SUMMARY SHEET

'Acting Wife': Marriage Market Incentives and Labor Market Investments*

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Abstract Do single women avoid career-enhancing actions because these actions signal undesirable traits, like ambition, to the marriage market? While married and unmarried female MBA students perform similarly when their performance is unobserved by classmates (on exams and problem sets), unmarried women have lower participation grades. In a field experiment, single female students reported lower desired salaries and willingness to travel and work long hours on a real-stakes placement questionnaire when they expected their classmates to see their preferences. Other groups responses were unaffected by peer observability. A second experiment indicates the effects are driven by observability by single male peers.

1 Introduction

Main goal To test for the existence and the implications of the trade-off for single women: actions that lead to professional success might be sanctioned in the marriage market because they signal ambition and assertiveness.

Methodology Observational evidence from a survey and an administrative dataset +2 field experiments, in an elite US MBA program.

Story

- Some facts: Men prefer female partners who are less professionally ambitious; men tend to avoid those with characteristics usually associated with professional ambition, such as high levels of education; a woman getting promoted or earning more than her husband increases the chance of divorce.
- Then single women may face a trade-off: actions that lead to professional success might be sanctioned in the marriage market because they signal ambition and assertiveness.

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- Single women may try to improve their marriage options by "acting wife".
- If true, marriage market signaling adds an explanation for gender differences in the labor market.

Data

- Administrative data, 2010-2016 cohorts, students' grades in introductory economics class
- Survey dataset, 2016 cohort, anonymous
- 2 experiment datasets, 2016 cohort, linked to administrative data

2 Observational Evidence (Survey + Students' Grades)

To assess (i) how often single women avoid actions beneficial to their careers to avoid appearing too ambitious or assertive and (ii) whether single women avoid these actions more than other groups, in particular non-single women.

2.1 Design

- The survey was conducted during a required class.
- The survey asked students' age, gender, relationship status and "In the last two years, are there behaviors or activities at your work that could have helped you professionally that you didn't undertake because you might have looked too ambitious, assertive, or pushy?" (see Table 2).

2.2 Results

See Table 2. 73% single women reported avoiding activities. The average number of avoided actions was 1.81 for single women, 1.12 for non-single women, 0.94 for single men, and 0.90 for non-single men. Overall, women's relationship status is predictive of avoiding these behaviors.

2.3 Students' grades

Compare students' participation (visible to their classmates) and nonparticipation (private) grades in their required first-year economics course. The grades are reported to potential employers, so that can have direct labor market consequences.

Married and unmarried women perform the same on nonparticipation grades. However, unmarried women perform over 6 points, or one-third of a standard deviation, lower on class participation (71.4 versus 77.5, p-value = 0.005). Married and unmarried men perform the same on both participation and nonparticipation grades. This pattern is true throughout the grade distribution and for all cohorts.

3 Primary Experiment

To directly test whether single women respond to the studied trade-off by explicitly changing their behavior, making themselves look less professionally appealing.

3.1 Design

- On the first day of the MBA program during a 45-minute session hosted by the career center. Mandatory attendance.
- The instructor asked students to fill out an introductory questionnaire that would be used to help with summer internship placement. Summer internships are a key stepping stone to landing a permanent position, so that students know that their answers would be related to ultimate placement.
- Two versions of the introductory questionnaire: public/private, distinguished by only one word.
- "The information on this survey will help the career office get to know you and help it find the right fit for your first-year internship. This information will not be shared with employers, so please express your true preferences, not just what you think employers want to hear. This information will be shared with your career advisor and [your/anonymized] answers will be discussed during the [name of the career class]."
- An equal number of public and private questionnaires were randomly sorted into a pile that was passed out in class.
- Demographic information, preferences over industries and geography.

 Heart: a series of questions designed to present a trade-off for single women (see Table 4). Positive answers to all the questions can be seen as signals of professional ambition. Placebo: self-assessed writing skills.

3.2 Results

See Table 4. Single and non-single women respond differently when they believe their answers will be public, but they behave similarly in private. These results do not change when we include controls for student characteristics. For writing skills rating, neither single women nor any other group significantly changed their answers in the public treatment.

4 Supplementary Experiment

To identify whether single women would disproportionately represent themselves as less ambitious and career-focused in front of their male classmates.

4.1 Design

- During the career class's last meeting of the semester (3 months after the primary experiment), students were given a questionnaire with three pairs of hypothetical jobs (see Table 5) and asked to choose their preferred job in each pair.
- Students were placed into small groups of six or seven for other class activities, a common practice in the course. They randomized the gender composition of the small groups. Approximately one-half of single women were placed into all-female groups and the remainder were placed with all male group-mates.
- "Please fill out the following questionnaire. There are no right or wrong answers. Once you have finished the questionnaire, continue onto the rest of the group work. If there is time at the end of class, the instructor will circulate and discuss your answers with your small group. The forms will be collected at the end of class."

4.2 Results

See Table 5. Women present themselves less favorably to the labor market when they believe their choices will be seen by men as opposed to women.

5 Related discussions

- For men, the consequences of actions in the labor and marriage markets are more closely aligned: women value their partner's intelligence and education, even when these exceed their own.
- Unobservable differences between single and non-single women may driving the results. This may be unlikely, since these unobservable characteristics must be correlated with women's relationship status but also have low correlation with observable controls; be unrelated to male relationship status; not change single women's writing skills rating in the public and private treatments; vary with their audience gender. Shyness.
- These results have implications for understanding gender gaps in labor market outcomes.
- Marriage market signaling is related to existing explanations surrounding social norms over gender identity and the propensity to negotiate, but kind of different.
- Future work may extend this analysis to other contexts, explore the long-run consequences of this trade-off, and assess interventions that may mitigate its effects on womens careers.

Table 2—Avoidance of Workplace Behaviors by Gender and Relationship Status (Survey Data)

	Taking initiative in negotiating a wage raise or promotion	Asking for a leadership role in a team or task force	Offering to make a presentation or sales pitch	Speaking up at meetings	Any behavior	Observations
Single women	63.5	40.4	25.0	51.9	73.1	52
Non-single women	39.4	24.2	15.2	33.3	60.6	33
Single men	25.3	23.0	18.4	27.6	43.7	87
Non-single men	30.3	23.6	6.7	29.2	50.6	89
p-values of differences						
Single versus non-single women	0.030	0.129	0.284	0.095	0.234	85
Single women versus others	0.000	0.014	0.031	0.002	0.002	261

Notes: Data are from a survey administered to first-year MBA students in the fall of 2016. Each number in the first four rows of data is the percentage of the group indicated by the row that avoided the action indicated by the column in their previous two years of work, despite the fact that they believed it could help their careers because they were concerned about appearing too ambitious, assertive, or pushy. Non-single refers to respondents in a serious relationship, cohabiting, engaged, or married.

Table 4—Effect of the Public Treatment on Reported Job Preferences and Skills (Primary Experiment)

	Kling- Liebman- Katz index	Desired compensation	Days per month of travel	Desired weekly hours of work	Tendency to lead	Professional ambition	Comfort in competitive environments	Writing skills
Panel A. Single women							0.10	0.10
Public treatment	-0.56 (0.13)	-18.12 (8.17)	-6.93 (2.35)	-3.89 (2.11)	-0.39 (0.19)	-0.75 (0.18)	0.12 (0.21)	0.13 (0.23)
Private treatment mean	-0.06	131.05	13.55	52.21	3.87	4.13	3.29	3.84
Observations	59	60	60	59	60	60	60	60
R^2	0.23	0.08	0.13	0.05	0.07	0.23	0.01	0.01
Panel B. Non-single women								
Public treatment	-0.15 (0.14)	-1.22 (7.77)	0.65 (3.14)	-4.06 (1.87)	-0.05 (0.18)	-0.14 (0.19)	-0.09 (0.24)	-0.07 (0.17)
Private treatment mean	0.00	134.72	9.67	52.54	3.89	4.26	3.63	4.11
Observations	51	52	52	52	52	52	51	52
R^2	0.02	0.00	0.00	0.08	0.00	0.01	0.00	0.00
Panel C. Single men								
Public treatment	0.04 (0.12)	-0.89 (7.57)	2.72 (2.36)	0.39 (2.09)	0.15 (0.15)	-0.07 (0.17)	-0.11 (0.15)	0.03 (0.18)
Private treatment mean	0.15	146.88	15.38	52.25	3.69	4.23	4.02	3.90
Observations	103	104	103	104	104	104	104	104
R^2	0.00	0.00	0.01	0.00	0.01	0.00	0.01	0.00
Panel D. Non-single men								
Public treatment	0.09 (0.10)	-7.13 (6.08)	2.39 (1.94)	3.34 (1.78)	0.11 (0.13)	-0.02 (0.12)	0.00 (0.14)	-0.12 (0.17)
Private treatment mean	-0.05	140.86	9.94	51.14	3.75	4.15	3.67	3.82
Observations	130	130	131	131	131	131	131	131
R^2	0.01	0.01	0.01	0.03	0.01	0.00	0.00	0.00
Panel E. p-values: difference in t	he effect of	the public treat	ment					
Single versus non-single women Single women versus others	0.032 0.000	0.129 0.101	0.050	0.952 0.042	0.191	0.018	0.494 0.471	0.490 0.475

Table 5—Effect of Group Composition on Single Women's Reported Job Preferences (Supplementary Experiment)

	Kling-Liebman-Katz index	Prefers higher salary over fewer hours	Prefers promotion over less travel	Prefers social impact over interactions with coworkers
Panel A. Peer gender				1 - 6,000 - 9
Male peers indicator	-0.77 (0.23)	-0.26 (0.14)	-0.42 (0.16)	0.01 (0.15)
Mean for single women in female groups	0.00	0.68	0.79	0.42
Observations	40	40	40	40
R^2	0.29	0.14	0.26	0.09
Panel B. Marital status of ma	le peers			
Share of male peers who	-1.20	-1.23	0.08	0.44
are unmarried	(0.34)	(0.19)	(0.27)	(0.33)
Mean for single women in male groups	-0.58	0.43	0.52	0.38
Observations	21	21	21	21
R^2	0.36	0.61	0.19	0.22

Notes: Panel A shows the results of regressing either the King-Liebman-Katz index or an indicator for choosing a given job on a dummy for being in a group with male peers, controlling for section fixed effects. Panel B shows the results of regressing the same dependent variables on the share of male peers who are unmarried. Regressions are limited to single women in panel A and to single women in groups with male peers in panel B. The choices presented and the Kling-Liebman-Katz index are described in the text. Standard errors clustered at the group level are in parentheses.