

7-30-2021

Employment Research, Vol. 28, No. 3, July 2021

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Citation

W.E. Upjohn Institute. 2021. Employment Research. 28(3). [https://doi.org/10.17848/1075-8445.28\(3\)](https://doi.org/10.17848/1075-8445.28(3))

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EMPLOYMENT RESEARCH

Beyond Degrees

The Kalamazoo Promise and Workforce Outcomes

Isabel McMullen and Brad J. Hershbein



ARTICLE HIGHLIGHTS

■ *Tuition-free programs like the Kalamazoo Promise have potential to improve workforce outcomes, but they will be more effective with deliberate efforts to match degree-earners with local employers.*

■ *We find the Kalamazoo Promise did not meaningfully increase in-state employment among scholars seven to nine years after high school graduation.*

■ *The scholarship did, however, slightly increase average earnings and modestly increase the chance that recipients earned at least \$25,000 a year.*

■ *Recipients of the scholarship were also more likely to live near Kalamazoo's central business district.*

Tuition-free college scholarships based on residency, often called Promise or place-based programs, are still a relatively new addition to the policy landscape. While many college scholarships frame eligibility around need or merit, place-based programs provide college funding based on where an individual lives, often a municipality or school district. The goal is not only to support individual students, but also to create better job opportunities and help revitalize the local economy. While approximately 200 such programs now exist nationwide, few have been around long enough to understand their impacts on college completion, let alone on workforce outcomes after college. Thus, the extent to which place-based policies of this kind can achieve their economic goals remains an open question.

Having operated for more than 15 years, the Kalamazoo Promise has yielded compelling results in terms of postsecondary access and attainment. Scholars eligible for the Promise receive first-dollar funding—before other aid is counted—to attend any public two- or four-year institution in the state of Michigan, and are eligible for funding up to 130 credits, a bachelor's degree, or 10 years (whichever comes first).¹ In part because of this flexibility and generosity, previous research found the Promise led to a 14 percent increase in immediate college enrollment and a 28 percent increase in the likelihood of earning a postsecondary credential by six years after high school (Bartik, Hershbein, and Lachowska 2020). To understand how these gains in college access and completion have in turn affected alumni's workforce success, we and our coauthors obtained employment and earnings data from the State of Michigan's Unemployment Insurance program on graduates of Kalamazoo Public Schools. We compared outcomes among Promise eligible and ineligible graduates, before and after the scholarship was implemented, to estimate the effect of the Promise on key labor market outcomes: employment (in Michigan),

earnings, and proximity of residence to Kalamazoo.

We find that the Promise had no meaningful impact on recipients' employment in Michigan within the first decade after high school graduation. However, there is some evidence that the Promise boosted average earnings by about 6 percent, and stronger evidence that it increased the

The Promise slightly increased the likelihood of earning at least \$6,000 per quarter (\$24,000 annualized) by the time scholars were in their mid-to-late 20s.

likelihood that scholars earn upwards of \$25,000 to \$40,000 by their mid-to-late 20s. Moreover, because of the Promise, alumni also became more likely to live within 20 miles of Kalamazoo's central business district.

These findings demonstrate that place-based college scholarships have potential to spur workforce development, but that even the most generous of them are not panaceas. As programs like the Kalamazoo Promise age and new programs emerge, including more wide-scale tuition-free scholarships, our study is an important reminder that degrees alone will not necessarily produce higher employment or better jobs, and that workforce and economic development programs must work simultaneously to grow the local economy.

The Kalamazoo Promise, Workforce Data, and Our Approach

Since the inaugural class of 2006, the Kalamazoo Promise has distributed funding to over 6,000 students from the Kalamazoo Public Schools (KPS), of which more than 2,300 have earned a postsecondary credential. To be eligible,

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students must attend (and reside in) the KPS district from at least ninth grade, but there are no other financial need or merit requirements. Consequently, about 90 percent of KPS high school graduates are eligible for Promise funding (W.E. Upjohn Institute 2021). The KPS school district partners closely with the Kalamazoo Promise to provide data on scholarship eligibility, and the district also discloses other demographic, residency, and achievement variables to the Promise. We draw on these data, which predate the Promise, to conduct our analysis.

For outcomes, we use data from the Michigan Unemployment Insurance (UI) Agency matched to individuals in the KPS education records. The Michigan UI data contain quarterly earnings for all individuals working in a UI-covered job in Michigan. This includes most forms of employment; however, it excludes federal government workers, those who are self-employed, and anyone working in a freelance or gig-style job. Additionally, anyone working outside of the state is also excluded, so we

are unable to observe those who have left Michigan. Overall, we match 79 percent of all KPS graduates from the classes of 2003–2013 to at least one UI record. For those matched, we observe their quarterly earnings at each job from 2006 through the beginning of 2019, as well as their ZIP code of residence each quarter.

Note that even individuals who match do not necessarily have an earnings record every quarter. In most cases, a missing quarter implies no employment, and we generally treat it as such, although we cannot rule out the noncovered employment activities mentioned above. These issues are likely to arise in any analysis of an education program that relies on similar state UI data. In the full [paper](#), we discuss how unmatched individuals (and unmatched quarters) are likely to affect our analyses, and we explore the sensitivity of our results to different assumptions, but our core findings are unaffected.

Our primary approach to understand the effects of the Kalamazoo Promise on the workforce

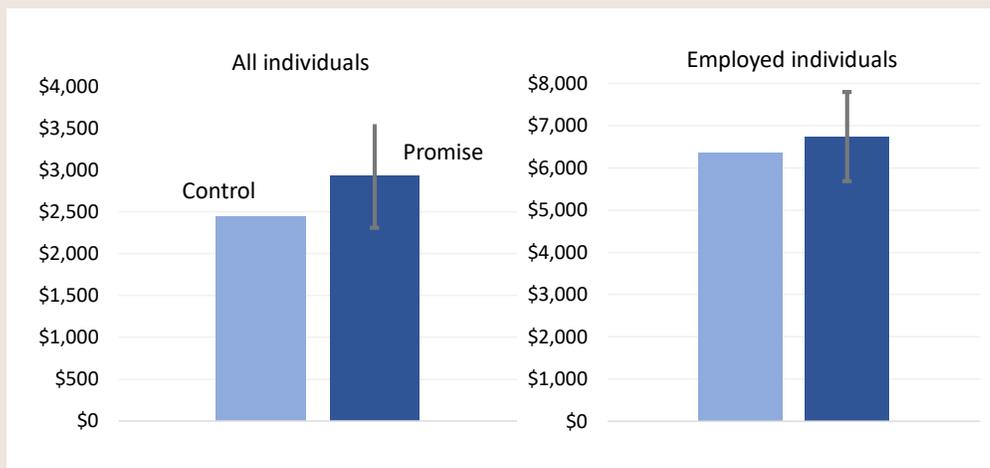
outcomes of scholarship recipients compares differences between eligible and ineligible students before and after the scholarship was implemented in 2006. Our main outcomes of interest include: 1) employment status (which we define as whether an individual had earnings in three or four quarters of a four-quarter period); 2) inflation-adjusted quarterly earnings averaged over a four-quarter period; 3) whether these earnings exceeded various thresholds; and 4) whether an individual lived within certain distances from Kalamazoo’s central business district. Although we estimate impacts at different time horizons since high school graduation, we focus on the period when individuals are in their mid-to-late 20s, and most have finished their schooling and begun their careers.

Results

We find that the Kalamazoo Promise has had minimal effects on employment, whether measured as working at least three or all four quarters in a four-quarter period. This suggests that the Promise’s positive impact on degree and credential attainment does not translate into a greater propensity for scholars to work within Michigan in early career. Although it is possible employment impacts may surface later in the career, this finding could also occur if the degree impacts more greatly affect the *types* of jobs that scholars take, rather than whether they have a job at all.

Thus, we also examine effects on average quarterly earnings, as shown in Figure 1. The left panel indicates that Promise recipients had somewhat higher quarterly earnings 7–10 years after high school graduation, but the overall levels are quite low because all quarters without earnings are treated as zeros in the comparison. This graph thus captures Promise impacts on both employment and earnings. The panel on the right focuses on employed individuals, counting only quarters

Figure 1 The Kalamazoo Promise Only Slightly Increased Average Quarterly Earnings 7–10 Years after High School Graduation



NOTE: The dependent variable is the inflation-adjusted average quarterly earnings (in 2018 dollars) of an individual over the specified time frame. The bar for the Promise group is constructed by adding the estimated Promise effect to the control group mean, and the whiskers show 95-percent confidence intervals. The left panel uses a sample that treats missing person-quarters as implicit zeros, while the right panel uses a sample that includes only matched person-quarters with positive earnings.

SOURCE: Authors’ calculations from KPS and Michigan UI administrative data.

with positive earnings. Promise-eligible individuals on average earn \$6,743 per quarter, about \$390, or 6 percent, more than the control group. However, neither of these effects is statistically significant, so these results are only suggestive.

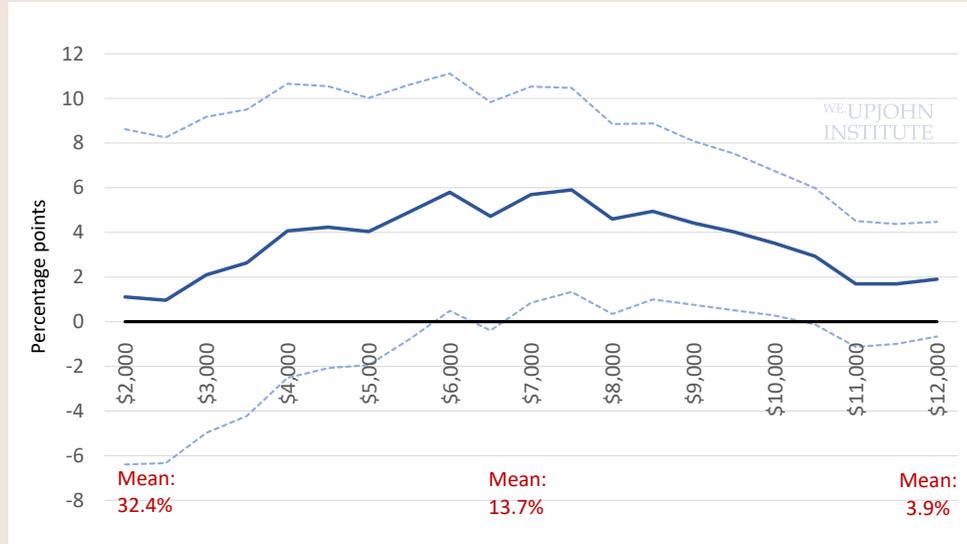
Of course, earnings vary considerably across individuals, especially early-career earnings, and even if the Promise had only minor effects on average earnings, it may have had larger impacts in lifting earnings at the bottom. Figure 2 shows how the Kalamazoo Promise affected the likelihood of having quarterly earnings of *at least* the amounts shown in the horizontal axis. Among all individuals, not just the employed, the Promise increased the likelihood of earning at least \$6,000 per quarter (\$24,000 annualized) by the time scholars were in their mid-to-late 20s. This boost occurred up to about \$10,000 per quarter, implying eligible individuals also had increased chances of earning at least \$40,000 on an annualized basis. Among those employed (not shown in the figure), the Promise increased the chances of earning at least \$7,000 per quarter—enough to exceed the poverty threshold for a family of four—from 73 percent to 78 percent, a small but meaningful increase. Thus, we find somewhat stronger evidence that the overall earnings distribution was shifted up by the Promise.

The strongest effects we find are for the likelihood of living close to central Kalamazoo. In particular, by their mid-to-late 20s, Promise-eligible graduates were 11–12 percentage points more likely to live within 10 or 20 miles of the city center, roughly corresponding to the outer edges of the metro area. These impacts indicate the Promise has had some success in keeping high school graduates close by, even after much of their schooling is complete.

Discussion and Implications

Despite the large increases in educational attainment the Promise induced (Bartik, Hershbein, and

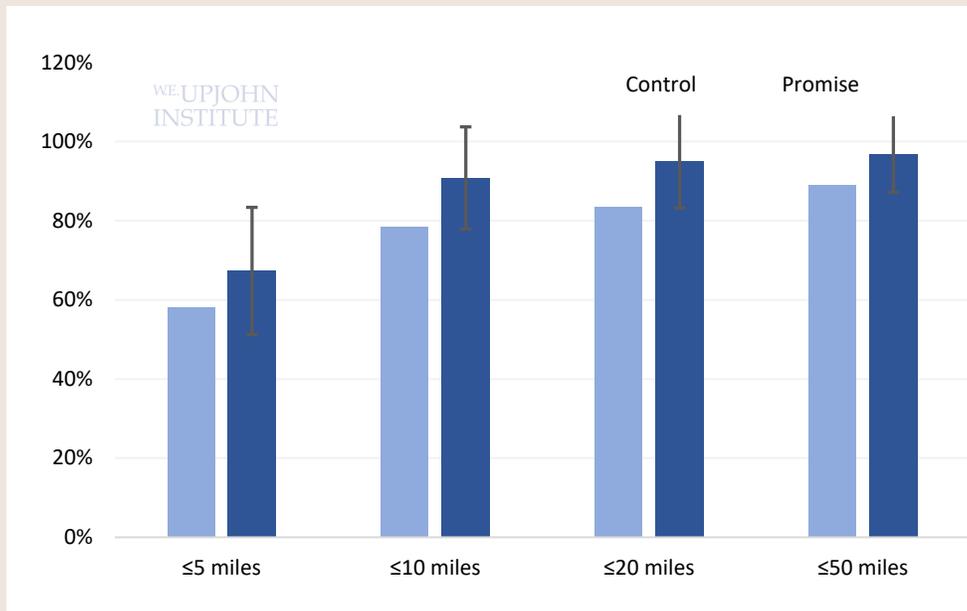
Figure 2 The Kalamazoo Promise Increased the Chances of Earning at Least \$6,000 Per Quarter, 7–10 Years after High School Graduation



NOTE: The dependent variables are whether the individual's average quarterly earnings (counting quarters of zero earnings) exceed the inflation-adjusted amounts shown in the horizontal axis. The solid blue line shows the Promise effect, in percentage points, on the probability of exceeding these thresholds. Select mean probabilities for the control group are shown in red at the bottom. For example, just under 14 percent of control individuals earned \$7,000 or more per quarter, but about 20 percent of Promise-eligible individuals did. The dashed blue lines show 95 percent confidence intervals.

SOURCE: Authors' calculations from KPS and Michigan UI administrative data.

Figure 3 The Kalamazoo Promise Increased the Chances of Living Closer to Kalamazoo 7–10 years after High School Graduation



NOTE: The dependent variable is an indicator for whether the centroid of the individual's ZIP code is within the specified distance of Kalamazoo's central business district, ZIP code 49007. The bar for the Promise group is constructed by adding the estimated Promise effect to the control group mean, and the whiskers show 95 percent confidence intervals.

SOURCE: Authors' calculations from KPS and Michigan UI administrative data.

Beyond Degrees: The Kalamazoo Promise and Workforce Outcomes

Lachowska 2020), we find that these educational gains have not translated into clear and convincing gains in employment and earnings. Although there is some evidence for earnings improvement in the middle of the distribution, and for greater geographic retention of individuals, impacts are generally modest. We think there are

itself may not be sufficient to lead to better workforce outcomes. Additional measures to promote job development may be necessary, including greater cooperation with other community stakeholders, economic development entities, and the business community.

For additional details, see the working paper at https://research.upjohn.org/up_workingpapers/350/.

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Notes

The research for this project was conducted under the auspices of Michigan Works! Southwest, the employment services agency for four counties in southwest Michigan and covering the Kalamazoo Public Schools. The authors thank Ben Damerow, the director of Michigan Works! Southwest, for his assistance and support of the research.

1. These features were in effect during the time period of our analysis. As of this writing, students may also use the Promise to attend most private colleges and universities in Michigan, and the credit cap has been raised to 145 credits.

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If local job opportunities are lacking, place-based college scholarships could lead to increased educational attainment but not improved employment and earnings.

at least two reasons for the somewhat lackluster findings. First, even a horizon of 7–10 years after high school may be too soon for full effects to emerge, especially if lingering impacts of the Great Recession slowed career advancement. Second, the context of Kalamazoo's labor market may be a factor. Compared to growing areas like Knoxville, Tennessee, which saw stronger employment and earnings effects from the place-based scholarship that grew into the Tennessee Promise (Carruthers, Fox, and Jepsen 2020), the Kalamazoo area (and Michigan more generally) has seen little job or population growth in recent years. Consequently, there may have been fewer job opportunities for Promise grads, causing some to lack employment and others to leave the state.

If local job opportunities are lacking, it is possible that place-based college scholarships could very well lead to increased educational attainment but not improved employment and earnings. As more states adopt explicit education goals to reach a certain share of their working-age population with post-secondary education credentials, our results serve as a cautionary reminder that greater educational attainment by

Informed Choices

Gender Gaps in Career Advice

Yana Gallen and Melanie Wasserman

College students often seek career advice from their social and professional networks, and the information that students receive may shape their perceptions of careers and influence their decision making. As of yet, there is little evidence on whether male and female students have access to the same information about careers. In our [paper](#), we investigate whether student gender changes the information that students receive regarding various career paths.

We conducted a large-scale field experiment, in which college students who were interested in learning about various careers sent messages to 10,000 working professionals on a popular online professional networking platform. The questions were preformulated requests for basic information about the professional's career path. To test whether student gender affects the information students receive about careers, we randomized whether a professional received a message from a male or a female student. We focus our analysis on two career attributes that prior research has

shown to differentially affect the labor market choices of women: work/life balance and workplace culture.

Our main finding is that student gender affects the information that professionals provide. When students ask a broad question about the pros and cons of the professional's career path, professionals are more than twice as likely to bring up work/life balance issues to female students than they are to male students. One explanation for this greater emphasis on work/life balance issues to female students is that professionals believe female students care more about this career attribute than male students do. We find, however, that even when students pose a question asking specifically whether work/life balance is a concern, professionals are still 28 percent more likely to respond to female students. In contrast, professionals bring up workplace culture issues to male and female students at equal rates.

Finally, we provide suggestive evidence that gender gaps in access to career information may matter for career choices. Information provided

relating to work/life balance tends to be negative and increases students' concern about the issue. At the end of the study, we find that female students are more deterred from their preferred career path than male students, and

Professionals are more than twice as likely to provide information on work/life balance issues to female students than to male students.

this gender gap is partly explained by professionals' greater emphasis on work/life balance issues to female students.

Studying Informal Interactions in the Real World

Our study recruited 100 college students at a large research university to send messages to 10,000 professionals. The college students were selected based on their interest in learning about four career paths: management consulting, data science, finance, and law. The pool of professionals consists of approximately 10,000 individuals on the platform with work experience in these four fields.

In an in-person or virtual meeting, each student participant was guided through the process of creating a profile on a popular online professional networking site. Almost 90 percent of students already had a profile on this platform, and students commonly use it to reach out to professionals for career information and advice. We asked all students to restrict their profiles to the same minimal information: 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 had on the platform. These restrictions ensure that professionals have access to the same information on all student participants. To study how student

ARTICLE HIGHLIGHTS

- *We conducted an experiment to investigate how a student's gender affects the information the student receives about careers.*
- *We had college students send messages requesting basic career information to 10,000 working professionals, each of whom randomly received a message from a male or female student.*
- *Female students were more likely than male students to receive replies with information on work/life balance issues.*
- *The work/life balance information was often negative and made students more concerned about this issue.*
- *By the study's end, female students were more deterred from their preferred career path; the greater emphasis on work/life balance issues they received partially drives this result.*

Informed Choices: Gender Gaps in Career Advice

gender affects the information received, we randomized whether each of the 10,000 professionals received a message from a male or a female student. We compare how professionals respond to male and female students who are otherwise similar (based on the above information). To this end, we limit the

gender differences in information acquisition:

- 1) **Broad question:** To test whether professionals emphasize different career attributes to male and female students, the broad message asked about the pros and cons of the professional’s field.
- 2) **Specific question:** To test whether male and female students receive different advice conditional on raising a particular concern, some messages asked specifically about work/life balance or competitive culture. Previous studies have documented gender differences in preferences for competitive environments and temporal flexibility (Goldin 2014; Niederle and Vesterlund 2011; Wiswall and Zafar 2018).
- 3) **Factual question:** To test whether male and female students receive different information about factual content, we asked law professionals about the billable

hours requirement for lawyers at large law firms.

We asked students to share with us the initial responses they received. For responses to the broad question, we coded whether the response mentioned work/life balance based on dictionary definitions and explicit references to work/life balance, hours worked per week, extent of work-related travel, and conflict or accommodation between work responsibilities and other life priorities. Here is one paraphrased example of a work/life balance mention: *Management Consulting can be considered a lifestyle since it requires travel, very long hours, always being on, and client-specific knowledge.*

We similarly coded mentions of competitive culture when the response explicitly mentioned competition within the workplace or among coworkers. However, because this was rare, we also created a broader metric of workplace culture, which included descriptions of interpersonal relations among colleagues, the work environment, or ethical issues in the workplace. This is an example of a culture mention: *Though this is changing, finance sometimes still depends on connections, bribes, or corruption.*

Results

Our main finding is that the information professionals provide depends on student gender. While the rate at which professionals responded to the broad question was similar for male and female students, the text of the responses reveals substantial gender disparities. Professionals are more than twice as likely to provide information on work/life balance issues to female students relative to male students (see Figure 1). The vast majority of these mentions are negative and increase students’ concern about this issue.

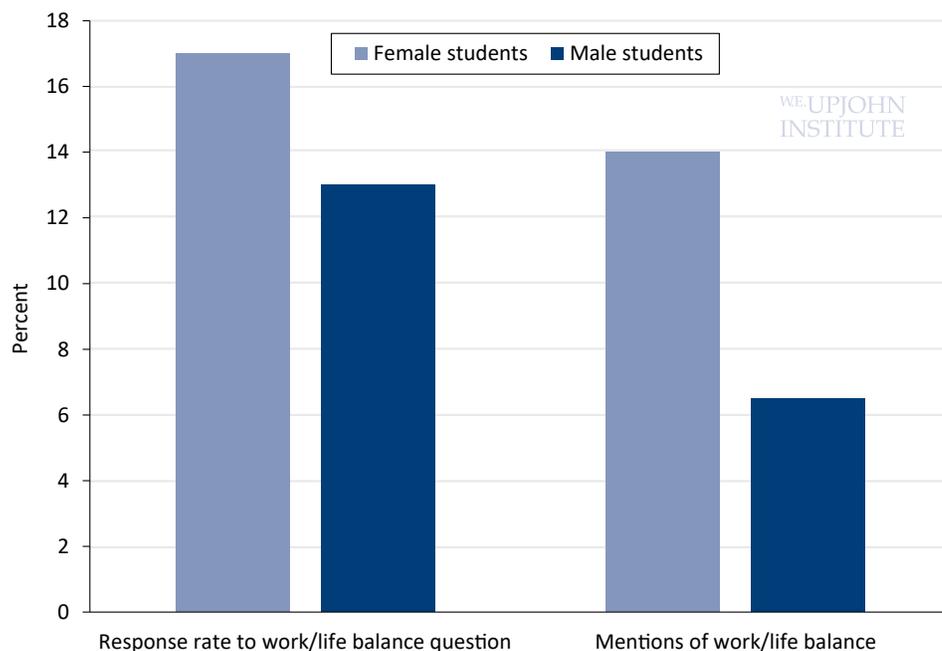
Are professionals simply tailoring their responses to what they think

Gender differences in access to information may lead men and women to select different careers.

sample to students whose first names unambiguously convey their true gender.

The messages sent by students are preformulated questions seeking information about the professional’s career path. The use of the professional networking platform as well as the text of the messages are based on a university career center’s guidance for informational interviews. We used three question templates, each intended to test a specific hypothesis regarding

Figure 1 Response Rate or Rate of Mentioning Work/Life Balance



students care about? Using the specific question, we focused professionals' perceptions on a discrete topic. When male and female students both directly asked for information on work/life balance, female students received 28 percent more responses than male students. This means that professionals' motivations for responding extend beyond their perceptions that female students are more interested in this topic.

Interestingly, we find no gender gap in professionals' emphasis on workplace culture, through either the broad or specific question.

Professionals may respond differently to male and female students on the work/life balance question because the true answer is gender specific. For example, women may struggle more on average with work/life balance, and professionals simply report this gender-specific answer to students of the corresponding gender. Using the factual question, we find some evidence that professionals continue to be more responsive to female students even when the answer to the question is objective and does not depend on student gender.

One might expect that the gender of the professionals themselves influenced the gender-specific responses on work/life balance, but we find that this played little role in explaining the gap. Both male and female professionals differentiated their responses by student gender.

Overall, these patterns suggest a subtle form of disparate treatment of individuals based on their gender. In particular, students' access to essential information about careers may depend on their gender in ways that may be difficult for students to ascertain.

Ramifications

We show that female students receive substantially more information on work/life balance than male students, whether they ask for it or not. A natural question is whether

students are getting the information that they want. While research on midcareer individuals shows that women value work/life balance more than men, a recent *New York Times* article reports a gender reversal in preferences for work/life balance among 18- to 29-year-olds (Miller and Yar 2019). Using a survey of students from the same university as our field experiment, we find that male students want to spend 40 percent more time discussing work/life balance with a professional than do female students. Together, our study and the survey imply that the information professionals supply does not match the information students demand. In particular, relative to female students, male students receive less information on work/life balance, even when they specifically ask for it, and even though they want more of it.

Finally, we explore the ramifications of the information provided by professionals for students' career choices. We surveyed students regarding their career plans by asking whether they became more or less likely to enter their preferred career path between the start and end of the experiment. Female students reported greater deterrence from their original preferred career path than male students, and a key driver is the greater emphasis on work/life balance issues to female students. Thus, gender differences in access to information may lead men and women to select different careers.

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For additional details, see the working paper at https://research.upjohn.org/up_workingpapers/340/.

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Vol. 28, No. 3

Employment Research is published quarterly by the W.E. Upjohn Institute for Employment Research. Issues appear in January, April, July, and October.

The Institute is a nonprofit, independent research organization devoted to finding and promoting solutions to employment-related problems at the international, national, state, and local levels.

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