Informed Choices: Gender Gaps in Career Advice*

Yana Gallen and Melanie Wasserman

March 2026

Abstract

This paper provides the first causal evidence that gender affects the information an individual receives about careers. We conduct a large-scale field experiment in which real college students seek career information from 10,000 working professionals. We randomize whether a professional receives a message from a male or a female student. When students ask broadly for information about a career, female students receive substantially more information on work/life balance than male students. This gender difference persists when students specifically ask about work/life balance. A survey of professionals suggests non-altruistic motives for discussing work/life balance with women. Combining findings from the field experiment and results from an information intervention, we conclude that gender gaps in information received about work/life balance are consequential for gender gaps in career choice.

Keywords: career information; gender; discrimination; correspondence study

JEL Codes: C93, J16, J24, J71

*Gallen: University of Chicago, Harris School of Public Policy and IZA. E-mail: yana@uchicago.edu. Wasserman: UCLA Anderson School of Management and NBER. E-mail: melanie.wasserman@anderson.ucla.edu. Funding is gratefully acknowledged from the Upjohn Institute Early Career Research Grant, UCLA Faculty Senate Grant, and the Initiative for the Study of Gender in the Economy at the Becker Friedman Institute at the University of Chicago. We thank Jack Landry, Reigne Dadey, Mikaela Hassenzahl, Amber Liu, Jessica Lyu, Jacob Kohlhepp, Elisabetta Campagna, Sam Lin, and Matias Giaccobasso for excellent research assistance. We have benefited from comments from Dan Black, Paola Giuliano, Romain Wacziarg, Brendan Price, Manasi Deshpande, Steven Durlauf, Trevor Gallen, Josh Gottlieb, Jeff Grogger, Juanna Joensen, Matt Notowidigdo, Nico Voigtlaender, Joanna Lahey, Bruce Sacerdote, Heather Sarsons, Ulf Zölitz, Martha Bailey, Peter Ganong, Anne Brenøe, and many helpful seminar participants. This study was pre-registered on the AEA Social Sciences Registry under AEARCTR-0005464, AEARCTR-0013302, and AEARCTR-0013537.

1 Introduction

Despite substantial convergence in the economic roles of men and women, gender inequality in labor market outcomes persists. A large literature documents that work/family trade-offs are at the root of these remaining disparities (Cortés and Pan, 2023). Upon the arrival of a first child, women's employment, hours worked, earnings, and wages drop precipitously, while men's outcomes are unaffected (Angelov et al., 2016; Kleven et al., 2019). At the same time, having children amplifies women's disproportionate share of domestic labor: time spent on childcare and other forms of non-market work rise.

Children affect women's choices long before parenthood, however. At labor market entry, women shy away from entering career paths with long and inflexible hours or those that penalize reduced or intermittent work, due to their perceived incompatibility with the future time demands of children (Polachek, 1981; Gronau, 1988; Goldin, 2014; Adda et al., 2017; Wiswall and Zafar, 2021; Wasserman, 2023). Prior to labor market entry, women tailor their human capital investments based on their ability to control and delay the timing of their first child (Goldin and Katz, 2002; Bailey et al., 2012; Gershoni and Low, 2021; Gallen et al., 2023). Embedded in these decisions—which major to pursue, which career to enter, and whether/when to have children—are beliefs about the magnitude of work/family trade-offs (Wiswall and Zafar, 2021). Despite the prominence of these parameters in decision-making, as of yet, there is little research on the forces that shape beliefs about the temporal demands of careers and beliefs about whether these demands are compatible with having children.

This paper provides novel evidence that informal conversations emphasize the temporal demands of careers to women. First, using a large-scale field experiment connecting college students and working professionals we establish that—prior to labor market entry—issues surrounding work/life balance are raised twice as often to women, *because* of their gender. This emphasis holds whether or not students specifically ask for information on work/life balance. Second, an online survey and vignette study of 2,500 professionals shows that professionals do not rely solely on (beliefs about) students' preferences when providing work/life balance information. Instead, our evidence suggests that professionals have paternalistic motives and believe that discussing work/life balance with women is particularly important due to future childcare considerations. Finally, using an information intervention

among hundreds of college students, we show that information on work/life balance reduces female students' interest in time-intensive positions. Together, the evidence suggests that societal expectations that women will experience work/family trade-offs influence the information transmitted to new labor market entrants, affecting their choices from the outset.

The field experiment recruits real college students to seek career information from 10,000 working professionals using the most popular online professional networking platform. We focus on professionals in four career paths that are majority male and tend to be time intensive. In order to identify the causal effect of gender on information received, we randomize whether each of the 10,000 professionals in our sample is contacted by a male or female student and the pre-formulated question each professional is asked. The online setting allows us to limit which student characteristics are observed by professionals, so that the students are perceived as otherwise similar, aside from their gender. An innovation of our study is that the students provide us with the verbatim responses that they receive, resulting in a data set that links the demographic characteristics of students, professionals, and the transcripts of their conversations.

Professionals were asked either a "broad" question about the pros and cons of a career path, or a "specific" question about a particular career attribute. The broad question tests whether professionals organically bring up different career attributes to female and male students. The specific questions further test whether, conditional on expressing interest in a particular career attribute, male and female students receive different responses from professionals. Our analysis of the broad question as well as the topics of the specific questions focus on two career attributes that differentially affect the labor market choices of women: temporal demands, known colloquially as "work/life balance," and competitive culture (Goldin, 2014; Wiswall and Zafar, 2018; Cubas et al., 2019; Niederle and Vesterlund, 2011; Flory et al., 2015).[1]

[1]Although careers can be characterized by numerous attributes, a main driver of the gender pay gap is temporal demands in the form of long, irregular, and/or continuous hours worked (Polachek, 1981; McDowell, 1982; Goldin, 2014; Cortés and Pan, 2019). Goldin (2014) argues that jobs disproportionately rewarding long hours amount to the last remaining hurdle in closing the gender pay gap. Another influential literature emphasizing the role of psychological traits has posited that women's aversion to competition may explain their lower wages and representation in jobs with pay contingent on competitive outcomes (Niederle and Vesterlund, 2011; Flory et al., 2015). While the investigation of gender differences in preferences for competition has mostly been conducted through lab studies, survey evidence shows that these factors can

The field experiment establishes that professionals provide more information on work/life balance issues to female students, because of their gender. When students ask professionals broadly about the pros and cons of a career path, male and female students are equally likely to receive a response. However, responses to female students are twice as likely to mention work/life balance issues relative to responses to male students. Professionals' discussions of work/life balance tend to be negative and make students more concerned about this issue. We find that professionals mention workplace culture to male and female students at similar rates. These results are robust to the inclusion of controls for both professionals' and students' characteristics, incorporating non-response, alternative definitions of student gender, and re-weighting the sample to be representative of the student population where we conduct our study.

Why do professionals emphasize work/life balance to female students? Drawing on models of parenting, we discuss three potential motivations. First, professionals may be altruistic, and provide information (that they believe is) consistent with maximizing students' utility. Second, professionals may be paternalistic and maximize what they believe students' utility *should be*. For example, professionals may consider students myopic and, when providing information, may focus on the future more than students prefer. Finally, professionals may have motives for emphasizing work/life balance that are unrelated to student welfare.

Using a combination of evidence from our field experiment and additional surveys of students and professionals, we find that altruism is unlikely to be the sole driver of professionals' emphasis on work/life balance to female students. Professionals' information provision is inconsistent with students' stated preferences. In our field experiment, when students specifically ask about work/life balance issues, professionals still differentiate their advice by student gender. Furthermore, professionals' information provision is inconsistent with students' actual preferences. Based on a survey of students from the same university, we find that female students want significantly *less* information on work/life balance than male students. We further show that professionals' information provision deviates from their own *beliefs* about student preferences. To do so, we conduct a survey and vignette study of 2,500 U.S. professionals on Prolific. Respondents were asked how they would allocate time to

account for around 16 percent of the gender pay gap (Blau and Kahn, 2017).

discussing characteristics of a hypothetical job (resembling the jobs in our field experiment) with a recent college graduate as well as how they believe the college graduate would like to allocate their time across topics. We find that professionals spend more time discussing the temporal demands of a job than they believe the applicant wants. In addition, when advising women, professionals' provision of information on the temporal demands of the job is insensitive to signals about how much the woman cares about work/life balance, even though professionals' beliefs about what the applicant wants to discuss are responsive to this information.

If professionals are not purely altruistic, then their emphasis on work/life balance to young women may arise because of paternalistic motives or motives unrelated to student welfare. In the professionals' survey, when asked why it is important to discuss work/life balance with young people, professionals bring up future family considerations significantly more for women than for men. This pattern is consistent with professionals paternalistically providing work/life balance information to young women due to beliefs that women could experience unanticipated changes in their preferences regarding work/life balance in the future. Such unexpected changes in women's preferences have been documented by prior research, which shows that women underestimate the employment effects of motherhood and the birth of a first child leads to more negative views of mothers who work (Kuziemko et al., 2018). We find no support for motives unrelated to student welfare in our study of professionals.

In the last part of the paper, we investigate the consequences of gender gaps in information provision. An extensive literature shows that women, more so than men, choose jobs based on their hours requirements (Eriksson and Kristensen, 2014; Goldin and Katz, 2016; Mas and Pallais, 2017; Wiswall and Zafar, 2018; Maestas et al., 2019; Wasserman, 2023). Gender gaps in information on work/life balance could amplify the effects of these gender gaps in preferences for temporal flexibility. Specifically, if discussion of work/life balance issues leads students to believe that certain careers are more temporally demanding, then differentially emphasizing these issues to women could further dissuade them from entering these careers. We provide two pieces of evidence consistent with this amplification mechanism. First, at the end of the field experiment, we surveyed student participants regarding their career plans. Students who received information on work/life balance from professionals are more likely

to be deterred from their preferred career path.

Second, we conduct an information intervention among over 400 college students that shows that information on work/life balance issues affects students' career plans. In the information intervention, students randomized into the treatment group are shown a message on the pros and cons of a particular career path, sourced from our original field experiment. Students randomized into the control group are shown the same message, with the portion discussing work/life balance removed. After reading the message, students are asked their beliefs about temporal attributes of the career path as well as questions related to their career plans on the extensive and intensive margins. We find that students who receive information on work/life balance issues believe that they would work more hours and there is less part-time work in this job. Furthermore, work/life balance information reduces students' willingness to attend a workshop with tips for entering the career path and shifts students towards jobs within the career with better work/life balance (and lower pay). The results from the field experiment and information intervention suggest that gender gaps in information received contribute to gender gaps in career choice.

As a final exercise, we quantify the effects of gender gaps in information on gender gaps in career choice, by combining (1) the estimated gender gaps in receipt of work/life balance information from our field experiment, (2) the effect of this information on beliefs about hours requirements from our information intervention, and (3) estimates from an extensive literature on the disamenity value of long hours. A back-of-the-envelope calculation suggests that informal conversations with professionals would lead the average female student to evaluate the same job as though it paid 13.1 percent less and the average male student to evaluate the same job as though it paid 3.4 percent less. This back-of-the-envelope calculation is potentially a lower bound on the impact of gender gaps in information, if discouraging women from entering an occupation prevents changes in the way that work is structured and organized that would make the occupation more attractive to women (Goldin and Katz, 2010).

This paper contributes to a number of literatures. First, we add to the extensive literature on how the conflicting time demands of work and family impact gender inequality in labor market outcomes. There is robust evidence that the career trajectories of men and women

diverge sharply when they have children, at which time women take on the majority of childcare responsibilities (Bertrand et al., 2010; Kleven et al., 2019; Angelov et al., 2016; Gallen, 2023; Buzard et al., 2023; Adams et al., 2025). This unequal sharing of household responsibilities is due in part to traditional household specialization (Becker, 1981; Hancock et al., 2024), differential external demands on women's time associated with children (Buzard et al., 2023), and internalized social norms (Kleven, 2022).[2] In addition, anticipation of work/family trade-offs shapes women's human capital investments well before motherhood (Polachek, 1981; Gronau, 1988; Adda et al., 2017; Wasserman, 2023). Our paper establishes that societal expectations of this trade-off affect the information transmitted to new labor market participants, and that this information in turn may discourage women from entering certain careers.

Our paper additionally shows that even when we hold fixed many features of the networking process—including the number of professionals contacted, demographic characteristics of professionals contacted, and the messages sent to professionals—gender continues to influence information transmission.[3] In doing so, we add to a small body of research on the effects of demographic characteristics on the supply of information. Milkman et al. (2015) uses fictitious prospective PhD students to send emails to faculty members asking about research opportunities, and finds that women and minorities are less likely to receive a reply than white men. Our study isolates the information seeking motive, by emphasizing that the student is not currently looking for job opportunities. Kalla et al. (2018) finds that fictitious male and female students are equally likely to receive a response to emails to local politicians seeking advice for a class project on how to become a politician.[4] Relative to these papers, we demonstrate that the informational content of responses differs by student gender and gender-differentiated responses affect students' beliefs about job attributes. In addition, we provide evidence on the motivations behind differential provision of information.

Finally, this paper advances the literature that relies on correspondence studies to

[2]It is also possible that women and men intrinsically differ in their preferences for home production.

[3]These findings complement existing research documenting gender differences in the structure, usage, and effects of professional networks (Mengel, 2020; Gallen and Wasserman, 2021; Zeltzer, 2020; Lindenlaub and Prummer, 2020; Obukhova and Kleinbaum, 2022).

[4]In a similar vein, Giulietti et al. (2017) finds that emails signed by Black-sounding names are less likely to receive responses to requests for information on local public services, and Evsyukova et al. (2024) finds LinkedIn connection requests from fictitious Black users are less likely to be accepted.

estimate discrimination. In a traditional correspondence study, fictitious resumes with randomized applicant characteristics are sent to employers. One issue that has been raised regarding these studies is that—due to the fictional nature of the job applicants—employers are being deceived and their time is being wasted (Pager, 2007; Bertrand and Duflo, 2017; Kessler et al., 2019).[5] Our paper resolves this issue by incorporating real students interested in career information, seeking advice from real professionals. While incorporating real students cedes precise control over student attributes, we take several steps in the experimental design and analysis to ensure "all else is equal," aside from student gender.

2 Experimental Design

To investigate whether informal conversations about careers transmit different information to men and women, we implement a large-scale field experiment in which college students solicit information from professionals on the most popular online professional networking platform.[6]

Setting: The field experiment recruits real college students to seek career information from 10,000 working professionals. For students beginning the process of career exploration, soliciting information from professionals in their fields of interest (an "informational interview") is a longstanding and common practice (Bolles, 1973). University career centers encourage students to conduct informational interviews and provide detailed resources to facilitate these exchanges, including introductory message templates, suggestions of whom to contact, and lists of potential questions.[7] The popularity of this practice is also evident in student behavior: 87 percent of students at the institution where we conduct our study have reached out to professionals for help with career choice.

In the experiment, students contact professionals using the most popular online professional networking platform. This platform is a natural setting for studying career information and additionally offers several methodological advantages. Nationwide, 58 percent of college students report using this platform (College Pulse, 2020). Among students

[5] See Lahey and Oxley (2018) for empirical estimates of time spent reviewing resumes.

[6] This study was pre-registered on the AEA Social Sciences Registry under AEARCTR-0005464.

[7] For example, UCLA's Career Guide has a section on career exploration: https://web.archive.org/web/20240520144708/https://cdn.uconnectlabs.com/wp-content/uploads/sites/230/2023/09/UCLA-Career-Guide.pdf and the University of Chicago provides networking resources: https://web.archive.org/web/20230816172215/https://grad.uchicago.edu/career-development/career-development-resources/networking-resources/?tab-section=informationalinterviews.

similar to those in our study, the fraction is even higher: 92 percent have a profile on the platform, 56 percent use the platform as a source of information about careers, and 44 percent have reached out to professionals on this platform to get career information or advice.[8]

Process: From February 2020 to June 2020, we recruited 100 college students at a large research university to send messages to 10,000 professionals. We advertised the study using email lists for the undergraduate economics, public policy, and math majors, extracurricular clubs related to economics, and undergraduate economics courses. The advertisement was targeted to students interested in career advice. Students interested in participating were asked to fill out a background survey, in which we asked for basic demographic information as well as whether the student was interested in receiving information on four career paths that undergraduate economics majors commonly choose post-graduation: finance, management consulting, data science, and law. These career paths are majority male and tend to be time intensive, especially during early career years. We selected students who expressed interest in receiving information on the career attributes of these fields.[9]

In an in-person or virtual meeting, each student participant was guided through the process of creating a profile on the online professional networking site.[10] We asked each student to restrict their profile to minimal information, including their first name and last initial, student status, university affiliation, start year and anticipated year of graduation, college major, and the number of network connections they have on this platform. Students who already had a profile were asked to temporarily remove other information from their profile for the three-week duration of the study. It is not possible to control for the informational content embedded in students' own profile photos, and using those would have compromised the internal validity of the study. Our choice was therefore between profiles without a photo—which could lead to professionals suspecting the profile is a bot/fake—and using a uniform photo across all student participants. In order to generate a realistic profile and increase response rates, we provided students with the same photo of an iconic university building to use as a profile picture (see Appendix Figure D1). We confirmed that students created a profile with the requisite restrictions through profile screenshots and independent

[8]These statistics are from a survey we conducted and discuss in Section 5.

[9]See Appendix F.1 for the background survey.

[10]See Appendix F.2 for the instructions provided to students.

verification on the site.

The pool of professionals consists of approximately 10,000 individuals on the site with work experience in the fields of finance, management consulting, law, or data science. We selected professionals that the student participants would reasonably contact outside of the experiment. Specifically, the professionals were found through a search of the professional networking site for individuals who work in the students' metropolitan area, who have work experience in at least one of the four fields, and who have a degree from a U.S. News and World Report top-40 ranked university.[11] We used the list of 10,000 professionals to create sets of 100 randomly assigned professionals to provide to student participants.[12] Professionals were stratified by field. Within each field, professionals were randomly assigned a message type and the student who would contact them. Each student was given a list of 100 professionals to contact: 13 data scientists, 28 finance professionals, 33 lawyers, and 26 management consultants. These proportions reflect the composition of professionals that came up in a search of the site. The students chose neither the professionals whom they contacted nor the messages they sent. Figure 1 provides a graphical depiction of the experimental design.

We provided the text of the initial message that students sent to professionals. Each professional-student communication used one of four message types, which were designed to emulate a conventional request for career information during an informational interview.[13] To test whether different career attributes are emphasized to male and female students, students sent a broad message that asked about the pros and cons of the professional's field. To test

[11]Professionals' profiles were checked to ensure they have work experience in one of the four fields.

[12]The random assignment took place prior to the recruitment of students, meaning that we could not add professionals to the experiment after the experiment started. Because we chose the 10,000 professionals who best matched our criteria, after the experiment started we could not add additional professionals to the sample. If we had added to the professional sample after the experiment started, the characteristics of the new professionals would have been systematically different from the original 10,000.

[13]These messages were based on suggested wording from a university career center guide on informational interviews. See pages 10 and 11 of `https://web.archive.org/web/20240520144708/https://cdn.uconnectlabs.com/wp-content/uploads/sites/230/2023/09/UCLA-Career-Guide.pdf`. Gallen and Wasserman (2021) provides evidence from a student-alumni professional networking website that 64 percent of career-related messages ask broadly about the professional's career path. There is no gender difference in the propensity to ask this question. In a survey of the same population used in the present study, we find that of students interested in the career paths we study, 85 percent want to spend 15 minutes talking to a professional in their field of interest (an informational interview), 92 percent have a profile on the platform, and 44 percent have messaged someone on the platform to get career information/advice.

whether there are gender differences in information received, conditional on bringing up a specific career attribute, students sent three message types: (1) a specific question asking whether work/life balance is a concern in the professional's field, (2) a specific question asking whether competitive culture is a concern in the professional's field, and (3) a factual question asking about billable hours at a large law firm (sent only to law professionals). We selected the above career attributes based on documented gender differences in preferences for competitive environments and temporal flexibility (Goldin, 2014; Wiswall and Zafar, 2018; Niederle and Vesterlund, 2011; Flory et al., 2015). Note that the factual question differs from the specific questions in that the answer to this question should not depend on student gender, since billable hours are a contractual obligation invariant to employee characteristics.[14] We designed the specific questions asking whether work/life balance or competitive culture is a concern to elicit a yes or no response, which we analyze below in the response content.[15]

All message templates emphasize that the student is only seeking career information, as well as explicitly state that the student is not searching for a job. Message templates are in Appendix Figure A1. To summarize, the four message types are: (1) Broad: Asks broadly about the pros and cons of the professional's field; (2) Specific work/life balance: Asks if work/life balance is a concern in the field; (3) Specific competitive culture: Asks if competitive culture is a concern in the field; and (4) Factual hours (law only): Asks what the billable hours requirements are at a large law firm.

Before sending any messages, students were asked to spend 20 minutes studying the profiles of professionals they would be messaging and provide a ranked list of the top 5 professionals they would like to ask the broad and specific questions to. Students were informed that these rankings would not affect the next step of the study, in which students sent messages to all 100 professionals in their list.

For data science, management consulting, and finance professionals, students sent half of the messages using the broad question and one-quarter of the messages using each specific

[14] Answers to the other specific questions may depend on student gender, if for example, parental leave policies depend on employee gender.

[15] Although the specific questions describe the career attributes in a negative light, we note that professionals were willing to refute the concern or say "it depends," especially in response to the competitive culture question (Table A1).

question. For law professionals, each student sent 44 percent of the messages using the broad question, 22 percent using each specific question, and 12 percent using the factual question. Within each field, professionals were randomly assigned a message type. Each professional received only one message.

In order to estimate the causal effect of student gender on career information received, we randomized whether a professional was sent a message from a male or a female student as well as the specific message type, as depicted in Figure 1. The students sent the messages on weekdays during typical working hours.[16] When a message is sent to a professional, depending on the professional's site preferences, they receive an email notification, an app notification, and/or an alert on the website. After a few days, the site automatically generates a reminder email notification of the message if the professional has not yet responded to the request.

Students were asked to provide the initial responses they receive within 21 days of sending the messages.[17] In order to verify that we obtained all initial responses received, we asked students for screenshots of their message inbox as well as screenshots of each response. If a professional responded, the student could choose whether he or she would like to continue the interaction. We emphasized to students that we would not ask for detailed information on these follow-up interactions. As an indication that we selected students based on their genuine interest in career advice, 34 percent of students reported that they planned to stay in touch with at least one of the professionals who responded. Students were asked to not use the site for activities unrelated to the study for the three-week period. We independently verified that students did not change their profile or otherwise engage in site activity throughout the study period. Three weeks after sending the messages, we followed up with the students to ensure that we had received all of their initial responses. To assess the role of information received on students' future career choices, three weeks after sending messages, students filled out a survey with their career intentions. Upon successful completion of this survey, students were paid $75.

[16] In some cases, students were unable to send all 100 messages in one sitting. In these situations, we asked that the students send the messages as soon as they were able to do so. We recorded the actual date and time that each message was sent.

[17] The vast majority of responses are received within two weeks of sending a message.

Identification: In contrast to a traditional correspondence study, we incorporate real students who are interested in information on careers. Since we cede control over the attributes of students, we cannot ensure that other student characteristics are orthogonal to student gender. The online setting allows us to mitigate concerns that other student characteristics confound the effect of student gender: (1) as discussed above, we ask students to strictly limit the information provided on their profiles, (2) in our regressions, we control for all student characteristics that are directly observed on the site, (3) using information from the background survey and whether the student has an online presence aside from their profile, we test whether the effect of student gender is sensitive to the inclusion of student characteristics that could be inferred from the profile (e.g. race/ethnicity) or observed elsewhere online, and (4) we examine whether the results are robust to restricting the sample to students without an online presence.

3 Data and Econometric Framework

3.1 Data

We collect data on response rates and the text of initial responses. We analyze the text using manual classification, sentiment analysis, and natural language processing tools that characterize word distributions. For responses to the broad question, manual classification entails coding whether the response mentions work/life balance or competitive culture. To manually classify messages, we employed five research assistants and gave each batches of messages to code (11 batches total). Each batch contained only de-identified message text and *no other information* except a random code which would later allow us to merge the classifications with the characteristics of senders and recipients. Messages were de-identified prior to being put into batches by replacing names of the student and professional with an X. The messages were coded by at least two research assistants. The authors of this paper then verified and reconciled the codes in case of disagreement. All coding and reconciliation was done without knowing the characteristics of message senders and recipients.

Professionals' mentions of work/life balance were coded using the following definition from the Cambridge dictionary: "The amount of time you spend doing your job compared with the amount of time you spend with your family and doing things you enjoy."[18] This includes

[18]https://dictionary.cambridge.org/us/dictionary/english/work-life-balance

explicit references to work/life balance, as well as discussion of the hours worked per week, extent of work-related travel, and conflict between/accommodation of work responsibilities and other life priorities. One paraphrased example of a work/life balance mention is: "Management Consulting can be considered a lifestyle since it requires travel, very long hours, always being on, and client-specific knowledge."

We code professionals' mentions of competitive culture when the response explicitly mentions competition within the workplace or among coworkers. Due to the low frequency of mentions of competitive culture—only six responses mention this attribute—we also create a broader metric of workplace culture, which includes descriptions of interpersonal relations among colleagues, the work environment, or ethical issues in the workplace. One paraphrased example of a culture mention is: "Though this is changing, finance sometimes still depends on connections, bribes, or corruption."

For the responses to the specific questions, which were designed to elicit a yes or no, we manually classify whether the response confirms that work/life balance or culture is a concern, refutes that it is a concern, or says "it depends" on factors such as the company or more granular occupation. In addition, we hire undergraduates (who are not experiment participants) to provide their subjective evaluations of the tone of all responses, specifically whether the response would cause a typical undergraduate student to be more or less concerned about work/life balance or workplace culture in the professional's field. For the responses to the factual hours question, we manually extract the hours requirement, which is a numerical value of hours or numerical range of hours. For answers with a range of hours, we take the midpoint of the range.

To analyze the role of professional attributes in generating gender differences in information received, we collect publicly available information on professionals on this site, including their education, gender, and network thickness. We use profile pictures and textual information to assign the gender of each professional. In cases where a picture or text-based information on gender was not available on their profile, we assign gender based on the professional's first name using U.S. Census and Social Security Administration name files. This process successfully classified gender for 99.5 percent of professionals.

3.2 Sample restrictions

The study recruited 100 college students to send messages to approximately 10,000 professionals. Once we drop students who were part of piloting, experienced logistical issues, or dropped out for other reasons, we are left with 89 students who successfully created a profile, sent messages, and provided responses.[19] Since we intend to estimate the causal effect of student gender on information received, we limit the main analysis sample to students whose first names unambiguously convey their true gender. We note that all results are robust to including students with gender ambiguous names.[20] Our final sample for the analysis consists of 76 students who contacted 7,367 professionals across four career categories.[21]

3.3 Summary statistics

Summary statistics for the students in the final sample are reported in Table 1, overall and by student gender. The top panel presents student attributes that are visible on or can be easily inferred from the student's profile. Students are 58 percent female, primarily freshmen and sophomores, and mostly economics majors, consistent with our recruitment strategy. The vast majority of students already had profiles on this platform. We also record whether students had any information on their profile beyond what is listed in the top panel of this table or had another profile issue that precluded perfect compliance with the profile restrictions. In general, these profile issues were limited to minor deviations from protocol such as a few activities or skills being visible on the profile. We control for the deviations

[19] One student was used for a pilot, which we discuss in Appendix B. Five students withdrew due to unforeseen logistical issues with their profiles or with sending the messages. Another five students dropped out after sending all of their messages. We diligently followed up with all student participants and found that students who took a very long time to provide responses (>4 months) had similar response rates to those students who completed the study promptly. This fact makes us less concerned that students dropped out because of the replies they received.

[20] We limit the main sample using the U.S. Census and Social Security Administration name files. If a student's name is at least 90 percent male or female, and coincides with the student's actual gender, then the student is included in the main analysis. This sample restriction drops 13 students.

[21] Our initial sample of professionals was 10,003 (three students were assigned 101 professionals and two of these students are in the final sample). This implies that our final sample of 76 students were assigned to contact 7,602 professionals. We drop 235 professionals who were not successfully contacted by students due to technical issues or who lacked screenshot verification of being contacted, leaving a final sample of 3530 professionals who were asked the broad question, 1763 who were asked the specific work/life balance question, 1776 who were asked the specific culture question, and 298 professionals who were asked the factual question.

from profile restrictions in all regressions. From a background survey that students filled out prior to sending messages, we observe that students are evenly split between race/ethnicity categories and 22 percent are first generation college-goers. While male and female students are overall similar, we observe that female students are less likely to be economics or STEM majors, have fewer network connections, and are more likely to identify as Asian/Asian American.

Table 2 reports summary statistics for professionals, overall and by field. One-third of professionals are female, and this varies substantially across field, with representation the lowest in finance and the highest in law. The professionals are, on average, in their late 30s and attended selective universities. More than 20 percent of professionals are alumni of the student's college. The majority have well-established networks on this site.

Table A1 presents summary statistics for the main outcomes, including response rates and mentions of work/life balance and workplace culture in responses to the broad question. The overall response rate across all question types is 12 percent, with a lower rate of response to the broad question (10 percent) and the highest rates of response to the specific work/life balance and competitive culture questions (14 and 15 percent, respectively). This response rate is higher than correspondence studies that send pitch emails to venture capitalists (6.5 percent), similar to studies that send applications to jobs, and somewhat lower than studies that send messages to existing network connections on LinkedIn (21 percent) and emails to politicians asking for career advice (26 percent) (Gornall and Strebulaev, 2025; Agan and Starr, 2018; Deming et al., 2016; Evsyukova et al., 2024; Kalla et al., 2018). In Figure A3, we observe that the distribution of response rates is centered around 12 percent. Among responses to the broad question that asks about the pros/cons of the professional's field, 11 percent bring up work/life balance issues and 12 percent mention workplace culture.

Table A2 reports results from tests of covariate balance. For each professional characteristic, we run a regression of this characteristic on whether the student who sent the professional a message is female. Professional characteristics are balanced across students, indicating that the randomization was successful.

3.4 Econometric framework

In order to estimate the causal effect of student gender on information received, we use the following regression specification:

$$Y_m = \alpha + \beta StudentFemale_m + X_m'\gamma + \epsilon_m \quad (1)$$

where the dependent variable, Y_m, is an outcome such as an indicator for whether message m received a response, or whether the response mentions a specific career attribute. The independent variables are an indicator for whether the message was sent by a female student, $StudentFemale_m$, as well as a vector of message and student controls, X_m. In our baseline specification, we include controls for message characteristics: categorical variables for the day of the week and the time of day that the message was sent, a linear term for the date that the message was sent, and the field of the professional. We also include controls for the characteristics of the students who sent the messages that are directly observable on the site: college major (economics, STEM, other), expected college graduation year, number of network connections, and whether the student was completely compliant with the profile restrictions.[22] Standard errors are clustered at the student level.

We test whether the coefficient on student gender is sensitive to the inclusion of additional student characteristics that may be available elsewhere online: student race/ethnicity, college GPA, first generation student status, and an indicator for whether there is information publicly available on the student through an online search. Since student race/ethnicity could also be conveyed through the student's first name, we test the sensitivity of the main results to this specific control. In the Appendix we also limit the sample to students with no online presence aside from their profile on the professional platform and find similar results.

[22]We also report specifications without any controls and find similar results. We do not use this as our main specification because there are differences between male and female students visible to professionals on students' profiles (Table 1). To investigate whether our results are influenced by a combination of these imbalances and heterogeneous effects of student gender, we also implement a re-weighting exercise in which we make our sample demographically representative of the student population at the university that we study.

4 The Information Students Receive Depends on Their Gender

4.1 Broad question

In this section, we analyze responses to the broad question and document that professionals emphasize work/life balance issues to women, because of their gender. When students ask professionals about the pros and cons of their career path, male and female students are equally likely to receive a response. Responses to female students, however, are substantially more likely to mention work/life balance issues.

Response rates: We start by testing whether student gender affects response rates to the broad question that asks about the pros/cons of the professional's field. We estimate Equation (1), and use as the dependent variable an indicator for whether a message received a response from the professional. Table 3 Panel A column 1 presents the results with the baseline message and student controls. We observe that response rates to male and female students are very similar; the coefficient on $StudentFemale_m$ is 0.011 and statistically insignificant. Consistent with the notion that the effect of student gender is not confounded by other student characteristics, when we include the supplemental student characteristics that may be observable elsewhere online, the coefficient on student female exhibits little change (columns 2 and 3).[23] The results are robust to the inclusion of students with ambiguously gendered names, to not including controls, to restricting to students with no other online presence, and to re-weighting the sample demographics to be representative of the student population at the university where we conduct our study (Tables A3 -A6).[24] Based on these results, we conclude that professionals are just as willing to engage with male and female students when they ask the broad question.

Response content: We next analyze whether there are gender differences in the content of the responses to the broad question. As mentioned in the Introduction, we focus on two career attributes that are known to differentially affect the occupational and job choices of women relative to men: work/life balance and competitive culture. We restrict the sample to responses received, estimate Equation (1), and use as the dependent variable an indicator

[23]Heckman and Siegelman (1993) raise the possibility that in correspondence studies, differences in the variance of unobservable productivity could explain differences in mean callback rates. We test for this in our setting using the methodology developed by Neumark (2012) and find that we cannot reject that the variance of unobservable characteristics of male and female students is the same.

[24]Logit and probit specifications yield similar findings (Tables A7 and A8).

for whether the response mentions a work/life balance issue. Table 3 Panel E shows that responses to female students are more than twice as likely as responses to male students to mention work/life balance issues: 6.7% of responses to male students mention a work/life balance issue, but the rate is 8.7 percentage points higher for female students. Controlling for student characteristics that are not directly observed on the site does not affect the results. If we assume that non-response is equivalent to not mentioning work/life balance in a response, then we can expand the sample to include all of the messages. When we do this, the rates of mentioning work/life balance are similarly differentiated by student gender (Table A9). The results are also robust to the same battery of checks we implemented in the response rate section.[25]

The greater emphasis on work/life balance in responses to women is not driven by differences in the types of professionals who respond to male and female students or differences in the types of professionals that male and female students prefer. In Table 3 column 4, across all outcomes, the coefficient on $StudentFemale_m$ is invariant to the inclusion of professional controls. Table A15 confirms that the average characteristics of professionals who respond to male and female students are similar. Using students' rankings of professionals, we observe gender differences in the type of professionals that students would like to interact with, but accounting for student preferences only makes the gender disparity in information received even larger. More details can be found in Appendix D.

Figure 2 further explores whether the differential provision of information to female students is concentrated among certain subgroups of professionals (coefficients are reported in Table A16). Each entry represents the coefficient on $StudentFemale_m$ from a separate regression, with the subgroup of professionals listed along the y-axis. Professionals who are female, alumni of the students' university, older, have a degree from an Ivy League university, and work in finance and law are more likely to emphasize work/life balance to female students, though these contrasts are not statistically significant.

We estimate whether the additional information provided on work/life balance to female students is driven by three specific topics: (1) the duration of a typical workweek, (2)

[25]The checks include: inclusion of students with ambiguously gendered names (Table A10), exclusion of controls (Table A11), re-weighting the sample demographics (Table A6), restricting to students with no other online presence (Table A12), and logit/probit specifications (Tables A13 and A14).

flexibility of work schedules, and (3) the ability (or inability) to work from home (Table A17).[26] Responses to female students are more than twice as likely to mention the duration of the typical workweek relative to male students. It also appears that responses to female students are more likely to contain information about work schedule flexibility, but this gender difference is not statistically significant.

Mentions of work/life balance tend to be negative. For example, one lawyer stated: "A career in law opens many doors...and also offers long hours, hard work, firm deadlines, and many challenges." A finance professional responded: "Challenges can be the hours depending on the area of finance (corporate finance FPA, consulting, investment banking, or even accounting)." We asked a team of college students who were not study participants to rate the extent to which a response would make a typical college student more or less concerned about work/life balance (workplace culture) in the professional's field. Based on the students' evaluations, responses containing mentions of work/life balance increased concern about this issue more than 75 percent of the time. Only three percent of such responses made students less concerned about work/life balance.[27]

We also investigate whether the additional information on work/life balance that women receive crowds out other, potentially useful, information on careers. We find no significant gender differences in the overall length of replies, suggesting that the additional emphasis on work/life balance to female students may displace other information (Table A19). Although our experimental design and analysis focus on work/life balance and workplace culture, in Online Appendix C, we explore the effect of gender on other message components, using manual classification, nonparametric natural language processing, and lexicon-based sentiment analysis. Overall, we find few gender differences, but professionals are less likely to offer advice or state their qualifications to women relative to men.

Finally, we estimate gender differences in mentions of competitive culture in responses to the broad question. Competitive culture is mentioned in only six messages, but the rates of mentioning it are similar to male and female students (Table A20). Due to the extremely

[26]These topics correspond to two O*NET work context categories and one researcher-defined category. For more information on these categories, see Table C.1.

[27]When we consider all responses (not just those mentioning work/life balance), we find that responses to female students are more likely to increase concern about work/life balance, but this contrast is not statistically significant (see Table A18).

low frequency of mentions of competitive culture, we also test for gender differences in mentions of workplace culture more generally, which includes descriptions of interpersonal relations among colleagues, the work environment, or ethical issues in the workplace. Twelve percent of responses to the broad question mention workplace culture (Table A1). Across specifications, the point estimates for the coefficient on $StudentFemale_m$ are close to zero (Table 3 Panel F). One limitation of our experiment is that we only track professionals' initial responses, in which they may be reluctant to discuss sensitive or controversial issues as well as issues that could make their firm vulnerable to legal action (Sockin and Sojourner, 2023). Consistent with this, only three responses to the broad question mentioned sexism or sexual harassment.

4.2 Specific and factual questions

Response rates: Recall that there are three message types that ask about specific career attributes: the message that asks whether work/life balance is a concern ("specific work/life balance"), the message that asks whether competitive culture is a concern ("specific competitive culture"), and the message that asks the minimum billable hours requirement for a first-year associate at a large law firm ("factual hours"). In Table 3, we investigate gender differences in response rates to these three questions. In Panel B, we find that, in contrast to the broad question, student gender does affect professionals' propensity to respond to the specific work/life balance question. In the baseline specification from column 1, female students are 3.7 percentage points, or 28 percent, more likely to receive a response relative to male students. Furthermore, when students ask a fact-based question related to work/life balance ("factual hours"), female students receive 80 percent more responses than male students (Table 3 Panel D), though the coefficient is not consistently statistically significant. Taking these results together, we find that expressing interest in discussing work/life balance does not eliminate the gender gap in information received.

Consistent with the result that workplace culture is not differentially emphasized to female students in the broad question, there is no gender difference in response rates to the specific question on competitive culture (Table 3 Panel C). This result is not driven by professionals' unwillingness to engage with students on this topic; in fact, the specific

competitive culture question had the highest response rate.[28]

Response content: Responses to the specific work/life balance question confirm that work/life balance is a concern in the professional's field and make students more concerned about this issue (Table A1). Only seven percent state that work/life balance is not a valid concern. Two paraphrased examples of responses are: [Law] It's definitely a valid concern. At a large law firm, your schedule will be outside of your control. You will not have your evenings, weekends, or vacations. In-house is usually better in terms of weekends and vacations, but it is still very demanding. [Management Consulting] Yes, would expect between 60–80 hours of work per week and little predictability Mon–Thurs on hours. Weekends are usually open though.

The responses to female students do not display meaningful content or tone differences relative to the responses to male students (Tables A18, A22, and A23), suggesting that student gender affects the willingness of professionals to discuss work/life balance, rather than the content, conditional on discussion. Although the specific questions describe the career attributes in a negative light, we note that professionals were willing to refute the concern or say "it depends," especially when responding to the competitive culture question (Table A23).[29]

5 Professionals' Motivations

Why do professionals emphasize work/life balance to female students? In this section, we provide a conceptual framework to guide our discussion of professionals' motivations for information provision. Then we use evidence from the field experiment and two additional surveys to distinguish between professionals' motivations.

5.1 Conceptual framework

When exploring careers, students solicit information from experienced advisors. Advisors choose to send students information through a message M, which affects students' beliefs about careers. Students rely on their beliefs to make career choices in order to maximize their present discounted value of future utility, U. What do advisors maximize? Drawing

[28]These results are robust to the inclusion of students with ambiguously gendered names (Table A3), controls for the composition of professionals (Table A21), and to re-weighting the sample demographics to be representative of the student population at the university where we conduct our study (Table A6).

[29]Unfortunately, we are underpowered to detect large differences in the hours responses to the factual question, but point estimates suggest that women are quoted higher hours requirements (Table A24).

on models of parenting styles by Doepke and Zilibotti (2017) and Doepke et al. (2019), we assume that advisors can be imperfectly altruistic, placing weight not only on students' preferences, U, but also on other considerations.

If advisors are purely altruistic, they give students information consistent with maximizing U. If instead, advisors are paternalistic, they believe that the student's utility function should be a different function $\tilde{U}$, where $\tilde{U} \neq U$. This may happen if an advisor believes that the student will experience unanticipated changes to their preferences, if an advisor believes that the student should discount the future less, or if an advisor thinks that there are parts of the utility function unknown to the student.[30]

We also acknowledge the possibility that advisors could have non-empathetic preferences, that is, derive utility from information provision due to reasons unrelated to the student's utility. For example, information provision could help the advisor work through their own problems (Eskreis-Winkler et al., 2018), could achieve a larger social objective, such recruiting underrepresented minorities to their field, or could arise from taste-based discrimination. We represent utility from these objectives (which do not have any altruistic or paternalistic component) with the function S.

Putting the various objectives of advisor together, advisors choose a message M from a set $\mathcal{M}$ to maximize:

$$V = \alpha[\gamma U(M) + (1-\gamma)\tilde{U}(M)] + (1-\alpha)S(M) - C(M)$$

where α represents the weight placed on the student's welfare relative to the advisor's non-empathetic objectives. Within the consideration of the student's welfare, γ represents the weight placed on the student's utility, U, versus the advisor's belief about what the student's utility function should be, $\tilde{U}$. $C(M)$ is the cost associated with a particular message (which

[30]It is possible that the message advisors send directly changes students' preferences. We consider U to be student utility *before* seeking advice, and $\tilde{U}$ may include the change in preferences after having a conversation with an advisor. For example, if professionals explain in detail how working long hours may make a person unhappy, a student may feel differently about the same job attributes relative to how they felt before the conversation. It is also possible that professionals do not change students' actual preferences, but provide messages that lead to behavior more in line with what professionals believe to be the correct choice. They may exaggerate negative aspects of a job in order to ensure that a student avoids that job, believing that this will in the long run make the student happier. We group these possibilities together in our setting under the umbrella term "paternalism." It is interesting to consider the normative implications of each possibility separately, but it is outside of the scope of this paper.

can be increasing in time spent, in lying, etc.).

Our field experiment establishes that advisors provide more information on work/life balance issues to female students. Using this framework, three motivations could lead professionals to provide different information to male and female students. First, professionals could be altruistic and believe that U differs on average by gender, because female students value work/life balance more than male students and/or female students are more misinformed about this issue than male students. Second, professionals could be paternalistic and believe that $\tilde{U}$ differs from U for women, which could arise if professionals believe that female students will experience unforeseen changes in their preferences, likely surrounding the birth of their first child (Paul, 2014; Kuziemko et al., 2018). A final possibility is that professionals have an agenda distinct from student utility and provide information to satisfy their non-empathetic motives.

In the subsections below, we discuss how the experimental design as well as two additional surveys allow us to distinguish between the sources of differential information provision to male and female students, which can inform policy interventions. If professionals are altruistic but misinformed about student preferences, then students could be encouraged to inform professionals about their goals and preferences. If professionals are paternalistic, then students could be informed of potential bias and instructed to discount information accordingly. If professionals have non-empathetic motivations, then students could be encouraged to rely on depersonalized information.

5.2 Pure altruism

If professionals are purely altruistic, then their emphasis on work/life balance to women should be driven by beliefs (correct or incorrect) that female students want this information more so than male students. Our specific and factual messages from the main experiment were designed to test whether the gender gap in information received persists when we hold fixed professionals' beliefs about student preferences. We find that professionals continue to provide more information on work/life balance to female students, suggesting that professionals' behavior is inconsistent with pure altruism. We further document that professionals' emphasis on work/life balance to female students does not reflect students' *actual* preferences for information. We conducted a survey of students from the same

university as the main experiment that asks students how they would allocate 15 minutes of time with a professional in their preferred career path among various career-related topics.[31] Male students allocate significantly more of their time than female students to this topic (14 v. 10 percent) (Figure 3).[32]

While the main experiment shows that professionals' behavior is inconsistent with students' stated and actual preferences, professionals may still be behaving altruistically based on their *beliefs* about student preferences. To address the limitation that we do not observe professionals' beliefs in the main experiment, we conducted a survey and vignette study to directly measure professionals' information provision, beliefs about student preferences, and their drivers. The study took place on Prolific among more than 2,500 U.S. college graduates. Respondents were shown characteristics of a job similar to an entry-level position in finance or management consulting, told to imagine that this was their former employer, and that they were providing information about the job to an applicant.[33] The job was described as having extremely long and unpredictable hours. The applicant was described as a recent college graduate from a top university. We randomize the gender of the job applicant to be either male (Ethan) or female (Emily). After being shown the characteristics of the applicant, professionals were asked how they would allocate 15 minutes discussing the hypothetical new job with the applicant among eight topics.[34] Next, we asked professionals their beliefs about how the college graduate would allocate 15 minutes across the same eight topics. Finally, professionals were asked directly about their motivations for giving information about work/life balance to young people.[35]

[31]See Appendix F.3 for the follow-up survey.

[32]We consider students' stated preferences for how to allocate time to be a reasonable proxy for their actual preferences. Because the students in our study are young and at the beginning of their career exploration, it is unlikely that they have already received substantial information on work/life balance. In the information intervention described in Section 6, we find patterns inconsistent with female students being more informed than male students about work/life balance: female students have less accurate beliefs than male students about the temporal demands of jobs and are also more responsive to information about work/life balance.

[33]Appendix Figure A5 displays the job description.

[34]The topics are: daily tasks on the job, career trajectory/growth, skill/education requirements, compensation, comparison with other jobs in the field, workplace culture, hours, and job stability. We use "hours" instead of "work/life" balance (which is used in a student survey discussed below) to avoid priming professionals to think about gender.

[35]We asked professionals "Suppose you are given 15 minutes with [Ethan/Emily] to discuss your experience at your former employer. Below, please fill in how much time (in minutes) you would like to spend discussing the following topics. You cannot use more than 15 minutes total. Your experience at your former employer is in italics below each topic." and "Now consider the question from [Ethan/Emily]'s perspective. Below,

Our first finding is that professionals' time allocation diverges from their beliefs about applicant preferences. Specifically, professionals spend 14 percent more time on work/life balance than they believe the applicant wants. The divergence occurs among both Emily and Ethan, suggesting that professionals do not behave purely altruistically when providing information.[36]

We additionally test whether providing direct and indirect information on applicant preferences for discussing work/life balance leads professionals to update their beliefs and time allocations. The vignette study varied the applicant's characteristics through four conditions: (1) Control: Basic information on job applicant, including that they are a recent college graduate who majored in economics, (2) Applicant preferences (direct information): Include information that applicants like Ethan (Emily) rank work/life balance information among the top (bottom) three topics they would like to discuss,[37] (3) No children (indirect information): Include information that the applicant does not want to have children, and (4) Social objective: Include information that the professional wants to recruit women to the firm (Emily only).[38]

When given information about the applicant's preferences for discussing work/life balance, professionals generally update their beliefs about what Emily and Ethan want to discuss (Table 4, columns 2 and 5). But we find an asymmetry in professionals' treatment of men and women: professionals adjust their time allocation for Ethan to better align with his preferences, but do not adjust for Emily (Table 4, columns 1 and 4).[39] If anything, the

please fill in how much time (in minutes) you think that [Ethan/Emily] would like to spend discussing the following topics. [Ethan/Emily] cannot use more than 15 minutes total. Your experience at your former employer is in italics below each topic."

[36]We also explored alternative wording that asks explicitly how much time professionals would allocate "in order to meet Emily's objectives." The time allocations are similar using this wording, so we do not believe the wedge between time allocated and beliefs about applicant preferences reflects professionals' beliefs that applicants underestimate how many minutes it takes to address a topic. Results are available upon request.

[37]This information was sourced from the survey of college students described above.

[38]The vignette study was pre-registered on the AEA Registry under: AEARCTR-0013302. We note that professionals' beliefs about how many minutes the applicant would like to spend discussing the job's hours is a secondary outcome.

[39]In the control condition, we find that professionals allocate a similar amount of time to discussing hours with Emily and Ethan (2.34 versus 2.37 minutes). In the condition in which Emily and Ethan state that they do not want to have children, professionals provide more information to Emily than Ethan about the hours on the job (2.41 versus 2.19 minutes). We cannot make informative comparisons for Ethan and Emily in the other two treatments, since the treatments differed for Ethan and Emily. We also note that across treatments, we find similar effects by professional gender (Tables A25 and A26).

wedge between professionals' beliefs and time allocation for Emily grows when provided with information on Emily's preferences (Table 4 column 3).[40,41]

5.3 Paternalism

Why might professionals provide more information on work/life balance to young women than they believe young women want? If professionals are not purely altruistic, then the emphasis on work/life balance to young women may arise because of paternalistic or non-empathetic motives.[42] Paternalistic professionals ($0 \leq \gamma < 1$) believe that applicants' utility should be $\tilde{U}$, which differs from applicants' utility U.

Prior literature suggests that women are more likely than men to experience unanticipated changes in their preferences. For example, Kuziemko et al. (2018) document that women do not accurately forecast changes in their preferences upon having children. Knowing this, advisors could emphasize work/life balance issues to female students that will become relevant in the future. In our main field experiment, we observe that female professionals—who are presumably more knowledgeable about future challenges female students will face—are particularly likely to emphasize these issues to female students (Figure 2 Panel A). When answering the broad question, female professionals are more likely than male professionals to bring up work/life balance issues, and this is especially the case when responding to female students.[43] In addition, when answering the specific question on whether work/life balance is a concern in the professional's career path, there is suggestive evidence that female professionals are less likely to refute this concern when responding to female students

[40]Our result is consistent with several other papers that document inaccurate or exaggerated beliefs about others' attributes and preferences (Bordalo et al., 2016; Eyal and Epley, 2017; Bohren et al., 2025a,b; Exley et al., 2022). However, exaggerated beliefs do not seem to be the only reason that professionals' information provision deviates from applicant preferences. Professionals provide more information on work/life balance than *they believe* students want.

[41]The "no children" treatment also tests whether professionals altruistically provide women with more information on work/life balance because they believe that young women are more misinformed than young men. The "no children" treatment signals that Emily has a lower valuation of reduced work hours, implying that professionals should be less inclined to provide information to address misperceptions. However, professionals continue to discuss hours with her at the same rate as in the control condition.

[42]Though outside of our model, it is also possible that this wedge is a manifestation of professionals' risk-aversion and uncertainty about what type of person Emily is. This motive does not explain the wedge because providing direct information on Emily's preferences in the "applicant preferences" treatment does not eliminate the wedge.

[43]Female and male professionals mention work/life balance to male students at similar rates (0.079 v. 0.063, respectively), but when responding to female students, female professionals bring up work/life balance at almost twice the rate of male professionals (0.22 and 0.13, respectively). We are under-powered to detect the difference in the gender gap in mentioning work/life balance by professional gender (Table A16).

(Appendix Figure A4).

In the Prolific survey, professionals' open-ended responses reveal that they believe that work/life balance information is important for young women due to family considerations, particularly those that materialize in the future. In the survey, professionals are asked an open-ended question on whether and why it is important to discuss work/life balance with young individuals, separately for young men and young women. Nearly all respondents (95 percent) agree that it is important to discuss work/life balance, with slightly (but significantly) higher rates for young women than for young men. Furthermore, when asked why it is important to discuss work/life balance, 32 percent of professionals give different reasons for young women and young men. When professionals cite different reasons for men and women, 41 percent cite family considerations for women, while just 18 percent mention this for men (measured using the keywords "family," "child" and "kids"). These responses often emphasize the importance of this information for the future, and more so for women than for men—49 percent vs. 18 percent. As one surveyed professional stated, "[it is important to provide young women with information on work/life balance because] they may not be thinking of having a family at a younger age but those things will be important when they do."

5.4 Non-empathetic Preferences

It is also possible that professionals have other considerations unrelated to student welfare—non-empathetic preferences (S)—that guide their information provision. These considerations could differ for female students, if, for example, professionals want to recruit female students to their workplace or profession to fulfill gender diversity goals. Our field experiment tries to shut down this motivation by stating in the message to professionals that the student is not currently looking for a job. We explore this motive directly in the vignette study of professionals on Prolific. In Table 4, we show that professionals' time allocated to discussing the job's extremely long and unpredictable hours with Emily does not change with the social objective treatment, that is, when the professional is informed that they want to recruit more women to the firm. It remains possible that professionals could emphasize work/life balance to women due to other forms of non-empathetic preferences, such as working through their own problems (Eskreis-Winkler et al., 2018).

Overall, we conclude that professionals are not behaving *purely* altruistically, especially when providing information to female students. Instead, a combination of evidence from prior research, our main field experiment, and the survey of professionals suggests that professionals exhibit some paternalism.

6 Consequences of Gender Gaps in Information

Our field experiment finds that professionals emphasize work/life balance information to female students. Does this disparate information provision contribute to gender gaps in career outcomes? Combining the findings from our field experiment and results from an information intervention, we show that gender gaps in information about work/life balance are consequential for gender gaps in career choice.

6.1 Evidence from the field experiment

In the main field experiment, because professionals are randomly assigned to students, we are able to assess the effect of being randomly assigned a professional who brings up work/life balance (conditional on student observables) on students' career plans. At the conclusion of the study, we surveyed students about their career plans. Of the 76 students in the main sample, 73 completed the survey. We measure whether a student indicates he/she is, relative to the start of the study, less likely to enter his/her preferred career path. Students were asked, "Relative to when you began sending messages for this study, are you, on a scale of 1–10, much less likely (1) ... much more likely (10) to go into [data science/finance/law/management consulting]?" We run the following regression:

$$L_i = \gamma_0 + WL_i'\gamma_1 + X_i'\gamma_2 + M_i'\gamma_3 + P_i'\gamma_4 + \varepsilon_i \tag{2}$$

where L_i, is an indicator for responses of 4 or below to this question for student i's preferred career path or the reverse of the scale described above (where 10 indicates least likely). WL_i is a vector including an indicator for whether a student received a response to the work/life balance question in their preferred career path, as well as an indicator for whether the student received a work/life balance mention in their preferred career path, X_i is a vector of student characteristics, including the basic student controls, race, and student's preferred career path, M_i includes characteristics of the messages received by student i, such as message length and whether the student received information about workplace culture,

and P_i is a vector of the average characteristics of professionals the student contacted in their preferred career path.

In Table 5, we find that being randomly assigned a professional who brings up work/life balance makes students report that they are significantly less likely to go into their initially preferred career path. The results are directionally similar when students receive a mention of work/life balance in response to the broad question, though the effect is insignificant. This result is similar whether the outcome variable is an indicator of being deterred or the continuous scale. These effects are robust to controlling for other message and professional characteristics (Table 5 columns 2-3 and 5-6).[44] The deterrence effects are driven by female students (Appendix Table A27). Although the analysis is suggestive due to the large standard errors stemming from the small number of students, the results indicate that the information professionals provide matter for stated career choices.

6.2 Evidence from an information intervention

We conduct an information intervention to further investigate whether gender gaps in work/life balance information affect gender gaps in labor market choices.[45] In an online survey, we randomize over 400 UCLA undergraduates to receive one of two versions of a message about management consulting, sourced from our main experiment: (1) a control message, which contains no work/life balance information or (2) a treatment message, which is identical to control but includes information on management consulting's long hours, extensive travel, and the challenges this poses for relationships (see Appendix E for details).[46]

After students receive the message, we ask them questions related to their career plans on the extensive and intensive margins. First, we tell students that we are hosting a live online workshop on "how to break into management consulting." As an extensive margin

[44] We note that most students state that they are more likely to go into their preferred career path at the end of the study, relative to the start of the study. We focus on deterrence because the vast majority of work/life balance information that students receive is negative. When we look more holistically at the distribution of preferences, we can reject that the distributions of responses to the career plans question are the same for students who did and did not receive a mention of work/life balance (p-value of 0.07).

[45] The experiment was pre-registered through the AEA Registry under AEARCTR-0015913.

[46] Management consulting is a lucrative, time-intensive career, similar to the other career paths in our main field experiment (law, finance, and data science) and similar to the job described in the survey of professionals. Data from American Community Survey shows that the gender pay gap for management analysts (the closest occupation code to management consulting) rises with age, and average hours of work are high and do not decline until age 50.

outcome, we ask the probability of attending the workshop. Second, we inform students that the previous description of management consulting was provided by a consultant from a top consulting firm. We give all students a description of work in a smaller, boutique consulting firm, which highlighted its lower pay and time demands, relative to a top consulting firm. For an intensive margin outcome, we ask the probability of accepting a job from a top firm instead of a boutique firm, if offered both. We incentivized students to answer truthfully by telling them that they would receive information on the next screen based on their choice. To validate that the treatment changed students' beliefs about work/life balance, we asked students about their beliefs about weekly hours and availability of part-time work (incentivized) in management consulting.

To estimate the effects of work/life balance information on students' career-related choices and beliefs, we use the following regression specification:

$$C_i = \lambda_0 + \lambda_1 T_i + \varepsilon_i \tag{3}$$

where T_i indicates whether student i was randomized into the treatment group that received work/life balance information and C_i is the outcome of interest, the probability of attending the workshop on how to break into management consulting (MC workshop), the probability of choosing top firm over boutique consulting, or beliefs about hours/part-time work availability in management consulting. We estimate the regression separately by student gender.

We find that information on work/life balance is consequential students'—especially female students'—career plans. Table 6 Panel A shows that the treatment reduces female students' probability of attending the MC workshop by nearly 9 percentage points (20 percent), and reduces the probability that female students choose a top firm over a boutique firm by almost ten percentage points (15 percent). Male students are less responsive than female students, particularly for the choice of top firm over boutique. Consistent with the shift away from management consulting being driven by changes in beliefs about work/life balance, Table 6 Panel B shows that the treatment increases students' perceptions of weekly hours and decreases their beliefs about the availability of part-time work in management consulting, with both shifts larger for women than men.

As a final exercise, we quantify the importance of gender gaps in information provision

using the following back-of-the-envelope calculation. Suppose a student talks to seven professionals before deciding on a career.[47] If each professional is an independent draw and brings up work/life balance at the rates seen in our main field experiment, then the expected number of conversations that bring up work/life balance for female students is one, and for male students is 0.5. If the female student updates her beliefs about hours according to our information intervention, then these conversations will increase her expected hours of work by 10.31 hours. Combining this with the willingness to pay for fewer hours in Wiswall and Zafar (2018), the average female student would evaluate the same job as though it paid 13.1 percent less. In contrast, after seven informal conversations, the average male student would evaluate the same job as though it paid 3.4 percent less.[48] In other words, the reduction in perceived compensation due to informal conversations is more than three times larger for women than for men.[49] Additional channels that we do not directly measure—such as endogenous preference formation resulting from repeated emphasis on work/life balance issues (Bowles, 1998; Ridgeway and Correll, 2004)—may amplify the effects of informal information.

7 Discussion and Conclusion

Information transmission through informal interactions is an everyday, routine occurrence. Using a large-scale field experiment with college students interested in career advice, this paper provides a window into informal exchanges and additionally sheds light on a subtle form of disparate treatment of individuals based on their gender. Our main finding is that professionals differentially emphasize work/life balance issues to female students. These gender differences in information provision matter: emphasizing a job's work/life balance issues steers female students away from the job.

The one-on-one conversations studied in this paper have the benefit of being tailored to

[47] When we surveyed current college students about how many professionals they talk to about potential careers, the majority of students responded that they had talked to 2-6 professionals. Taking the midpoints of the ranges we provided, the average is approximately 7 professionals.

[48] The calculation for women is: $0.97 \times 10.31 \times 1.31 = 13.10$. The calculation for men is: $0.47 \times 9.37 \times 0.78 = 3.44$.

[49] Note that the larger reduction for women arises due to the differential emphasis on work/life balance information and women's larger WTP for lower hours. If men received as much information on work/life balance as women, then informal conversations would reduce their valuation of the job by 7.09 percent. If, instead, men valued lower hours as much as women, then informal conversations would reduce their valuation of the job by 5.77 percent.

the interests and preferences of the information seeker. Our evidence suggests, however, that professionals depart from the stated preferences of students and instead provide information paternalistically, based on beliefs about what female students should or will value in the future. Even paternalistic information provision could be beneficial: given that women do not fully anticipate how their preferences for working will change after having children, it is possible that professionals know the evolution of students' preferences better than they do themselves, leading to a more efficient allocation of workers to jobs.

Our discussion thus far has used a partial equilibrium perspective, taking the temporal demands of jobs as given. Another possibility is the entry of women into an occupation may change the way that work is structured and organized that makes the occupation more attractive to women. For example, Goldin and Katz (2010) discusses how the entry of women into pediatrics may have led to structural changes that increased the availability of part-time work. By discouraging women from entering historically male-dominated fields, informal conversations with professionals may inadvertently hinder the evolution of the job characteristics they caution students about.

Information passed down from older to younger cohorts may also serve to perpetuate gender inequality, if changes in beliefs about work/family trade-offs lag behind technological changes that attenuate these trade-offs. Sociologists refer to this phenomenon as "cultural lag," in which gender inequality persists even when egalitarian options are viable due to the enduring transmission of traditional gender roles, which outlast the economic conditions that originally established them (Ogburn, 1957; Brinkman and Brinkman, 1997; Ridgeway, 2011). For example, professionals' information provision may not reflect the increased prevalence of remote work and how it affects the capacity of new female entrants to reconcile the competing demands of work and family life (Aksoy et al., 2022; Harrington and Kahn, 2023). Culture may also be slow to change because change is initially classified as an exception to a rule, before eventually becoming a new rule or norm (Hewstone, 1994).

Empirical evidence from economics shows remarkable persistence of the norms governing women's work and care-giving roles. For example, Alesina et al. (2013) document the persistence of gender norms rooted in historical agricultural plough use. Our paper highlights a mechanism that may help sustain gender norms: informal conversations that impart the

societal expectation that women consider their future parental roles when making early career decisions.

References

Adams, A., Hara, K., Milland, K., and Callison-Burch, C. (2025). The gender wage gap in an online labor market: The cost of interruptions. *The Review of Economics and Statistics*, 107(1):55–64.

Adda, J., Dustmann, C., and Stevens, K. (2017). The career costs of children. *Journal of Political Economy*, 125(2):293–337.

Agan, A. and Starr, S. (2018). Ban the Box, Criminal Records, and Racial Discrimination: A Field Experiment. *The Quarterly Journal of Economics*, 133(1):191–235.

Aksoy, C. G., Barrero, J. M., Bloom, N., Davis, S. J., Dolls, M., and Zarate, P. (2022). Working from home around the world. Working paper.

Alesina, A., Giuliano, P., and Nunn, N. (2013). On the Origins of Gender Roles: Women and the Plough. *The Quarterly Journal of Economics*, 128(2):469–530.

Angelov, N., Johansson, P., and Lindahl, E. (2016). Parenthood and the gender gap in pay. *Journal of Labor Economics*, 34(3):545–579.

Bailey, M. J., Hershbein, B., and Miller, A. R. (2012). The opt-in revolution? contraception and the gender gap in wages. *American Economic Journal: Applied Economics*, 4(3):225–54.

Becker, G. (1981). *A Treatise on the Family*. Harvard University Press.

Bertrand, M. and Duflo, E. (2017). Field Experiments on Discrimination. *Handbook of Economic Field Experiments*, 1:309–393.

Bertrand, M., Goldin, C., and Katz, L. F. (2010). Dynamics of the gender gap for young professionals in the financial and corporate sectors. *American Economic Journal: Applied Economics*, 2(3):228–255.

Blau, F. D. and Kahn, L. M. (2017). The Gender Wage Gap: Extent, Trends, and Explanations. *Journal of Economic Literature*, 55(3):789–865.

Bohren, J. A., Haggag, K., Imas, A., and Pope, D. G. (2025a). Inaccurate statistical discrimination: An identification problem. *Review of Economics and Statistics*, 107(3):605–620.

Bohren, J. A., Hull, P., and Imas, A. (2025b). Systemic discrimination: Theory and measurement. *The Quarterly Journal of Economics*, 140(3):1743–1799.

Bolles, R. N. (1973). *What Color is Your Parachute*. Ten-Speed Press.

Bordalo, P., Coffman, K., Gennaioli, N., and Shleifer, A. (2016). Stereotypes. *The Quarterly Journal of Economics*, 131(4):1753–1794.

Bowles, S. (1998). Endogenous preferences: The cultural consequences of markets and other economic institutions. *Journal of Economic Literature*, 36(1):75–111.

Brinkman, R. L. and Brinkman, J. E. (1997). Cultural lag: Conception and theory. *International Journal of Social Economics*, 24(6):609–627.

Buzard, K., Gee, L., and Stoddard, O. (2023). Who You Gonna Call? Gender Inequality in External Demands for Parental Involvement. *Working Paper*.

College Pulse (2020). College students rely heavily on linkedin during the job search. `https://collegepulse.com/blog/college-students-rely-heavily-on-linkedin-during-job-search`.

Cortés, P. and Pan, J. (2019). When time binds: Substitutes for household production, returns to working long hours, and the skilled gender wage gap. *Journal of Labor Economics*, 37(2):351–398.

Cortés, P. and Pan, J. (2023). Children and the remaining gender gaps in the labor market. *Journal of Economic Literature*, 61(4):1359–1409.

Cubas, G., Juhn, C., and Silos, P. (2019). Coordinated work schedules and the gender wage gap. Working Paper 26548, National Bureau of Economic Research.

Deming, D. J., Yuchtman, N., Abulafi, A., Goldin, C., and Katz, L. F. (2016). The value of postsecondary credentials in the labor market: An experimental study. *American Economic Review*, 106(3):778–806.

Doepke, M., Sorrenti, G., and Zilibotti, F. (2019). The economics of parenting. *Annual Review of Economics*, 11(Volume 11, 2019):55–84.

Doepke, M. and Zilibotti, F. (2017). Parenting with style: Altruism and paternalism in intergenerational preference transmission. *Econometrica*, 85(5):1331–1371.

Eriksson, T. and Kristensen, N. (2014). Wages or fringes? some evidence on trade-offs and sorting. *Journal of Labor Economics*, 32(4):899–928.

Eskreis-Winkler, L., Fishbach, A., and Duckworth, A. L. (2018). Dear abby: Should i give advice or receive it? *Psychological Science*, 29(11):1797–1806.

Evsyukova, Y., Rusche, F., and Mill, W. (2024). Linkedout? a field experiment on discrimination in job network formation. *The Quarterly Journal of Economics*, 140(1):283–334.

Exley, C. L., Hauser, O. P., Moore, M., and Pezzuto, J.-H. (2022). Beliefs about gender differences in social preferences. Discussion Papers 2204, University of Exeter, Department of Economics.

Eyal, T. and Epley, N. (2017). Exaggerating accessible differences: When gender stereotypes overestimate actual group differences. *Personality and Social Psychology Bulletin*, 43(9):1323–1336.

Flory, J. A., Leibbrandt, A., and List, J. A. (2015). Do Competitive Workplaces Deter Female Workers? A Large-Scale Natural Field Experiment on Job-Entry Decisions. *The Review of Economic Studies*, 82(1):122–155.

Gallen, Y. (2023). Motherhood and the Gender Productivity Gap. *Journal of the European Economic Association*, 22(3):1055–1096.

Gallen, Y., Joensen, J. S., Johansen, E. R., and Veramendi, G. F. (2023). The labor market returns to delaying pregnancy. *SSRN Electronic Journal*.

Gallen, Y. and Wasserman, M. (2021). Do male and female students use networks differently? *AEA Papers and Proceedings*, 111:154–58.

Gershoni, N. and Low, C. (2021). The power of time: the impact of free ivf on women's human capital investments. *European Economic Review*, 133:103645.

Giulietti, C., Tonin, M., and Vlassopoulos, M. (2017). Racial Discrimination in Local Public Services: A Field Experiment in the United States. *Journal of the European Economic Association*, 17(1):165–204.

Goldin, C. (2014). A grand gender convergence: Its last chapter. *American Economic Review*, 104(4):1091–1119.

Goldin, C. and Katz, L. F. (2002). The power of the pill: Oral contraceptives and women's career and marriage decisions. *Journal of Political Economy*, 110(4):730–770.

Goldin, C. and Katz, L. F. (2010). The career cost of family. Technical report, Sloan Conference on Workforce Flexibility. Washington, DC.

Goldin, C. and Katz, L. F. (2016). A most egalitarian profession: Pharmacy and the evolution of a family-friendly occupation. *Journal of Labor Economics*, 34(3):705–746.

Gornall, W. and Strebulaev, I. A. (2025). Gender, race, and entrepreneurship: A randomized field experiment on venture capitalists and angels. *Management Science*, 71(6):5308–5327.

Gronau, R. (1988). Sex-related wage differentials and women's interrupted labor careers-the chicken or the egg. *Journal of Labor Economics*, 6(3):277–301.

Hancock, K., Lafortune, J., and Low, C. (2024). Winning the Bread and Baking it Too: Gendered Frictions in the Allocation of Home Production. *Working Paper*.

Harrington, E. and Kahn, M. E. (2023). Has the rise of work-from-home reduced the motherhood penalty in the labor market?

Heckman, J. and Siegelman, P. (1993). The urban institute audit studies: Their methods and findings. In Fix and Struyk, editors, *Clear and Convincing Evidence: Measurement of Discrimination in America*, pages 187–258. The Urban Institute Press.

Hewstone, M. (1994). Revision and change of stereotypic beliefs: In search of the elusive subtyping model. *European review of social psychology*, 5(1):69–109.

Kalla, J., Rosenbluth, F., and Teele, D. L. (2018). Are You My Mentor? A Field Experiment on Gender, Ethnicity, and Political Self-Starters. *The Journal of Politics*, 80(1):337–341.

Kessler, J. B., Low, C., and Sullivan, C. D. (2019). Incentivized resume rating: Eliciting employer preferences without deception. *American Economic Review*, 109(11):3713–3744.

Kleven, H. (2022). The geography of child penalties and gender norms: A pseudo-event study approach. Working Paper 30176, National Bureau of Economic Research.

Kleven, H., Landais, C., and Søgaard, J. E. (2019). Children and gender inequality: Evidence from denmark. *American Economic Journal: Applied Economics*, 11(4):181–209.

Kuziemko, I., Pan, J., Shen, J., and Washington, E. (2018). The mommy effect: Do women anticipate the employment effects of motherhood? Working Paper 24740, National Bureau of Economic Research.

Lahey, J. N. and Oxley, D. R. (2018). Discrimination at the intersection of age, race, and gender: Evidence from a lab-in-the-field experiment. Working Paper 25357, National Bureau of Economic Research.

Lindenlaub, I. and Prummer, A. (2020). Network Structure and Performance. *The Economic Journal*, 131(634):851–898.

Maestas, N., Mullen, K., Powell, D., von Wachter, T., and Wenger, J. (2019). The Value of Working Conditions in the United States and Implications for the Structure of Wages. *The Value of Working Conditions in the United States and Implications for the Structure of Wages*.

Mas, A. and Pallais, A. (2017). Valuing alternative work arrangements. *American Economic Review*, 107(12):3722–3759.

McDowell, J. (1982). Obsolescence of knowledge and career publication profiles: Some evidence of differences among fields in costs of interrupted careers. *American Economic Review*, 72(4):752–68.

Mengel, F. (2020). Gender differences in networking. *The Economic Journal*, pages 1–34.

Milkman, K. L., Akinola, M., and Chugh, D. (2015). What happens before? A field experiment exploring how pay and representation differentially shape bias on the pathway into organizations. *Journal of Applied Psychology*, 100(6):1678–1712.

Neumark, D. (2012). Detecting discrimination in audit and correspondence studies. *The Journal of Human Resources*, 47(4):1128–1157.

Niederle, M. and Vesterlund, L. (2011). Gender and Competition. *Annual Review of Economics*, 3:601–630.

Obukhova, E. and Kleinbaum, A. M. (2022). Scouting and schmoozing: A gender difference in networking during job search. *Academy of Management Discoveries*, 8(2):203–223.

Ogburn, W. F. (1957). Cultural lag as theory. *Sociology & Social Research*.

Pager, D. (2007). The Use of Field Experiments for Studies of Employment Discrimination: Contributions, Critiques, and Directions for the Future. *Annals of the American Academy of Political and Social Science*, 609(1):104–133.

Paul, L. A. (2014). *Transformative Experience*. Oxford University Press.

Polachek, S. W. (1981). Occupational self-selection: A human capital approach to sex differences in occupational structure. *The Review of Economics and Statistics*, 63(1):60–69.

Ridgeway, C. L. (2011). *Framed by Gender: How Gender Inequality Persists in the Modern World*. Oxford University Press.

Ridgeway, C. L. and Correll, S. J. (2004). Unpacking the gender system: A theoretical perspective on gender beliefs and social relations. *Gender & Society*, 18(4):510–531.

Sockin, J. and Sojourner, A. (2023). What's the inside scoop? challenges in the supply and demand for information on employers. *Journal of Labor Economics*, 41(4).

Wasserman, M. (2023). Hours Constraints, Occupational Choice, and Gender: Evidence from Medical Residents. *The Review of Economic Studies*, 90(3):1535–1568.

Wiswall, M. and Zafar, B. (2018). Preference for the Workplace, Investment in Human capital, and Gender. *Quarterly Journal of Economics*, 133(1):457–507.

Wiswall, M. and Zafar, B. (2021). Human capital investments and expectations about career and family. *Journal of Political Economy*, 129(5):1361–1424.

Zeltzer, D. (2020). Gender homophily in referral networks: Consequences for the medicare physician earnings. *American Economic Journal: Applied Economics*, 12(2):169–197.

Figures and Tables

Figure 1: Experimental Design

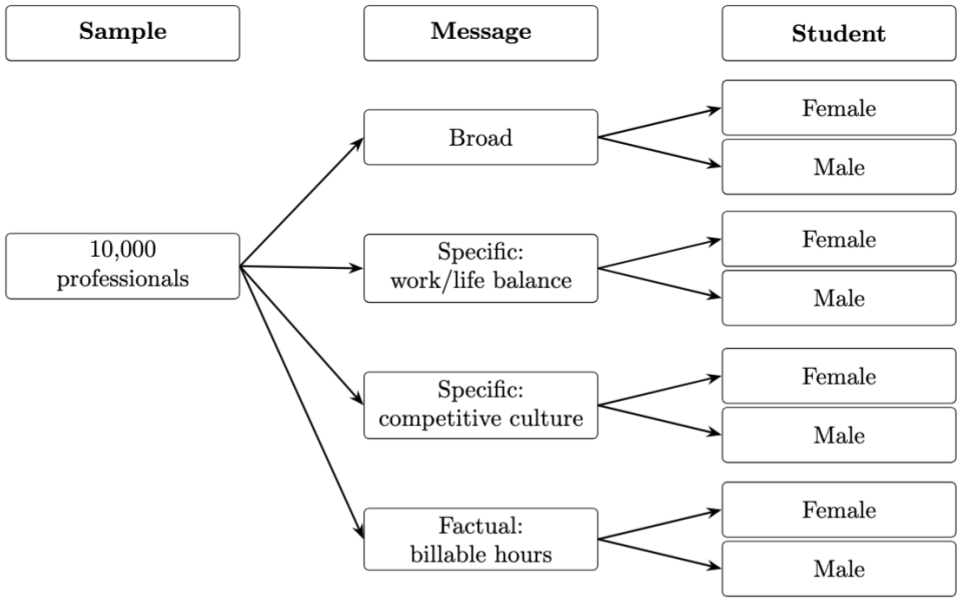
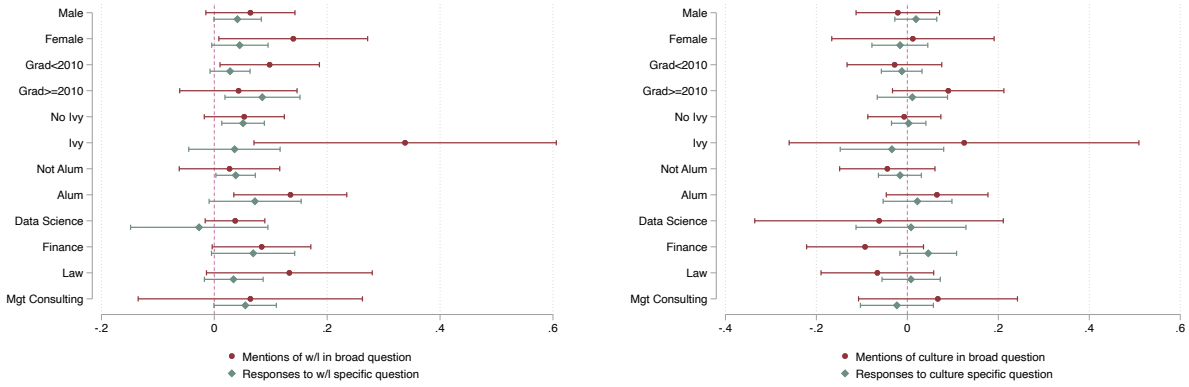


Figure 2: Heterogeneity by Professional Characteristics



(a) Work/life Balance

(b) Workplace Culture

Note: This figure reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is indicated in the legend, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, student profile characteristics, and student race/ethnicity. The y-axis lists the subsample of professionals used for estimation. Each entry in the figure reports the estimated coefficient on student female from a separate specification, along with 95% confidence intervals clustered at the student level.

Figure 3: Student Demand for Career Information, by Student Gender

Note: This figure uses the follow-up survey of 151 undergraduates at the same university to depict student demand for career information, by topic and student gender. Each student was asked how they would allocate 15 minutes of time spent with a professional in their preferred career path among 8 career-related topics. The figure plots the average percentage of the 15 minutes allocated to each topic, separately for female and male students. The following gender contrasts are statistically significant at the 5 percent level: different types of jobs within the field and work/life balance.

Table 1: Student Summary Statistics

	All Students	Male	Female
Female	0.58		
	(0.50)		
Profile Information			
Expected Graduation Year	2022	2022	2022
	(1.04)	(0.95)	(1.08)
Economics	0.62	0.69	0.57
	(0.49)	(0.47)	(0.50)
STEM	0.22	0.25	0.20
	(0.42)	(0.44)	(0.41)
0-49 Connections	0.46	0.44	0.48
	(0.50)	(0.50)	(0.51)
50-249 Connections	0.28	0.25	0.30
	(0.45)	(0.44)	(0.46)
250+ Connections	0.26	0.31	0.23
	(0.44)	(0.47)	(0.42)
Profile Extra Info	0.47	0.56	0.41
	(0.50)	(0.50)	(0.50)
Profile Issue	0.07	0.03	0.09
	(0.25)	(0.18)	(0.29)
Demographic Information			
White/Caucasian	0.30	0.28	0.32
	(0.46)	(0.46)	(0.47)
Asian/Pacific Islander	0.37	0.31	0.41
	(0.49)	(0.47)	(0.50)
Other Race/Ethnicity	0.33	0.41	0.27
	(0.47)	(0.50)	(0.45)
Non-Profile Student Information			
GPA	3.64	3.62	3.65
	(0.28)	(0.34)	(0.24)
First Generation College Student	0.22	0.25	0.20
	(0.42)	(0.44)	(0.41)
Online Presence	0.71	0.66	0.75
	(0.46)	(0.48)	(0.44)
Observations	76	32	44

Note: This table reports means for each student characteristic, with standard deviations in parentheses.

Table 2: Professionals Summary Statistics

	All Professionals	Data Science	Finance	Law	Mgmt Consulting
Data Science	0.13				
	(0.33)				
Finance	0.28				
	(0.45)				
Law	0.33				
	(0.47)				
Mgmt Consulting	0.26				
	(0.44)				
Female	0.34	0.29	0.23	0.43	0.36
	(0.47)	(0.45)	(0.42)	(0.49)	(0.48)
College Graduation Year	2004	2010	2004	1998	2007
	(12.00)	(7.59)	(11.95)	(11.84)	(11.16)
College Selectivity - Admit Rate	0.25	0.39	0.25	0.20	0.28
	(0.22)	(0.28)	(0.22)	(0.16)	(0.23)
Alumni of Student's College	0.21	0.25	0.27	0.15	0.21
	(0.41)	(0.44)	(0.44)	(0.35)	(0.41)
Any Graduate Degree	0.70	0.72	0.50	1.00	0.51
	(0.46)	(0.45)	(0.50)	(0.00)	(0.50)
Any Ivy Degree	0.16	0.07	0.16	0.19	0.15
	(0.36)	(0.26)	(0.36)	(0.39)	(0.36)
0-249 Connections	0.11	0.13	0.10	0.15	0.05
	(0.31)	(0.33)	(0.30)	(0.36)	(0.21)
250-499 Connections	0.21	0.24	0.21	0.27	0.13
	(0.41)	(0.42)	(0.41)	(0.45)	(0.33)
500+ Connections	0.64	0.59	0.64	0.54	0.78
	(0.48)	(0.49)	(0.48)	(0.50)	(0.41)
Observations	7602	970	2156	2522	1954

Note: This table reports summary statistics for the sample of professionals, overall and by professional field. Means for each professional characteristic are reported, with standard deviations in parentheses. Appendix Table A2 conducts tests of randomization based on professionals' characteristics.

Table 3: Effect of Student Gender on Response Rates and Content

	(1)	(2)	(3)	(4)
Panel A. Response Rate, Broad Question (N = 3530)				
Student Female	0.011	0.014	0.013	0.018
	(0.010)	(0.011)	(0.010)	(0.011)
	[0.101]	[0.101]	[0.101]	[0.101]
Panel B. Response Rate, Specific Question - Work/Life Balance (N = 1763)				
Student Female	0.037**	0.041***	0.040**	0.042***
	(0.015)	(0.015)	(0.016)	(0.016)
	[0.130]	[0.130]	[0.130]	[0.130]
Panel C. Response Rate, Specific Question - Competitive Culture (N = 1776)				
Student Female	0.003	0.009	0.011	0.009
	(0.015)	(0.017)	(0.017)	(0.017)
	[0.139]	[0.139]	[0.139]	[0.139]
Panel D. Response Rate, Factual Question (N = 298)				
Student Female	0.061*	0.059	0.060	0.057
	(0.032)	(0.036)	(0.039)	(0.039)
	[0.073]	[0.073]	[0.073]	[0.073]
Panel E. Broad Question, Mention of Work/Life Balance (N = 363)				
Student Female	0.087***	0.072**	0.076**	0.057*
	(0.032)	(0.032)	(0.033)	(0.033)
	[0.067]	[0.067]	[0.067]	[0.067]
Panel F. Broad Question, Mention of Workplace Culture (N = 363)				
Student Female	-0.003	-0.024	-0.024	-0.022
	(0.034)	(0.034)	(0.034)	(0.039)
	[0.128]	[0.128]	[0.128]	[0.128]
Message Time/Date	X	X	X	X
Student Profile	X	X	X	X
Student Race/Ethnicity		X	X	X
Non-Profile Student Controls			X	
Professional Controls				X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is listed in each panel title, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics and student profile characteristics. Column 2 adds controls for student race/ethnicity, column 3 adds controls for student characteristics that may be observable elsewhere online, and column 4 adds controls for professional characteristics. Each entry in the table reports the estimated coefficient on student female from a separate specification. Standard errors are clustered at the student level and are reported in parentheses. Dependent variable means for male students are in brackets.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Effect of Applicant Characteristics on Professionals' Minutes Allocated, Beliefs, and the Wedge between Minutes Allocated and Beliefs

	Applicant: Emily			Applicant: Ethan		
	(1)	(2)	(3)	(4)	(5)	(6)
	Minutes Allocated	Belief	Wedge	Minutes Allocated	Belief	Wedge
Applicant Preferences Treatment	-0.12	-0.20*	0.07	0.36***	0.84***	-0.48***
	(0.11)	(0.10)	(0.11)	(0.11)	(0.12)	(0.12)
No Children Treatment	0.07	-0.14*	0.21*	-0.18*	-0.09	-0.09
	(0.10)	(0.08)	(0.11)	(0.10)	(0.10)	(0.12)
Social Objective Treatment	0.00	-0.06	0.06			
	(0.11)	(0.10)	(0.11)			
Control Mean	2.34	2.09	0.25	2.37	2.04	0.33
p-value for Emily/Ethan control mean diff	0.76	0.58	0.47			
Observations	1454	1454	1454	1118	1118	1118

Note: This table reports the results of a regression in which the dependent variable is either the professional's minutes allocated to discussing the job's hours, the professional's belief about students' desired minutes allocated to discussing the job's hours, or the difference between minutes allocated and the belief ("wedge"). For the Emily (Ethan) specifications, the independent variables are indicator variables for the three (two) treatment arms, with the control condition the omitted category. Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Effect of Information Received on Student Career Plans

	Less Likely to Enter (binary)			Less Likely to Enter (continuous)		
	(1)	(2)	(3)	(4)	(5)	(6)
Response Mentioned W/L Balance	0.185	0.189	0.226	0.340	0.600	0.810
	(0.136)	(0.160)	(0.150)	(0.933)	(0.967)	(0.996)
Received Response to W/L Question	0.079*	0.079*	0.116	1.018**	1.008**	1.103*
	(0.043)	(0.044)	(0.078)	(0.444)	(0.443)	(0.603)
Response Mentioned Workplace Culture		-0.004	0.008		-0.264	-0.033
		(0.095)	(0.112)		(0.841)	(1.129)
Received Response to Culture Question		-0.007	-0.044		-0.922*	-1.015
		(0.071)	(0.075)		(0.496)	(0.615)
Male Mean	0.000			3.710		
Observations	73	73	73	73	73	73
Industry Controls	X	X	X	X	X	X
Student Controls	X	X	X	X	X	X
Message Controls		X	X		X	X
Professional Controls			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (2), in which the dependent variable is an indicator for whether a student is dissuaded from her preferred career path relative to the start of the study in columns 1-3, or the student rating from 1-10 of how likely they are to go into their preferred career path (we reversed the scale so that larger numbers correspond to more deterrence) in columns 4-6. The independent variables are whether the student received any information on work/life balance in her preferred career path, characteristics listed on the student's profile, and the student's preferred career path. Columns 2 and 5 include whether the student received any information on workplace culture in her preferred career path and response length. Columns 3 and 6 include all previously listed controls as well as the characteristics of the professionals. Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 6: Information Intervention: Effect of Work/Life Balance Information on Beliefs and Choices

	Panel A. Choices			
	Likelihood of attending MC workshop (pct)		Chose Large, Elite over Boutique (pct, incentivized)	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	-3.62	-8.93**	-0.89	-9.91***
	(5.35)	(3.66)	(4.66)	(2.91)
Control Mean	44.01	43.64	66.00	67.34
Observations	129	276	129	276
	Panel B. Beliefs			
	Beliefs about Average Hours		Beliefs about Part-time Availability	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	9.37***	10.31***	-2.42	-5.06**
	(2.71)	(1.72)	(4.05)	(2.46)
Control Mean	50.65	47.26	25.22	28.34
Observations	129	276	129	276

Note: This table reports the results of a regression in which the dependent variable is indicated in columns: the likelihood of attending a workshop on how to break into management consulting, the preference for a large, elite management consulting firm compared to a boutique management consulting firm, a student's beliefs about average hours worked in management consulting, and students' beliefs about the the fraction of management consultants who work part-time. Beliefs about part-time availability were incentivized through a bonus payment if the student's response was within 5 percentage points of the correct answer. The choice of which type of management consulting firm to choose was incentivized by telling students that they would receive information on the next page based on their answer. The independent variable is an indicator for whether the student is in the treatment group, that is, received information on work/life balance in management consulting. Specifications are run separately for male students (columns 1 and 3) and female students (columns 2 and 4). Robust standard errors are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

A Online Appendix Figures and Tables

Figure A1: Message Templates

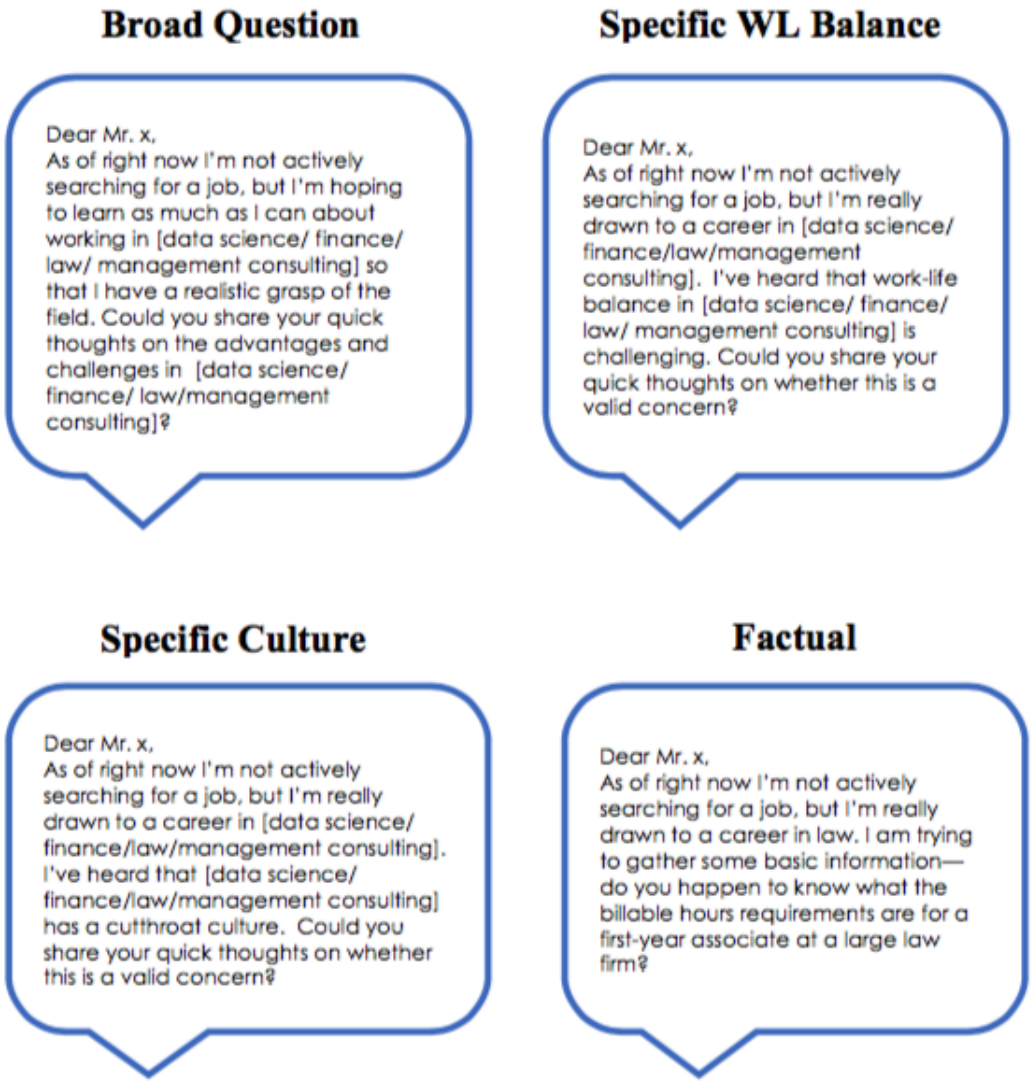
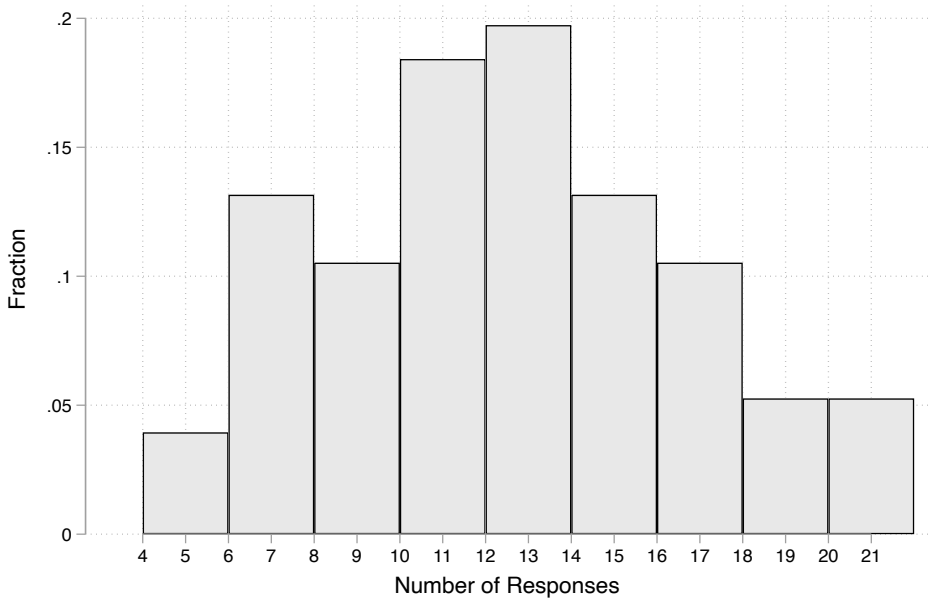
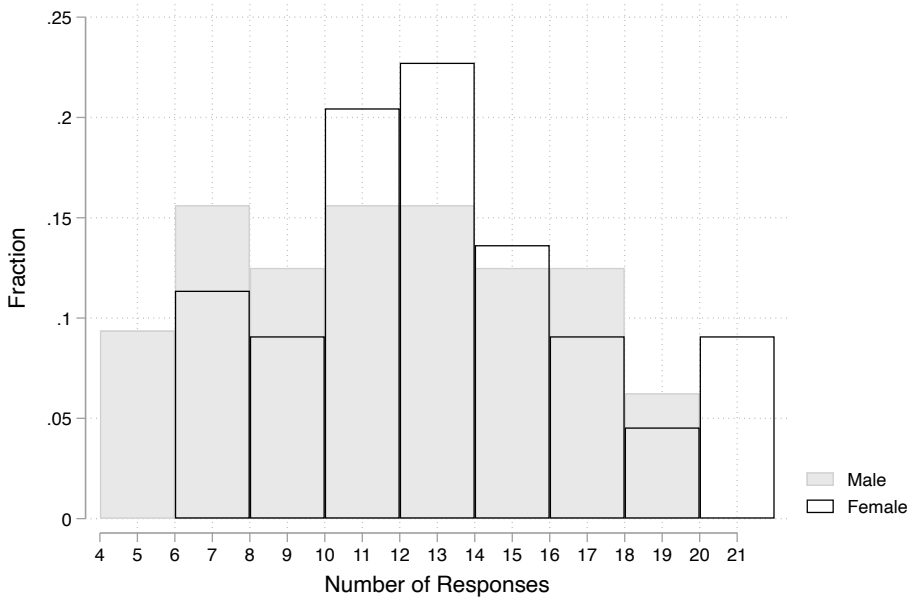


Figure A2: Distribution of Number of Responses



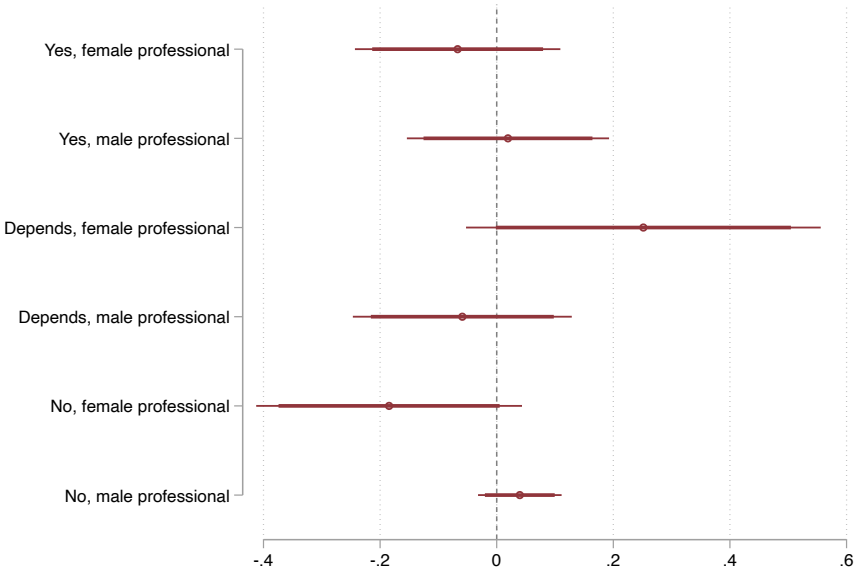
Note: This figure plots the distribution of the number of responses received across the 76 students in our analysis sample.

Figure A3: Distribution of Number of Responses, by Student Gender



Note: This figure plots the distribution of the number of responses received across the 76 students in our analysis sample, by student gender.

Figure A4: Effect of Student Gender on Answers to the Specific Work/Life Balance Question



Note: This figure reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator of whether the professional answered the specific work/life balance in the way indicated on the y-axis, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, student profile characteristics, and student race/ethnicity. Each point estimate plots the coefficient on student female, along with 90 (thin line) and 95 (thick line) percent confidence intervals, where standard errors are clustered at the student level.

Figure A5: Job Characteristics from Vignette Study

Daily tasks on the job:	**stimulating** projects that allowed for **professional development**
Career trajectory/growth:	experience at this firm is **valued** by other employers
Skill/education requirements:	entry-level position that requires a **college degree**
Compensation:	great **salary and benefits**
Comparison with other jobs in the field:	good job **relative** to other entry-level positions
Workplace culture:	**collegial** environment
Hours:	extremely **long** and **unpredictable** hours
Job stability:	Difficult to be promoted at this employer, so people typically **leave after a few years**

Note: This figure presents the job description from the vignette study.

Table A1: Outcome Summary Statistics

	All Messages	Broad	Specific - Work/Life	Specific - Culture	Factual
Response Rate	0.12	0.10	0.14	0.15	0.11
	(0.33)	(0.30)	(0.35)	(0.36)	(0.32)
Response Character Count	434.73	414.39	486.64	429.95	304.18
	(558.77)	(687.34)	(492.37)	(396.61)	(553.03)
Work/Life Balance Mentioned		0.11			
		(0.32)			
Workplace Culture Mentioned		0.12			
		(0.33)			
Valid concern?					
Yes			0.44	0.16	
			(0.50)	(0.37)	
It depends			0.49	0.54	
			(0.50)	(0.50)	
No			0.07	0.30	
			(0.26)	(0.46)	
Billable Hours Quoted					1989.00
					(77.42)
Observations	7367	3530	1763	1776	298

Note: This table reports summary statistics for the main outcomes, overall and by question type. Means for each outcome are reported, with standard deviations in parentheses.

Table A2: Tests of Randomization

	(1) All Messages	(2) Sent Messages Only
Data Science	0.000	-0.000
	(0.001)	(0.002)
Finance	0.000	-0.003
	(0.001)	(0.004)
Law	-0.000	0.008
	(0.001)	(0.008)
Mgmt Consulting	-0.001	-0.005
	(0.001)	(0.004)
Professional Female	0.004	0.004
	(0.012)	(0.012)
0-249 Connections	0.004	0.004
	(0.007)	(0.008)
250-499 Connections	0.017*	0.021**
	(0.010)	(0.010)
500+ Connections	-0.015	-0.018
	(0.012)	(0.012)
College graduation year	0.311	0.208
	(0.321)	(0.320)
Alumni of Student's College	-0.003	-0.005
	(0.010)	(0.011)
Undergraduation Selectivity Quartile 1	-0.009	-0.012
	(0.008)	(0.008)
Undergraduation Selectivity Quartile 2	0.008	0.008
	(0.009)	(0.009)
Undergraduation Selectivity Quartile 3	0.005	0.008
	(0.011)	(0.012)
Undergraduation Selectivity Quartile 4	0.007	0.006
	(0.008)	(0.008)
Any Graduate Degree	0.008	0.011
	(0.010)	(0.011)
Any Ivy Degree	0.003	0.002
	(0.008)	(0.008)
N	7602	7367

Note: This table reports the results of the estimation of a regression specification, in which the dependent variable is a professional characteristic, listed in the rows, and the independent variable is indicator for whether the student who sent the message to the professional is female. Each entry represents the estimated coefficient from a separate specification. Column 1 reports the results for all messages that were assigned to students. Column 2 reports the results for the subset of messages that students actually sent. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3: Effect of Student Gender on Response Rates, By Question Type
Including Students with Ambiguously Gendered Names

	Broad Question			Work/Life Balance Question			Competitive Culture Question			Factual Question (Law Only)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Student Female	0.011	0.015	0.016	0.040**	0.046***	0.046***	0.001	0.008	0.008	0.072**	0.092***	0.088**
	(0.010)	(0.010)	(0.010)	(0.015)	(0.016)	(0.017)	(0.014)	(0.015)	(0.015)	(0.030)	(0.035)	(0.035)
Finance	-0.051***	-0.051***	-0.051***	-0.120***	-0.120***	-0.120***	-0.092***	-0.092***	-0.092***			
	(0.016)	(0.016)	(0.016)	(0.034)	(0.034)	(0.034)	(0.030)	(0.030)	(0.030)			
Law	-0.081***	-0.082***	-0.081***	-0.134***	-0.134***	-0.134***	-0.098***	-0.099***	-0.099***			
	(0.015)	(0.015)	(0.015)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)	(0.030)			
Mgmt Consulting	-0.031*	-0.032**	-0.031**	-0.072**	-0.072**	-0.073**	-0.077***	-0.078***	-0.079***			
	(0.016)	(0.016)	(0.016)	(0.031)	(0.031)	(0.031)	(0.028)	(0.028)	(0.028)			
Male Mean	0.099			0.130			0.139			0.071		
Observations	4147	4147	4147	2063	2063	2063	2081	2081	2081	350	350	350
Message Time/Date	X	X	X	X	X	X	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X		X	X		X	X
Non-Profile Student Controls			X			X			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a message received a response, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. The sample is expanded to include the 13 students with ambiguously gendered names. Separate regressions are estimated for each question type: broad, specific - work/life balance, specific - competitive culture, and factual. Columns 1, 4, 7, and 10 report results from the baseline specification. Columns 2, 5, 8, and 11 report results from a specification that additionally includes controls for student race/ethnicity. Columns 3, 6, 9, and 12 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4: Effect of Student Gender on Response Rates, By Question Type: Robustness to Reducing Controls

	Broad Question			Work/Life Balance Question			Competitive Culture Question			Factual Question (Law Only)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Student Female	0.003	0.009	0.011	0.022	0.028*	0.037**	0.017	0.018	0.003	0.070**	0.072**	0.061*
	(0.011)	(0.010)	(0.010)	(0.017)	(0.016)	(0.015)	(0.016)	(0.015)	(0.015)	(0.033)	(0.033)	(0.032)
Finance		-0.055***	-0.055***		-0.118***	-0.118***		-0.094***	-0.094***			
		(0.017)	(0.018)		(0.037)	(0.037)		(0.032)	(0.032)			
Law		-0.084***	-0.084***		-0.135***	-0.134***		-0.106***	-0.107***			
		(0.017)	(0.017)		(0.033)	(0.032)		(0.033)	(0.033)			
Mgmt Consulting		-0.030*	-0.030*		-0.072**	-0.071**		-0.084***	-0.086***			
		(0.018)	(0.018)		(0.033)	(0.032)		(0.031)	(0.031)			
Male Mean	0.101			0.130			0.139			0.073		
Observations	3530	3530	3530	1763	1763	1763	1776	1776	1776	298	298	298
Message Time/Date		X	X		X	X		X	X		X	X
Student Profile			X			X			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a message received a response, and the independent variable is an indicator for whether the student who sent the message is female. Column 1 includes no other controls. Column 2 adds controls for the professional's field, message time/date characteristics. Column 3 adds controls for student profile characteristics and is the baseline specification in Table 3. Separate regressions are estimated for each question type: broad, specific - work/life balance, specific - competitive culture, and factual. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A5: Effect of Student Gender on Response Rates, By Question Type
Restricting to Students with No Online Presence

	Broad Question			Work/Life Balance Question			Competitive Culture Question			Factual Question (Law Only)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Student Female	0.031	0.043**	0.040*	0.048*	0.066**	0.087**	0.051	0.045	0.027	0.105***	0.077***	0.062***
	(0.018)	(0.020)	(0.023)	(0.027)	(0.030)	(0.040)	(0.040)	(0.044)	(0.050)	(0.035)	(0.016)	(0.021)
Finance	-0.113***	-0.114***	-0.114***	-0.056	-0.055	-0.053	-0.070	-0.070	-0.070			
	(0.036)	(0.036)	(0.036)	(0.062)	(0.062)	(0.062)	(0.072)	(0.072)	(0.072)			
Law	-0.119***	-0.119***	-0.119***	-0.115*	-0.115*	-0.117*	-0.085	-0.085	-0.082			
	(0.039)	(0.039)	(0.039)	(0.057)	(0.058)	(0.058)	(0.065)	(0.065)	(0.064)			
Mgmt Consulting	-0.074*	-0.076*	-0.076*	-0.058	-0.063	-0.068	-0.053	-0.052	-0.047			
	(0.041)	(0.041)	(0.042)	(0.061)	(0.059)	(0.060)	(0.053)	(0.052)	(0.052)			
Male Mean	0.095			0.115			0.125			0.023		
Observations	1030	1030	1030	511	511	511	520	520	520	87	87	87
Message Time/Date	X	X	X	X	X	X	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X		X	X		X	X
Non-Profile Student Controls			X			X			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a message received a response, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. The sample is restricted to messages sent by students who do not have an online presence. Separate regressions are estimated for each question type: broad, specific - work/life balance, specific - competitive culture, and factual. Columns 1, 4, 7, and 10 report results from the baseline specification. Columns 2, 5, 8, and 11 report results from a specification that additionally includes controls for student race/ethnicity. Columns 3, 6, 9, and 12 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A6: Effects of Student Gender on Information Received: Re-weighted to be Representative of Student Population by Race/Ethnicity and Gender

	Broad Q		Work/Life Balance Q		Competitive Culture Q		Factual (Law Only) Q		Mention W/L		Mention Culture	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Main	Weighted	Main	Weighted	Main	Weighted	Main	Weighted	Main	Weighted	Main	Weighted
Student Female	0.011	0.015	0.037**	0.038**	0.003	0.007	0.061*	0.081**	0.087***	0.077***	-0.003	-0.023
	(0.010)	(0.010)	(0.015)	(0.015)	(0.015)	(0.016)	(0.032)	(0.034)	(0.032)	(0.029)	(0.034)	(0.031)
Finance	-0.055***	-0.049**	-0.118***	-0.126***	-0.094***	-0.100***			0.013	-0.003	-0.127**	-0.128**
	(0.018)	(0.020)	(0.037)	(0.037)	(0.032)	(0.033)			(0.028)	(0.026)	(0.055)	(0.056)
Law	-0.084***	-0.086***	-0.134***	-0.131***	-0.107***	-0.106***			0.062	0.048	-0.172***	-0.160***
	(0.017)	(0.020)	(0.032)	(0.035)	(0.033)	(0.036)			(0.043)	(0.041)	(0.053)	(0.049)
Mgmt Consulting	-0.030*	-0.031	-0.071**	-0.071**	-0.086***	-0.081**			0.208***	0.183***	-0.074	-0.069
	(0.018)	(0.021)	(0.032)	(0.034)	(0.031)	(0.035)			(0.051)	(0.049)	(0.060)	(0.061)
Male Mean	0.101		0.130		0.139		0.073		0.067		0.128	
Observations	3530	3530	1763	1763	1776	1776	298	298	363	363	363	363
Message Time/Date	X	X	X	X	X	X	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X	X	X	X	X	X	X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a message received a response or whether the response mentions work/life balance or workplace culture, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Separate regressions are estimated for each question type and for mentions of work/life balance and workplace culture in responses to the broad question. Odd columns reproduce results from Table 3. Even columns reweight the specifications so that the race/ethnicity and gender distribution is the same as the undergraduate population at the university where we conducted the study. Robust standard errors, clustered by student, are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A7: Effect of Student Gender on Response Rates, By Question Type: Logit Specification

	Broad Question			Work/Life Balance Question			Competitive Culture Question			Factual Question (Law Only)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Student Female	0.012	0.014	0.014	0.037**	0.041**	0.041**	0.004	0.010	0.011	0.070*	0.061	0.060
	(0.011)	(0.011)	(0.010)	(0.016)	(0.017)	(0.017)	(0.016)	(0.017)	(0.017)	(0.037)	(0.042)	(0.041)
Male Mean	0.101			0.131			0.139			0.073		
Observations	3520	3520	3520	1749	1749	1749	1766	1766	1766	298	298	298
Message Time/Date	X	X	X	X	X	X	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X		X	X		X	X
Non-Profile Student Controls			X			X			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1) using logit, in which the dependent variable is an indicator for whether a message received a response, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Separate regressions are estimated for each question type: broad, specific - work/life balance, specific - competitive culture, and factual. Average marginal effects are reported. Columns 1, 4, 7, and 10 report results from the baseline specification. Columns 2, 5, 8, and 11 report results from a specification that additionally includes controls for student race/ethnicity. Columns 3, 6, 9, and 12 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A8: Effect of Student Gender on Response Rates, By Question Type: Probit Specification

	Broad Question			Work/Life Balance Question			Competitive Culture Question			Factual Question (Law Only)		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Student Female	0.012	0.014	0.014	0.039**	0.043***	0.042**	0.004	0.009	0.010	0.073**	0.067*	0.071*
	(0.011)	(0.011)	(0.010)	(0.015)	(0.016)	(0.016)	(0.015)	(0.017)	(0.017)	(0.036)	(0.040)	(0.041)
Male Mean	0.101			0.131			0.139			0.073		
Observations	3520	3520	3520	1749	1749	1749	1766	1766	1766	298	298	298
Message Time/Date	X	X	X	X	X	X	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X		X	X		X	X
Non-Profile Student Controls			X			X			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1) using probit, in which the dependent variable is an indicator for whether a message received a response, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Separate regressions are estimated for each question type: broad, specific - work/life balance, specific - competitive culture, and factual. Average marginal effects are reported. Columns 1, 4, 7, and 10 report results from the baseline specification. Columns 2, 5, 8, and 11 report results from a specification that additionally includes controls for student race/ethnicity. Columns 3, 6, 9, and 12 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A9: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture Accounting for Non-response

	Work/Life Balance Mention			Workplace Culture Mention		
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.009***	0.008**	0.008**	0.001	-0.002	-0.002
	(0.003)	(0.003)	(0.004)	(0.003)	(0.003)	(0.003)
Finance	-0.001	-0.001	-0.001	-0.023***	-0.023***	-0.023***
	(0.003)	(0.003)	(0.003)	(0.008)	(0.008)	(0.008)
Law	0.002	0.002	0.002	-0.028***	-0.028***	-0.028***
	(0.004)	(0.004)	(0.004)	(0.008)	(0.008)	(0.008)
Mgmt Consulting	0.025***	0.025***	0.025***	-0.014	-0.014	-0.014
	(0.006)	(0.006)	(0.006)	(0.009)	(0.009)	(0.009)
Male Mean	0.007			0.013		
Observations	3530	3530	3530	3530	3530	3530
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X
Non-Profile Student Controls			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response mentions work/life balance (columns 1–3) or workplace culture (columns 4–6), and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Messages that do not receive a response are coded as not mentioning these career attributes. Columns 1 and 3 report results from the baseline specification, which includes controls for student race/ethnicity. Columns 2 and 4 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A10: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture
Including Students with Ambiguously Gendered Names

	Work/Life Balance Mention			Workplace Culture Mention		
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.074***	0.069**	0.068**	-0.005	-0.018	-0.021
	(0.028)	(0.028)	(0.028)	(0.032)	(0.032)	(0.033)
Finance	0.015	0.014	0.010	-0.096*	-0.097*	-0.098**
	(0.026)	(0.026)	(0.026)	(0.049)	(0.049)	(0.049)
Law	0.076*	0.074*	0.070*	-0.128**	-0.128**	-0.131**
	(0.039)	(0.039)	(0.039)	(0.051)	(0.051)	(0.051)
Mgmt Consulting	0.201***	0.200***	0.202***	-0.038	-0.040	-0.041
	(0.045)	(0.045)	(0.046)	(0.056)	(0.056)	(0.056)
Male Mean	0.066			0.126		
Observations	420	420	420	420	420	420
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X
Non-Profile Student Controls			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response mentions work/life balance (columns 1–3) or workplace culture (columns 4–6), and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. The sample is expanded to include the 13 students with ambiguously gendered names. Columns 1 and 3 report results from the baseline specification, which includes controls for student race/ethnicity. Columns 2 and 4 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A11: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture: Robustness to Reducing Controls

	Work/Life Balance Mention			Workplace Culture Mention		
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.073**	0.068**	0.087***	-0.006	-0.017	-0.003
	(0.031)	(0.028)	(0.032)	(0.036)	(0.033)	(0.034)
Finance		0.013	0.013		-0.125**	-0.127**
		(0.027)	(0.028)		(0.055)	(0.055)
Law		0.068	0.062		-0.165***	-0.172***
		(0.044)	(0.043)		(0.054)	(0.053)
Mgmt Consulting		0.204***	0.208***		-0.072	-0.074
		(0.050)	(0.051)		(0.060)	(0.060)
Male Mean	0.067			0.128		
Observations	363	363	363	363	363	363
Message Time/Date		X	X		X	X
Student Profile			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response mentions work/life balance (columns 1-3) or workplace culture (columns 4-6), and the independent variable is an indicator for whether the student who sent the message is female. Columns 1 and 3 report results from a regression with no other controls. Columns 2 and 5 add controls for the professional's field, message time/date characteristics. Columns 3 and 6 add controls for student profile characteristics and is the baseline specification in Table 3. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A12: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture
Restricting to Students with No Online Presence

	Work/Life Balance Mention		Workplace Culture Mention	
	(1)	(2)	(3)	(4)
Student Female	0.132***	0.138***	0.034	0.061
	(0.026)	(0.030)	(0.049)	(0.047)
Finance	-0.023	-0.027	-0.134	-0.134
	(0.055)	(0.056)	(0.107)	(0.109)
Law	-0.030	-0.040	-0.266*	-0.263*
	(0.074)	(0.077)	(0.135)	(0.140)
Mgmt Consulting	0.056	0.054	-0.111	-0.115
	(0.087)	(0.087)	(0.118)	(0.121)
Male Mean	0.061		0.102	
Observations	110	110	110	110
Message Time/Date	X	X	X	X
Student Profile	X	X	X	X
Student Race/Ethnicity	X	X	X	X
Non-Profile Student Controls		X		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response mentions work/life balance (columns 1–2) or workplace culture (columns 3–4), and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. The sample is restricted to messages sent by students who do not have an online presence. Columns 1 and 3 report results from the baseline specification, which includes controls for student race/ethnicity. Columns 2 and 4 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A13: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture: Logit Specification

	Work/Life Balance Mention			Workplace Culture Mention		
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.095***	0.074**	0.069**	0.003	-0.026	-0.026
	(0.035)	(0.034)	(0.033)	(0.033)	(0.034)	(0.034)
Male Mean	0.067			0.128		
Observations	363	363	363	363	363	363
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X
Non-Profile Student Controls			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1) using logit, in which the dependent variable is an indicator for whether a response mentions work/life balance (columns 1-3) or workplace culture (columns 4-6), and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Average marginal effects are reported. Columns 1 and 4 report results from the baseline specification. Columns 2 and 5 report results from a specification that additionally includes controls for student race/ethnicity. Columns 3 and 6 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A14: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture: Probit Specification

	Work/Life Balance Mention			Workplace Culture Mention		
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.096***	0.079**	0.079**	-0.001	-0.031	-0.030
	(0.032)	(0.032)	(0.031)	(0.032)	(0.033)	(0.033)
Male Mean	0.067			0.128		
Observations	363	363	363	363	363	363
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity		X	X		X	X
Non-Profile Student Controls			X			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1) using probit, in which the dependent variable is an indicator for whether a response mentions work/life balance (columns 1-3) or workplace culture (columns 4-6), and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Average marginal effects are reported. Columns 1 and 4 report results from the baseline specification. Columns 2 and 5 report results from a specification that additionally includes controls for student race/ethnicity. Columns 3 and 6 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A15: Gender Differences in Composition of Professionals who Respond

	(1) Female Student Mean	(2) Male Student Mean	(3) M-F Difference	(4) p-value
Data Science	0.206	0.181	-0.024	0.562
Finance	0.271	0.282	0.011	0.821
Law	0.196	0.201	0.005	0.905
Mgmt Consulting	0.327	0.336	0.008	0.867
Female	0.248	0.255	0.007	0.874
College Graduation Year	2006.016	2007.037	1.021	0.417
College Selectivity - Admit Rate	0.274	0.269	-0.004	0.875
Alumni of Student's College	0.308	0.369	0.061	0.232
Any Graduate Degree	0.645	0.691	0.046	0.356
Any Ivy Degree	0.107	0.121	0.013	0.697
0-249 Connections	0.047	0.067	0.020	0.418
250-499 Connections	0.159	0.168	0.009	0.822
500+ Connections	0.757	0.732	-0.025	0.587
Observations	214	149	363	363

Note: This table reports the characteristics of professionals who respond to the broad questions, separately for male and female students.

Table A16: Heterogeneity by Professional Attributes

(1) Male	(2) Female	(3) Grad<2010	(4) Grad>=2010	(5) No Ivy	(6) Ivy	(7) Not Alum	(8) Alum	(9) Data Science	(10) Finance	(11) Law	(12) Mgmt Consulting
Panel A. Response Rate, Broad Question											
0.015	0.006	0.009	-0.002	0.010	0.012	0.015	0.008	0.025	0.014	0.009	0.009
(0.011)	(0.019)	(0.010)	(0.024)	(0.014)	(0.019)	(0.012)	(0.023)	(0.032)	(0.020)	(0.015)	(0.024)
[0.114]	[0.076]	[0.082]	[0.145]	[0.114]	[0.075]	[0.087]	[0.160]	[0.139]	[0.096]	[0.068]	[0.124]
Panel B. Response Rate, Specific Question - Work/Life Balance											
0.041*	0.045*	0.028	0.085**	0.051***	0.036	0.038**	0.072*	-0.027	0.069*	0.034	0.055*
(0.021)	(0.025)	(0.018)	(0.033)	(0.019)	(0.041)	(0.018)	(0.041)	(0.061)	(0.037)	(0.026)	(0.028)
[0.148]	[0.094]	[0.105]	[0.165]	[0.132]	[0.129]	[0.115]	[0.182]	[0.245]	[0.085]	[0.104]	[0.150]
Panel C. Response Rate, Specific Question - Competitive Culture											
0.019	-0.016	-0.012	0.011	0.003	-0.034	-0.016	0.022	0.008	0.046	0.008	-0.023
(0.023)	(0.031)	(0.022)	(0.039)	(0.019)	(0.057)	(0.024)	(0.038)	(0.061)	(0.031)	(0.032)	(0.040)
[0.154]	[0.108]	[0.125]	[0.170]	[0.145]	[0.155]	[0.125]	[0.223]	[0.242]	[0.109]	[0.115]	[0.146]
Panel D. Broad Question, Mention of Work/Life Balance											
0.064	0.140**	0.098**	0.043	0.053	0.338**	0.027	0.135***	0.037	0.084*	0.133*	0.064
(0.040)	(0.066)	(0.044)	(0.052)	(0.036)	(0.132)	(0.045)	(0.050)	(0.026)	(0.044)	(0.073)	(0.099)
[0.063]	[0.079]	[0.050]	[0.066]	[0.083]	[0.000]	[0.107]	[0.018]	[0.000]	[0.000]	[0.033]	[0.180]
Panel E. Broad Question, Mention of Workplace Culture											
-0.021	0.012	-0.028	0.090	-0.007	0.125	-0.044	0.065	-0.062	-0.093	-0.066	0.067
(0.046)	(0.089)	(0.052)	(0.061)	(0.040)	(0.189)	(0.053)	(0.056)	(0.136)	(0.064)	(0.062)	(0.087)
[0.126]	[0.132]	[0.100]	[0.092]	[0.116]	[0.056]	[0.155]	[0.036]	[0.185]	[0.119]	[0.100]	[0.120]

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is listed in each panel title, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, student profile characteristics, and student race/ethnicity. The column titles list the subsample used for estimation. Each entry in the table reports the estimated coefficient on student female from a separate specification. Standard errors are clustered at the student level and are reported in parentheses. Dependent variable means for male students are in brackets.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A17: Effect of Student Gender on Mentions of Specific Work/Life Balance Issues

	Duration Typical Workweek		Work Schedule Flexibility		Extent of Travel/Work from Home	
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.054*	0.057*	0.023	0.026	0.015	0.016
	(0.030)	(0.030)	(0.022)	(0.023)	(0.022)	(0.023)
Finance	0.026	0.022	0.021	0.018	0.001	0.001
	(0.025)	(0.024)	(0.013)	(0.015)	(0.018)	(0.018)
Law	0.062	0.057	0.043*	0.036*	-0.004	-0.004
	(0.040)	(0.038)	(0.022)	(0.021)	(0.017)	(0.017)
Mgmt Consulting	0.142***	0.143***	0.089***	0.089***	0.170***	0.171***
	(0.042)	(0.042)	(0.029)	(0.030)	(0.045)	(0.044)
Male Mean	0.047		0.027		0.034	
Observations	363	363	363	363	363	363
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity	X	X	X	X	X	X
Non-Profile Student Controls		X		X		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response mentions a specific work/life balance issue, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Columns 1, 3, and 5 report results from the preferred specification, which also controls for student/race ethnicity. Columns 2, 4, and 6 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A18: Gender Differences in Response Tone (Student Ratings)

	Student more concerned about work/life balance		Student more concerned about workplace culture	
	(1)	(2)	(3)	(4)
	Broad	Work/Life Balance	Broad	Competitive Culture
Student Female	0.021	-0.049	-0.023	-0.013
	(0.026)	(0.053)	(0.014)	(0.033)
Finance	-0.020	0.310***	-0.088***	0.097*
	(0.024)	(0.053)	(0.024)	(0.058)
Law	0.048	0.368***	-0.077***	0.107**
	(0.034)	(0.061)	(0.025)	(0.053)
Mgmt Consulting	0.161***	0.496***	-0.056*	-0.040
	(0.042)	(0.042)	(0.029)	(0.051)
Male Mean	0.114	0.523	0.087	0.293
Observations	3717	2626	3717	2682
Message Time/Date	X	X	X	X
Student Profile	X	X	X	X
Student Race/Ethnicity	X	X	X	X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response would make a typical college student more concerned about work/life balance or workplace culture, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, student profile characteristics, and student race/ethnicity. The question type is listed in each column title. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A19: Gender Differences in Response Length

	Broad		Work/Life Balance		Competitive Culture		Factual (Law Only)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Character Count	Log(Count)	Character Count	Log(Count)	Character Count	Log(Count)	Character Count	Log(Count)
Student Female	-8.747	-0.125	10.755	0.094	41.875	0.007	-115.259	-0.323
	(39.126)	(0.107)	(52.191)	(0.156)	(48.090)	(0.113)	(102.349)	(0.597)
Finance	-261.644***	-0.595***	-20.247	0.020	-55.515	-0.171		
	(74.237)	(0.180)	(54.440)	(0.153)	(66.544)	(0.152)		
Law	-210.993***	-0.381**	18.193	0.039	26.743	0.027		
	(78.255)	(0.176)	(57.283)	(0.154)	(70.103)	(0.164)		
Mgmt Consulting	-163.236**	-0.320*	134.036**	0.389***	14.302	0.092		
	(76.321)	(0.177)	(59.732)	(0.143)	(66.023)	(0.141)		
Male Mean	359.547	5.402	414.608	5.691	367.980	5.661	259.889	5.170
Observations	359	359	249	249	262	262	33	33
Message Time/Date	X	X	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X	X	X
Student Race/Ethnicity	X	X	X	X	X	X	X	X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is the length of the response, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, student profile characteristics, and student race/ethnicity. Columns 1, 3, 5, and 7 analyze the response's character count, while columns 2, 4, 6, and 8 analyze the natural logarithm of the character count. Responses to each question are analyzed separately. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A20: Effect of Student Gender on Mentions of Competitive Culture

	Competitive Culture Mention		
	(1)	(2)	(3)
Student Female	0.020	0.016	0.016
	(0.016)	(0.016)	(0.016)
Finance	0.038**	0.039**	0.040**
	(0.019)	(0.019)	(0.019)
Law	-0.005	-0.007	-0.009
	(0.006)	(0.008)	(0.008)
Mgmt Consulting	0.023	0.023*	0.019
	(0.014)	(0.013)	(0.012)
Male Mean	0.007	0.007	0.007
Observations	363	363	363
Message Time/Date	X	X	X
Student Profile	X	X	X
Student Race/Ethnicity		X	X
Non-Profile Student Controls			X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response mentions competitive culture, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Messages that do not receive a response are coded as not mentioning these career attributes. Column 1 reports results from the baseline specification. Column 2 includes controls for student race/ethnicity and 3 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A21: Role of Professional Composition in Gender Differences in Response Rates

	Work/Life Balance Question		Competitive Culture Question		Factual Question (Law Only)	
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.041***	0.042***	0.009	0.009	0.059	0.056
	(0.015)	(0.016)	(0.017)	(0.017)	(0.036)	(0.039)
Finance	-0.118***	-0.117***	-0.094***	-0.072**		
	(0.037)	(0.037)	(0.032)	(0.033)		
Law	-0.134***	-0.100**	-0.107***	-0.070*		
	(0.033)	(0.039)	(0.033)	(0.038)		
Mgmt Consulting	-0.071**	-0.078**	-0.087***	-0.075**		
	(0.032)	(0.034)	(0.031)	(0.032)		
Observations	1763	1763	1776	1776	298	298
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity	X	X	X	X	X	X
Professional		X		X		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a message received a response, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, student profile characteristics, and student race/ethnicity. Separate regressions are estimated for each question type: broad, specific - work/life balance, specific - competitive culture, and factual. Columns 1, 3, and 5 report results from the preferred specification. Columns 2, 4, and 6 report results from a specification that additionally includes controls for professional characteristics. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A22: Gender Differences in Responses to "Is work/life balance a concern?"

	Yes		It depends		No	
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.002	-0.008	-0.023	-0.015	0.020	0.023
	(0.070)	(0.074)	(0.076)	(0.078)	(0.034)	(0.035)
Finance	0.217**	0.215**	-0.030	-0.034	-0.186***	-0.181***
	(0.088)	(0.087)	(0.108)	(0.107)	(0.069)	(0.068)
Law	0.315***	0.314***	-0.076	-0.063	-0.240***	-0.251***
	(0.091)	(0.093)	(0.111)	(0.115)	(0.065)	(0.067)
Mgmt Consulting	0.674***	0.672***	-0.427***	-0.422***	-0.247***	-0.250***
	(0.062)	(0.064)	(0.089)	(0.091)	(0.060)	(0.061)
Male Mean	0.427		0.512		0.061	
Observations	211	211	211	211	211	211
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity	X	X	X	X	X	X
Non-Profile Student Controls		X		X		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response to the specific work/life balance question is one of the categories in the column titles, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Columns 1, 3, and 5 report results from the preferred specification, which also controls for student/race ethnicity. Columns 2, 4, and 6 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A23: Gender Differences in Responses to "Is cutthroat culture a concern?"

	Yes		It depends		No	
	(1)	(2)	(3)	(4)	(5)	(6)
Student Female	0.025	0.024	0.007	0.010	-0.032	-0.033
	(0.049)	(0.050)	(0.066)	(0.066)	(0.070)	(0.068)
Finance	0.083	0.082	0.185	0.205*	-0.267***	-0.287***
	(0.079)	(0.081)	(0.112)	(0.115)	(0.097)	(0.100)
Law	0.135*	0.133*	0.092	0.098	-0.227**	-0.231**
	(0.079)	(0.078)	(0.111)	(0.109)	(0.088)	(0.088)
Mgmt Consulting	-0.030	-0.035	-0.053	-0.037	0.083	0.071
	(0.056)	(0.055)	(0.105)	(0.106)	(0.109)	(0.110)
Male Mean	0.134		0.512		0.354	
Observations	215	215	215	215	215	215
Message Time/Date	X	X	X	X	X	X
Student Profile	X	X	X	X	X	X
Student Race/Ethnicity	X	X	X	X	X	X
Non-Profile Student Controls		X		X		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is an indicator for whether a response to the specific competitive culture question is one of the categories in the column titles, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. Columns 1, 3, and 5 report results from the preferred specification, which also controls for student/race ethnicity. Columns 2, 4, and 6 additionally include controls for student characteristics that may be observable elsewhere online. The omitted field is data science. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A24: Gender Differences in Hours Quoted in Response to Factual Question

	(1)	(2)
Student Female	81.61	70.74
	(73.97)	(68.69)
Male Mean	1937.50	
Observations	25	25
Message Time/Date	X	X
Student Profile	X	X
Student Race/Ethnicity		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (1), in which the dependent variable is the hours quoted in responses to the factual question, and the independent variables are an indicator for whether the student who sent the message is female, the professional's field, message time/date characteristics, and student profile characteristics. We only analyze only responses that include a numeric value or range. Column 1 reports results from the specification without controls for student/race ethnicity. Column 2 includes controls for student race/ethnicity. Standard errors are clustered at the student level and are reported in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A25: Effect of Applicant Characteristics on Professionals' Minutes Allocated, Beliefs, and the Wedge between Minutes Allocated and Beliefs: Female Professionals

	Applicant: Emily			Applicant: Ethan		
	(1)	(2)	(3)	(4)	(5)	(6)
	Minutes Allocated	Belief	Wedge	Minutes Allocated	Belief	Wedge
Applicant Preferences Treatment	-0.17	-0.16	-0.01	0.53***	0.91***	-0.38**
	(0.16)	(0.15)	(0.16)	(0.17)	(0.17)	(0.18)
No Children Treatment	0.10	-0.16	0.26*	-0.11	-0.15	0.04
	(0.14)	(0.12)	(0.15)	(0.15)	(0.15)	(0.18)
Social Objective Treatment	0.10	-0.09	0.19			
	(0.15)	(0.13)	(0.15)			
Control Mean	2.36	2.16	0.19	2.47	2.18	0.29
p-value for Emily/Ethan control mean diff	0.44	0.92	0.55			
Observations	705	705	705	537	537	537

Note: This table reports the results of a regression in which the dependent variable is either the professional's minutes allocated to discussing hours, the professional's belief about students' desired minutes allocated to discussing hours, or the difference between minutes allocated and the belief ("wedge"). For the Emily (Ethan) specifications, the independent variables are indicator variables for the three (two) treatment arms, with the control condition the omitted category. Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A26: Effect of Applicant Characteristics on Professionals' Minutes Allocated, Beliefs, and the Wedge between Minutes Allocated and Beliefs: Male Professionals

	Applicant: Emily			Applicant: Ethan		
	(1)	(2)	(3)	(4)	(5)	(6)
	Minutes Allocated	Belief	Wedge	Minutes Allocated	Belief	Wedge
Applicant Preferences Treatment	-0.08	-0.22	0.14	0.21	0.77***	-0.56***
	(0.16)	(0.15)	(0.16)	(0.15)	(0.16)	(0.15)
No Children Treatment	0.05	-0.15	0.21	-0.23*	0.01	-0.24
	(0.15)	(0.12)	(0.16)	(0.14)	(0.13)	(0.16)
Social Objective Treatment	-0.06	-0.08	0.02			
	(0.16)	(0.15)	(0.16)			
Control Mean	2.29	2.03	0.26	2.26	1.91	0.35
p-value for Emily/Ethan control mean diff	0.79	0.30	0.55			
Observations	720	720	720	561	561	561

Note: This table reports the results of a regression in which the dependent variable is either the professional's minutes allocated to discussing hours, the professional's belief about students' desired minutes allocated to discussing hours, or the difference between minutes allocated and the belief ("wedge"). For the Emily (Ethan) specifications, the independent variables are indicator variables for the three (two) treatment arms, with the control condition the omitted category. Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A27: Effect of Information Received on Career Plans: Is the Student Less Likely to Enter Preferred Career Path? By Student Gender

	Male Students		Female Students	
	(1)	(2)	(3)	(4)
Response Mentioned Work/Life Balance	-0.261	0.465	0.758	1.213
	(1.471)	(1.682)	(1.043)	(1.242)
Received Response to Specific Work/Life Question	-0.311	-0.420	1.430*	1.404*
	(0.754)	(0.763)	(0.766)	(0.796)
Response Mentioned Workplace Culture		-0.675		-0.198
		(0.906)		(1.857)
Received Response to Specific Culture Question		0.237		-1.364*
		(0.852)		(0.759)
Mean	3.710		3.857	
Observations	31	31	42	42
Industry Controls	X	X	X	X
Student Controls	X	X	X	X
Message Controls		X		X

Note: This table reports the results of the estimation of the regression specification outlined in Equation (2), in which the dependent variable is the student rating from 1-10 of how likely they are to go into their preferred career path (we reversed the scale so that larger numbers correspond to more deterrence), and the independent variables are whether the student received any information on work/life balance in her preferred career path, characteristics listed on the student's profile, and the student's preferred career path. Columns 1 and 2 analyze male students and columns 3 and 4 analyze female students. Columns 2 and 4 include all previously listed controls as well as the response length. We note that we cannot estimate the binary specification separately for male students because no male students are deterred from their preferred career. Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A28: Information Intervention: Effect of Work/Life Balance Information on Beliefs and Choices, Including Student Demographic Controls

	Panel A. Choices			
	Likelihood of attending MC workshop (pct)		Chose Large, Elite over Boutique (pct, incentivized)	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	-6.44	-7.78**	-1.27	-9.89***
	(5.05)	(3.31)	(4.76)	(2.86)
Control Mean	44.01	43.64	66.00	67.34
Observations	129	276	129	276
	Panel B. Beliefs			
	Beliefs about Average Hours		Beliefs about Part-time Availability	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	9.60***	10.46***	-2.95	-5.33**
	(2.69)	(1.64)	(4.17)	(2.46)
Control Mean	50.65	47.26	25.22	28.34
Observations	129	276	129	276

Note: This table reports the results of a regression in which the dependent variable is indicated in columns: the likelihood of attending a workshop on how to break into management consulting, the preference for a large, elite management consulting firm compared to a boutique management consulting firm, a student's beliefs about average hours worked in management consulting, and students' beliefs about the the fraction of management consultants who work part-time. Beliefs about part-time availability were incentivized through a bonus payment if the student's response was within 5 percentage points of the correct answer. The choice of which type of management consulting firm to choose was incentivized by telling students that they would receive information on the next page based on their answer. The independent variable is an indicator for whether the student is in the treatment group, that is, received information on work/life balance in management consulting. The specification also includes controls for student graduation year and major category. Specifications are run separately male students (columns 1 and 3) and female students (columns 2 and 4). Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A29: Information Intervention: Effect of Work/Life Balance Information on Beliefs and Choices, Conditioning on Respondents who Passed the Attention Check

	Panel A. Choices			
	Likelihood of attending MC workshop (pct)		Chose Large, Elite over Boutique (pct, incentivized)	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	-1.01	-12.73**	-2.35	-12.29***
	(8.45)	(5.28)	(6.36)	(4.01)
Control Mean	39.37	45.82	66.83	65.91
Observations	55	147	55	147
	Panel B. Beliefs			
	Beliefs about Average Hours		Beliefs about Part-time Availability	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	12.64***	10.83***	-2.74	-1.34
	(3.22)	(2.49)	(6.48)	(3.33)
Control Mean	49.00	48.27	24.70	28.26
Observations	55	147	55	147

Note: This table reports the results of a regression in which the dependent variable is indicated in columns: the likelihood of attending a workshop on how to break into management consulting, the preference for a large, elite management consulting firm compared to a boutique management consulting firm, a student's beliefs about average hours worked in management consulting, and students' beliefs about the the fraction of management consultants who work part-time. Beliefs about part-time availability were incentivized through a bonus payment if the student's response was within 5 percentage points of the correct answer. The choice of which type of management consulting firm to choose was incentivized by telling students that they would receive information on the next page based on their answer. The independent variable is an indicator for whether the student is in the treatment group, that is, received information on work/life balance in management consulting. Specifications are run separately for male students who passed the survey attention check (columns 1 and 3), and female students who passed the survey attention check (columns 2 and 4). Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A30: Information Intervention: Effect of Work/Life Balance Information on Beliefs and Choices, Restricted to Control Group with Padding

	Panel A. Choices			
	Likelihood of attending MC workshop (pct)		Chose Large, Elite over Boutique (pct, incentivized)	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	-5.15	-8.39*	-2.81	-10.16***
	(7.59)	(4.47)	(6.53)	(3.38)
Control Mean	45.54	43.11	67.92	67.59
Observations	87	215	87	215
	Panel B. Beliefs			
	Beliefs about Average Hours		Beliefs about Part-time Availability	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	5.25	9.29***	-3.12	-8.31***
	(3.80)	(2.11)	(5.52)	(3.08)
Control Mean	54.77	48.28	25.92	31.59
Observations	87	215	87	215

Note: This table reports the results of a regression in which the dependent variable is indicated in columns: the likelihood of attending a workshop on how to break into management consulting, the preference for a large, elite management consulting firm compared to a boutique management consulting firm, a student's beliefs about average hours worked in management consulting, and students' beliefs about the the fraction of management consultants who work part-time. Beliefs about part-time availability were incentivized through a bonus payment if the student's response was within 5 percentage points of the correct answer. The choice of which type of management consulting firm to choose was incentivized by telling students that they would receive information on the next page based on their answer. The independent variable is an indicator for whether the student is in the treatment group, that is, received information on work/life balance in management consulting. The control group is restricted to students who were randomized to receive additional content ("padding") to equalize the length of the survey for treatment and control students. Specifications are run separately male students (columns 1 and 3) and female students (columns 2 and 4). Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A31: Information Intervention: Effect of Work/Life Balance Information on Choices, Secondary Outcomes

	Panel A. All Respondents			
	Interested in Attending MC Workshop (binary)		Completed Application (binary)	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	-8.94	-4.35	-9.11	0.17
	(6.68)	(5.23)	(6.43)	(4.76)
Control Mean	22.06	27.21	20.59	19.12
Observations	129	276	129	276
	Panel B. Respondents who Passed Attention Check			
	Interested in Attending MC Workshop (binary)		Completed Application (binary)	
	(1)	(2)	(3)	(4)
	Male	Female	Male	Female
Received W/L Balance Info	0.00	-18.41**	0.00	-8.47
	(11.03)	(7.58)	(11.03)	(6.88)
Control Mean	20.00	39.39	20.00	25.76
Observations	55	147	55	147

Note: This table reports the results of a regression in which the dependent variable is indicated in columns: interest in attending the management consulting workshop (binary) and completed the application for the workshop (binary). The independent variable is an indicator for whether the student is in the treatment group, that is, received information on work/life balance in management consulting. Specifications are run separately male students (columns 1 and 3) and female students (columns 2 and 4). Robust standard errors are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

B Online Appendix: Additional Details on Experimental Design

In this Appendix, we provide additional details on the experimental design, including the choice of occupational attributes, the design and results of two pilots, and power calculations.

B.1 Vignette Pilot with MBA Students

In order to pilot the specific wording for the messages as well as to get a sense for the types of responses we could expect in the actual experiment, in Summer 2019, we conducted a vignette-study pilot among first-year UCLA Anderson MBA students. The survey asked students the career path that they had the most experience in among management consulting, finance, marketing, and tech startups, which are four popular career paths among this student population. The survey included the following broad question:

> Suppose you receive the following message from a student at your undergraduate alma mater with a question on their career path choice.
>
> Hello,
>
> My name is [Scott/Stephanie] and I'm a junior trying to figure out my plans after graduation. As of right now I'm not actively searching for a job, but I'm hoping to learn as much as I can about working in [finance/management consulting/marketing/tech startups] so that I have a realistic grasp of the field. Could you share your quick thoughts on the challenges and opportunities in [finance/management consulting/marketing/tech startups]? Thank you in advance for your thoughts!
>
> [Scott/Stephanie]
>
> Please pretend that you actually received this message and answer naturally. Please provide your response below.

Each survey respondent was randomized to receive one of three specific questions about career attributes: work/life balance, workplace culture, and job instability:

> Hello, My name is [Scott/Stephanie] and I'm a junior trying to figure out my plans after graduation. I'm considering going into [finance/management consulting/marketing/tech startups] and would appreciate hearing your thoughts on whether this is the best option for me. I'm really drawn to virtually all aspects of the job. I've heard that work/life balance is challenging, which makes me worried about choosing [finance/management consulting/marketing/tech startups] as a long-term career. Do you think this is a valid concern? Thank you in advance for your thoughts! [Scott/Stephanie]
>
> Hello, My name is [Scott/Stephanie] and I'm a junior trying to figure out my plans after graduation. I'm considering going into [finance/management consulting/marketing/tech startups] and would appreciate hearing your thoughts on whether this is the best option for me. I'm really drawn to virtually all aspects of the job. I've heard that the culture is very cutthroat, which makes me worried about choosing [finance/management consulting/marketing/tech startups] as a long-term career. Do you think this is a valid concern? Thank you in advance for your thoughts! [Scott/Stephanie]

> Hello, My name is [Scott/Stephanie] and I'm a junior trying to figure out my plans after graduation. I'm considering going into [finance/management consulting/marketing/tech startups] and would appreciate hearing your thoughts on whether this is the best option for me. I'm really drawn to virtually all aspects of the job. However, I'm worried about job instability. Do you think this is a valid concern? Thank you in advance for your thoughts! [Scott/Stephanie]

We randomized whether the survey respondent received messages from Scott or Stephanie.

We coded whether responses to the broad question mentioned work/life balance, workplace culture, and job instability. We also used the responses to create a detailed rubric to comprehensively categorize each component of the response, starting with the O*NET classification system.

95 students responded to the survey. In responses to the broad messages, the rate of mentioning work/life balance was 13 percent, workplace culture was 6 percent, and job instability was 5 percent. For the career paths that overlap with our main field experiment (management consulting and finance), the rates were 16 percent for work/life balance, 7 percent for workplace culture, and 2 percent for job instability. These survey respondents were 10.7 percentage points more likely to bring up work/life balance issues to Stephanie relative to Scott. There was no gender difference in rates of bringing up workplace culture issues. Survey respondents were slightly less likely to bring up job instability to Stephanie.

Due to the lower rate of bringing up job instability in response to the broad message and statistical power concerns, we chose two career attributes for the field experiment: work/life balance and workplace culture.

B.2 Response Rate Pilot on Networking Platform

In our power calculations, we assumed an overall 15% response rate, which is in between response rates in studies of cold emails to politicians (Kalla et al., 2018) and cold emails to venture capitalists (Gornall and Strebulaev, 2025). This response rate, combined with the rate of mentioning work/life balance from the pilot above, led us to a sample size of 10,000.

In order to assign message-types to professionals, we used 100 of our 10,000 professionals to gauge relative response rates on our professional networking platform, and to finalize the relative number of broad, specific, and factual questions we would have, and primarily to work through logistical details of the experimental procedure. We did this pilot two months before we finalized our full professional sample, so the sample of professionals does differ systematically from the remaining 9,900 in the sample (it includes more alumni, for example). We randomized the remaining professionals after this pilot was completed. This student had a 14% response rate overall, similar to what we saw overall, and a higher response rate in the factual question than what we saw ultimately in the study.

B.3 Profile photo

Figure D1: Photo of Iconic University Building

C Online Appendix: Details of Text Analysis

In this Appendix, we provide details of the manual classification, Kullback-Leiber Divergence metric, and the lexicon-based sentiment analysis.

C.1 Manual Classification

We provide an exploratory analysis of the remaining message components. We manually code each component of the response. Specifically, we construct a rubric based on the O*NET classification of occupations' work contexts and activities. Our rubric supplements the O*NET classification with additional fields that are mentioned in the messages (such as job search advice or compensation), to ensure we categorize the vast majority of the message text. Since many O*NET categories are used infrequently, we group related categories together. For example, we group interpersonal career attributes such as "communicate with persons outside the organization," "communicate with supervisors, peers, or subordinates," and "deal with external customers." The Online Appendix provides information on each grouping used, as well as the remaining ungrouped but frequently used categories.[50] This rubric allows us to test whether the responses to male and female students exhibit other content differences.

A description of each frequently used category is in Online Appendix Table C.1 below.

Category	Description	Source
Analytical Aspects		
Estimate Quantifiable Characteristics of Products, Events, or Information	Estimating sizes, distances, and quantities; or determining time, costs, resources, or materials needed to perform a work activity	O*NET Work Activity
Get Information	Observing, receiving, and otherwise obtaining information from all relevant sources	O*NET Work Activity
Analyze Data or Information	Identify the underlying principles, reasons, or facts of information by breaking down information or data into separate parts	O*NET Work Activity
Evaluate Information to Determine Compliance with Standards	Using relevant information and individual judgment to determine whether events or processes comply with laws, regulations, or standards.	O*NET Work Activity
Process Information	Compile, code, categorize, calculate, tabulate, audit, or verify information or data	O*NET Work Activity
Interact with Computers	Use computers and computer systems (including hardware and software) to program, write software, set up functions, enter data, or process information	O*NET Work Activity

[50] We consider frequent usage to be attributes that appear in more than 5 percent of messages.

Interpret Meaning of Information for Others	Translating or explaining what information means and how it can be used	O*NET Work Activity
Decision-making Aspects		
Develop Objectives and Strategies	Establishing long-range objectives and specifying the strategies and actions to achieve them	O*NET Work Activity
Make Decisions or Solve Problems	Analyze information and evaluate results to choose the best solution and solve problems	O*NET Work Activity
Organize, Plan, and Prioritize Work	Developing specific goals and plans to prioritize, organize, and accomplish your work.	O*NET Work Activity
Excitement and Impact Aspects		
Think Creatively	Developing, designing, or creating new applications, ideas, relationships, systems, or products, including artistic contributions	O*NET Work Activity
Update and Use Relevant Knowledge	Keep up-to-date technically and apply new knowledge to your job	O*NET Work Activity
Responsibility for Outcomes	How responsible is the worker for work outcomes and results of other workers	O*NET Work Context
Consequence of Error	How serious would the result usually be if the worker made a mistake that was not readily correctable?	O*NET Work Context
Freedom to Make Decisions	How much decision making freedom, without supervision, does the job offer?	O*NET Work Context
Impact of Decisions on Coworkers/Company Results	What results do your decisions usually have on other people or the image or reputation or financial resources of your employer?	O*NET Work Context
Importance of Being Exact or Accurate	How important is being very exact or highly accurate in performing this job?	O*NET Work Context
Structured v. Unstructured Work	To what extent is this job structured for the worker, rather than allowing the worker to determine tasks, priorities, and goals?	O*NET Work Context
Importance of Repeating Same Tasks	How important is repeating the same physical activities (e.g., key entry) or mental activities (e.g., checking entries in a ledger) over and over, without stopping, to performing this job?	O*NET Work Context

Projects Monotonous/Constantly Changing		Supplemental Category
Interpersonal Aspects		
Communicate with Persons Outside Org.	Communicate with people outside the organization, represent the organization to customers, the public, government, and other external sources. This information can be exchanged in person, in writing, or by telephone or e-mail	O*NET Work Activity
Communicate with Supervisors, Peers, Subordinates	Providing information to supervisors, co-workers, and subordinates by telephone, in written form, e-mail, or in person	O*NET Work Activity
Coordinate Work Activities of Others	Getting members of a group to work together to accomplish tasks	O*NET Work Activity
Developing and Building Teams	Encouraging and building mutual trust, respect, and cooperation among team members	O*NET Work Activity
Establish and Maintain Personal Relationships	Developing constructive and cooperative working relationships with others, and maintaining them over time	O*NET Work Activity
Guide, Direct, and Motivate Subordinates	Providing guidance and direction to subordinates, including setting performance standards and monitoring performance	O*NET Work Activity
Provide Consultation and Advice to Others	Providing guidance and expert advice to management or other groups on technical, systems-, or process-related topics	O*NET Work Activity
Resolve Conflicts and Negotiate with Others	Handling complaints, settling disputes, and resolving grievances and conflicts, or otherwise negotiating with others	O*NET Work Activity
Sell or Influence Others	Convincing others to buy merchandise/goods or to otherwise change their minds or actions	O*NET Work Activity
Coordinate or Lead Others	How important is it to coordinate or lead others in accomplishing work activities in this job?	O*NET Work Context
Deal with External Customers	Job entails work with external customers or the public	O*NET Work Context
Deal with Unpleasant or Angry People	How frequently does the worker have to deal with unpleasant, angry, or discourteous individuals as part of the job requirements?	O*NET Work Context

Face-to-face Discussions	How often do you have to have face-to-face discussions with individuals or teams in this job?	O*NET Work Context
Frequency of Conflict	How often are there conflict situations the employee has to face in this job?	O*NET Work Context
Work with Work Group or Team	How important is it to work with others in a group or team in this job?	O*NET Work Context
Work/Life Balance Aspects		
Duration of Typical Workweek	Number of hours typically worked in one week	O*NET Work Context
Work Schedule Flexibility	Timing of work is flexible/inflexible	Supplemental Category
Extent of Travel/Work from Home	Location of work is flexible/inflexible, including work-related travel	Supplemental Category
Individual Categories that Appear in >5% of Responses		
Explains Paths within Field	Explains various paths within the field	Supplemental Category
Compensation	Mentions pay including salary or bonus	Supplemental Category
Job Stability	Jobs within career path stable/unstable	Supplemental Category
Short v. Long term Considerations	Any time dimension to career path, including whether it positions one well for future jobs or has changing attributes as one gains experience	Supplemental Category
Qualities of Individuals who Like/Succeed	Attributes of people who do well in this career path	Supplemental Category
Broadness of Question	Statement that the question is broad	Supplemental Category
Info on Job Search	Information on how to find a job within the field	Supplemental Category
Implicit/Explicit Offer to Discuss Further	Statement to discuss further (over message, email, phone, etc.) or asks a follow-up question	Supplemental Category
Decision is Person-Specific	Statement that the career decision depends on the person and their attributes/preferences	Supplemental Category
States Qualifications for Answering	Statement of experience in career path with intention of demonstrating that one is/isn't equipped to answer	Supplemental Category
Education Requirements and Environment	Statement of degree requirements and/or description of the attributes of those requirements (e.g. law school is grueling)	Supplemental Category

Online Appendix Table C2 reports the results. Responses to female students are less likely to offer any type of advice and less likely to state the professional's qualifications for answering the question. Responses to female students are also less likely to explain career paths and provide information on how to find a job, but these differences are not statistically significant. Responses to female students are more likely to discuss the analytical aspects of a career, compensation, and qualities of individuals who like/succeed in the field, as well as provide an offer to discuss further, but again these contrasts are not statistically significant. A joint test of significance indicates that we can reject that the gender differences are jointly zero. Combining the results on response length with the gender differences in other response content, we find evidence consistent with work/life balance crowding out other career information.

C.2 Kullback-Leiber Divergence Metric

Throughout this section, we use the term "female corpus" to refer to the set of words (with frequencies) used in all responses to female students. We use the term "male corpus" to refer to the set of words (with frequencies) used in all responses to male students.

When we refer to the distribution of words in a corpus, we refer to the distribution over unique words, where the probability of word j is given by:

$$p_j = \frac{\text{\# of occurrences of j}}{\text{total word-occurrences in corpus}}$$

Note that in this sense, the point estimates do not distinguish between words that occur once in many messages and words that occur many times in a single message: only the total number of occurrences across all messages matter.

Measure of Divergence

In order to compare the differences in language used to respond to male students and female students, we define a measure of divergence, which compares the distribution of words in the female corpus to the distribution of words in the male corpus.

Before defining the measure, we must deal with one critical issue: how to treat words which occur in one corpus but not the other. In our application, the set of words that are not shared across corpi is actually quite large. This can be seen in Table C3. Of the total 3,855 unique words in responses to female students, nearly half are not found in the male responses.

To accommodate this feature of our data, we follow Bohren et al. (2018) and use what we define as the smoothed Kullback-Leiber (K-L) divergence of two corpi. This is the K-L divergence between the two distributions with Lidstone smoothing applied. We use a smoothing parameter of 0.5. The formal definition of our smoothed K-L divergence is given below.

Definition 1 *Given corpus F and corpus M, let V_i denote the vocabulary in corpus i and $C_i()$ denote a function giving the count of a word in corpus i. Then the* ***smoothed K-L divergence*** *of the distributions of F from M is given by:*

$$D_{KLS}(F, M) := \sum_{w \in V_F \cup V_M} p(w) log\left(\frac{p(w)}{q(w)}\right)$$

Table C2: Gender Differences in Other Response Components

	(1) Main Specification	(2) Additional Student Controls
Offers Advice of Any Type	-0.075*	-0.078*
	(0.043)	(0.043)
Explains Career Paths	-0.037	-0.037
	(0.045)	(0.043)
Mentions Analytical Aspects of Career	0.050	0.051
	(0.042)	(0.041)
Mentions Decision-Making/Responsibility Aspects of Career	0.012	0.013
	(0.028)	(0.028)
Mentions Excitement/Impact Aspects of Career	0.024	0.029
	(0.040)	(0.038)
Mentions Interpersonal Aspects of Career	0.022	0.025
	(0.045)	(0.044)
Compensation	0.052	0.051
	(0.039)	(0.038)
Job Stability	0.035	0.036
	(0.028)	(0.028)
Short v. Long Term Considerations	-0.022	-0.023
	(0.032)	(0.032)
Qualities of Individuals who Like/Succeed	0.043	0.040
	(0.026)	(0.024)
Broadness of Question	-0.026	-0.027
	(0.032)	(0.033)
Info on Job Search	-0.035	-0.037
	(0.029)	(0.029)
Offer to Discuss Further	0.064	0.064
	(0.051)	(0.051)
Decision is Person Specific	-0.025	-0.025
	(0.025)	(0.024)
States Qualifications for Answering	-0.082*	-0.084*
	(0.045)	(0.043)
Education Requirements/Environment	0.030	0.029
	(0.032)	(0.031)
Other attribute	0.010	0.008
	(0.034)	(0.033)
p-value from joint test M=F	0.002	0.001
N	363	363

Note: This table reports the results of the estimation of Equation (1), in which the dependent variable is an indicator for whether a response mentions the categories listed in the rows. Standard errors are clustered at the student level and are reported in parentheses.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table C3: Vocabulary Overlap of Responses to Female and Male Students

Analysis	Total Words	Shared Words	Female Only Words	Male Only Words
All	4,817	1,928	1,927	962
Broad	3,045	1,093	1,195	757
Factual	557	135	365	57
Specific Cutthroat	2,444	835	1,123	486
Specific Work-Life	2,402	926	1,020	456

where:

$$p(w) := \frac{C_F(w) + 0.5}{\sum_{s \in V_F} C_F(s) + 0.5|V_F \cup V_M|}$$

$$q(w) := \frac{C_M(w) + 0.5}{\sum_{s \in V_M} C_M(s) + 0.5|V_F \cup V_M|}$$

We can interpret this measure as the expectation of the logarithmic difference of the distributions, where the expectation uses the female word distribution. In this sense, we are measuring how likely it is that the male observations were taken from the female distribution.

Estimation Procedure

To estimate the K-L divergence metric, we use the definition and replace all probability distributions with their sample analogues. To perform inference we use the bootstrapping procedure outlined in Bohren et al. (2018). This procedure consists of the following: (1) Count the number of responses to male students (N_M) and the number to female students (N_F). (2) For each bootstrap iteration, randomly sample without replacement N_F responses from the full set of responses. Call these responses the placebo female group. (3) Call the remaining N_M responses the placebo male group. (4) Calculate the relevant divergence metric using the placebo groups instead of the true gender. (5) The p-value is the percentage of bootstrap estimates which are less than the point estimate.

To derive what we call p-values clustered at the student level, we perform the following block bootstrap procedure: (1) Count the number of unique male students (N_M) and the number of unique female students (N_F). (2) For each bootstrap iteration, randomly sample without replacement N_F students from the full set of students. Call these students the placebo female group. (3) Call the remaining N_M students the placebo male group. (4) Calculate the relevant divergence metric using the placebo groups instead of the true gender. (5) The p-value is the percentage of bootstrap estimates which are larger than the point estimate.

Consistent with the prior literature, 1,000 bootstrap replications were performed to calculate p-values for each K-L divergence estimate (1,000 replications per p-value).

Data Preparation and Analysis Tools

The sample restrictions are the same as in the main analysis: the 76 students whose names unambiguously convey their gender and who completed the study. The response sample is

limited those received within 21 days.

The K-L divergence analyses were conducted using R 3.5.3. The text responses are processed using the packages "stringr" and "quanteda." The command "textstat_frequency" is the main command used to compute word frequencies. Words are defined to be sets of letters separated by spaces. The only processing performed on message text is the removal of punctuation and the removal of the word "x." "x" was used to manually redact messages of identifying information like company and person names. Other than these two processing steps, no other processing was performed. Words are not stemmed and stop words are not removed.

Results

The K-L divergence metric is reported in Table C4. In addition to the overall analysis (denoted "All"), the analysis is performed by question type: broad, specific work/life balance, specific competitive culture, and factual.

Table C4 reports point estimates of the K-L divergence of the male response corpus from the female response corpus. It utilizes the smoothed K-L divergence metric given in Definition 1; p-values are computed using bootstrapping responses. Clustered p-values are computed from bootstrapping students.

Considering all of the responses received, the responses to female students are not drawn from a different word distribution than the responses to male students (p-value=0.745). When we look by question type, we also do not see significant gender differences in the word distributions used for messages to male vs. female students.

Table C4: Smoothed Kullback-Leiber Divergence: Male vs. Female Students

	Responses	K-L Divergence	p-value	Clust. p-value
All	913	0.102	0.688	0.745
Broad	363	0.159	0.817	0.848
Factual	34	0.299	0.399	0.394
Narrow Cutthroat	264	0.168	0.476	0.554
Narrow Work-Life	252	0.158	0.387	0.458

C.3 Sentiment Analysis

To measure the tone and emotional content of the messages, we utilize lexicon-based sentiment analysis. Lexicon analyses rely on human-coded databases of words mapped to emotions. The two we utilize are the National Research Council Canada (NRC) lexicon and the Bing lexicon. The NRC lexicon provides eight emotional categories and two sentiment categories (positive or negative). The Bing lexicon provides two sentiment categories only.[51]. The NRC lexicon contains 6,468 unique words, and each word can have multiple

[51]The website with supporting information is here: `www.cs.uic.edu/~liub/FBS/sentiment-analysis.html`

sentiments/emotions (categories are not unique).[52] The Bing lexicon contains 6,785 unique words, and all but three words are uniquely classified as either positive or negative.

For each lexicon and for each sentiment/emotional category in each lexicon, we compute a sentiment score that we call the "sentiment fraction." The sentiment fraction of sentiment j and response i is given by:

$$SF_{i,j} = \frac{\#\text{ words of sentiment } j \text{ in message } i}{\text{total words in message } i}$$

This normalizes sentiment score with respect to message length, and provides a measure of the emotion/sentiment per word in the message. All word counts are counting the number of occurrences of words, not the number of unique words. In this analysis only, we exclude a list of words that are industry related that happen to have sentiment connotation. These include words like "lawyer", which in normal conversation would have a negative connotation, but because our experiment involved discussing a career in law, it has a neutral connotation. As a result, these words are excluded from both the sentiment count (numerator) and the count of words (denominator).

In terms of vocabulary coverage of the lexicons, out of a total of 4,804 words, 691 words are classified under the Bing lexicon and 936 are classified under the NRC lexicon.

The sentiment analysis, which includes t-tests (adjusted for multiple hypothesis testing) of the difference of means, is presented in Table C5. The table compares the mean fraction of words of each sentiment within responses to male and female students. Overall, there are no significant gender differences in the sentiment of responses, nor are there differences in the sentiment of responses to any particular question.

[52]The website with supporting information is here: `https://saifmohammad.com/WebPages/NRC-Emotion-Lexicon.htm`

Table C5: Gender Differences in Sentiments of Responses

	All			Broad			Factual			Narrow (Cutthroat)			Narrow (Balance)		
	Diff	p-val	Clust.	Diff	p-val	Clust.	Diff	p-val	Clust.	Diff	p-val	Clust.	Diff	p-val	Clust.
Bing Lexicon															
Negative	0.002	0.505	0.529	0.002	0.631	0.571	0.012	0.554	0.418	-0.003	0.559	0.566	0.004	0.163	0.188
Positive	0.000	0.870	0.889	0.002	0.668	0.702	0.017	0.554	0.418	0.002	0.624	0.579	-0.004	0.455	0.462
NRC Lexicon															
Anger	-0.001	0.950	0.969	0.000	0.990	0.974	0.002	0.688	0.515	-0.003	0.567	0.691	0.000	0.991	0.995
Anticipation	0.001	0.993	0.993	0.005	0.822	0.883	0.023	0.432	0.401	-0.002	0.987	0.989	-0.004	0.810	0.884
Disgust	0.000	0.959	0.970	0.000	0.990	0.974	-0.004	0.236	0.515	0.000	0.987	0.989	-0.001	0.890	0.905
Fear	0.000	0.993	0.993	0.003	0.581	0.433	0.002	0.598	0.449	-0.003	0.728	0.835	-0.002	0.794	0.874
Joy	0.002	0.950	0.949	0.004	0.933	0.903	0.006	0.942	0.949	0.005	0.568	0.633	-0.004	0.808	0.874
Negative	-0.001	0.990	0.993	0.002	0.983	0.961	0.004	0.633	0.515	-0.004	0.490	0.633	0.000	0.991	0.995
Positive	-0.004	0.826	0.752	-0.004	0.965	0.947	0.016	0.834	0.791	0.002	0.987	0.989	-0.012	0.530	0.390
Sadness	0.000	0.993	0.993	0.001	0.990	0.974	0.000	0.995	0.997	0.001	0.987	0.989	-0.002	0.794	0.861
Surprise	0.002	0.746	0.752	0.001	0.990	0.974	0.015	0.688	0.515	0.001	0.987	0.989	0.002	0.890	0.905
Trust	-0.001	0.993	0.993	0.002	0.990	0.974	-0.006	0.942	0.949	0.002	0.978	0.975	-0.006	0.681	0.571

Note: This table displays t-tests comparing the fraction of words from a particular sentiment across female and male students. Negative differences indicate female students received a higher fraction of words from the sentiment than males. p-values are corrected for multiple comparisons (within lexicon). Westfall-Young corrections are performed using the STATA package -wyoung-, with 1,000 bootstrap replications. Column -Clust- reports WY adjusted p-values when standard errors are clustered at the student level.

D Online Appendix: Incorporating student selection of professionals

If students could choose which professionals they contacted, how would this change gender gaps in information received? Our study—like every correspondence study—relies on random assignment to estimate discrimination, on average. However, it is reasonable to believe that individuals do not sample randomly from their full choice set.[53,54] To understand how student selection of professionals could alter conclusions about gender differences in access to information, we develop a methodology to combine our experimental estimates with student preferences for professionals.[55] More generally, correspondence studies can incorporate this methodology for combining experimental estimates with information on agent preferences to better understand whether average bias is reflected in agents' experiences.

Using this methodology, we find that allowing students to choose professionals does not align the information they receive with the information they demand.

Estimating student preferences for professionals

Before students sent messages, we asked them to rank professionals in terms of whom they would most prefer to ask the questions in the study.[56] Students were told that these rankings would not impact the messages they send in the study and were purely for the researchers to learn about their preferences over the professionals. Students were also told that they could choose the same five professionals for each of the three rankings, different professionals, or a combination thereof—whatever reflected their preferences.

Using these student rankings, we estimate a rank-ordered logit choice model for student preferences over professional characteristics (Beggs et al., 1981).[57] We separately estimate male student preferences over professional characteristics and female student preferences over professional characteristics.

[53]For example, Pager and Pedulla (2015) documents that minority job seekers search more broadly for jobs than their nonminority counterparts. Abel (2017) further shows that immigrant job seekers are more likely to search for jobs farther away if they live in areas with higher levels of discrimination. Using a large-scale correspondence study, Agan and Starr (2020) find that Black-sounding job applicants experience more discrimination in less-Black neighborhoods, and simulate how equilibrium racial discrimination is affected by residential sorting.

[54]In the labor market, the extent to which minorities apply to discriminatory firms determines wage gaps, not the bias of the average employer (Becker, 1971; Heckman, 1998; Charles and Guryan, 2008). In a search framework, average discrimination may generate wage gaps (Black, 1995), but the magnitude of such differences depends on both supply-side and demand-side behavior.

[55]Another potential dimension of selection is selection into asking questions. In a survey of students from the same university, we find that male and female students have solicited information on work/life balance at equal rates in the past. In addition, Gallen and Wasserman (2021) document using data from an online student mentoring platform that there are few gender differences in questions asked. In contrast, Heikensten and Isaksson (2018) find that women seek less advice than men in a lab experiment.

[56]We did not ask students to rank the lawyers whom they would want to ask about billable hours requirements—there is no factual question ranking.

[57]More specifically, we estimate student preferences over the following professional characteristics commonly observed on profiles: gender, binned undergraduate graduation year (1980s or earlier, 1990s, 2000s, 2010s+, or no information on graduation year available), connections (binned in low, medium, and high), an indicator for whether the professional is an alumnus of the student's college, undergraduate institution selectivity quartile, whether the professional has any graduate degree, and an indicator for whether the professional has any degree from an Ivy League institution.

Appendix Table D1 shows that the professionals whom students rank differ in a number of ways from the full sample, and moreover, female and male students rank different types of professionals.[58] The table displays the average characteristics of all professionals ranked by students, those ranked by female students (column 2), by male students (column 4), as well as the average characteristics of professionals, weighted by the probability that a professional is preferred by a female student based on their characteristics according to a rank-order conditional logit model (column 3, titled "female predicted"), and the weighted average characteristics of professionals weighted by the probability that a professional is preferred by a male student based on their characteristics according to a rank-order conditional logit model (column 5, titled "male predicted").[59] Given these differences between the preferred sample and the full sample, the average gender gaps estimated in Section 4 may change when we incorporate student preferences. For example, preferred professionals are more likely to have attended an Ivy League university (16 percent of full sample and 20 percent of those ranked by students as preferred). Since those who received a degree from an Ivy League institution are more likely to differentiate their response to the broad question based on gender, we might expect the gender gap in mentions of work/life balance to expand when students choose professionals on their own.

Econometric framework for incorporating student preferences

We estimate the following specification:

$$Y_p = \alpha^g + \beta^g StudentFemale_p + \gamma^g X_p + e_p \tag{4}$$

where Y_p is an outcome of a message sent to professional p, $StudentFemale_p$ indicates whether the professional p actually received a message from a female student in the field experiment, and X_p is a vector of characteristics of the student who sent the message to the professional as well as message-level controls such as time and date the message was sent, analogous to our main specification.[60]

We estimate two versions of this model. One in which the observations are weighted by the predicted probability that a professional is ranked by a male student, and another in which observations are weighted by the predicted probability that a professional is ranked by a female student. Weighting by the propensity to be preferred by a student of gender g gives us coefficients β^g where g indicates whether the regression is weighted by the preferences of male ($g = m$) or female ($g = f$) students. The predicted probabilities are estimated as described above using a rank-ordered conditional logit model over professional characteristics.

[58]Relative to the full sample, preferred professionals are younger, more likely to be female, and more likely to have a degree from an Ivy League institution. The professionals preferred by female students relative to those preferred by male students are more likely to have a law or management consulting background, are more likely to be female, and are more likely to have a graduate degree.

[59]The observation counts differ between the professionals actually ranked and those predicted to be preferred. Each student ranks only five of the 100 professionals they were assigned. The prediction uses all professionals in the sample. We display the results of the preference estimation based on rankings for the broad question. Results are similar if we use student rankings for the other questions.

[60]We note that because each professional received exactly one message, indexing observations at the professional level is interchangeable with indexing observations at the message level.

Table D1: Attributes of Preferred Professionals

	All Ranked	Female Ranked	Female Predicted	Male Ranked	Male Predicted
Data Science	0.18	0.14	0.14	0.24	0.25
	(0.38)	(0.34)	(0.34)	(0.43)	(0.44)
Finance	0.33	0.28	0.24	0.39	0.41
	(0.47)	(0.45)	(0.43)	(0.49)	(0.49)
Law	0.28	0.38	0.38	0.14	0.14
	(0.45)	(0.49)	(0.48)	(0.35)	(0.34)
Mgmt Consulting	0.22	0.21	0.25	0.23	0.20
	(0.41)	(0.41)	(0.43)	(0.42)	(0.40)
Female	0.43	0.58	0.60	0.20	0.27
	(0.50)	(0.49)	(0.49)	(0.40)	(0.44)
College Graduation Year	2005.20	2005.04	2005.01	2005.45	2006.04
	(10.90)	(10.44)	(10.91)	(11.67)	(10.87)
College Selectivity - Admit Rate	0.23	0.22	0.24	0.23	0.25
	(0.19)	(0.18)	(0.22)	(0.20)	(0.23)
Alumni of Student's College	0.23	0.19	0.22	0.29	0.30
	(0.42)	(0.40)	(0.41)	(0.45)	(0.46)
Any Graduate Degree	0.70	0.73	0.75	0.65	0.65
	(0.46)	(0.45)	(0.44)	(0.48)	(0.48)
Any Ivy Degree	0.20	0.21	0.20	0.19	0.15
	(0.40)	(0.41)	(0.40)	(0.40)	(0.35)
0-249 Connections	0.12	0.11	0.11	0.13	0.10
	(0.33)	(0.32)	(0.31)	(0.34)	(0.30)
250-499 Connections	0.19	0.18	0.16	0.19	0.18
	(0.39)	(0.39)	(0.37)	(0.40)	(0.38)
500+ Connections	0.64	0.69	0.71	0.57	0.65
	(0.48)	(0.47)	(0.46)	(0.50)	(0.48)
Observations	209	125	3647	84	3647

Note: This table reports summary statistics for the preferred sample of professionals, overall and by student gender. Means for each professional characteristic are reported, with standard deviations in parentheses.

This method is analogous to re-weighting non-representative surveys due to oversampling in order to obtain population level means and statistics, as described in Särndal et al. (1992). We can think of these estimates as being weighted so that the sample is non-representative of the overall sample of professionals, but instead representative of the sample of preferred professionals. In the same vein, the main estimates in the paper are weighted by the inverse propensity of being selected, yielding population-representative averages.

We emphasize that the weight given to a professional preferred by a student of gender g is orthogonal to the gender of the student who contacted the professional, since students were randomly assigned professionals to contact. We can therefore identify both the gender bias of the professionals preferred by male students (β^m) and the gender bias of the professionals preferred by female students (β^f). Note that with observational data, it is not possible to identify β^f and β^m unless all professionals are contacted by observationally equivalent male and female students. In addition, we can use the propensity weights to summarize the average response to male students among professionals preferred by male (α^m) and female (α^f) students. We formalize this intuition in the next section with a potential outcomes framework.

Potential outcomes framework that formalizes identification

Let $y_p(1)$ be the response of professional p to a female student and $y_p(0)$ be the response of the same professional to an equivalent male student, asking the same question. Our main field experiment described in Section 2 allows us to estimate β, the average gender difference in the responses of professionals in our sample:

$$\beta = E\left(y_p(1) - y_p(0) | p \in 1, ..., P\right)$$

However, students may prefer some professionals over others. Let the set of professionals preferred by students be $\mathbf{P} \subseteq \{1, ..., P\}$. Given information about student preferences over professionals, we can define β^p to be the average gender difference in responses among the preferred professionals:

$$\beta^p = E\left(y_p(1) - y_p(0) | p \in \mathbf{P}\right)$$

We also define gender bias among professionals preferred by male and female students:

$$\beta^g = E\left(y_p(1) - y_p(0) | p \in \mathbf{P^g}\right)$$

where $g \in \{m, f\}$ indicates gender and $\mathbf{P^m}$ is the set of professionals preferred by male students and $\mathbf{P^f}$ is the set of professionals preferred by female students. β^m is the average gender bias of professionals preferred by male students, and β^f is the average gender bias of professionals preferred by female students.

Even if $\beta^f = \beta^m$, professionals preferred by female students may have different levels of y than the professionals preferred by male students. We define the average responses to male students in the set of professionals preferred by males and females, respectively, as

$$\alpha^g = E\left(y_p(0) | p \in \mathbf{P^g}\right), \quad g \in \{m, f\}$$

Together, these moments can be used to compute β^s, which represents how responses to female students seeking information from female-preferred professionals differ from responses to male students seeking information from male-preferred professionals:

$$\beta^s = \underbrace{\beta^f + \alpha^f}_{E\left(y_p(1)|p\in\mathbf{P^f}\right)} - \underbrace{\alpha^m}_{E(y_p(0)|p\in\mathbf{P^m})}$$

Our experimental design allows separate identification of α^g, β^g for $g \in \{m, f\}$. Note that $E\left(y_p(1)|p \in \mathbf{P^f}\right)$ and $E\left(y_p(0)|p \in \mathbf{P^m}\right)$ are available in observational data, meaning that one can estimate $\beta^s = \beta^f + \alpha^f - \alpha^m$. However, using only observational data on student selection of professionals and the outcomes of these interactions, the average bias of professionals contacted by male and female students (β^m and β^f, respectively) are not identified unless $\mathbf{P^m} = \mathbf{P^f}$.

Gender differences in information received, incorporating student preferences

Allowing students to choose professionals does not eliminate gender differences in information received on work/life balance. Appendix Table D2 reports the results for mentions of work/life balance and workplace culture in responses to the broad question. Recall that in our main field experiment, professionals were 7.2 percentage points more likely to mention work/life balance issues in their responses to female students relative to male students. Incorporating student selection amplifies this gender difference. In column 3, we observe that female-preferred professionals are substantially more likely to mention work/life balance to female students (coefficient on $StudentFemale_p$ is 0.097). This gender bias is similar for male-preferred professionals. Female-preferred professionals bring up work/life balance at approximately the same rate to male students as male-preferred professionals (0.057 vs. 0.051 in columns (3) and (4) of Table D2). In columns 1 and 2, we find that female students tend to select professionals with lower response rates overall, but the difference is negligible.[61]

[61] Appendix Table D3 presents analogous results for response rates to the specific work/life balance and competitive culture questions.

Table D2: Effect of Student Gender on Mentions of Work/Life Balance and Workplace Culture, Inclusive of Student Selection

	(1)	(2)	(3)	(4)	(5)	(6)
	Broad Response Rate		Work/Life Balance		Workplace Culture	
	Female Pref.	Male Pref.	Female Pref.	Male Pref.	Female Pref.	Male Pref.
Student female	0.010	0.020	0.097**	0.110**	-0.002	-0.017
	(0.018)	(0.020)	(0.046)	(0.054)	(0.052)	(0.067)
Male mean	0.095	0.121	0.057	0.051	0.111	0.141
	(0.012)	(0.013)	(0.023)	(0.043)	(0.033)	(0.055)
Observations	3530	3530	363	363	363	363

Note: This table reports the results of the estimation of the regression specification outlined in Equation (4), in which the dependent variable is an indicator for whether a professional responded to the broad message (columns 1–2), for whether a response to the broad question mentions work/life balance (columns 3–4) or workplace culture (columns 5–6). There are 363 responses to the broad question. Columns 1, 3, and 5 report results from the regression specification outlined in Equation (4) in which each observation is weighted by the propensity of the professional to be preferred by female students according to a rank-ordered conditional logit model of female student preferences over professional characteristics. Columns 2, 4, and 6 report results from the regression specification outlined in Equation (4) in which each observation is weighted by the propensity of the professional to be preferred by male students according to a rank-ordered conditional logit model of male student preferences over professional characteristics. In all regressions, the independent variables are an indicator for whether the student who sent the message is female, message time/date characteristics, and student profile characteristics. The bootstrapped standard errors are based on 1000 iterations and cluster at the student-ranker in the step when the model of student preferences is estimated to account for estimation error.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table D3: Effect of Student Gender on Response Rates, Inclusive of Student Selection

	(1)	(2)	(3)	(4)	(5)	(6)
	Broad Response Rate		Work/Life Response Rate		Culture Response Rate	
	Female Pref	Male Pref	Female Pref	Male Pref	Female Pref	Male Pref
Student female	0.010	0.020	0.047*	0.047*	-0.014	0.023
	(0.018)	(0.020)	(0.028)	(0.027)	(0.027)	(0.028)
Male mean	0.095	0.121	0.116	0.142	0.128	0.151
	(0.012)	(0.013)	(0.018)	(0.017)	(0.017)	(0.017)
Observations	3530	3530	1763	1763	1776	1776

Note: This table reports the results of the estimation of the regression specification outlined in Equation (4), in which the dependent variable is an indicator for whether a message received a response, by question type as indicated in the columns. Columns 1, 3, and 5 report results from the regression specification outlined in Equation (4) in which each observation is weighted by the propensity of the professional to be preferred by female students according to a rank-ordered conditional logit model of female student preferences over professional characteristics. Columns 2, 4, and 6 report results from the regression specification outlined in Equation (4) in which each observation is weighted by the propensity of the professional to be preferred by female students according to a rank-ordered conditional logit model of female student preferences over professional characteristics. In all regressions, the independent variables are an indicator for whether the student who sent the message is female, message time/date characteristics, and student profile characteristics. The bootstrapped standard errors are based on 1000 iterations and cluster at the student-ranker in the step when the model of student preferences is estimated to account for estimation error.
* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

E Online Appendix: Information Intervention Experiment

To provide additional evidence on the link between gender gaps in work/life balance information and gender gaps in career outcomes, we conduct an information intervention with over 400 UCLA undergraduate students.[62] The experiment focuses on management consulting, one of the four career paths from our main field experiment. Management consulting has broad appeal among undergraduate students and its applicant pool draws from a wide swath of student majors. In addition, in our main field experiment, management consultants frequently bring up work/life balance issues when discussing the pros and cons of entering the field (23 percent of responses mention it).

We recruited students who were potentially interested in management consulting through large introductory economics courses and various major listservs. In the survey, students are given a brief introduction to management consulting. Next, the survey indicates that students will receive information about the pros and cons of management consulting from management consultant who graduated from a top university.[63] We sourced the information from one of the messages that a student received in our main field experiment. We randomize students to receive one of two versions of the message: (1) a control message, which contains no work/life balance information or (2) a treatment message, which is identical to control but includes work/life balance information. The control message states:

> It's great that you're getting a head start on understanding your possible fields of interest. Some quick thoughts per your request. Advantages: Fast-paced learning environment where you quickly get exposure to high level people and strategic issues. High standards help you immediately upskill in the basics like PPT, excel, Tableau. Consultants bond very quickly and very deeply; you and your team and your office will become a very close-knit social circle. Challenges: The pay feels good compared to other entry level jobs but it's actually often not worth it if you have any coding or tech skills that will get you in at a tech salary. Hopefully that helps you get a feel for what to expect!

The treatment message additionally includes:

> It is very hard to feel like you have roots anywhere because you "live" everywhere. It is even harder to get your non-consulting friends to understand what your life looks and feels like, and you may feel alienated because in their mind you're never around so they stop acting like you are unless you remind them. It is difficult to maintain a relationship with someone long-distance or who does not understand what you do. It can be very high-burn (60-80+ hours/week). Travel is not always a good thing (i.e. if you're going to the middle of nowhere and have to take two

[62] The experiment was pre-registered through the AEA Registry under AEARCTR-0015913.

[63] The survey states that the consultant was asked the following question "Hello! As of right now I'm not actively searching for a job, but I'm hoping to learn as much as I can about working in management consulting so that I have a realistic grasp of the field. Could you share your quick thoughts on the advantages and challenges in management consulting?" Note that this is identical to the question that students asked professionals in our main field experiment.

planes and then drive an hour twice per week; I've avoided this but that is the literal schedule my best friend at the firm had for 1.5 years).[64]

After students receive the message, we ask them questions related to their career plans on the extensive and intensive margins. First, we told students that we were hosting a live online workshop on "how to break into management consulting." As an extensive margin outcome, we ask the probability of attending the workshop. Second, we inform students that the previous description of management consulting was provided by a consultant from a top consulting firm (e.g. McKinsey or Boston Consulting Group). We give all students a description of work in a smaller, boutique consulting firm, which highlighted its lower pay and time demands, relative to a top consulting firm. For an intensive margin outcome, we ask the probability of accepting a job from a top firm instead of a boutique firm, if offered both. We incentivized students to answer truthfully by telling them that they would receive information on the next screen based on their choice. To validate that the treatment changed students' beliefs about work/life balance, we asked students about their beliefs about weekly hours and availability of part-time work (incentivized) in management consulting.

Students were shown a written version of the message and also provided with an audio recording. After students read and listened to the message, we asked them a series of incentivized questions related to their career plans. First, we asked the probability of attending a workshop on "how to break into management consulting," where students were required to fill out an application to be eligible to attend. Then, we informed students that the previous description of management consulting was provided by a consultant from a top consulting firm (e.g. McKinsey or Boston Consulting Group) and provided students with a description of work in a smaller, boutique consulting firm. We next asked the probability of accepting a job from a top firm instead of a boutique firm, if offered both. Students were told that they would receive information on the next screen based on their choice.[65]

To estimate the effects of work/life balance information on students' career-related choices and beliefs, we use the following regression specification:

$$C_i = \lambda_0 + \lambda_1 T_i + \varepsilon_i \tag{5}$$

where T_i indicates whether student i was randomized into the treatment group that received work/life balance information and C_i is the outcome of interest, the probability of attending

[64]Note that the treatment message is longer than the control message. To test whether survey length matters for students' beliefs, half of the control group was randomized to answer an additional question on their classes for the next quarter. The effects of the treatment are invariant to the inclusion of this additional question.

[65]In addition, to demonstrate that these messages changed the student's information set, we also elicited their beliefs about two non-wage amenities related to the temporal demands of management consulting:

1. Hours worked per week: Average of hours worked per week during your first year as a management consultant (non-incentivized).

2. Part-time work availability: Consider the top management consulting firm in the U.S. What fraction of their management consultants do you think worked part-time in 2024? (incentivized: student was informed that they would receive a bonus payment if within 5 percentage points of correct answer, which is 8.5 percent).

These results are in Panel B of Table 6.

the workshop on how to break into management consulting (MC workshop), the probability of choosing a top firm over boutique consulting, or beliefs about hours/part-time work availability in management consulting. We estimate the regression separately by student gender.

F Online Appendix: Experiment materials

F.1 Background survey for student participants in experiment

Block 1

Consent Form for Research Participation

Study Number: IRB19-1526
Study Title: Seeking Career Advice
Researcher(s): Yana Gallen

This is a consent form for research participation. It contains important information about this study and what to expect if you decide to participate. Your participation is voluntary.

Purpose: The purpose of this study is to understand how obtaining career advice affects student perceptions of careers and how students perceive the advice they receive.

Procedures and Time Required: You will first be asked to fill out a survey which asks about your career interests. This will take only 5 minutes. Based on your answers, you may be asked to participate in an intervention to get you to seek career advice. You will be asked to send approximately 100 messages to industry professionals on LinkedIn and to evaluate any responses you receive. Finally, you will be asked to complete an end line survey which will take less than one hour to complete. The total time commitment is approximately 5 hours.

Financial Information: Participation in this study will involve no cost to you. You will be paid a total of up to $75 for your participation in this study. More specifically, you will be paid $25 for attending an in-person training session, and the remaining $50 after completion of the final survey. Should you drop out of the study before the final survey, you will be paid $10 per week for active week of participation.

Risks and Benefits: Your participation in this study does not involve any risks to you beyond those of everyday life.The benefits of this study to you will be the potential to build a professional network as well as coaching on how to make professional contacts for the purposes of obtaining

career advice.

Confidentiality: All data which includes identifiers will be stored using a code which only the PI has access to on a secure University of Chicago server for the duration of the study. When the study is complete, all personal identifying information will be destroyed. Throughout the study, you will be in contact with the PI via email. All emails you send will be deleted after the data is downloaded. We request that you also delete all emails from your account once the data are downloaded by the PI. If you decide to withdraw from this study, the researchers will ask you if the information already collected from you can be used. Identifiable data will never be shared outside the research team. De-identified information from this study may be used for future research studies or shared with other researchers for future research without your additional informed consent.

Contacts & Questions:

If you have questions or concerns about the study, you can contact the researchers at Yana Gallen, (773) 834-2784, yana@uchicago.edu

If you have any questions about your rights as a participant in this research, feel you have been harmed, or wish to discuss other study-related concerns with someone who is not part of the research team, you can contact the University of Chicago Social & Behavioral Sciences Institutional Review Board (IRB): phone (773) 702-2915, email sbs-irb@uchicago.edu.

Consent:

Participation is voluntary. Refusal to participate or withdrawing from the research will involve no penalty or loss of benefits to which you might otherwise be entitled. By clicking “yes” below, you agree to participate in this research study.

- Yes
- No

Default Question Block

What is your name?

What is your UChicago email address?

Are you a University of Chicago undergraduate?

- Yes
- No

What is your expected graduation year?

- 2020
- 2021
- 2022
- 2023
- 2024
- Other

What is your gender

- ○ Female
- ○ Male

Are you a first generation college student?

- ○ Yes
- ○ No

Do you consider yourself

- ○ White/Caucasian
- ○ Black/African American
- ○ American Indian
- ○ Hispanic/Latino
- ○ Asian/Pacific Islander
- ○ _____ Other

What majors are you potentially interested in? (Check all that apply)

- ☐ Economics
- ☐ Psychology
- ☐ Sociology
- ☐ Political Science
- ☐ Public Policy
- ☐ Computer Science
- ☐ _____ Other

If you have declared a major, what is it (Type N/A if you haven't declared)

How many courses have you taken in economics

What was your SAT score (Type N/A if you didn't take it)

What was your ACT score (Type N/A if you didn't take it)

What is your college GPA?

From the options below, which career path are you MOST interested in?

- Finance
- Consulting
- Data Science
- Law

- ○ I am not interested in any of these paths

Are you interested in learning about the attributes (work/life balance, culture, etc) of the above careers?

- ○ Very interested
- ○ Somewhat interested
- ○ Not at all interested

Which sources of information do you use when thinking about career choice? (Check all that apply)

- ☐ Career Advancement Office
- ☐ UChicago classmates
- ☐ UChicago Alumni
- ☐ UChicago Professors
- ☐ Connections outside of UChicago
- ☐ Family
- ☐ Information obtained online
- ☐ LinkedIn
- ☐ Wisr
- ☐ _____ Other:

What classes do you plan to take in Fall 2020?

Powered by Qualtrics

F.2 Student participant guide

Student Participant Manual

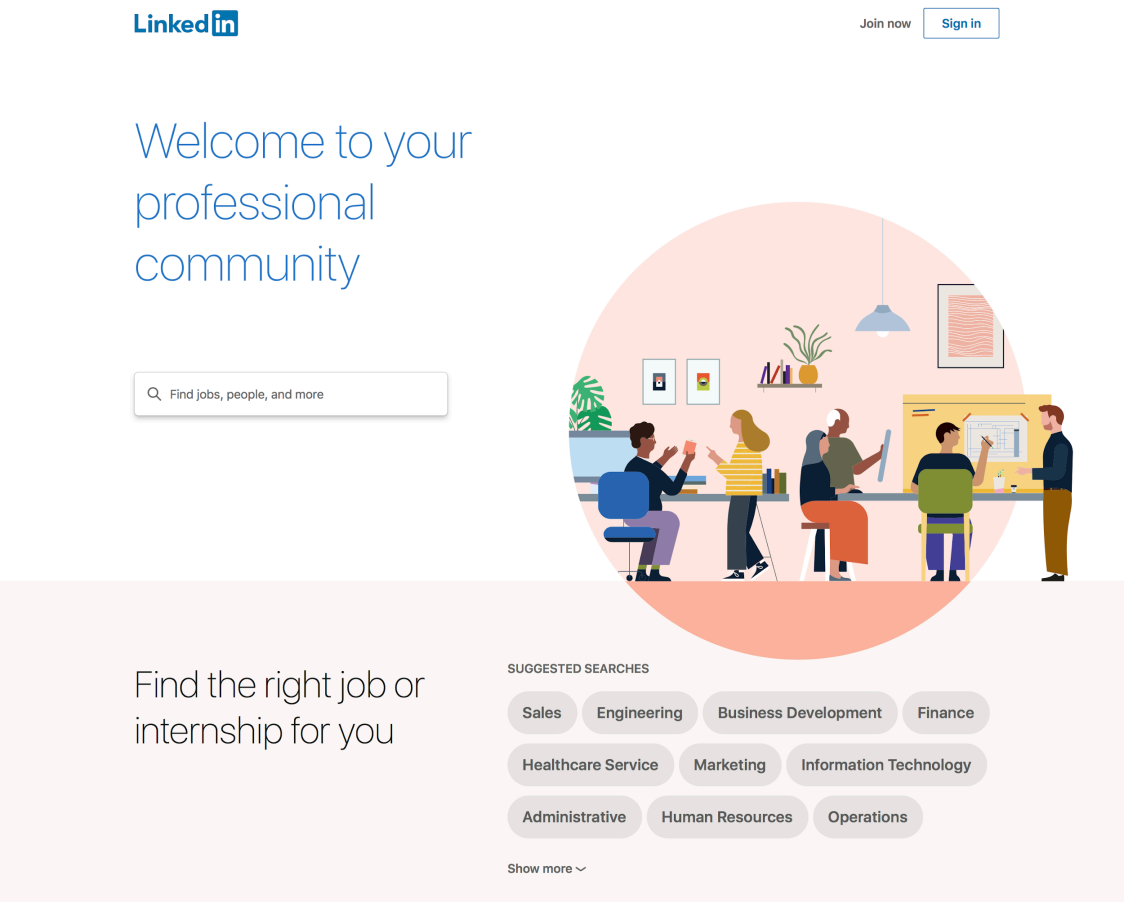
We want to make sure (to the extent possible!) that the advice you receive isn't because of any characteristics unique to you such as your profile picture, your work history, etc. etc. Because of this, we will ask you to remove as much information as possible from your LinkedIn profile (if you have one).

If you do not yet have a LinkedIn profile, we will ask you to create one in Section 1. If you already have a LinkedIn Profile, please skip to Section 2.

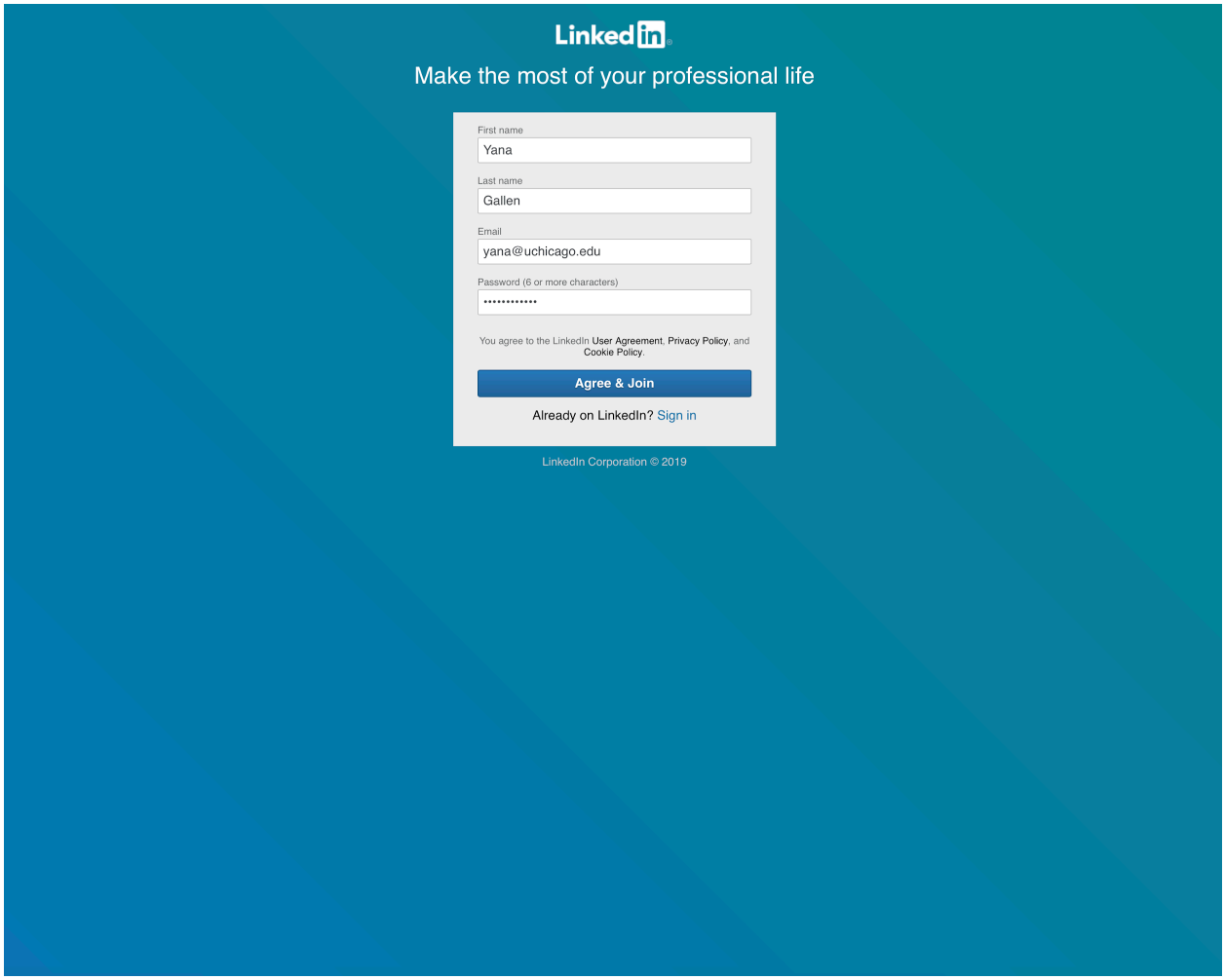
SECTION 1: FOR THOSE WHO DO NOT HAVE A LINKEDIN PROFILE

Creating your LinkedIn profile

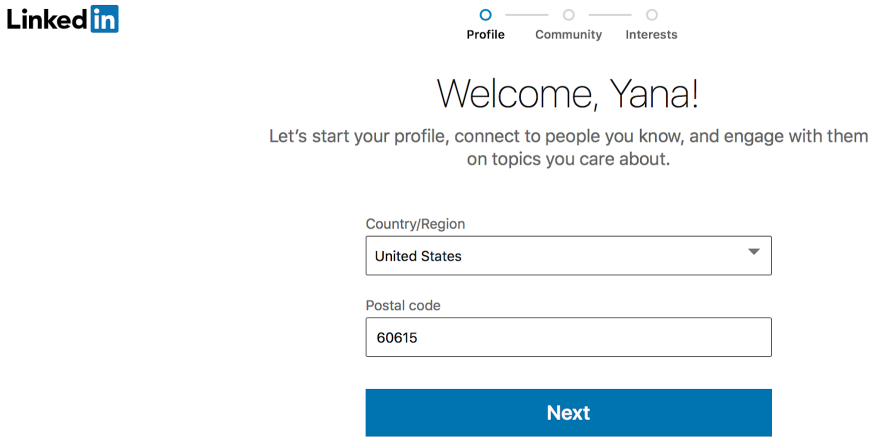
1. Visit linkedin.com and select the "join now" option in the top right hand corner of your screen.



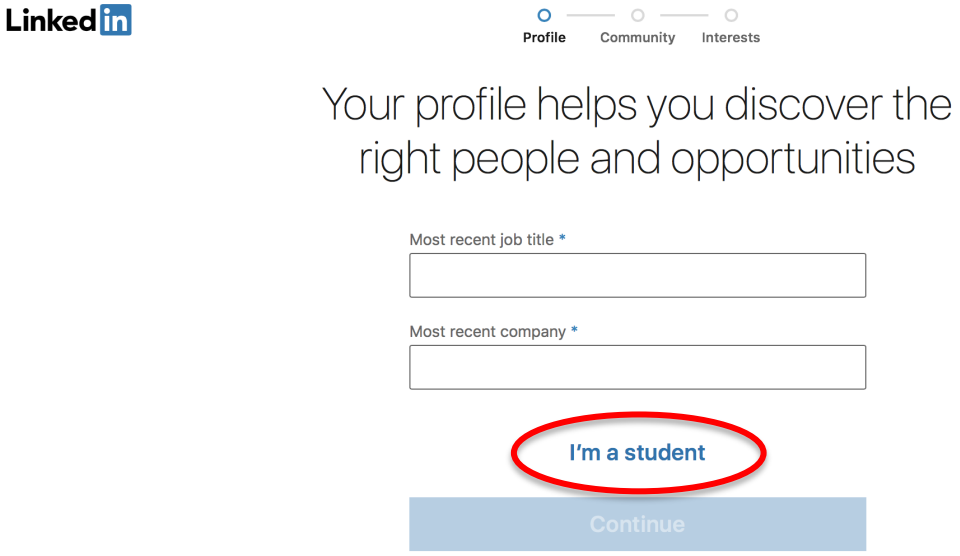
2. Fill in your first name, last name, UChicago email address, and create a password. Please use the name you used in your communications with careeradvicestudy@gmail.com



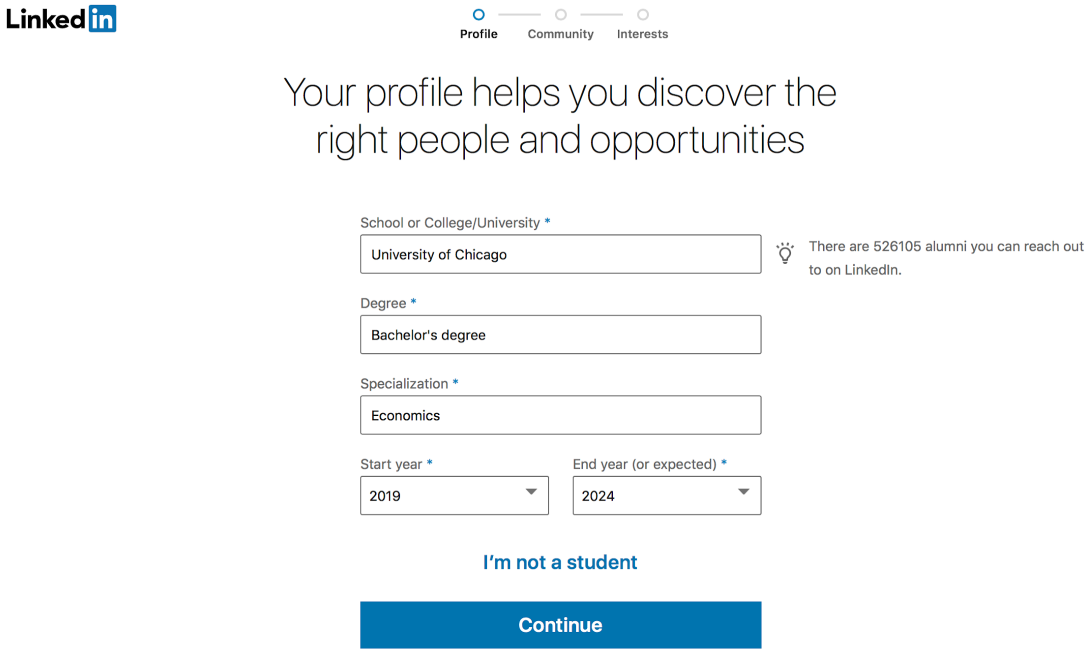
3. Enter your country and zip code



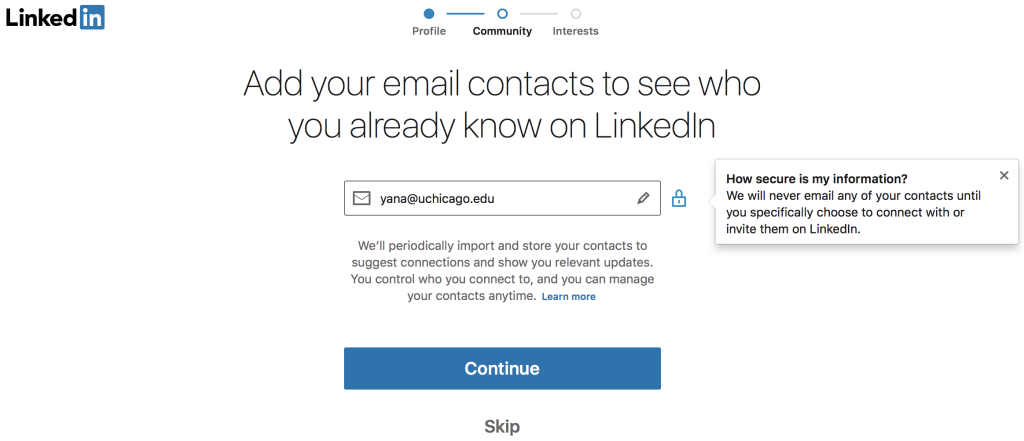
4. Click “I’M A STUDENT” when the job title/company page appears

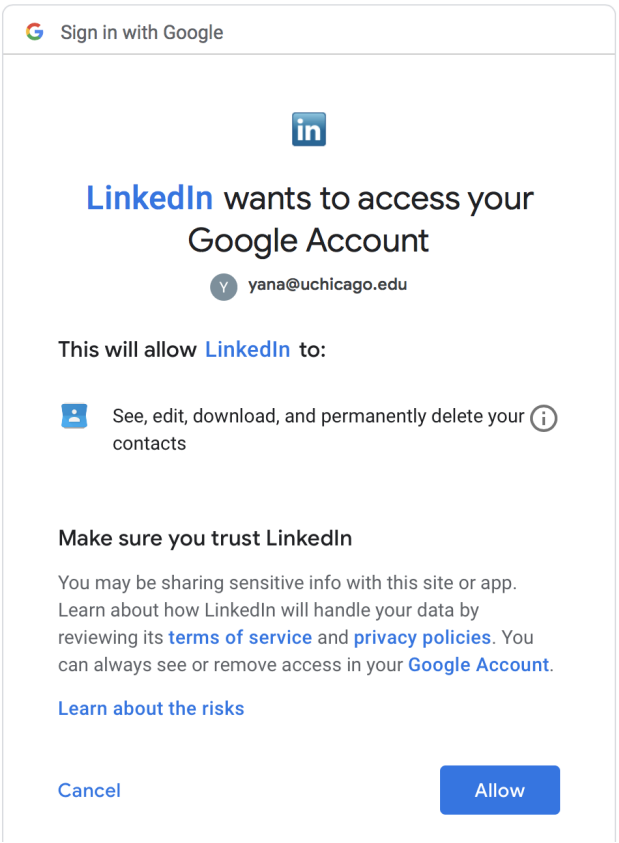


5. Fill in University of Chicago, your expected degree and concentration, and your start and expected graduation year.

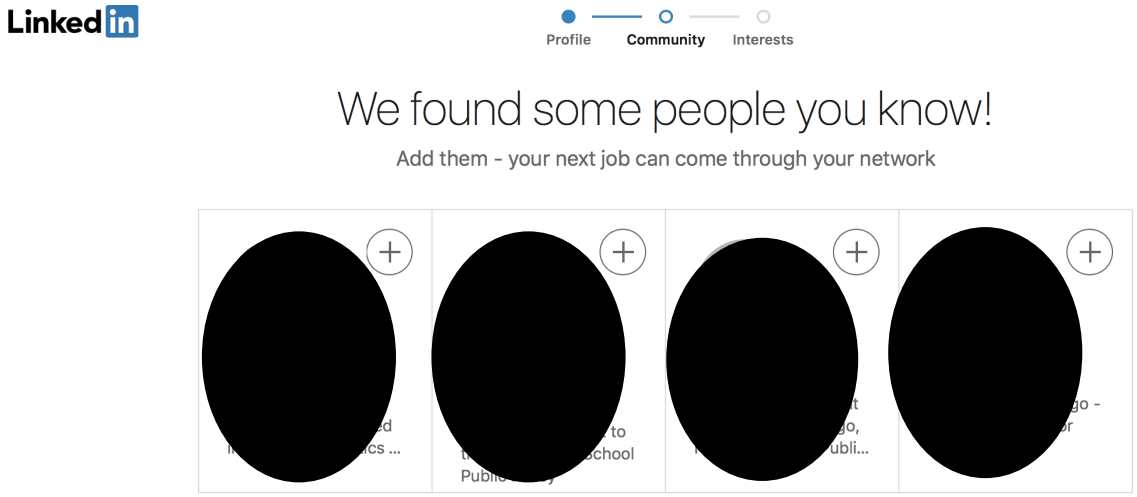


6. We ask that you create a network of connections all of whom are current University of Chicago undergraduates. At this point, please do not connect with professionals (later on we will ask you to connect with specific professionals). You can do this in one of two ways.
   6.1. You can import a list of contacts who will automatically be sent invitations from your email. To do this, click “continue” on the screen, and “allow” on the following screen

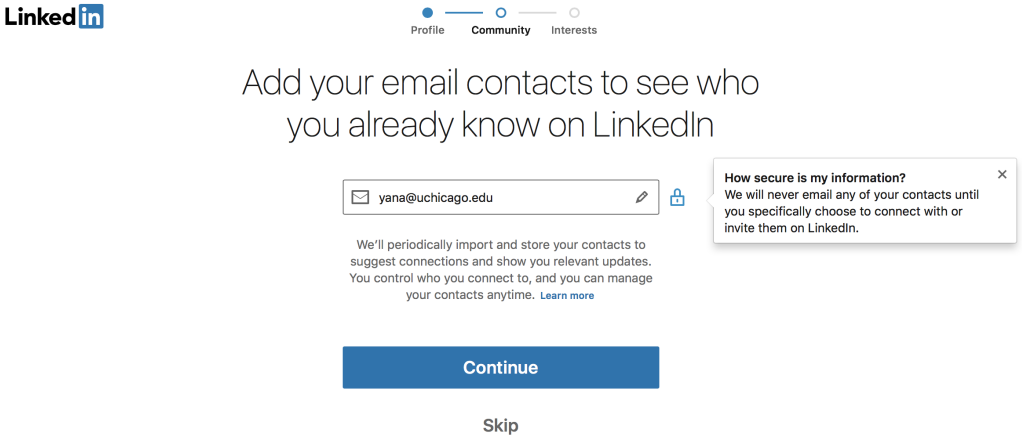




You will get a list of “people you know,” as below. Select up to 10 current UChicago undergraduates that you would like to add as connections.



6.2 If you do not want to import contacts from your email, click skip on the screen

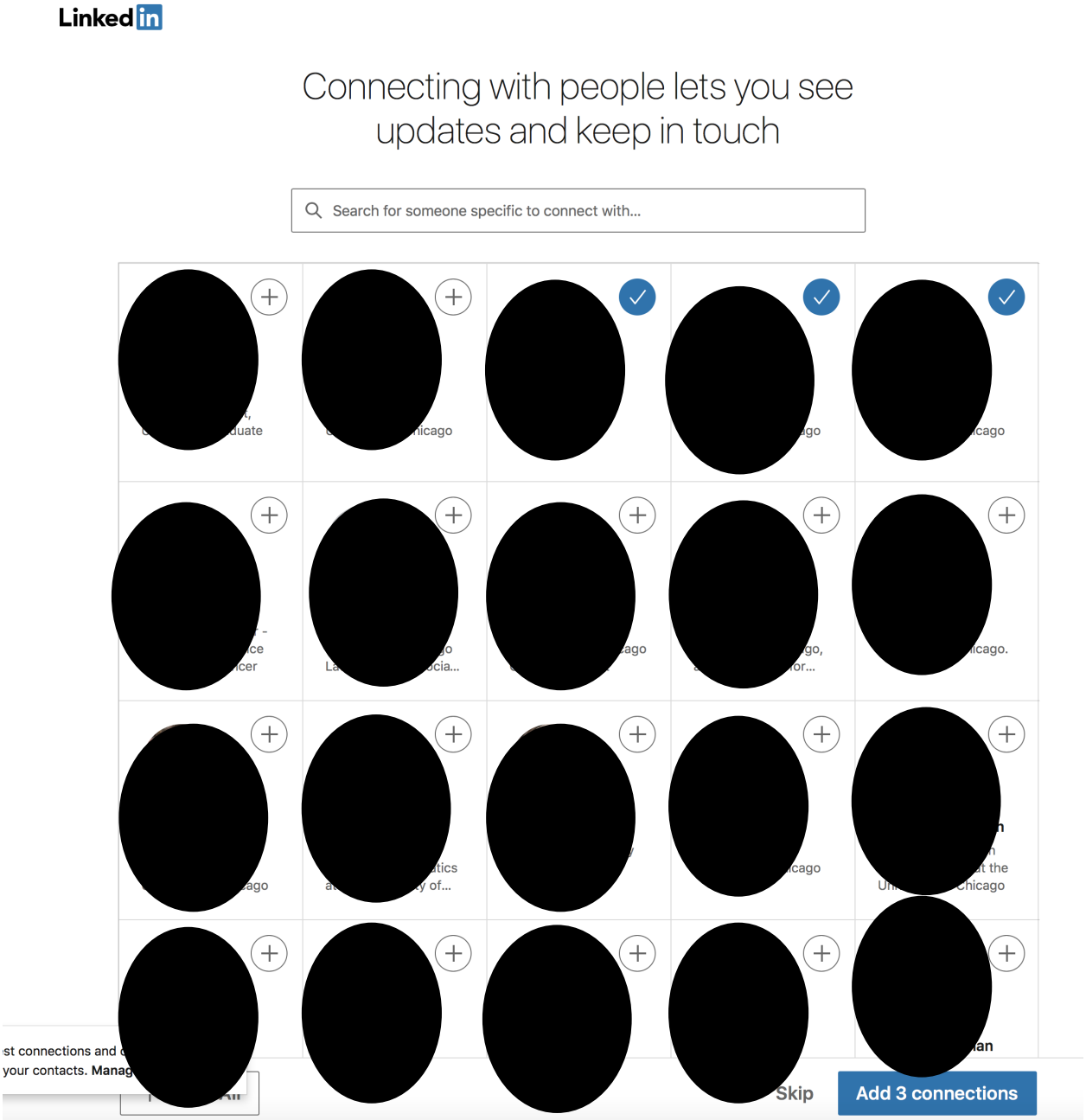


Then, LinkedIn will suggest a number of connections for you (from the set of people connected to your institution).

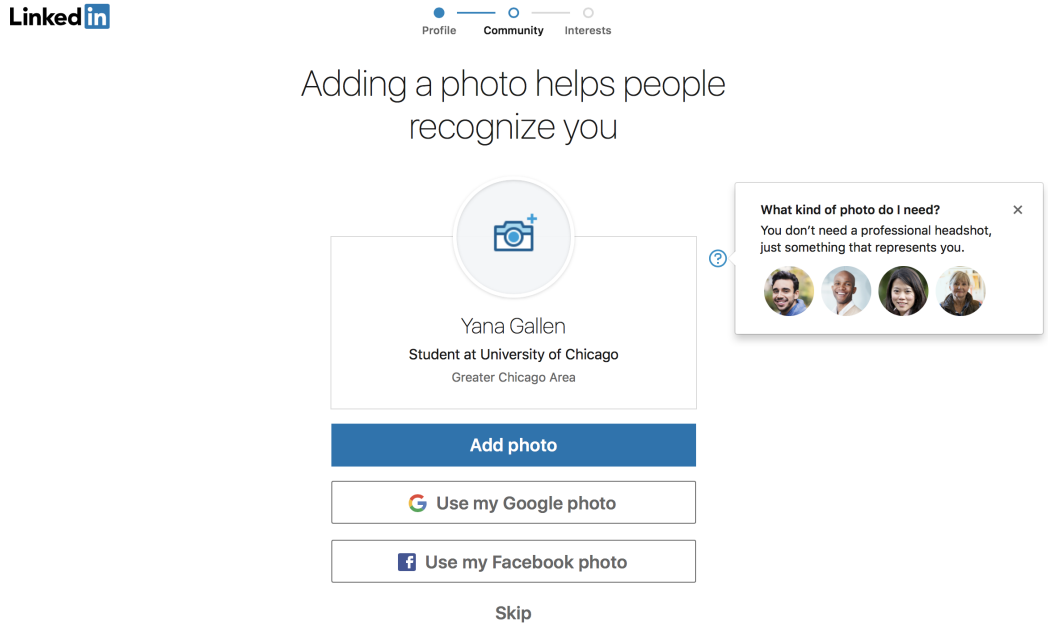
6.2.1 You may know some of them and want to connect with them. In that case, click the "+" symbol to do so. Select up to 10 current UChicago undergraduates that you would like to add as connections.

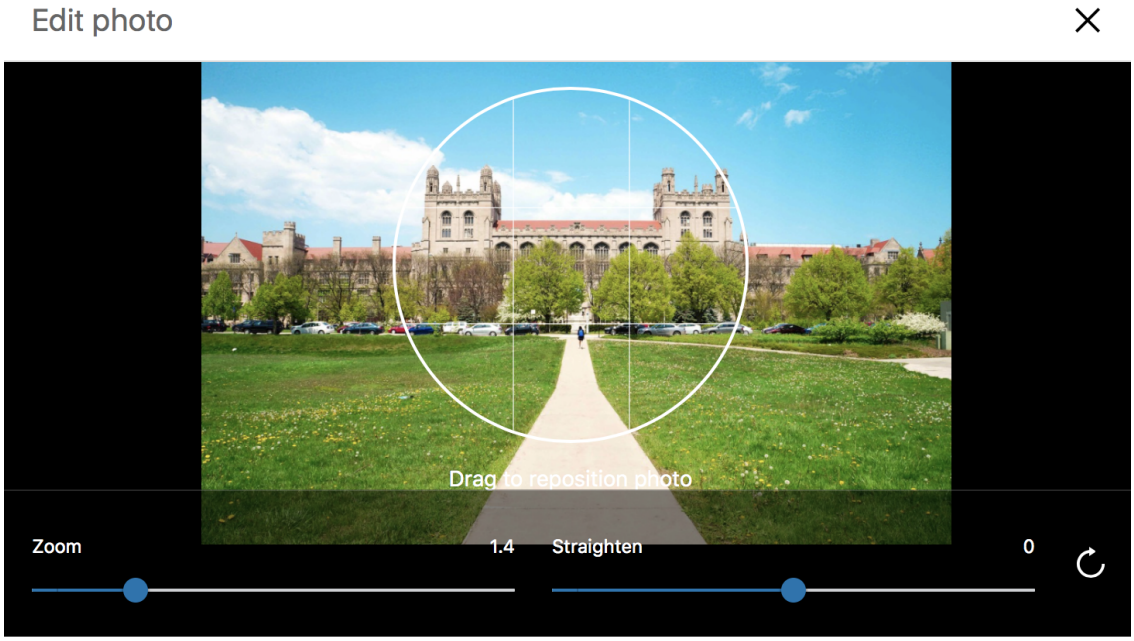
6.2.2 It will turn to a blue check.

6.2.3 Click "add x connections" at the bottom of the screen

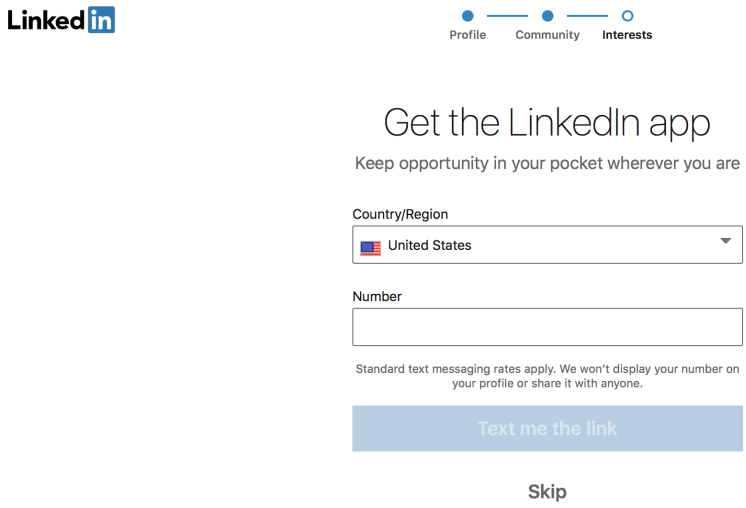


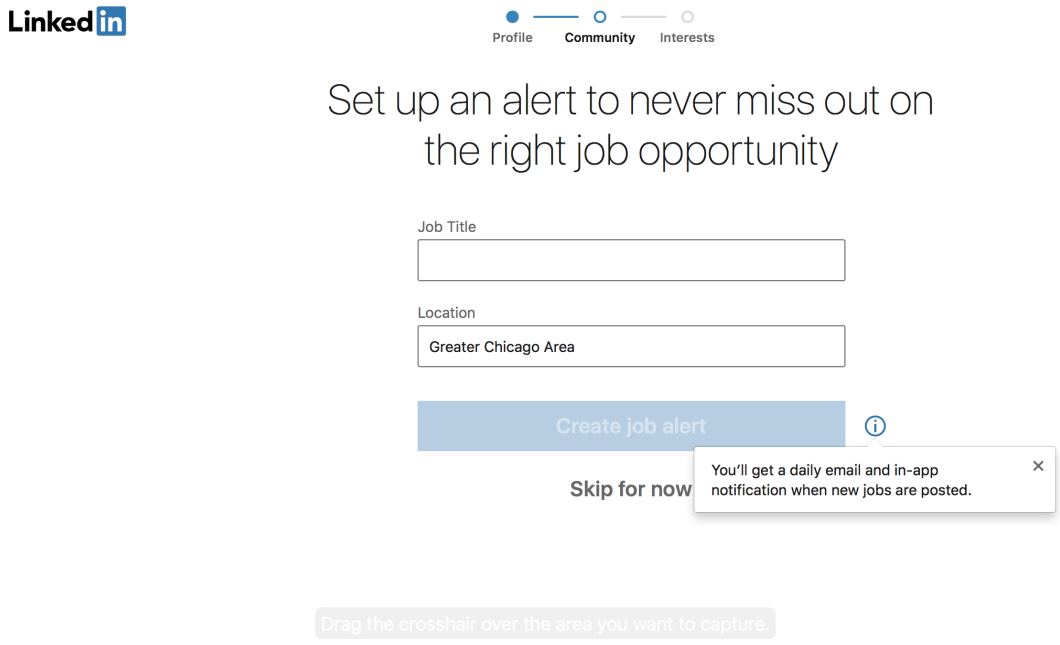
7. You will be prompted to add a photo. Please upload the photo we've provided titled "Photo." Please zoom/position the photo so that it looks approximately as below.



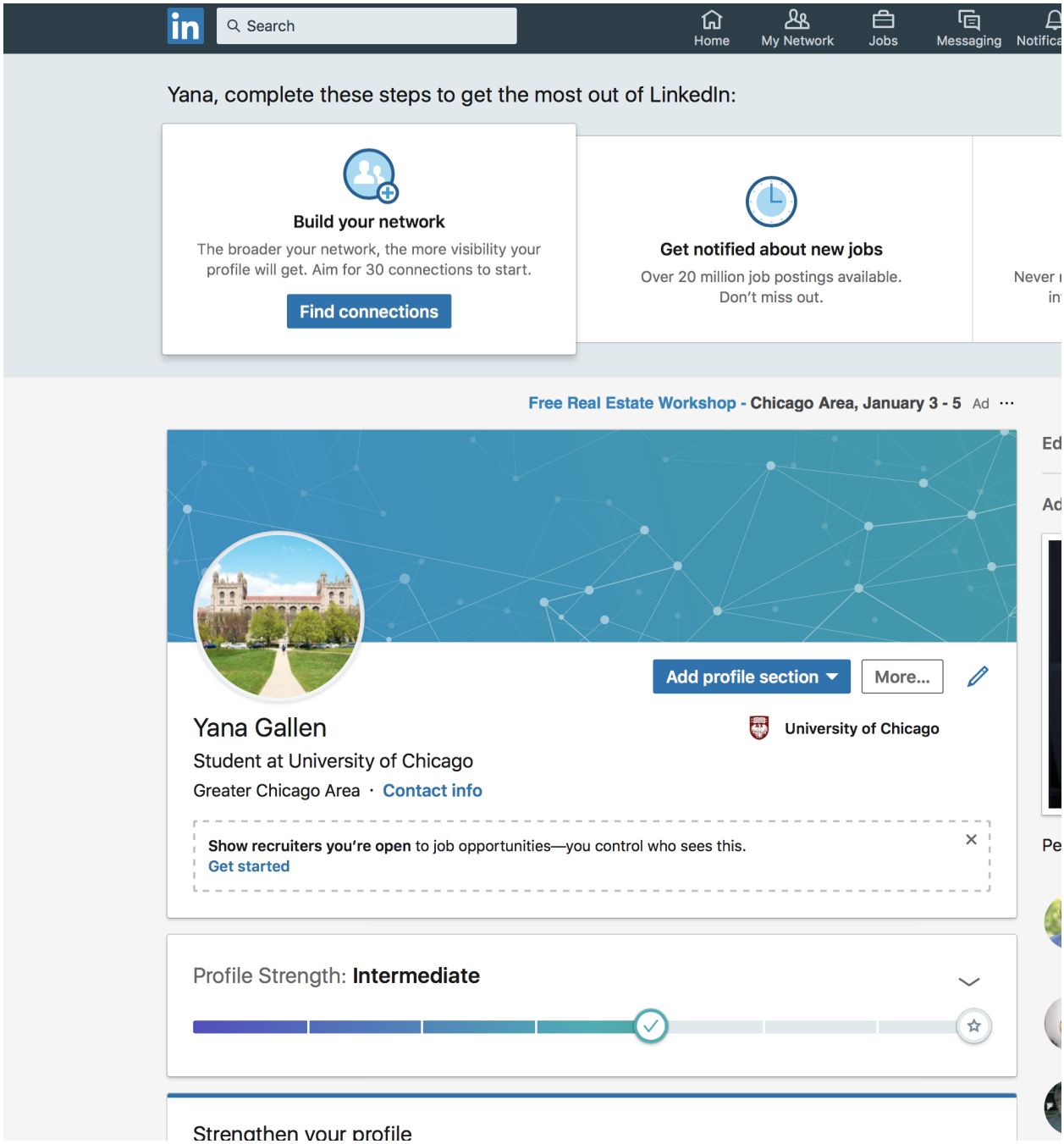


8. Skip creating a job alert and setting up the app. Click “skip” and “skip for now” on the next two pages.





9. Congratulations! You now have a LinkedIn profile. Please continue to section 3.

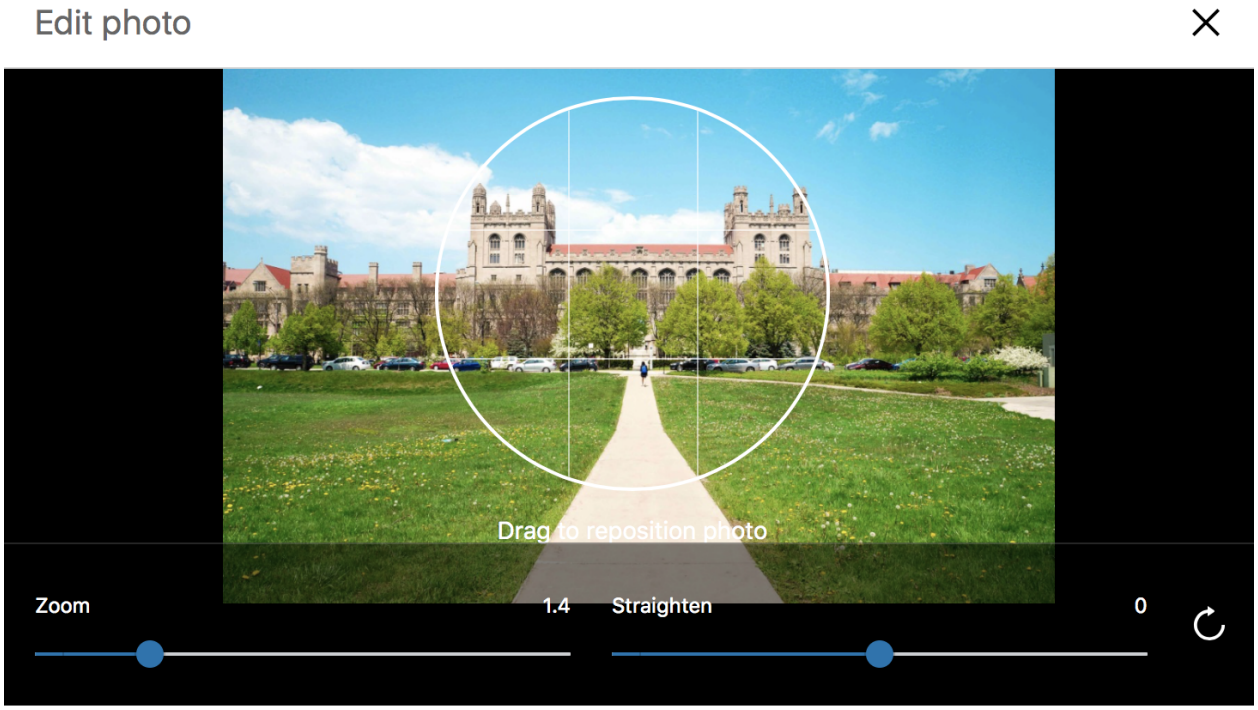

Search
Home
My Network
Jobs
Messaging
Yana, complete these steps to get the most out of LinkedIn:
Build your network
The broader your network, the more visibility your profile will get. Aim for 30 connections to start.
Find connections
Get notified about new jobs
Over 20 million job postings available. Don't miss out.
Free Real Estate Workshop - Chicago Area, January 3 - 5 Ad
Add profile section
More...
Yana Gallen
Student at University of Chicago
Greater Chicago Area · Contact info
University of Chicago
Show recruiters you're open to job opportunities—you control who sees this.
Get started
Profile Strength: Intermediate
Strengthen your profile

SECTION 2: FOR THOSE WHO ALREADY HAVE A LINKEDIN PROFILE

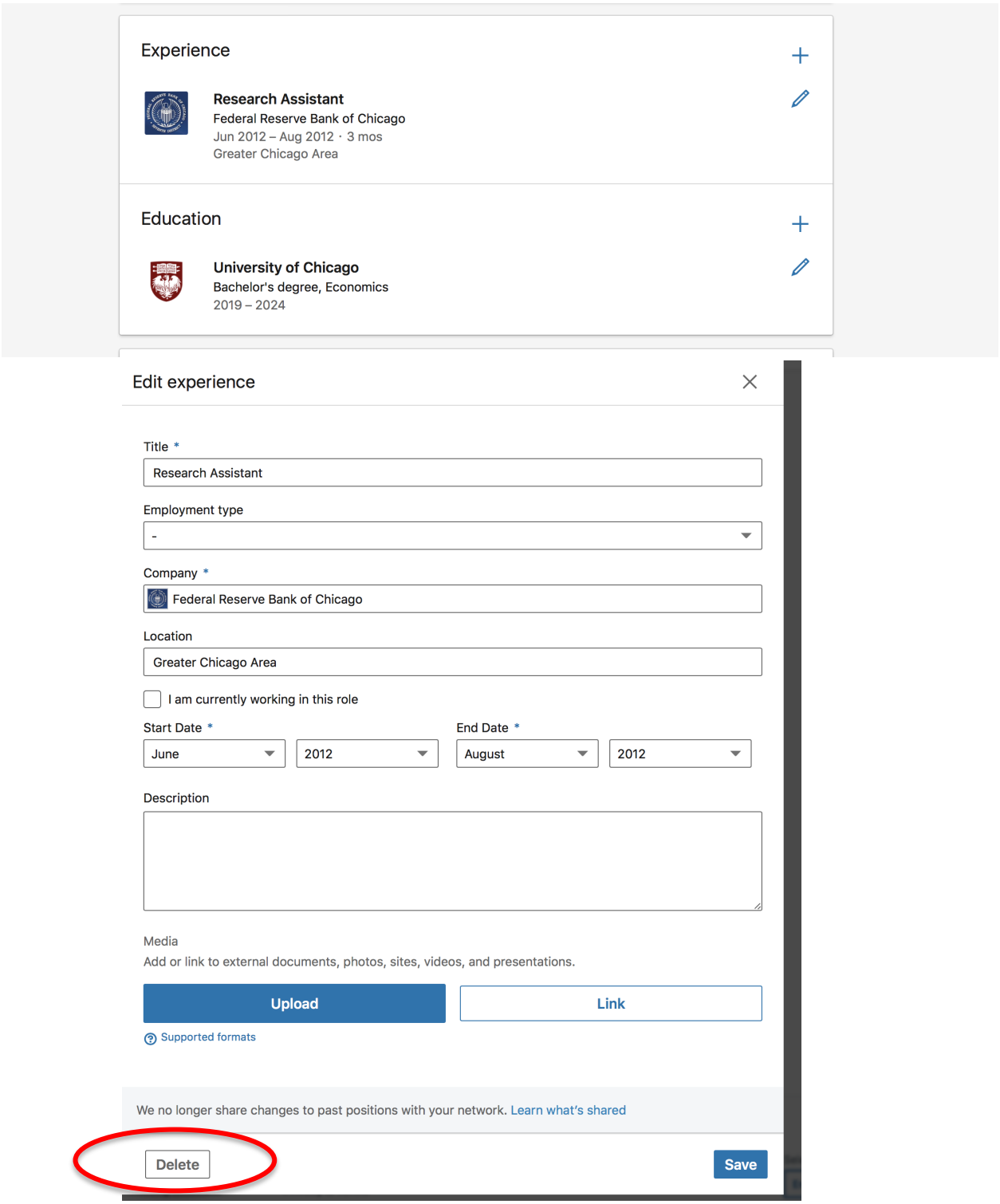
Modifying your LinkedIn profile

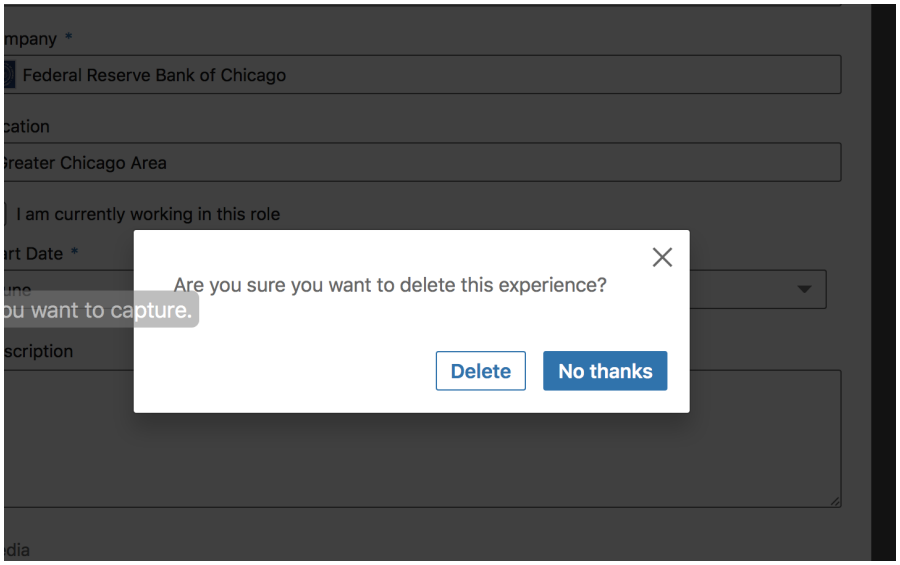
If you have a LinkedIn profile, we ask that you implement the following:

1. Please upload the photo we've provided titled "Photo." Please zoom/position the photo so that it looks approximately as below.

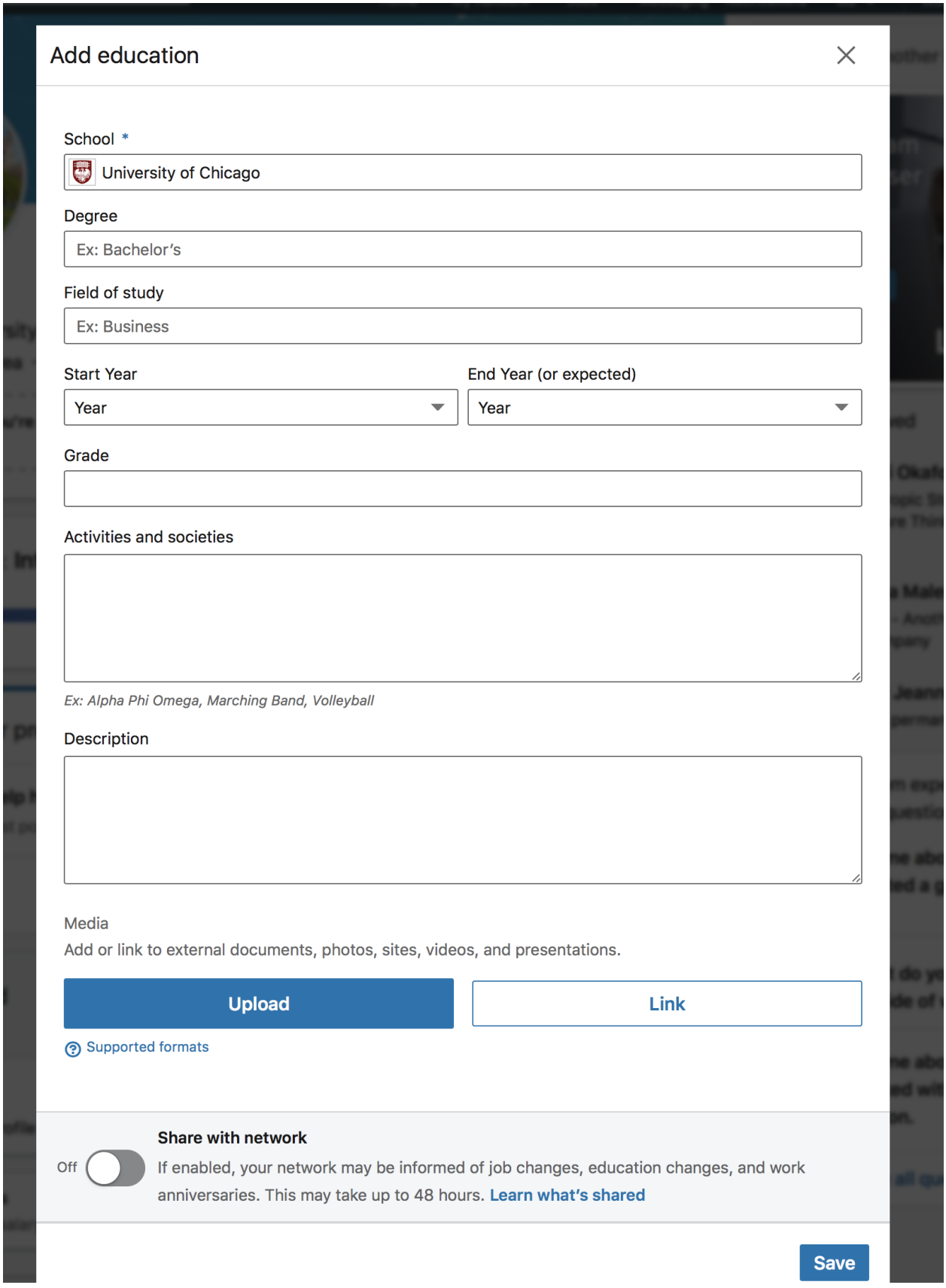


2. Please delete any experience you have previously uploaded to LinkedIn for the duration of the study (one month). You will be able to add it back in later, as well as change your photo to your original photo.

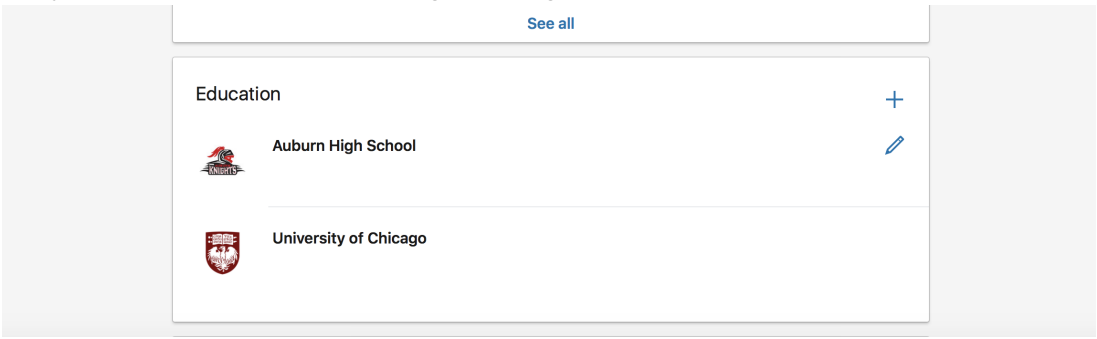

Experience
Research Assistant
Federal Reserve Bank of Chicago
Jun 2012 – Aug 2012 · 3 mos
Greater Chicago Area
Education
University of Chicago
Bachelor's degree, Economics
2019 – 2024
Edit experience
Title *
Research Assistant
Employment type
-
Company *
Federal Reserve Bank of Chicago
Location
Greater Chicago Area
I am currently working in this role
Start Date *
June
2012
End Date *
August
2012
Description
Media
Add or link to external documents, photos, sites, videos, and presentations.
Upload
Link
Supported formats
We no longer share changes to past positions with your network. Learn what's shared
Delete
Save

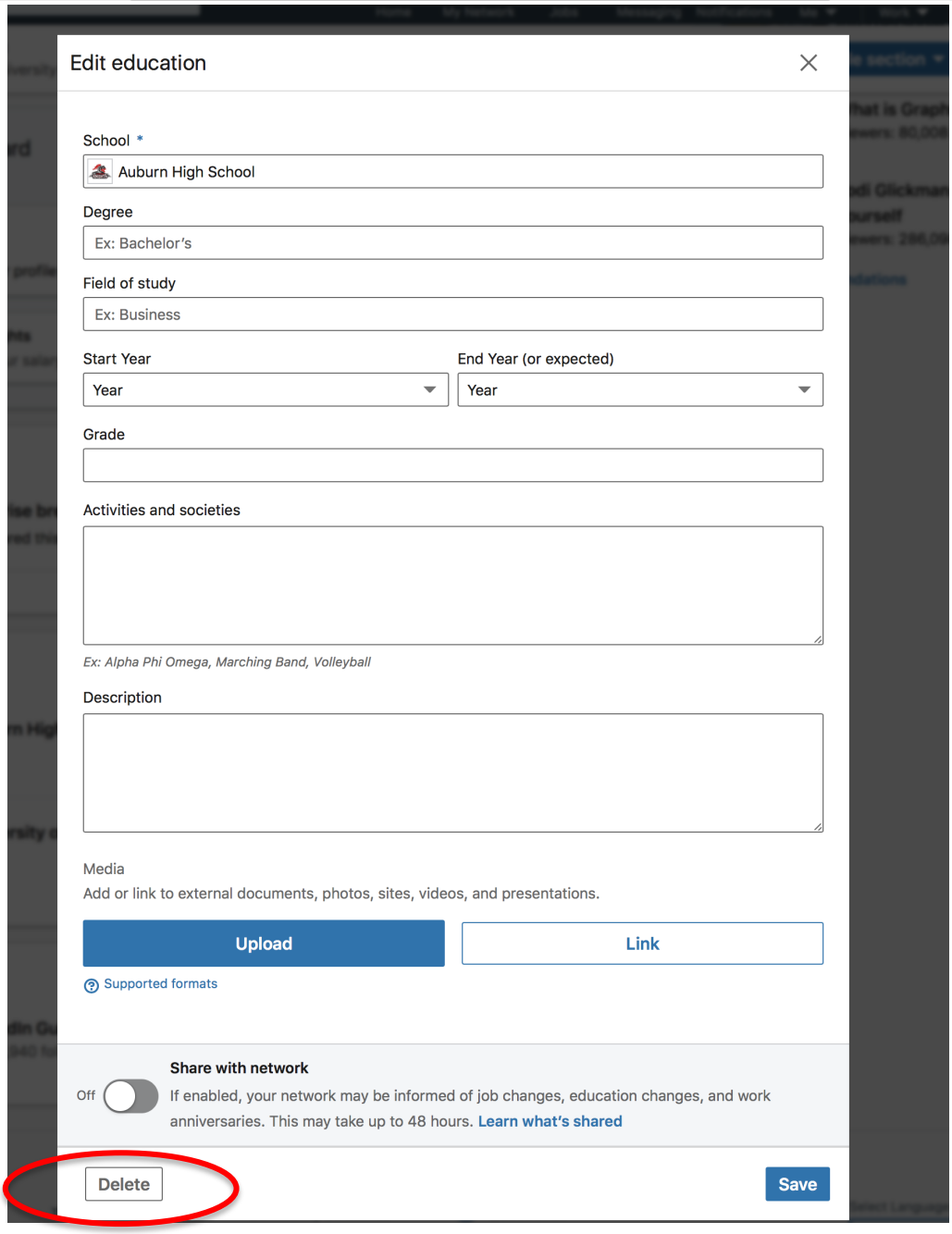


3. Please also make sure that your education includes only your current degree program at the University of Chicago (again, you can add back previous education at the end of the study).


Add education
School *
University of Chicago
Degree
Ex: Bachelor's
Field of study
Ex: Business
Start Year
Year
End Year (or expected)
Year
Grade
Activities and societies
Ex: Alpha Phi Omega, Marching Band, Volleyball
Description
Media
Add or link to external documents, photos, sites, videos, and presentations.
Upload
Link
Supported formats
Share with network
Off
If enabled, your network may be informed of job changes, education changes, and work anniversaries. This may take up to 48 hours. Learn what's shared
Save

Delete any past education/non-UChicago undergraduate education:





4. Please unfollow any interests (at the bottom of your LinkedIn profile) that you previously followed except for the University of Chicago. To do so, click on each interest and then click “unfollow.”

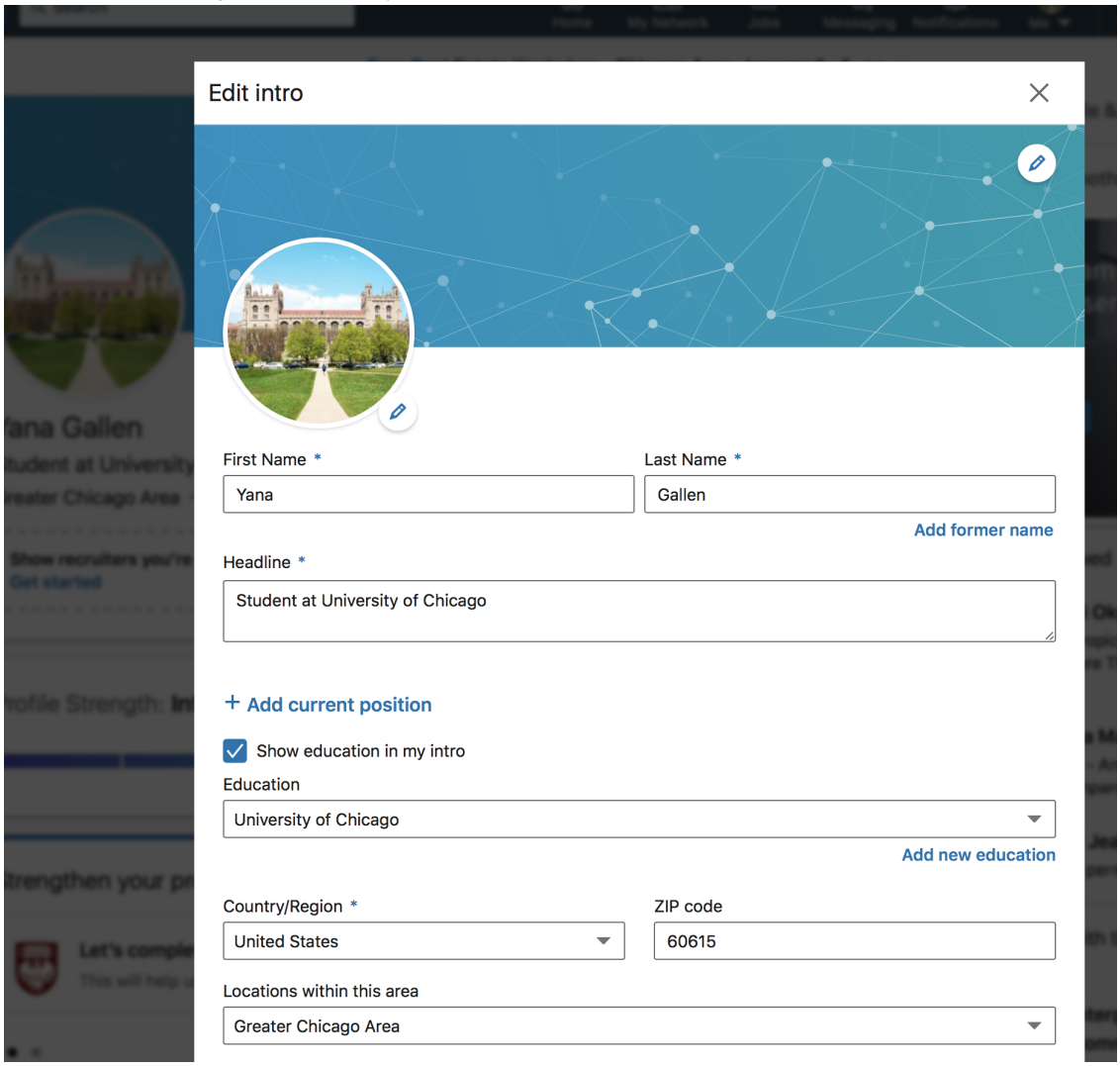
5. Please also delete any into you have, any “about” section that you have, any background (except being a UofC student), any skills, accomplishments, additional information, and supported languages, for the duration of the study (1 month). You can add all of this information back after the study is complete.

If at any point you have questions or concerns, please send an email to careeradvicestudy@gmail.com .

SECTION 3: FOR EVERYONE

Modifying Headline:

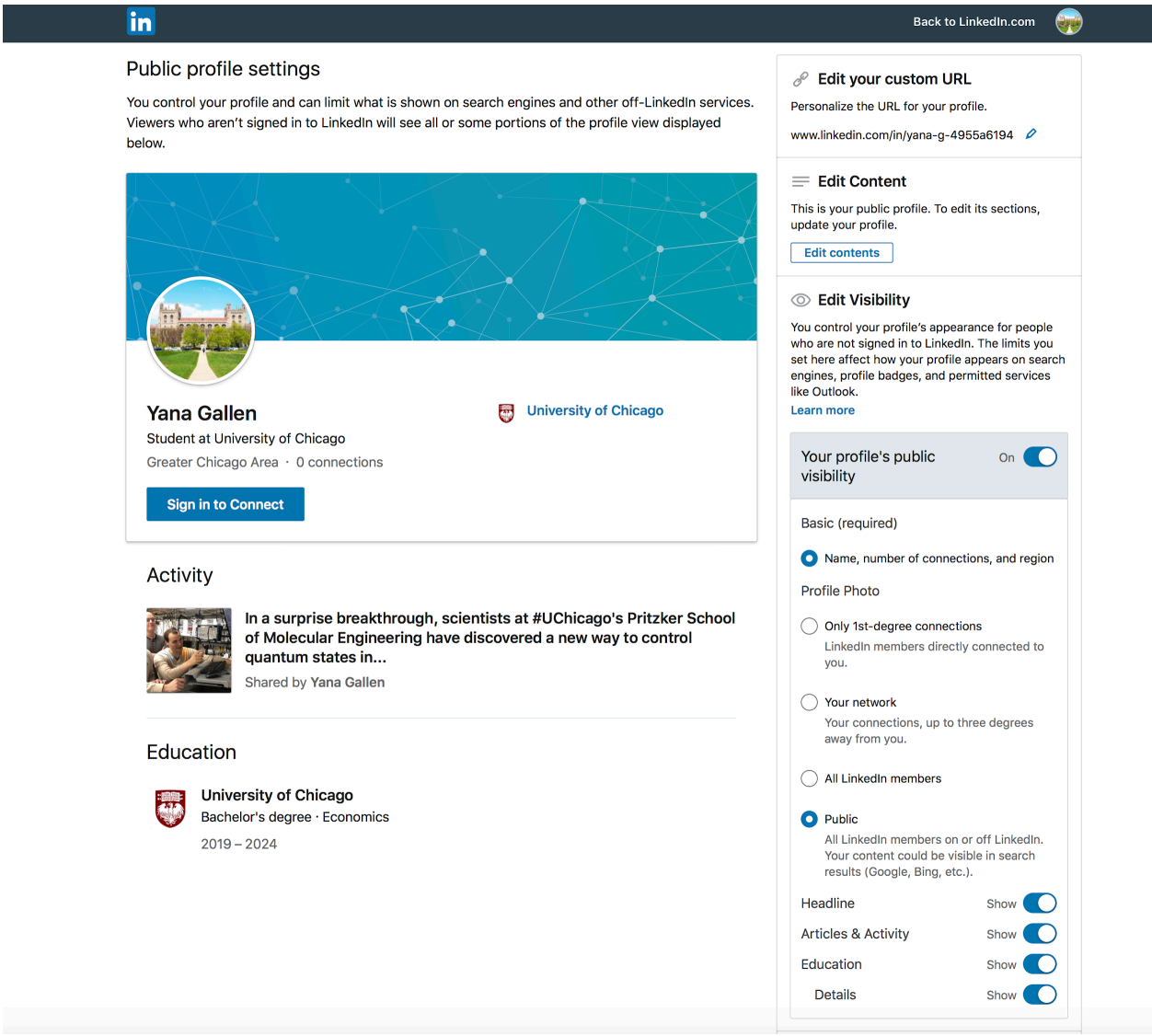
Please make sure that your headline says “Student at the University of Chicago.” To change your headline in case it does not, click the “Me” icon at the top of your LinkedIn homepage, then click “view profile” then click the pencil/edit icon across from your name. In the edit pop-up window, make the changes below to your headline box:



Modifying the privacy settings:

1. On your profile page, click the upper right hand corner, click on “me”

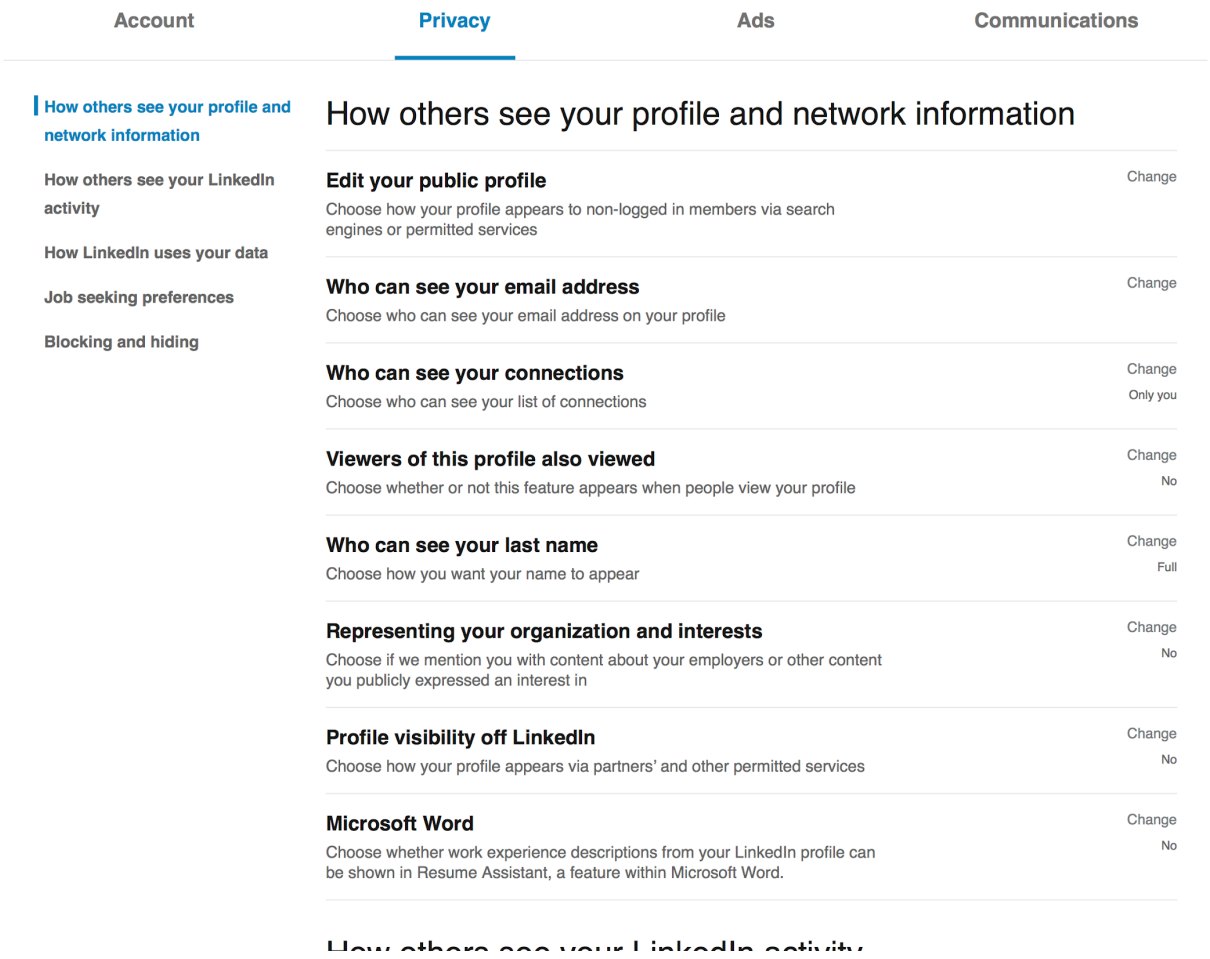
2. Then click on Settings & Privacy
    a. Under “How others see your profile and network information” / “Edit your public profile”, click “Change”
        - Turn your public profile visibility ON
        - Under Photo, click “Public”
        - Allow headline, articles & activities, education, details to “show”



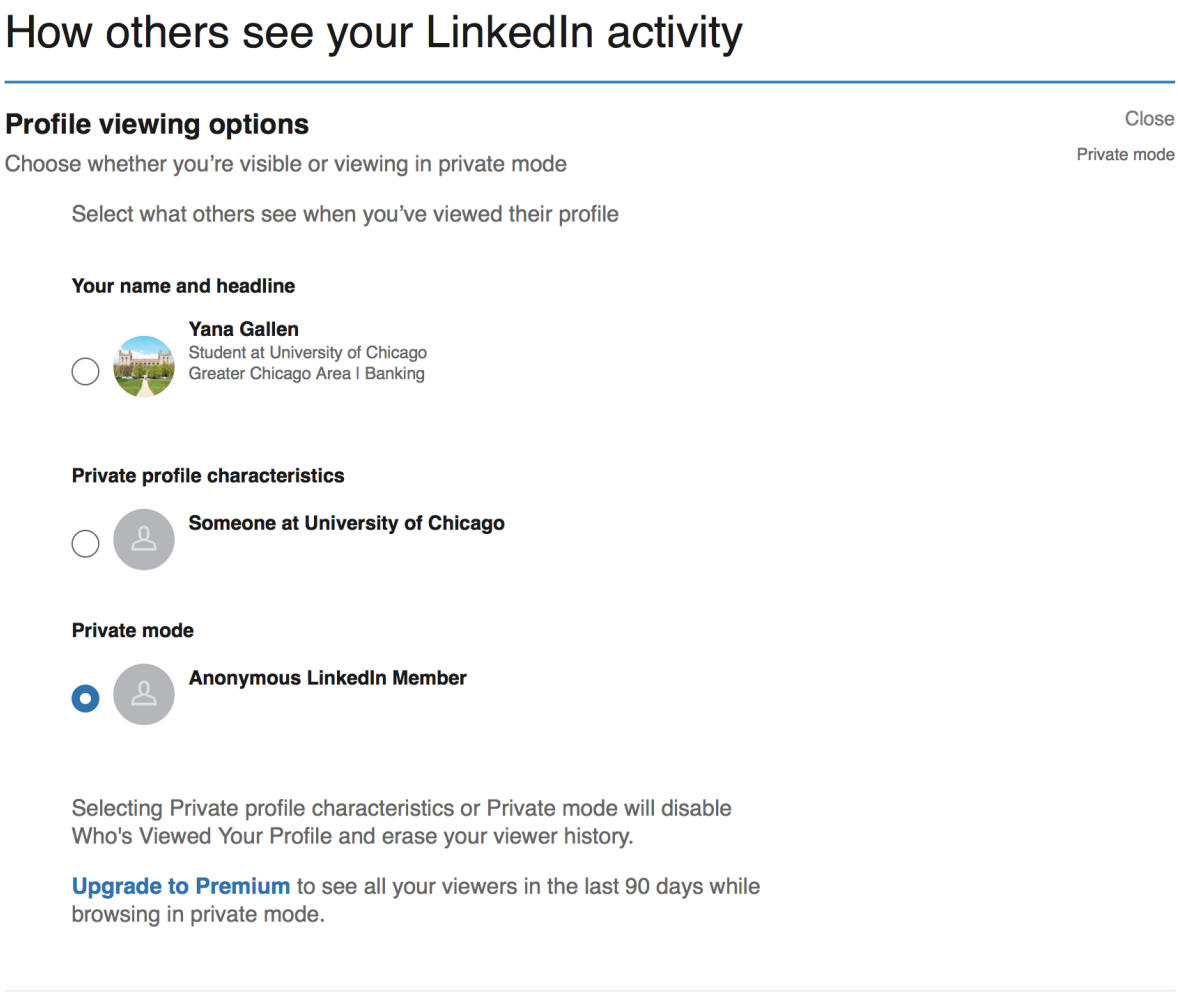
    - Under “How others see your profile and network information” click “change” under “Who can see your email address”
        - Change it to “only visible to me”

- Under “How others see your profile and network information” click “change” under “Who can see your connections”
    - Change it to “only you”
- Under “How others see your profile and network information” click “change” under “Who can see your last name”
    - **Click the second option for the abbreviated last name**
- Under “How others see your profile and network information” click “change” under “viewers of this profile also viewed”
    - Change it to “no”
- Change every subsequent subsection of “how others see your profile and network information to “no”

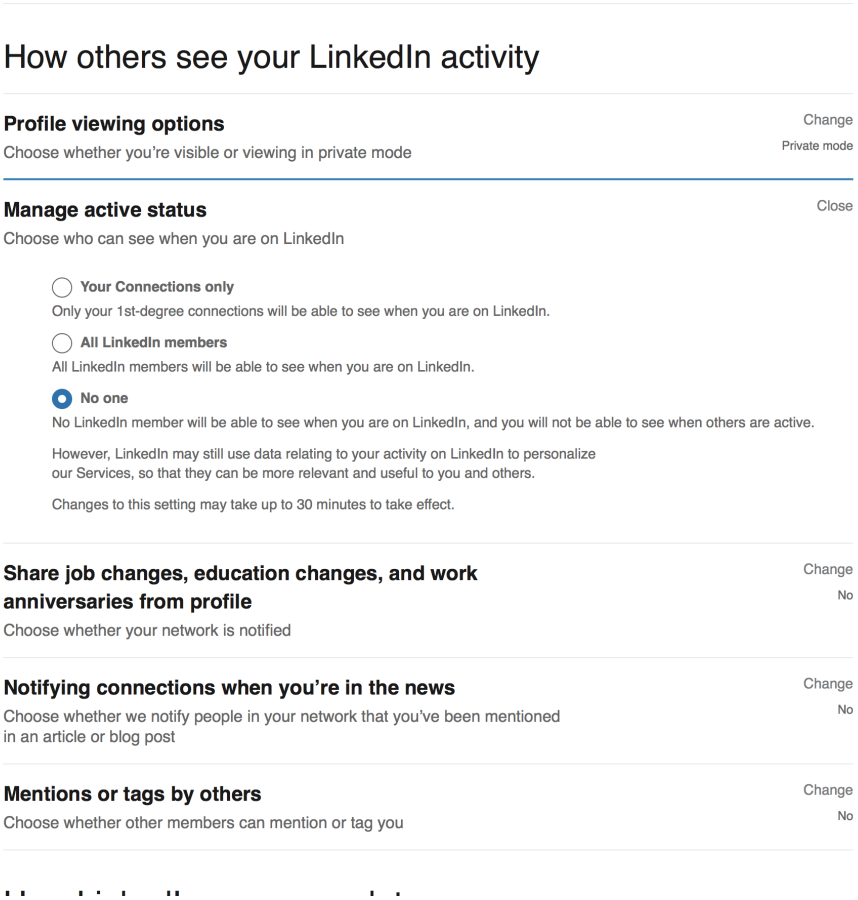
3. At the end of this process, your page should look like the following:



4. In the next privacy section “How others see your LinkedIn activity,”
    - Under “Profile viewing options” select “private mode”



    - Under “Manage active status” select “no one”



- Everything else should be "no" in this section.
- The end product should look like the picture above

5. Please make no other changes to your LinkedIn Profile

Please save your profile page as a pdf and send it along with your LinkedIn URL to careeradvicestudy@gmail.com.

******Please do not send any non-study related messages or change your LinkedIn profile for the duration of this study!!******

SECTION 4: INSTRUCTIONS FOR SENDING MESSAGES

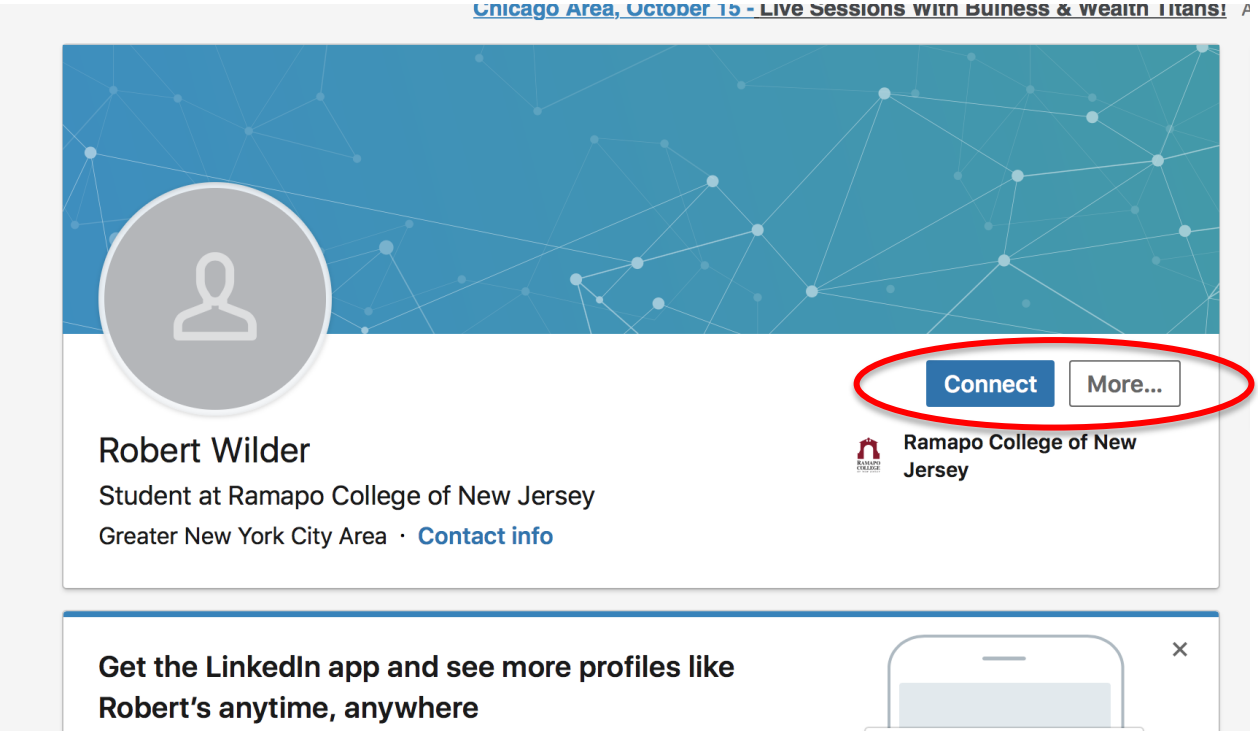
******Please do not send any non-study related messages or change your LinkedIn profile for the duration of this study!!******

Browsing industry professionals

1. You have received an Excel spreadsheet with a list of LinkedIn profiles, and a list of questions personalized for those professionals.
2. Please spend about 15-20 minutes browsing the profiles of these professionals. At this time, please do not send any messages to these professionals.
3. Fill out 1. Form-Results of Profile Search.docx . When you are finished, please save the document as *YourLastName_YourFirstName_MentorSearch.doc*
4. Email the completed document to *careeradvicestudy@gmail.com*
5. **Please wait to receive additional instructions on how to send messages.**

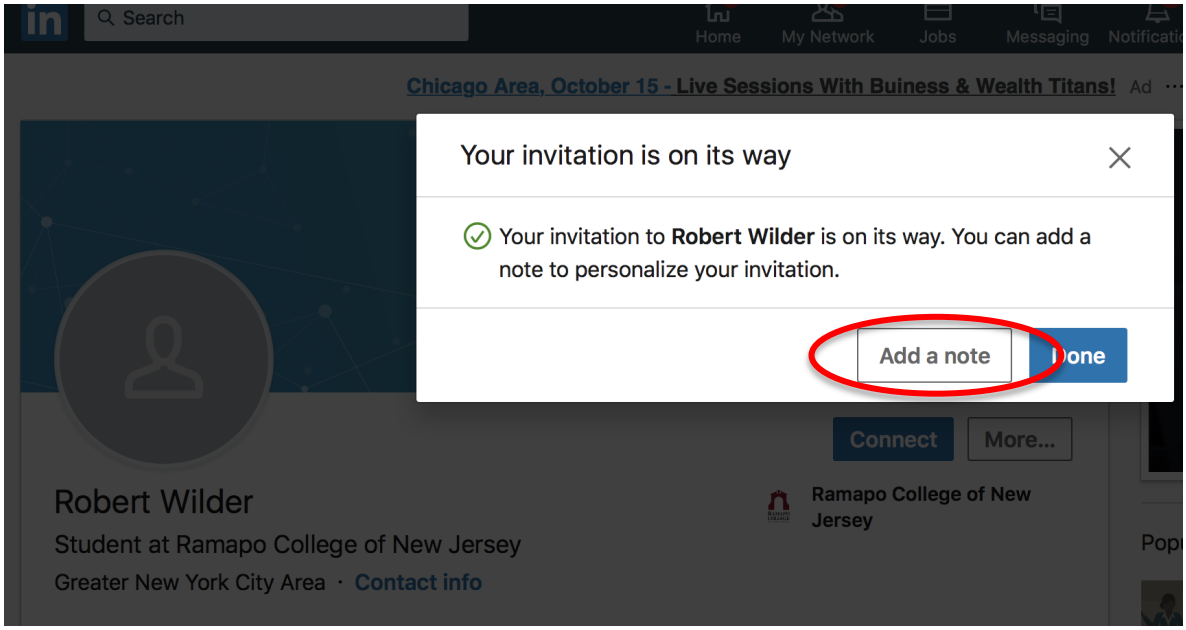
Sending messages

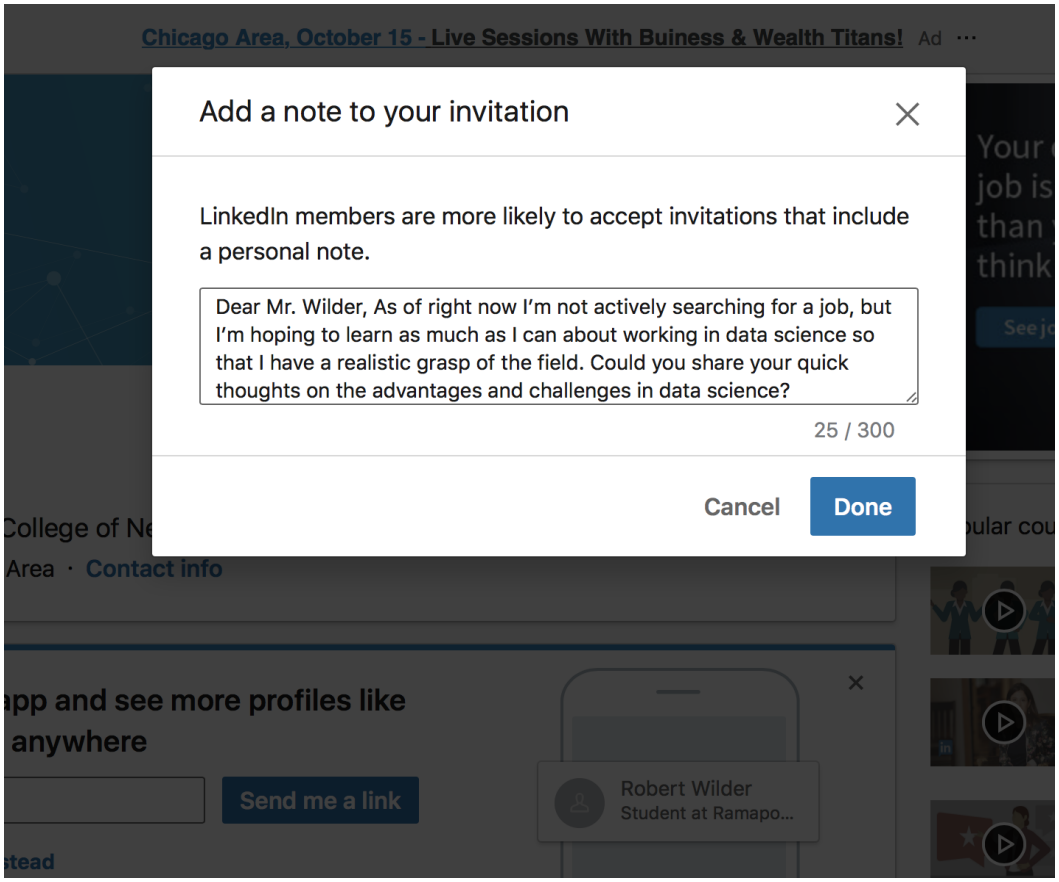
1. We would like you to send messages in the "note" that comes with an invitation to connect, which appears when you click the blue Connect button. Some profiles have different layouts compared to other profiles. Please click "More" if you do not see the blue Connect button prominently displayed on the right hand side of the profile box. There should always be a "Connect" option there.



If you have problems, please raise your hand and we will help you.

Be sure that you click "add a note" This is where you ask your question by pasting the text of the personalized message from the Excel file into the box which appears after you select "add a note".





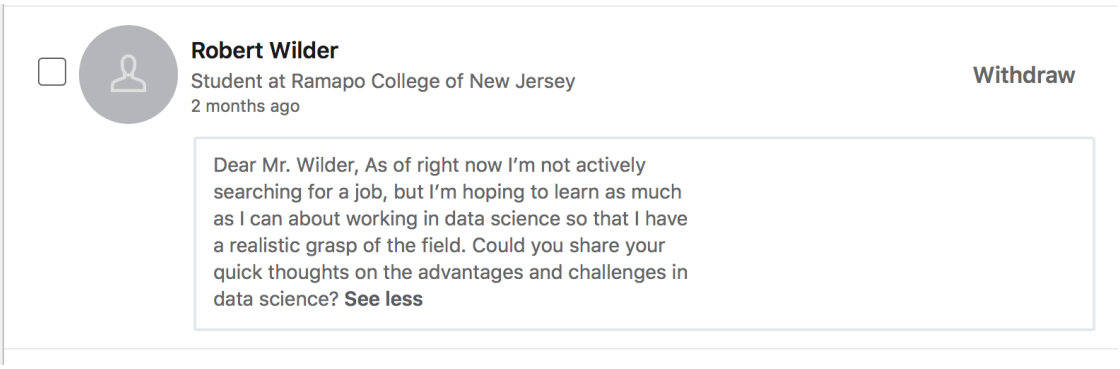
After adding the message, click “send invitation.”

2. For each of the 100 professionals in the Excel file, connect and add the personalized note.

Verifying messages sent

1. To make a pdf of messages sent, go to the following URL: https://www.linkedin.com/mynetwork/invitation-manager/sent/and expand each message one-by-one by clicking “see more.” Print a pdf of the website by selecting ctr+p (or cmd+p on a mac) and selecting “save as pdf.” An individual message will look like this image below, but the entire pdf file will be approximately 18 pages long:
    a. *Please save this document as YourLastName_YourFirstName_Sent.pdf*
    b. *Email the completed document to careeradvicestudy@gmail.com*

2. Count to make sure there are 100 messages sent. If there are fewer than 100 messages sent:
    c. Go to https://www.linkedin.com/messaging/to see whether one of your connection requests has already been accepted. If so, take a screenshot of those messages. *Please save this document as YourLastName_YourFirstName_Connected.pdf. Email the completed document to careeradvicestudy@gmail.com*
    d. If there are still fewer than 100 messages sent, please verify your connection requests against the original list in the excel file.



Receiving replies

1. Please check your email or LinkedIn often for the duration of this study!
2. If you receive a reply, please fill out the Word document entitled “2. Form-Messages Recieved Template.doc.” Save it as *YourLastName_YourFirstName_ContactID_Response.doc* and send back a screenshot of the reply as in the attached example. We will also ask you to copy and paste the text of the reply, and answer questions about the content of the reply. Please fill out this document for each reply you receive.
3. If you receive a reply, you should feel free to interact further (but you don’t have to!).
4. At the end of the study, we will ask you to fill out a survey reflecting on your experience in this study.

5. **Please do not send any non-study related messages or change your LinkedIn profile for the duration of this study!!** If at any point you have questions, please email careeradvicestudy@gmail.com.

Managing data collection

1. At the end of this study, please delete all emails you have sent to careeradvicestudy@gmail.com
2. At the end of this study, please delete from your computer:
    a. The MS Excel spreadsheet with the list of mentors to contact.
    b. All saved MS Word documents with messages sent and received.
    c. All screenshots of messages sent and received.

F.3 Follow-up survey on demand for information

Demographics

UNIVERSITY OF CHICAGO
CONSENT FORM FOR RESEARCH PARTICIPATION

Study Title: Career Advice Study

Principal Investigator: Yana Gallen

IRB Study Number: IRB21-0367

I am a faculty member at the University of Chicago, in the School of Public Policy. I am planning to conduct a research study, which I invite you to take part in. This form has important information about the reason for doing this study, what we will ask you to do if you decide to be in this study, and the way we would like to use information about you if you choose to be in the study.

Why are you doing this study?

You are being asked to participate in a research study about preferences for career advice. The purpose of the study is to understand how people make choices regarding career advice.

What will I do if I choose to be in this study?

You will answer questions about how you search for jobs and your preferences concerning getting advice from professionals.

Study time: Study participation will take approximately 10 minutes.

Study location: All study procedures will take place online.

What are the possible risks or discomforts?

Your participation in this study does not involve any physical or emotional risk to you beyond that of everyday life.

As with all research, there is a chance that confidentiality of the information we collect from you could be breached – we will take steps to minimize this risk, as discussed in more detail below in this form.

What are the possible benefits for me or others?

You are not likely to have any direct benefit from being in this research study. This study is designed to learn more about how people make decisions about career advice.

How will you protect the information you collect about me, and how will that information be shared?

Results of this study may be used in publications and presentations. Your study data will be handled as confidentially as possible. If results of this study are published or presented, individual names and other personally identifiable information will not be.

To minimize the risks to confidentiality, we will no data will be identified. We may share the data we collect from you for use in future research studies or with other researchers – if we share the data that we collect about you, we will remove any information that could identify you before we share it.

If we think that you intend to harm yourself or others, we will notify the appropriate people with this information.

Financial Information

Participation in this study will involve no cost to you. You will be given a $5 amazon gift card for participating in this study.

Payment received for participation in research is considered taxable income by the Internal Revenue Service (IRS). If payment to a research participant is $600 or more in any one calendar

year, the University of Chicago is required to report this information to the IRS. You will need to provide the researchers your address and Social Security number for IRS reporting purposes.

What are my rights as a research participant?

Participation in this study is voluntary. You do not have to answer any question you do not want to answer. If at any time and for any reason, you would prefer not to participate in this study, please feel free not to. If at any time you would like to stop participating, please tell me. We can take a break, stop and continue at a later date, or stop altogether. You may withdraw from this study at any time, and you will not be penalized in any way for deciding to stop participation.

If you decide to withdraw from this study, the researchers will ask you if the information already collected from you can be used.

What if I am a University of Chicago student or employee?

You may choose not to participate or to stop participating in this research at any time. This will not affect your class standing, grades, employment, or any other aspects of your relationship with the University of Chicago.

Who can I contact if I have questions or concerns about this research study?

If you have questions, you may contact the researcher, Yana Gallen, at yana@uchicago.edu or at careeradvicestudy@gmail.com

If you have any questions about your rights as a participant in this research, you can contact the following office at the University of Chicago:

Social & Behavioral Sciences Institutional Review Board
University of Chicago
1155 E. 60th Street, Room 418
Chicago, IL 60637
Phone: (773) 834-7835

Email: sbs-irb@uchicago.edu

Consent

I have read this form and the research study has been explained to me. I have been given the opportunity to ask questions and my questions have been answered. If I have additional questions, I have been told whom to contact. I agree to participate in the research study described above and will receive a copy of this consent form.

If you agree to participate, click yes.

- ○ Yes
- ○ No

We've detected that you are taking this survey on a mobile device. Please turn your screen sideways to continue the survey. Thank you for your cooperation.

First, we will ask you some questions about yourself.

Which year were you born in?

- ○ 1996
- ○ 1997
- ○ 1998
- ○ 1999
- ○ 2000
- ○ 2001
- ○ 2002

- ○ 2003
- ○ 2004
- ○ _____ Other

Do you consider yourself

- ○ White/Caucasian
- ○ Black/African American
- ○ American Indian
- ○ Hispanic/Latino
- ○ Asian/Pacific islander
- ○ _____ Other

Are you a first generation college student?

- ○ Yes
- ○ No

What is your gender

- ○ Male
- ○ Female

What is your major or intended major?

_____

Are you currently pursuing more than one major?

- Yes
- No

What is your second major?

What is your GPA on a scale of 0 - 4, rounded to the nearest tenth?

When do you expect to graduate from UChicago?

- 2021
- 2022
- 2023
- 2024
- 2025

Which of the following careers are you most interested in?

- Law
- Management Consulting

- ○ Data Science
- ○ Finance
- ○ [ ] Other

The next part of this survey will ask you additional questions about how you seek information about careers.

Would you be interested in meeting with a professional working in your preferred career for 15 minutes for the purposes of getting information on your preferred career?

- ○ Yes
- ○ No

Suppose you are given 15 minutes to learn about your preferred career by talking to a professional working in your preferred career. Below, please fill in how much time (in minutes) you would like to spend discussing the following topics. **You cannot use more than 15 minutes total.**

	Time in minutes										
	0	2	3	5	6	8	9	11	12	14	15
Different types of jobs within the field											
Daily tasks on the job											
Skill/education requirements											

Compensation	
Work/life balance	
Workplace culture	
Career trajectory/growth	
Job stability	
Total:	

Mentoring questions

Which sources of information do you use when thinking about career choice (check all that apply)

- [ ] University of Chicago Career Advancement Office
- [ ] Wisr
- [ ] UChicago classmates
- [ ] Family
- [ ] UChicago Alumni
- [ ] Connections outside of UChicago
- [ ] Linkedin
- [ ] UChicago Professors
- [ ] Information obtained online
- [ ] _____ Other

How many people have you contacted to get information about the best choice of career for you?

- I haven't contacted anyone
- One person
- 2-3 people
- 4-6 people
- 7-10 people
- 11-20 people
- More than 20 people

Have you asked any UChicago alumni for career advice or information?

- Yes
- No

Do you have a LinkedIn account?

- Yes
- No

Have you ever contacted UChicago Alumni on LinkedIn for the purposes of getting career information/advice?

- Yes
- No

Have you ever contacted other professionals on LinkedIn for the purposes of

getting career information/advice?

- ○ Yes
- ○ No

Block 3

Have you ever sought information on work/life balance in various careers?

- ○ Yes
- ○ No

Which sources of information did you seek work/life balance information from (check all that apply)?

- ☐ University of Chicago Career Advancement Office
- ☐ Wisr
- ☐ UChicago classmates
- ☐ Family
- ☐ UChicago Alumni
- ☐ Connections outside of UChicago
- ☐ Linkedin
- ☐ UChicago Professors
- ☐ Information obtained online
- ☐ _____ Other

Have you ever sought information on workplace culture in various careers?

- ○ Yes
- ○ No

Which sources of information did you seek information on workplace culture from (check all that apply)?

- ☐ University of Chicago Career Advancement Office
- ☐ Wisr
- ☐ UChicago classmates
- ☐ Family
- ☐ UChicago Alumni
- ☐ Connections outside of UChicago
- ☐ Linkedin
- ☐ UChicago Professors
- ☐ Information obtained online
- ☐ _____ Other

Have you ever received unsolicited information about workplace culture in various careers?

- ○ Yes
- ○ No

Have you ever received unsolicited information about work/life balance in

various careers?

- Yes
- No

Relative to male students, do you think that female students are more or less likely to receive career advice about workplace culture?

- More Likely
- Less Likely
- Equally Likely

Relative to male students, do you think that female students are more or less likely to receive career advice about work/life balance?

- More Likely
- Less Likely
- Equally Likely

Block 3

Thank you for completing the survey. Please enter your **University of Chicago email address here**. We will send you a $5 Amazon egift card. The contact information you provide will not in any way be linked to your responses.

Powered by Qualtrics

Appendix References

Abel, M. (2017). Labor market discrimination and sorting: evidence from South Africa. *World Bank Policy Research Working Paper*.

Agan, A. Y. and Starr, S. B. (2020). Employer neighborhoods and racial discrimination. Working Paper 28153, National Bureau of Economic Research.

Becker, G. (1971). *The Economics of Discrimination*. University of Chicago Press, 2 edition.

Beggs, S., Cardell, S., and Hausman, J. (1981). Assessing the potential demand for electric cars. *Journal of Econometrics*, 17(1):1–19.

Black, D. A. (1995). Discrimination in an equilibrium search model. *Journal of Labor Economics*, 13(2):309–334.

Bohren, A., Imas, A., and Rosenberg, M. (2018). The Language of Discrimination: Using Experimental versus Observational Data. *AEA Papers and Proceedings*, 108:169–74.

Charles, K. K. and Guryan, J. (2008). Prejudice and wages: An empirical assessment of becker's the economics of discrimination. *Journal of Political Economy*, 116(5):773–809.

Gallen, Y. and Wasserman, M. (2021). Do male and female students use networks differently? *AEA Papers and Proceedings*, 111:154–58.

Gornall, W. and Strebulaev, I. A. (2025). Gender, race, and entrepreneurship: A randomized field experiment on venture capitalists and angels. *Management Science*, 71(6):5308–5327.

Heckman, J. J. (1998). Detecting Discrimination. *Journal of Economic Perspectives*, 12(2):101–116.

Heikensten, E. and Isaksson, S. (2018). Simon Says: Examining Gender Differences in Advice Seeking and Influence in the Lab. *SSRN Electronic Journal*.

Kalla, J., Rosenbluth, F., and Teele, D. L. (2018). Are You My Mentor? A Field Experiment on Gender, Ethnicity, and Political Self-Starters. *The Journal of Politics*, 80(1):337–341.

Pager, D. and Pedulla, D. (2015). Race, Self-Selection, and the Job Search Process. *American Journal of Sociology*, 120(4):1005–54.

Särndal, C.-E., Swensson, B., and Wretman, J. (1992). Model assisted survey sampling.