

# Gender Targeting in U.S. Newspaper Ads: 1940-2000

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<sup>1</sup>Research results and conclusions expressed are those of the authors and do not necessarily reflect the views of the Federal Reserve Bank of Philadelphia, the Federal Reserve System, or the Federal Reserve Board of Governors.

# Explicit Gender Targeting

## Gender pay gap

- ▶ Rapid convergence in the 80s, 90s; no change in the 60s, 70s
- ▶ Changes in human capital accumulation; technological change; home appliances; gender norms have been linked to progress

Do employers overtly discriminate when they are allowed to?

- ▶ 1964 Civil Rights Act: “prohibits employment discrimination based on race, color, religion, sex and national origin.”
- ▶ Equal Employment Opportunity Commission formed in 1965.
- ▶ 1969 lawsuit filed by National Organization of Women for segregating job ads.
  - ▶ Pittsburgh Press v. Pittsburgh County on Human Relations et al. (1973)

How do employers transition from discriminating to not?

- ▶ Do employers substitute towards more subtle targeting?
- ▶ Is any sluggish response correlated with sluggish employment or wage outcomes?

## Background: Job Ads in 1958

**Help Wanted—Female**

**TEMPORARY**

**ARE YOU . . .**

Frankly 46—but on this side of 60?  
we take them younger, too . . .

**A visitor in New York?**

**A housewife whose children are at school?**

**A permanent job seeker — or ap-  
pointed, whose duties do not start  
immediately?**

**Your FREE TIME is  
PROFIT-TIME**

**Put Your Skill to Work  
at INTERESTING  
TEMPORARY ASSIGNMENTS**

**UPTOWN & DOWNTOWN  
MANHATTAN LOCATIONS**

**Work 3 to 5 FULL days or  
more in our clients' offices**

**NEEDED NOW . . .**

**STENOGRAHERS**

**TYPISTS-STAT TYPISTS**

**TRANSCRIPTION OPERS**

**COMPTR & CALC OPERS**

**SWITCHBOARD OPERS**

No part days, evenings or Saturdays!  
No FEES TO APPLICANTS  
Interviews & phone calls 10 AM-4 PM

**TEMPORARY  
OFFICE SERVICES**

150 NASSAU ST., N.Y.C.  
ROOM 621 WO 4-1352  
139 W 42 ST., N.Y.C.  
ROOM 2001 LA 4-3410

**TEMPORARY**

**Help Wanted—Female**

**TYPISTS**  
(To Age 50)

— EXCELLENT SALARIES —  
— REGULAR INCREASES —  
Experienced Preferred

- MODERN OFFICES (AIR-CONDITIONED)
- COFFEE SERVICE
- LUNCHEON FACILITIES
- CONVENIENT LOCATION (DOWNTOWN MANHATTAN)

**THE TRAVELERS INSURANCE CO.**

80 JOHN ST.  
MR. MALLORY

DI 4-7000

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**TYPISTS**  
EXPERIENCED

We offer a variety of interesting & diversified positions with salaries geared to your abilities. Excellent working conditions and congenial co-workers plus liberal company benefits. 5 DAYS 36½ HOURS

Call Mr. D. Lotufo JU 2-6654  
**FOSTER WHEELER CORP.**  
666 5th Ave. NY (52-53 STS) 4th Fl.

**TYPISTS**

THE NEW YORK TIMES, SUNDAY, JAN. 5, 1958.

W 7

Help Wanted—Female	Help Wanted—Female	Help Wanted—Female
<b>TYPISTS</b>	<b>TYPIST</b>	<b>TYPIST</b>
A New Job in Sight FOR YOU IN '58 . . .		COULD YOU TYPE THIS AD IN THREE MINUTES?
IF YOU: .. Have a High School diploma .. Type 40-50 W.P.M. .. Are 17-30.	An experienced typist is needed to do varied work for top engineering company.  A minimum speed of 40 to 45 wpm is required.	That's all it takes to qualify for one of an extremely wide variety of jobs we can presently offer. Evening training available. Dictation training. Free typewriter. Telephone training. Foreign travel through multilingual and vari-type. These jobs can start as high as \$500 per month. Offer you an excellent chance for advancement. We include free insurance, medical service and a profit sharing plan that will give you a share of the profits.
WE OFFER: Promotional Opportunities IN OUR EXECUTIVE OFFICES	Join our friendly professional staff in modern offices, conveniently located or three subways.	For a job with a future here's a chance to select one from our collection. Stop in any day this week. We keep a file of many good leads. Look them over for yourself. MARY LYNCH PIERCE, FENNER BEANE, 10 Pine Street, New York
.. COMPANY CAFETERIA .. MANY EMPLOYEE BENEFITS	CALL MISS A. M. RETTIG BA 7-5900	
APPLY IN PERSON 9 AM-2 PM 300 PARK AVE. at 50th St. 8th Floor	<b>BURNS and ROE, Inc.</b> Engineers & Constructors 160 WEST BWAY, NEW YORK	
<b>TYPISTS</b>	Typists . . . \$60 St	<b>TYPISTS</b>
Moving Up?	Electric typewriter. Pleasant air-conditioned office. Engineering firm. <b>VOLT TECHNICAL CORP.</b> 241 Church St., NYC WO 6-0708	<b>BEGINNERS—EXP</b>
You'll get the satisfaction with this expanding national company. If you're between 17-40, eager to learn and provide interesting varied work. New air-conditioned offices. new equipment. Very low cost cafeteria. Free life insurance. 11 paid holidays. company paid pension plan program, medical facilities.	LAB TECHNICIAN <b>BIO-CHEMISTRY RESEARCH</b> Fundamental work on enzymes including isolation. Master's degree or equivalent preferred. Good starting salary. Modern community hospital located 20 minutes from Penn station on LIRR. PERSONNEL DEPARTMENT	Five positions open at \$50-\$60 per start. Diversified duties. 35 wpm satisfactory. 9 to 5, 3 days. Full employee benefits.
INSURANCE COMPANY OF NORTH AMERICA COMPANIES 770 BROADWAY (9 ST.) 10 FL. Phone BE 3-5010, ext 314	NORTH SHORE POLICE VALLEY ROAD MANHASSET, L.I. MANHASSET 7-5000 EXAL 272	APPLY IN PERSON 120 Bway (Rm 41 (Near Wall St)
<b>TYPISTS</b>	<b>TYPIST-CLERKS</b>	<b>TYPISTS</b>
EXPD BEGINNERS	\$60-65 \$56	Various Locations Salary \$52 to \$60 Per Week AGES 20-45 YEARS Many employee benefits

# Background: Job Ads in 1978

## Help Wanted 2600

### PURCHASING ASSISTANT mW1

Increase your professional skills at a major book publisher

An Associate's Degree or equivalent plus 2 years work experience earns you an opportunity to enlarge the scope of your know-how and puts you in position for long range growth with this major book publisher. You'll be involved in invoice processing, accounts receivable, competitive bids. Heavy phone contact with vendors and company requisitioners. Salary \$1600 depending on experience. Excellent fringe benefits, interesting environment. For interview appointment:

Call Janet Tylor

935-3127

An equal opportunity employer M/F  
PURCHASING

### Join A Winning Team! BUYER

Foster Wheeler, a leading Fortune 500 company serving the energy field has an exciting career opportunity available for a buyer.

We are seeking an individual with an engineering degree and a strong background in buying castings.

Salary will be commensurate with experience, experience with various contracts and a professional and congenial atmosphere. Please send resume and salary history in confidence to: Roval M. Cowles, Dept NTB 11/12

### FOSTER WHEELER ENERGY CORPORATION

110 SOUTH ORANGE AVENUE  
LIVINGSTON, NEW JERSEY 07039  
Equal Opportunity Employer M/F/H

### PURCHASING ASSISTANT BUYER

Due to growth and expansion of our company, we have a position available

## Help Wanted 2600

### QUALITY CONTROL MANAGER

An interesting opportunity for an experienced Quality Control Manager to join the staff of this rapidly expanding consumer products manufacturer.

The individual we seek will have prior background to further develop, implement, and monitor an organization-wide program in Quality Control. Previous experience in the printing industry is desirable, but not mandatory.

The successful candidate will receive an attractive compensation package as well as outstanding company paid benefits program.

Please send resume, in strict confidence, stating work history and salary requirements, to:

### V.P. PERSONNEL RUDCO

INDUSTRIES, INC.  
123 Tryon Ave. West  
Teaneck, NJ 07666

An equal opportunity employer M/F  
QUALITY

### SUPERVISION

Excellent opportunity to join tea rated manufacturer electric/mechanical/plastic consumer goods.

Technically oriented person to seek out problem areas and initiate corrective test procedures.

We seek college-trained person with good verbal and written skills capable of accepting responsibility and growth.

- ...PAID Blue Cross
- ...PAID Blue Shield
- ...PAID Major Medical/Life
- ...PAID Dental
- ...PAID Vision
- ...PAID Holidays
- ...PAID Sick Days
- ...PAID Vacation
- ...PAID Tuition Refund

Submit resume or call  
Victor Turman: 381-7000

Emerson Quiet Kool

## Help Wanted 2600

### RADIATION THERAPIST

Full time. Experienced. Licensed. Good benefits.  
DEEP DALE GENERAL HOSPITAL  
55-100 Ridgefield Avenue  
Little Neck, N.Y. 11362  
(212) 428-2000; ext 618

### RADIOGRAPHER

-Level I or 2-  
Perform radiography of power plant pipe welds in accordance with Section 111 ASME code.

Steady work, good pay & benefits. Including profit-sharing. Ridgewood/Massey area.

(212) 386-0700 Ext 356

### RADIOLOGY TECHNOLOGIST

Full time plus some call position available for registered ARRT or CRT to work with EMI Body Scanner. Experience preferred but will train and as a staff technologist.

Please join our JCAH expanding to full accreditation. We offer excellent bilingual areas with the beautiful desert, rodeo country, 2 hours east of San Diego, south of Palm Springs and just 30 miles from Mexican border. Excellent benefits. Contact PERSONNEL Dept.

(714) 344-2120 Ext 726  
8:30 AM to 5:30 PM  
Monday through Friday

### PIONEER'S MEMORIAL HOSPITAL

207 W. Legion Rd.  
Brawley, CA 92227

RADIOLOGY Temp. apox 4 mos

### RADIO THERAPY TECHNOLOGIST

LICENSE REQU'D. Days 9-5  
Major voluntary teaching Hospital  
soc. exp. Radio Therap. Technologist  
to work in fast-paced Radiology Dept.  
Challenge & good starting salary.  
Call Stan Giovannini, 780-1862

LI College Hospital

354 Henry St., Brooklyn, NY 11201  
An Equal Opportunity Employer M/F

## Help Wanted 2600

### REAL ESTATE

**OFFICE MGR.  
FOR PROMINENT FIRM**

Process leases, handle collections at site office for new government aided hi-rise bldgs. Supervise small staff. Typing required.

CALL: 575-1053

REAL ESTATE F/Pd \$75-35K

### CORPORATE REP

Our client, a Fortune 500 corporation, is seeking 2 management level individuals to administer a program of acquisitions, sales and marketing of residential properties within their \$200MM+ portfolio. Corporate or institutional exp. must. To apply, call (212) 227-8000 or write LOGO Personnel, 1000 Avenue of the Americas, 17th Broadway, NYC 10036 (Agency).

### RECEIVING CLERK

Elizabeth Arden has an opening in its shipping & receiving area. The responsibilities will include handling and lifting cartons of merchandise associated clerical duties. Experienced applicants preferred.

Please pick up application on the 2nd floor from 10AM to 12 Noon on Monday, November 13th.

### ELIZABETH ARDEN

1345 Avenue of the Americas  
New York, New York 10019  
An Equal Opportunity Employer M/F

### RECEPTIONIST

Front desk spot in rapidly growing E.Side corp. for dynamic indiv. Hrs 9-5 Some tyng. To \$175 F/PD  
CALL ELSA ABBEY 679-6644

### SNELLING & SNELLING

18 E. 41 St (Agency)

### RECEPTIONIST

### SALES PERSONALITY

Sales and Marketing Firm Grand Central Avenue, Dept. BMN, 11th fl., Harderizing products, handle phones, type and learn our business. Advancement possibilities. \$140-\$160 per week. Call Miss Ralph 953-0749 Between 9-12 Betw Elec. 10th & 11th Sts. (Agency)

DONNELLY

505 5th Ave. (18Flr)

Receptionist Fee Pd \$200

PUBLISHING

Evening Night edition & newspaper

## Help Wanted 2600

### RECEPTIONIST

\$190-215

**Cosmopolitan**

### MEET TOP EXECUTIVES

Are you a bright, outgoing, well-qualified Indiv? If so, we have the opportunity available for you with one of the most prestigious companies in the publishing industry. This is a low-keyed, non-pressure position. You will be working with a professional staff, excel brnts program. Accurate typg 50 wpm.

**Cosmopolitan**

### THE SOURCE FOR PERMANENT & TEMPORARY POSITIONS

505 5th Ave

15th Fl

996-0500

4th Fl

964-3434

544-5609

Forest Hills

Street Level

Equal Opp/No F/No Agency

RECEPTIONIST

F/PD TO \$175

### FASHION

Discount on clothes, plush offices

Ex. corp. brnts. Must have jnng & wk

bkgnd. Gd. exp. in perf. exp. Call

Anne Avon for appt. 679-6644

### RECEPTIONIST

F/PD

\$175

### PARK AVENUE

Type 40wpm Work in plush offic

lll benefits package. Call Se

Diwan. 966-5805

400 Park Avenue

41E42St

ME EDITORIAL SECY

F/CDP

To

BI-LINGUAL

Fluent Spanish essential for chang

ing position where flexibility &

to details are essential! Prod

ing, exceclng skills, work on cw

reaching oriented organization.

See Broch Luckhurst, 966-5805

ACCURATE agency 41E42St

RECEPTIONIST

505 5th Ave

15th Fl

996-0500

4th Fl

964-3434

544-5609

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15th Fl

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4th Fl

964-3434

544-5609

Forest Hills

Street Level

Equal Opp/No F/No Agency

RECEPTIONIST

505 5th Ave

## This Paper

Use digitized newspaper text from the *Boston Globe, New York Times, and Wall Street Journal* ads from 1940-2000.

What were the trajectories of explicit gender targeting pre and post-legislation?

Did employers substitute in their language after passage of the Civil Rights Act and the formation of the EEOC?

Did substitution towards implicit targeting impede convergence in labor market outcomes?

## This Paper

Use digitized newspaper text from the *Boston Globe*, *New York Times*, and *Wall Street Journal* ads from 1940-2000.

What were the trajectories of explicit gender targeting pre and post-legislation?

- ▶ Common before mid-1960s, equally so for male and female applicants, concentrated in low-skill occupations
- ▶ Declines throughout the 60s, but still prevalent in the early 70s.

Did employers substitute in their language after passage of the Civil Rights Act and the formation of the EEOC?

- ▶ Occupations (or employers) who previously mentioned an explicit gender preference when it was legal use more "gendered" adjectives later on.
- ▶ These differences abate slowly.

Did substitution towards implicit targeting impede convergence in labor market outcomes?

## Previous Literature

- ▶ Prevalence of explicit gender targeting / policies
  - ▶ Darity Jr. and Mason (1998): Comb through newspaper ads from 1960
  - ▶ Goldin (1990): Employer surveys asking about gender roles.
  - ▶ Kuhn and Shen (2013), Hellester, Kuhn, and Shen (2017, 2020): Online ads in Mexico and China
    - ▶ Targeting in low-skill jobs, equally likely to be male or female
    - ▶ Age twist (target young females, old males)
    - ▶ Effects on applications, callbacks
- ▶ Impacts of legislation on discrimination
  - ▶ Donohue III and Heckman (1991), Kurtulus (2012, 2016), Miller (2017)
  - ▶ Unintended consequences: Chan and Eyster (2003), Autor and Scarborough (2008), Yagan (2016)

# Outline

1. Data Sources
2. Explicit Gender Targeting
3. Substitution to Implicit Gender Targeting?
4. Wages and Occupational Segregation

## Processing newspaper text files

ProQuest processes images of newspaper pages into text files (OCR)

- ▶ Job ads from *New York Times* (1940-2000), *Wall Street Journal* (1940-1998), and *Boston Globe* (1960-1983)

Steps to construct the data set (steps 1-3 are from earlier work)

1. Distinguish vacancy postings from other advertisements
2. Find the boundaries between vacancy postings
3. Identify the ad's job title ⇒ SOC code
4. Identify the party posting the ad; salary; personal adjectives; page on which ad appears
5. Explicit gender targeting:
  - ▶ Men: "young man," "young boy," "young men," (or old, mature, experienced), "guy friday," "male position,"...
  - ▶ Women: "young woman," "young girl," "young women," (or old, mature, experienced), "gal friday," "female position,"...

# Example

From the February 20, 1966 New York Times

Classified Ad Index - The Times  
20 E 42 St  
**Help Wanted-Freelance**  
Cont'd From Previous Page

**RECEPTIONIST**  
**TYPIST**

Very experienced office personnel  
available. Apply to Stern Brothers with resume.  
Resumes accepted.  
Fees negotiable.  
Call collect.

APPLY: STERN BROTHERS  
20 E 42 St  
New York City

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Receptionists \$70-95

**Airline**

No experience required.  
DIAL Agency, 20 East 42 St  
DIAL Agency, 125 Broadway  
2000 Broadway Street

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**RECEPTIONIST-EXECS**

SECRETARIAL STAFF  
GORDON G. WHITE &  
ASSOCIATES INC.  
1000 BROADWAY  
10TH FLOOR  
NEW YORK CITY  
100-110 PER HOUR  
FEE NEGOTIABLE

FRONT DESK AGENCY  
111 W 42nd St  
200-250 PER HOUR

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**RECEPTIONIST/GAL FRIDAY**

Very experienced office personnel  
available. Apply to Stern Brothers with resume.  
Resumes accepted.  
Fees negotiable.  
Call collect.

APPLY: STERN BROTHERS  
20 E 42 St  
New York City

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**RECEPTIONISTS**

A few openings available  
for experienced office  
personnel working in  
various industries. Call  
collect.

For immediate  
resumes  
forward  
to:  
RECEPTIONIST-Agency  
FEE NEGOTIABLE  
APPLY: STERN BROTHERS  
20 E 42 St  
New York City

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**TAFT**

Open Washington's Battalions  
COURT OF APPEALS  
RECEP-TYPISTS - PER 10 HRS

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**THEATRICAL**

Joyce

11 W 41 St New York (Garment)

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**RECEP-TYPISTS \$80-90**

Personnel Trained  
No fees. Resumes accepted with \$10  
TDS. Resumes to be submitted daily at  
125 Broadway, 10th floor, New York  
APPEAL Agency, 20 E 42 St  
(200-250 PER HOUR)

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**RECEPTIONISTS \$80-90**

This block ad seeks out with fee and  
no fees. Resumes accepted with \$10  
TDS. Resumes to be submitted daily at  
125 Broadway, 10th floor, New York  
APPEAL Agency, 20 E 42 St  
(200-250 PER HOUR)

GRAHAM-WHITE  
400 42nd Street, New York, N.Y. 10018

# Example

**receptionist i typist** very active . office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

**receptionist** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

**receptionist gal friday** we operate an executive personnel . the position is for our staff . we require an alert . brie . reliable person with a rood phone voice . no skills -no exp . required . 365-75 start . many benefits . no fee , of course **[Robert Half Agency]**

**receptionist** a new Madison avenue agency designed for those interested in extra-ordinary and unique public con- tact positions . tee negotiable typing trainees or exp . Madison avenue agency

**corner mad th lobby receipt typist** 9 b divers i fiend work in plush aft . co pays fee 585 Taft open Washington s birthday 150 Broadway agency di 90330 one east 42 st mu p640 receipt no skills fee pd to theatrical Joyce 11 w 42 , 1 rm 700 ( ) receipt ty pi ts **\$ 80-90** personnel trainees np exp , company trains gals with 40 wpm in the personnel department of a rep steel company . interesting-fee paid appeal agency , 20 e 42 st near wall street **[Appeal Agency]**

**receptionist \$ 80** this plush cg seeks gal with typing and that clean scrubbed look to meet 8 greet clients . any exp ok benefits bonus co pays fee graham-white vj e also interview eve s . call for apple 1 dl ag d i 9-1280 reception desk to 90 fee paid large park ave coy teach and reservations ; type ; attar and poised **[Graham White Agency]**

**record clerk r tv \$ 90-95** ad figure apt . 2-3 vars exp in banking r-insurance . hunt 8 peck , fee reimbursed emerita a en v 2 4 in for full time position in media- cal research of medical ' school ) r or intensive care experience . call , fy 2-600d , ext 177

# Example

**receptionist i typist [439022]** very active . office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

**receptionist [434171]** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

**receptionist gal friday [434171]** we operate an executive personnel . the position is for our staff . we require an alert . brie . reliable person with a rood phone voice . no skills -no exp . required . 365-75 start . many benefits . no fee , of course [**Robert Half Agency**]

**receptionist [434171]** a new Madison avenue agency designed for those interested in extraordinary and unique public con- tact positions . tee negotiable typing trainees or exp . Madison avenue agency

**corner mad th lobby receipt typist [436014]** 9 b divers i fiend work in plush aft . co pays fee 585 Taft open Washington s birthday 150 Broadway agency di 90330 one east 42 st mu p640 receipt no skills fee pd to theatrical Joyce 11 w 42 , 1 rm 700 () receipt ty pi ts **\$ 80-90** personnel trainees np exp , company trains gals with 40 wpm in the personnel department of a rep steel company . interesting-fee paid appeal agency , 20 e 42 st near wall street [**Appeal Agency**]

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**record clerk r [434071] tv \$ 90-95** ad figure apt . 2-3 vars exp in banking r-insurance . hunt 8 peck , fee reimbursed emerita a en v 2 4 in for full time position in media- cal research of medical ' school ) r or intensive care experience . call . fy 2-600d , ext 177

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**receptionist i typist [439022]** very active . office requires cal with good and clerical back- , . must en ) oy working with people . excellent benefits fiver week liberal benefits apply stern brothers 6th floor personnel 41 west 42 st . new York cit v i

**receptionist [434171]** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

**receptionist gal friday [434171]** we operate an executive personnel . the position is for our staff . we require an alert . brie . reliable person with a rood phone voice . no skills -no exp . required . 365-75 start . many benefits . no fee , of course **[Robert Half Agency]**

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**receptionist [434171]** airline no experience co trains NYC interesting dial agency , 20 east 42 st dial agency , 135 b way near wall street reception . iist execs nice appearing . well spoken girls with a flair for tact are needed for the e xx flog of this too cg . i a minimum of one year i e xv or some college freq . 90-100 fee negot front desk agency public contact specialists 15 e 40th ( off mad av ) rm 206

**receptionist gal friday [434171]** we operate an executive personnel . the position is for our staff . we require an alert brie . reliable person with a rood phone voice . no skills -no exp . required . 365-75 start . many benefits . no fee , of course [Robert Half Agency]

**receptionist [434171]** a new Madison avenue agency designed for those interested in extra-ordinary and unique public con- tact positions . tee negotiable typing trainees or exp . Madison avenue agency

**corner mad th lobby receipt typist [436014]** 9 b divers i fiend work in plush aft . co pays fee 585 Taft open Washington s birthday 150 Broadway agency di 90330 one east 42 st mu p640 receipt no skills fee pd to theatrical Joyce 11 w 42 , 1 rm 700 ( ) receipt ty pi ts \$ 80-90 personnel trainees np exp , company trains gals with 40 wpm in the personnel department of a rep steel company . interesting-fee paid appeal agency , 20 e 42 st near wall street [Appeal Agency]

**receptionist [434171]. \$ 80** this plush cg seeks gal with typing and that clean scrubbed look to meet 8 greet clients . any exp ok benefits bonus co pays fee graham-white vj e also interview eve s . call for apple 1 dl ag d i 9-1280 reception desk to 90 fee paid large park ave coy teach and reservations ; type ; attar and poised [Graham White Agency]

**record clerk r [434071]** tv \$ 90-95 ad figure apt . 2-3 vars exp in banking r-insurance . hunt 8 peck , fee reimbursed emerita a en v 2 4 in for full time position in media- cal research of medical ' school ) r or intensive care experience . call . fy 2-600d , ext 177

## Summary Statistics

	1940-63	1964-70	1971-2000	1940-2000
Explicit Male	0.036	0.013	0.002	0.017
Explicit Female	0.036	0.022	0.002	0.018
Male Page	0.292	0.206	0.006	0.150
Female Page	0.239	0.133	0.003	0.115
Male+Female Page	0.000	0.171	0.031	0.048
Ads (million)	3.3	1.8	3.9	9.1
with firm info	0.38	0.43	0.53	1.33
with salary info	0.11	0.09	0.20	0.39

## Summary Statistics

	Explicit Targeting			Gendered Pages		
	Male	None	Female	Male	None	Female
Male Page	0.440	0.262	0.101	1	0	0
Non-gendered Page	0.459	0.542	0.454	0	1	0
Female Page	0.110	0.197	0.454	0	0	1
Prefer Male	1	0	0	0.046	0.025	0.011
No explicit preference	0	1	0	0.945	0.947	0.919
Prefer Female	0	0	1	0.010	0.027	0.069
Percent of Ads	2.6	94.4	3.0	24.6	56.7	18.6

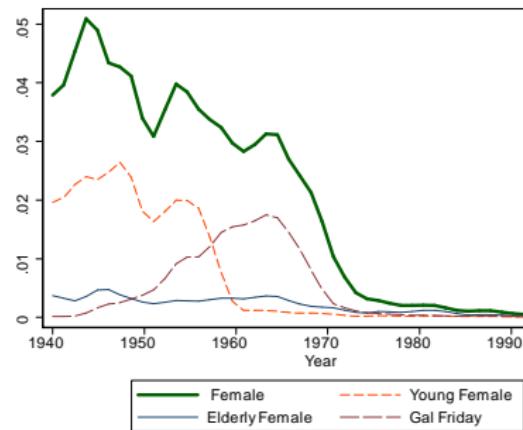
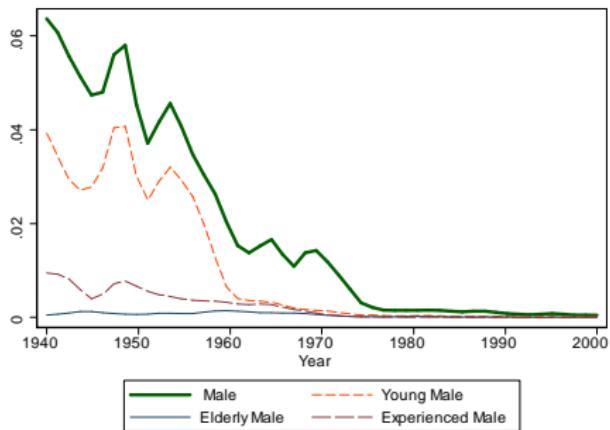
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Log Salary (Resid.)	0.018	0.001	-0.061	0.032	-0.092	-0.022
Regular schedule	0.163	0.146	0.359	0.086	0.133	0.305
Irregular schedule	0.018	0.006	0.009	0.010	0.006	0.005
Percent of Ads	2.6	94.4	3.0	24.6	56.7	18.6

# Outline

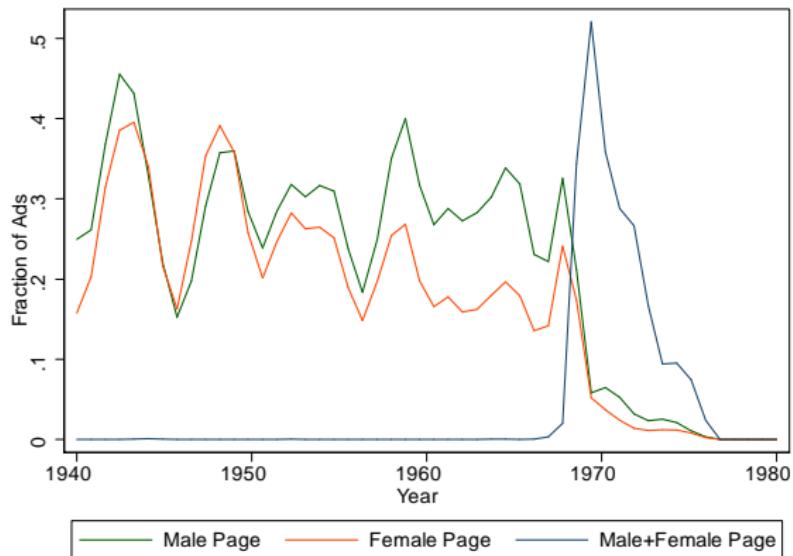
1. Data Sources
2. **Explicit Gender Targeting**
3. Substitution to Implicit Gender Targeting?
4. Wages Gaps and Occupational Segregation

# Trends in Explicit Gender Targeting

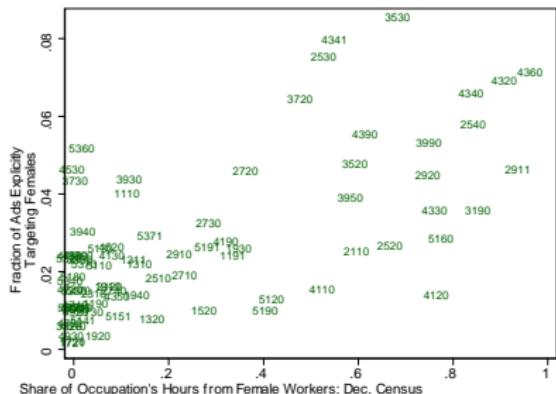
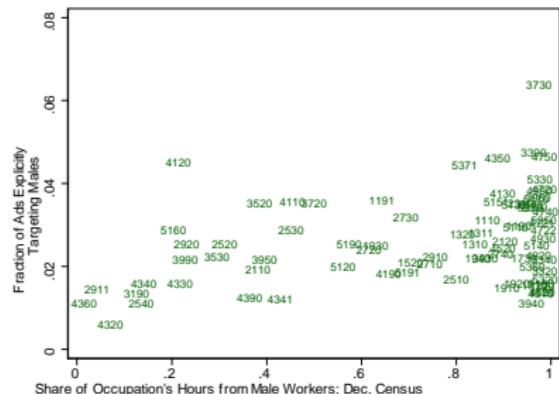


- ▶ 4.5 (1.4) percent of ads in the early 60s (70s) have an explicit mention of applicants for a gender.

# Trends in Gender-Specific Pages of Ads



# Overt Targeting by Occupation



# Outline

1. Data Sources
2. Explicit Gender Targeting
3. **Substitution to Implicit Gender Targeting?**
4. Wages and Occupational Segregation

## Gendered Adjectives

In the period in which targeting is legal (1946-63), regress targeting against a list of (500) personal adjectives  $\in \{\text{abrupt, accessible, ... , worrying, youthful}\}$

- ▶ Penalized regression, control for ad length, year fixed effects, and occupation fixed effects

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- ▶ Call  $w_a^{\text{male}}$  and  $w_a^{\text{female}}$  the number of mentions of the "male-predicting" or "female-predicting" personal adjectives in ad  $a$

# Regression Specification

In the pre-period, compute

- ▶ the frequency of explicit targeting  $\Rightarrow \bar{d}_o^{\text{female}}$  or  $\bar{d}_o^{\text{male}}$ .
- ▶ the average of "male" or "female" gendered adjectives  $\Rightarrow \bar{w}_o^{\text{female}}, \bar{w}_o^{\text{male}}$
- ▶  $o$  indexes either occupations (4-digit) or firm  $\times$  occupation (2-digit) cells

## Regression Specification

In the pre-period, compute  $\bar{d}_o^{\text{female}}$ ,  $\bar{d}_o^{\text{male}}$ ,  $\bar{w}_o^{\text{female}}$ ,  $\bar{w}_o^{\text{male}}$

After gendered targeting is prohibited, compute  $w_{ot}^{\text{female}}$  and  $w_{ot}^{\text{male}}$  by  $o \times t$  pair

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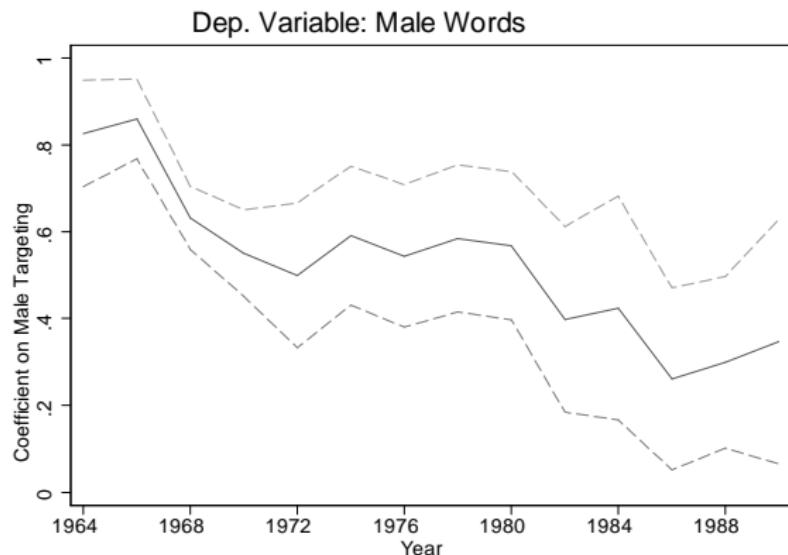
Regression:

$$\begin{aligned} w_{ot}^{\text{male}} = & \beta_t + \mu_t \cdot \bar{d}_o^{\text{male}} + \nu_t \cdot \bar{w}_o^{\text{male}} \\ & + \phi_t \cdot \bar{d}_o^{\text{female}} + \gamma_t \cdot \bar{w}_o^{\text{female}} + \epsilon_{ot} \end{aligned}$$

(with a corresponding regression with  $w_{ot}^{\text{female}}$  as dependant variable)

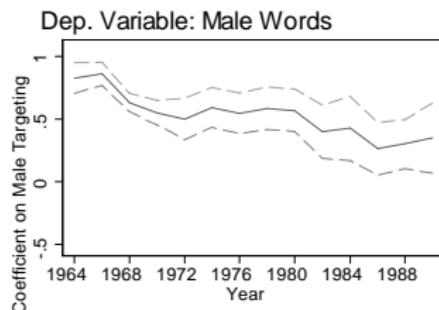
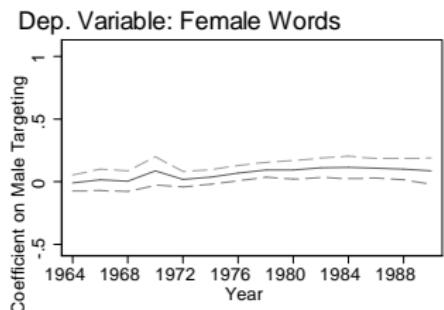
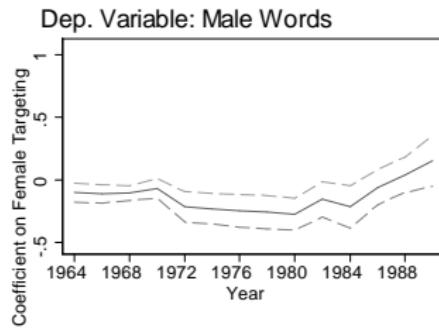
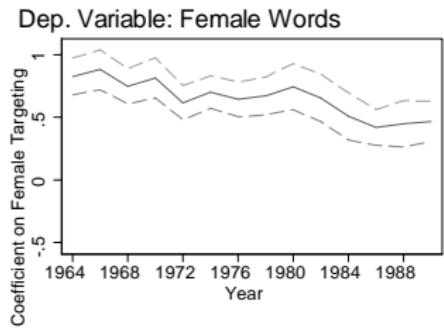
- ▶ Coefficients of interest:  $\mu_t$  and  $\phi_t$ : relationship between past explicit targeting and current use of gendered adjectives.

## Results: SOC

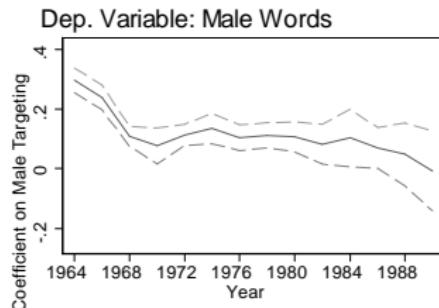
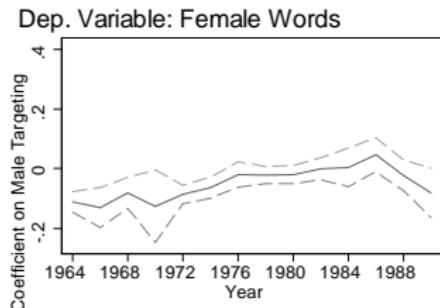
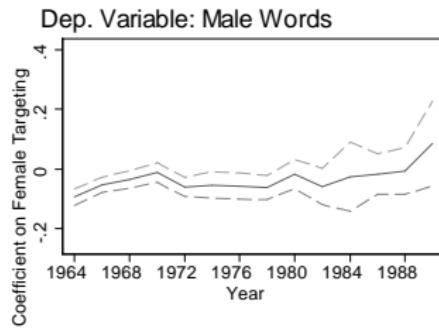
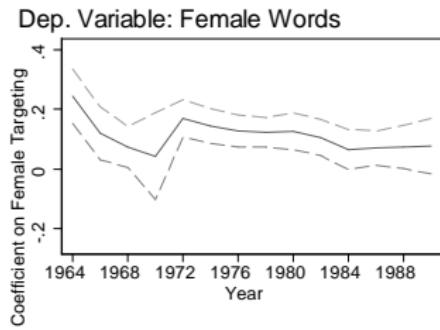


- ▶ Occupations with 1 extra mention of explicit targeting for males had 0.5 more mentions of male-specific gendered adjectives in the 1970s

## Results: SOC



## Results: Firm-by-SOC



# Outline

1. Data Sources
2. Explicit Gender Targeting
3. Substitution to Implicit Gender Targeting?
4. **Wages and Occupational Segregation**

# Correlation between gendered language and labor market outcomes

In the pre-period, compute  $\bar{d}_o^{\text{female}}$ ,  $\bar{d}_o^{\text{male}}$ ,  $\bar{w}_o^{\text{female}}$ ,  $\bar{w}_o^{\text{male}}$

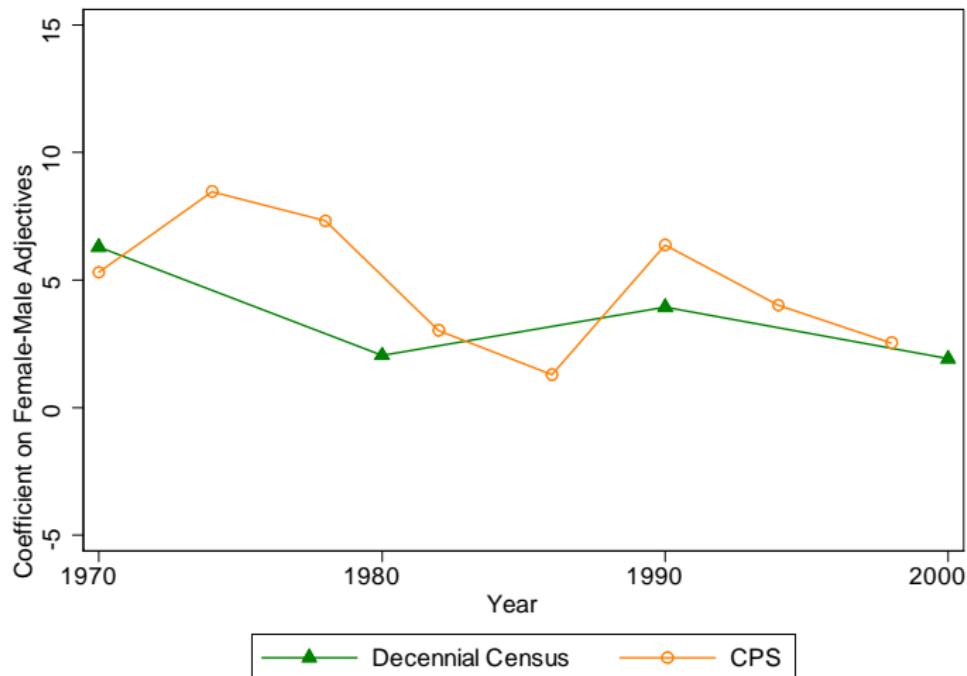
After gendered targeting is prohibited, compute  $w_{ot}^{\text{female}}$  and  $w_{ot}^{\text{male}}$  by  $o \times t$  pair

Regression:

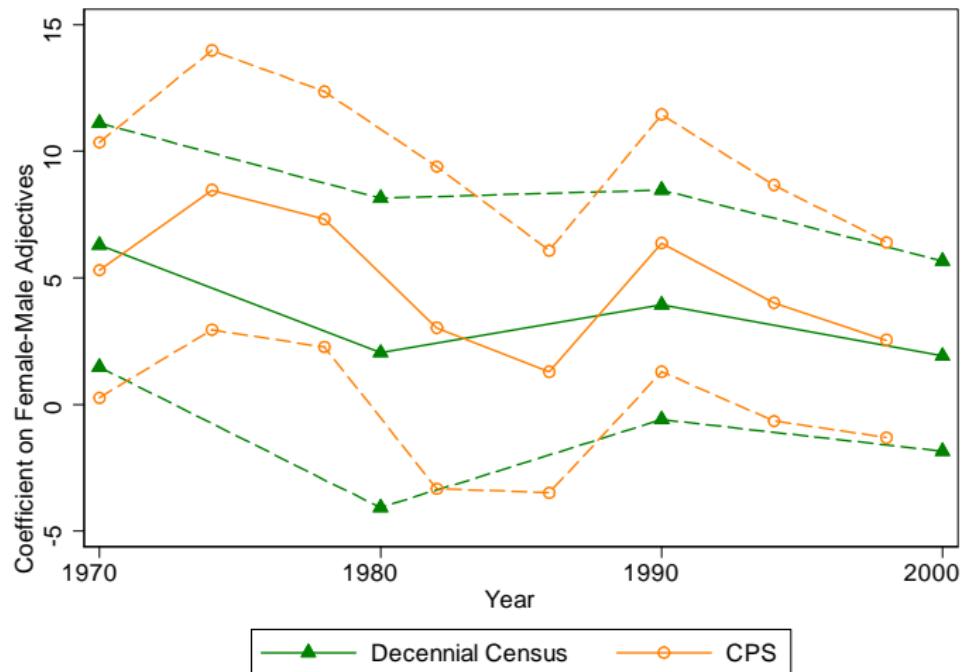
$$y_{ot} = \beta_t + \delta_t \cdot (w_{ot}^{\text{male}} - w_{ot}^{\text{female}}) + \mu_t \cdot \bar{d}_o^{\text{male}} + \phi_t \cdot \bar{d}_o^{\text{female}} \\ + \nu_t \cdot (\bar{w}_o^{\text{male}} - \bar{w}_o^{\text{female}}) + \theta_t \cdot \bar{y}_o + \epsilon_{ot}$$

- ▶  $y_{ot}$ : labor market variable:  
  {share of female workers, log average wage} from CPS ASEC or Decennial Census

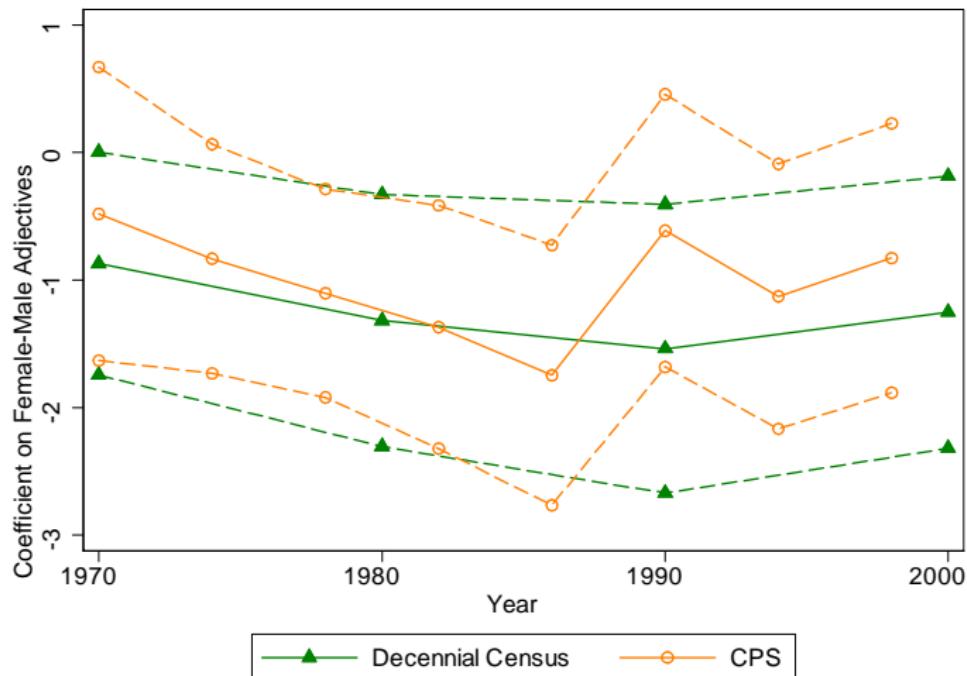
Substitution to Female Words, Away from Male Words  
Correlated with Higher Female Labor Share



# Substitution to Female Words, Away from Male Words Correlated with Higher Female Labor Share



# Substitution to Female Words, Away from Male Words Correlated with Lower Wages



## Recap

- ▶ Study firm gender targeting between 1940s to 90s (primarily 50s to 70s)
- ▶ Explicit gender targeting was common up to early 1970s
- ▶ Occupations (firms) with more explicit gender targeting before mid 1960s use more gendered adjectives after
- ▶ Gendered adjectives post 1970 correlate with labor outcomes: female share of workers, average wages, female-male wage gap.