaking, do you think of yourself as a Republican, a Democrat, an Independent, or what? [Options: Republican, Democrat, Independent, Other (please specify): _____]
15. [If selected Democrat in Question 14]: Would you call yourself a strong Democrat or a not very strong Democrat? [Options: Strong Democrat, Not Very Strong Democrat]
16. [If selected Republican in Question 14]: Would you call yourself a strong Republican or a not very strong Republican? [Options: Strong Republican, Not Very Strong Republican]
17. [If selected Independent in Question 14]: Do you think of yourself as closer to the Republican Party or the Democratic party? [Options: Republican Party, Democratic Party, Neither]
18. Here is a 7-point scale on which the political views that people might hold are arranged from extremely liberal to extremely conservative. Where would you place yourself on this scale? [Options: Extremely liberal, Somewhat liberal, Slightly liberal, Moderate, Slightly conservative, Somewhat conservative, Extremely conservative]

Finally, we're going to ask for your opinion on several questions about the way you think about things. In each, we'll ask you how much you disagree or agree with a statement. [Options: Disagree strongly, Disagree somewhat, Neither agree nor disagree, Agree somewhat, Agree strongly]

19. Our society should do whatever is necessary to make sure that everyone has an equal opportunity to succeed.
20. We have gone too far in pushing equal rights in this country.
21. Please select Agree strongly for this question.
22. One of the big problems in this country is that we don't give everyone an equal chance.
23. This country would be better off if we worry less about how equal people are.
24. It is not really that big of a problem if some people have more of a chance in life than others.
25. If people were treated more equally in this country we would have many fewer problems.
26. Please select Disagree somewhat for this question.
27. Most people who don't get ahead should not blame the system; they have only themselves to blame.
28. Hard work offers little guarantee of success.
29. If people work hard they almost always get what they want.
30. Most people who do not get ahead in life probably work as hard as people who do.
31. Any person who is willing to work hard has a good chance at succeeding.
32. Even if people try hard they often cannot reach their goals.

Appendix C

Predicting Treatment Status with other Surveyed Characteristics (Balance Check)

	Individualism Frame	Inequality Frame	Workforce Alignment Frame	Narrow Preparation Frame	College Prep/Access Frame
Women	0.001 (0.03)	-0.092 (-2.14)	-0.083 (-1.92)	-0.059 (-1.39)	-0.021 (-0.47)
Black	-0.062 (-0.97)	-0.072 (-1.10)	-0.055 (-0.87)	0.004 (0.07)	-0.026 (-0.43)
Latino/a	-0.061 (-0.90)	-0.061 (-0.88)	-0.132 (-1.83)	-0.141 (-1.95)	-0.021 (-0.32)
Asian	-0.177 (-1.71)	-0.207 (-1.95)	-0.139 (-1.36)	-0.160 (-1.59)	-0.201 (-1.92)
Other/Multiple Races	-0.056 (-0.48)	0.091 (0.86)	0.078 (0.72)	0.141 (1.44)	-0.071 (-0.58)
Age	0.004 (1.67)	-0.000 (-0.19)	-0.002 (-0.88)	-0.001 (-0.58)	0.001 (0.52)
Number of Children	0.033 (1.92)	0.034 (1.91)	0.020 (1.21)	0.028 (1.72)	0.044 (2.63)
Child Performance (5-pt scale)	0.012 (0.54)	0.012 (0.55)	0.001 (0.04)	0.035 (1.63)	0.000 (0.01)
Urban	0.027 (0.55)	-0.031 (-0.63)	-0.032 (-0.66)	-0.100 (-2.08)	0.032 (0.68)
Rural	-0.029 (-0.57)	-0.004 (-0.07)	-0.102 (-1.95)	-0.046 (-0.94)	-0.082 (-1.59)
Some College	0.039 (0.80)	-0.038 (-0.77)	0.035 (0.70)	0.026 (0.52)	0.005 (0.09)
Bachelor's Degree	0.067 (0.97)	0.004 (0.06)	-0.006 (-0.09)	0.088 (1.36)	0.060 (0.93)
Advanced Degree	-0.028 (-0.37)	-0.063 (-0.81)	-0.056 (-0.72)	0.009 (0.12)	-0.067 (-0.86)
Income (12-pt scale)	-0.008 (-1.05)	0.004 (0.46)	0.003 (0.36)	-0.008 (-0.99)	0.001 (0.14)
Party ID (Strong D=7)	-0.011 (-0.95)	-0.009 (-0.76)	0.003 (0.30)	-0.000 (-0.03)	0.000 (0.01)
Conservatism (7-pt scale)	-0.017 (-1.19)	-0.001 (-0.08)	-0.012 (-0.87)	-0.006 (-0.42)	-0.003 (-0.22)
Individualism Score (5-pt scale)	-0.033 (-1.18)	0.041 (1.49)	0.023 (0.81)	-0.005 (-0.21)	0.019 (0.66)
Equality Score (5-pt scale)	0.017 (0.53)	0.054 (1.76)	-0.005 (-0.14)	-0.021 (-0.69)	-0.001 (-0.02)
Constant	0.403	0.152	0.552	0.550	0.285

	(1.75)	(0.68)	(2.44)	(2.58)	(1.28)
Observations	670	656	652	693	669

Notes: Each column represents the coefficients and standard errors of OLS regression with the specified treatment status as the dependent variable. For each, the control condition is the comparison group. Coefficients that are bolded and underlined indicate characteristics that significantly predict (at a 5% significance level) treatment status. Stars represent statistical significance at the following levels after correcting for multiple comparisons, using Romano-Wolf step-down adjusted p-values: + $p < .1$, * $p < .05$, ** $p < .01$.

Appendix D

Ordinary Least Squares Results from Framing Treatments for Measures of CTE Support

	Models with No Controls			Models with Controls		
	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE (\$)	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE (\$)
Individualism Frame	0.050 (0.098)	1.712 (1.089)	-0.443 (6.832)	0.065 (0.098)	1.917 ⁺ (1.086)	2.810 (6.302)
Inequality Frame	-0.101 (0.099)	-0.081 (1.101)	2.473 (6.908)	-0.106 (0.099)	-0.034 (1.100)	1.635 (6.382)
Workforce Alignment Frame	0.026 (0.099)	1.468 (1.104)	<u>16.407</u> (6.931)	0.041 (0.099)	1.522 (1.102)	<u>14.932</u> ⁺ (6.395)
Narrow Preparation Frame	-0.022 (0.096)	-0.468 (1.071)	-2.171 (6.719)	0.000 (0.096)	-0.314 (1.071)	-0.122 (6.214)
College Prep/Access Frame	0.077 (0.098)	-0.041 (1.090)	-1.997 (6.837)	0.074 (0.098)	0.131 (1.087)	-2.871 (6.308)
Constant	5.587 (0.069)	33.469 (0.765)	87.906 (4.802)	4.381 (0.325)	40.773 (3.623)	19.107 (21.028)
Controls				X	X	X
Observations	1984	1984	1984	1984	1984	1984

Notes: Each column represents the coefficients and standard errors associated with assignment to each treatment, where the control group is omitted. In columns 1-3, no controls are included, meaning the constant can be interpreted as the mean for the control group, with coefficients on the other treatment arms showing deviations from the control group mean. Each column represents a different measure of CTE support: CTE Significance Rating (1-7), % of School Hours that should be CTE-focused, and Support for Proposal to increase CTE spending (1-7). Columns 4-6 include all characteristic listed in Table 2 as controls. Coefficients that are bolded and underlined indicate characteristics that significantly predict (at a 5% significance level) support for CTE. Stars represent statistical significance at the following levels after correcting for multiple comparisons, using Romano-Wolf step-down adjusted p-values: + $p < .1$, * $p < .05$, ** $p < .01$.

Appendix E

Moderator Analysis:

*Exploring Statistically Significant Interactions between Respondent Characteristics and Treatment Status
(only significant coefficients on interactions and their associated treatments shown)*

<i>a. Republicans</i>			
	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Republicans	-0.215		
College Prep/Access Frame	-0.105		
College Prep/Access Frame X Republicans	0.443*		
Constant	5.678***		
Observations	1582		
<i>b. Political Independents (No Partisan Lean)</i>			
	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Independent		2.579	
Workforce Alignment Frame		2.629*	
Workforce Align. Frame X Independent		-5.585+	
Constant		32.911***	
Observations		1984	
<i>c. Democrats</i>			
	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Democrats	0.215		
College Prep/Access Frame	0.338*		
College Prep/Access Frame X Democrats	-0.443*		
Constant	5.462***		
Observations	1582		
<i>d. HS Graduate or Less</i>			
	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
HS Grad or Less	-0.347*		
Narrow Preparation Frame	-0.172		
Narrow Prep. Frame X HS Grad/Less	0.495*		
Constant	5.694***		
Observations	1984		

e. Some College

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Some College	-0.079	-0.468	-23.126*
Workforce Alignment Frame	-0.145		3.704
Workforce Align. Frame X Some College	0.434*		33.840*
College Prep/Access Frame		-1.496	
College Prep/Access Frame X Some College		4.003+	
Constant	5.616***	33.639***	96.296***
Observations	1984	1984	1984

f. Bachelor's Degree

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Bachelor's Degree		0.079	
Narrow Preparation Frame		0.559	
Narrow Prep. Frame X Bach. Degree		-4.927+	
Constant		33.456***	
Observations		1984	

g. Advanced Degree

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Advanced Degree	0.601**	1.336	88.177***
Individualism Frame	0.136		
Individ. Frame X Adv. Degree	-0.522+		
Workforce Alignment Frame	0.108	2.292+	22.208**
Workforce Align. Frame X Adv. Degree	-0.505+	-5.493+	-32.071+
College Prep/Access Frame	0.163	0.864	
College Prep/Access Frame X Adv. Degree	-0.528+	-6.525*	
Constant	5.491***	33.256***	73.860***
Observations	1984	1984	1984

h. Low Income

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Low Income			-53.710***
Narrow Preparation Frame			-13.213
Narrow Prep. Frame X Low Income			32.316*
Constant			107.710***
Observations			1984

i. Middle Income

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Middle Income			11.619
Narrow Preparation Frame			10.085
Narrow Prep. Frame X Middle Income			-30.921*
Constant			82.902***
Observations			1984

j. High Income

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
High Income		0.457	
Workforce Alignment Frame		2.667*	
Workforce Align. Frame X High Income		-5.715*	
College Prep/Access Frame		0.992	
College Prep/Access Frame X High Income		-4.443+	
Constant		33.379***	
Observations		1984	

k. Women

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Woman		-2.586 ⁺	-40.873***
Individualism Frame			-14.503
Individualism Frame X Woman			23.702⁺
Inequality Frame		-2.530	-16.424
Inequality Frame X Woman		4.521*	30.781*
Narrow Preparation Frame			-16.889 ⁺
Narrow Prep. Frame X Woman			23.252⁺
Constant		34.942***	112.230***
Observations		1984	1984

l. Men

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Man		2.586 ⁺	40.873***
Individualism Frame			9.199
Individualism Frame X Man			-23.702⁺
Inequality Frame		1.991	14.358

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Inequality Frame X Man		-4.521*	-30.781*
Narrow Preparation Frame			6.363
Narrow Prep. Frame X Man			-23.252+
Constant		32.357***	71.357***
Observations		1984	1984

m. White

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
White	0.217		
Individualism Frame	0.401*		
Individualism Frame X White	-0.507*		
Inequality Frame	0.313+		
Inequality Frame X White	-0.587**		
Narrow Preparation Frame	0.269		
Narrow Prep. Frame X White	-0.424*		
Constant	5.442***		
Observations	1984		

n. Latino/a

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Latino/a	-0.143	-12.211	
Inequality Frame	-0.177+		-1.781
Inequality Frame X Latino/a	0.871*		47.831*
Constant	5.603***		89.238***
Observations	1984		1984

o. Other and Multiple Races

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Other and Multiple Races	-0.811*		
Individualism Frame	0.009		
Individ. Frame X Other/Mult. Races	1.391*		
Constant	5.611***		
Observations	1984		

p. Rural

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Rural	-0.094		
Individualism Frame	-0.059		
Individualism Frame X Rural	0.389⁺		
Constant	5.614 ^{***}		
Observations	1984		

q. Respondents who value Individualism most (top 25% composite score)

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
High Indiv Score	-0.154		
Workforce Alignment Frame	-0.229		
Workforce Align. Frame X High Indiv Score	0.565[*]		
Constant	5.717 ^{***}		
Observations	1121		

r. Respondents who value Individualism least (bottom 25% composite score)

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Low Indiv Score	0.154		
Workforce Alignment Frame	0.336 ⁺		
Workforce Align. Frame X Low Indiv. Score	-0.565[*]		
Constant	5.563 ^{***}		
Observations	1121		

s. Respondents who value Equality most (top 25% composite score)

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
High Equality Score		-2.598	-11.553
Inequality Frame		-2.045	-0.388
Inequality Frame X High Equal Score		6.056[*]	19.274
Workforce Alignment Frame		0.510	-7.812
Workforce Align. Frame X High Equal Score			49.047[*]
Narrow Preparation Frame		0.948	-13.449
Narrow Prep. Frame X High Equal Score			33.862⁺
College Prep/Access Frame		0.228	-17.778
College Prep/Access Frame X High Equal Score			44.074[*]
Constant		33.917 ^{***}	91.667 ^{***}
Observations		1101	1101

t. Respondents who value Equality least (bottom 25% composite score)

	CTE Significance	Pct. School Hours in CTE	Willingness to Pay for CTE
Low Equality Score		2.598	11.553
Inequality Frame		4.012 ⁺	
Inequality Frame X Low Equal Score		-6.056*	
Workforce Alignment Frame			41.235**
Workforce Align. Frame X Low Equal Score			-49.047*
Narrow Preparation Frame			20.413
Narrow Prep. Frame X Low Equal Score			-33.862⁺
College Prep/Access Frame			26.297 ⁺
College Prep/Access Frame X Low Equal Score			-44.074*
Constant		31.318***	80.114***
Observations		1101	1101

Notes: Each panel shows the coefficients and significance levels associated with the specified characteristics, the interaction between that characteristic and assignment to any treatment that was statistically significant, along with the coefficient associated with that treatment, compared to the control group. The following symbols represent statistical significance: + $p < .1$, * $p < .05$, ** $p < .01$, *** $p < .00$.