

Appendix to:

**Gender-Targeted Job Ads in the Recruitment
Process: Evidence from China**

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For online publication

Appendix 1: Examples of Gendered Job Ads from Indeed.com

Accurate measures of the share of ads on a job site that are gender-targeted cannot be generated by conducting searches on the site's public portals, for a number of reasons. First, the ads on the site at a point in time represent a stock sample with potentially many 'stale' ads. Second, unless the job board has chosen to collect and to publicize an unambiguous indicator of the employer's gender preference (as XMRC does), gender preferences can be expressed in many different ways, some of which are evasive, others of which are costly to detect.¹ Third, jobseekers' search results are often prioritized in ways that are opaque to the user. And finally, without a well-defined sample that has been drawn from the board's internal database, researchers are forced to rely on denominators provided by the job board, which are not clearly defined and prone to exaggeration.²

With these cautions in mind, we can arguably get some indicators of at least the presence and typical form of explicit gender requests by conducting keyword searches for jobs through the worker portal on a site. In this document we present examples of the results of such searches on Indeed.com, which currently operates job search platforms in 63 countries. The ads reproduced in the following pages were collected from Indeed.com's international portal: <https://www.indeed.com/worldwide> on November 12, 2018. In all cases, we searched for the terms "male" and "female" in the sites' native languages (this was English in India and Pakistan), then --where necessary-- used Google to translate the results. Since "male" and "female" can be used in several ways that do not request a specific gender for the job (including saying that both men and women are welcome), we manually searched through the ads till we found ads that expressed preference for one gender. We never had to go beyond the first 50 search results to find such ads.

In all cases the searches were done without creating an account on Indeed, and without specifying a type of work or location—the only search term was "male" or "female". No other filtering or ordering of results was done. The countries searched are the ten countries represented by Indeed with the largest populations. Since Indeed serves ten of the eleven largest countries, our results are for the world's 11 most populous countries with exception of Bangladesh, representing 57.4% of the world's population. The ads are numbered by country population rank.

¹ Because the words vary across jobs, the use of gendered job titles (such as abogada and abogado in Spanish) is particularly burdensome to measure.

² Another emerging difficulty is the possibility that job boards are designing their worker-facing search algorithms to make certain forms of explicit gender requests hard to find via a keyword search, even though these requests are still present in ads (that are found via other keywords). We report some suggestive evidence of this in Section 3.2.

1. China—female



admin officer

米高蒲志(Michael Page) ★★★★★ 169 reviews - 上海市 静安区

查看详情或申请

保存职位

- competitive salary and benefits
- promising and good culture in working environment

关于我们的客户

our client has strong background invested by Canada top fund and local state-on wed company.

职责描述

- support total 10 staff in 2 projects,
- support finance director for daily cash-er job,
- in charge vendor management,
- in charge office purchasing, office relocation and renovation.

理想的求职者

- female, married with kid or single.
- at least 3-5 years in office management role of small size office.
- outgoing, passionate personality.
- good English.

薪酬待遇

promising and good culture in working environment

competitive salary and benefits

联系:

Martina Zhu

职位编号: 3972202

+86 6122 2645

our client has strong background invested by Canada top fund and local state-on wed company.

职责描述

-support total 10 staff in 2 projects, -support finance director for daily cash-er job, -in charge vendor management, -in charge office purchasing, office relocation and renovation.

理想的求职者

-female, married with kid or single. -at least 3-5 years in office management role of small size office. -outgoing, passionate personality. -good English.

薪酬待遇

1. China- male

[找工作](#) [发布招聘职位 \(免费\)](#)



关键词
职务、公司或技能

工作地点
省市县区请名





业务员

深圳市汇力货运代理有限公司 - 中山市

[查看详情及申请该职位](#)

所属行业: 交通/运输/物流

分享到:

职位类别: 销售 > 销售代表

工作性质

全职

招聘人数

1

月薪 (人民币)

面议

外语要求

工作经验要求

1-2年

学历要求

本科

性别要求

不限

职位描述:

- Analytical,out-going,self-motivated,aggressive and able to develop new business
- Frequent to travel our clients in most of industrial areas of Zhongshan,Jiangmen,Zhuhai and Shunde is required.
- PC knowledge of Power Point,Word,Excel,Chinese Work Processing and fast typing skill in English.

任职条件说明:

- Local resident of Zhongshan.
- Diploma or University Degree holder.
- Over 1 year working experience as Sales/Marketing job is preferable.
- Good command in both written and spoken English(i.e.CET 4 or above),Mandarin and Cantonese
- **The positions to be recruited only male**

爱聘才招聘网 - 7天前 - [保存招聘职位](#) - [原网站职位](#)

2. India—female

Executive Assistant (Gurgaon)

Manav Management Group - Gurgaon, Haryana

₹1,75,000 - ₹3,00,000 a year

[Apply On Company Site](#)

[Save this job](#)

Job Description

We have Urgent requirement for the post of: - Executive Assistant

Post of: - Executive Assistant

Experience: - 2y to 5y

Salary: - 15000k-25000k

Location: - Udyog Vihar Ph-4 Gurgaon

Applied Candidate: -Female only

Company Profile: - Training & Coaching

Education: Graduate

Job Responsibility:

1. Should have strong English communication (both verbal and written)
2. Managing the day-to-day operations of the office.
3. Screening and prioritizing mail and phone calls.
4. Researching and writing memos.
5. Organizing and maintaining files and records.
6. Maintain executive calendars and meeting agendas.
7. Prepare materials used in executive presentations and make travel arrangements
8. Planning and scheduling meetings and appointments and recording meeting discussions.
9. Securing information by completing data base backups.
10. Maintaining professional and technical knowledge by attending educational workshops.
11. Reviewing professional publications
12. Establishing personal networks.
13. Participating in professional societies and any other similar duty that may be assigned from time to time.

Salary

1 Lac 75 Thousand To 3 Lac P.A.

Industry

Front Office / Executive Assistant / Data Entry

Work Experience

2 - 5 Years

Qualification

Other Bachelor Degree

2. India—male



what

job title, keywords, or company

where

city, state, or pin code

IT Executive (Male)

Titan Media - Bhiwadi, Rajasthan

- Windows, Software Installation & configuration, back up.
- All printer and scanner installation and troubleshooting.
- LAN,WAN Configuration
- Basic knowledge of Microsoft Dynamic NAV Software.

Qualification - Any Graduate

Experience:- Minimum 1 year

Salary:- Based on Qualification and Experience

Skills:-

- Should have a positive attitude towards work.

Location:- Bhiwadi, Rajasthan

Titan Media - 2 days ago - [save job](#) - [Is there a problem with this job?](#) - [original job](#)

[Apply On Company Site](#)

3. USA:

We searched for “male” and “female” as keywords without registering as workers and without specifying a location or type of worker.

All of the **first 50 hits for “men”** were used to convey:

- a “genuine” job requirement (e.g. housekeeper for a men’s locker room, male clothing model, male urine sample collection specialist)
- a feature of the work environment (e.g. hairstylist for male clientele, clerk in male inmate facility), or
- a military draft requirement (e.g. “Census enumerator--all male applicants must be registered with Selective Service system”).

with one possible exception: “male on-camera sports host”.

All of the **first 50 hits for “women”** were used to convey:

- a “genuine” job requirement (e.g. customer service swimwear, TSA pat-down officer)
- a feature of the work environment (e.g. “female run and managed company”, support staff for female clients in drug recovery)
- a diversity statement (e.g. "EOE/Minorities/Females/Veterans/Disabled", in 39/50 ads)
- different physical qualifications for men and women (e.g. “Correctional officer ... 4 pushups female, 8 pushups male)

with one possible exception: “front desk agent--we are looking to add another female to our front desk position... professional appearance”

4. Indonesia-- female

Receptionist

Ahloo ID - Indonesia

[Apply On Company Site](#)

[Save this job](#)

Responsibilities

- Greet and welcome the guests and directing them to the correct person or department.
- Answer all incoming calls and redirect them or keep messages.
- Sorting and distributing incoming documents.
- Prepare the outgoing mails.
- Managing a booking system (for meetings and interviews).
- Keeping the reception area tidy and clean.

Requirements

- Female.
- Maximum age 28 years old.
- At least 1 year(s) of working experience in the related field is requires for this position.
- Minimum education Diploma from any major.
- Have good communication skills, friendly, and attractive.
- Able to operate Microsoft Word, Excel, & internet.
- Proficient in English (oral and written).

In several countries, requests for a specific gender are frequently accompanied by a desired age range as well. See Delgado Helleseer, Kuhn and Shen (forthcoming) for detailed evidence on age*gender interactions in job ads from China and Mexico.

4. Indonesia—male

Chemist



Geoservices ★★★★★ 51 reviews - Karawang

[Apply On Company Site](#)

[Save this job](#)

• Male, 25 – 35 years old

- Candidate must possess at least Bachelor's Degree, Chemistry.
- At least 2 years of working experience in the related field is required for this position
- Able to operating instruments tools ICP/ AAS/ XRF/ LECO
- Have a good quality control skill
- Proficiency in English both oral & written
- Candidate must be willing to placement in Cikarang and other site area.

5. Brazil—female

Auxiliar Administrativo Feminino em Lavras



Traço RH - Lavras, MG
R\$ 1.000 por mês

[Visualizar ou candidatar-se à vaga](#)

[Salvar esta vaga](#)

- PRÉ – REQUISITO
- ✓ Possuir 01 ano de experiência na área administrativa;
- ✓ Conhecimento em informática e boa digitação.
- PRINCIPAIS ATIVIDADES:
- ✓ Atuar com atendimento ao cliente, confecção de contratos, rescisões, atendimento telefônico, resolver pendência sobre imóveis e demais atividades.
- HORÁRIO:
- Segunda a Sexta: 08:30 – 18:00 hs.
- Sábados eventuais.
- Remuneração: R\$ 1.000,00

5. Brazil—male

Auxiliar Administrativo Masculino

Traço RH - Lavras, MG
R\$ 1.300 por mês



Visualizar ou candidatar-se à vaga

Salvar esta vaga

- Os candidatos podem residir em:
- ITUTINGA,
- NAZARENO;
- LAVRAS (se residir em Lavras, possui disponibilidade de ficar em alojamento durante a semana).
- Sexo: MASCULINO
- PRÉ – REQUISITOS:
- Possuir 01 ano de experiência na área administrativa;
- É um diferencial para empresa ter atuado antes no segmento de reflorestamento ou produção de carvão;
- **Habilitação AB, com prática em ambas;**
- Informática básica.
- PRINCIPAIS ATIVIDADES:
- ✓ Irá dar suporte nos serviços administrativos nas fazendas em Lavras, São João Del Rei, São Sebastião da Vitória e Itutinga.
- Conferência de documentos, controle, agendamento de exames, enviar documentos a contabilidade, organizar frentes de trabalho, alojamentos e demais atividades.
- HORÁRIOS:
- Segunda a Quinta-feira: 07:00 – 17:00
- Sexta: 07:00 – 16:00
- Remuneração: R\$ 1.300,00 e Almoço no Local de Trabalho.
- Veículo da empresa disponível para trabalho.

A large number of Indeed's Brazilian ads say the job is open to both men and women, but single-sex ads like these also exist.

This is an interesting example of the same company is advertising similar jobs for men and women, but offering a 30 percent higher wage in the male ad.

6. Pakistan—female

Female Receptionist

F S Engineering - Lahore

Rs 15,000 - Rs 20,000 a month

[Apply Now](#)

[Save this job](#)

Good looking personality

Computer knowledge

Minimum education intermediate

Filing

Spoken skills

Job Type: Full-time

Salary: Rs15,000.00 to Rs20,000.00 /month

Experience:

- receptionist: 1 year (Preferred)

Requests for women in customer-contact jobs like this one frequently include explicit requests for beauty (Delgado Helleseter, Kuhn and Shen forthcoming).

6. Pakistan—male

Cashier- Male

Hampton Bay L.L.C - Lahore



[Apply On Company Site](#)

[Save this job](#)

Looking for **Cashier- Male**, Graduate having 2 yrs of working experience. This is a Lahore based position. Candidates with similar experience can share their resume with title Cashier- Male

7. Nigeria—female

Female Marketer

- Lagos

[Apply On Company Site](#)

[Save this job](#)

Fifth Quadrant Performance Limited

Marketing & Communications

Fifth Quadrant Performance Limited

Marketing & Communications

Lagos|Full Time|Real Estate|

NGN Confidential

1mo

Job Summary

Fifth Quadrant Performance Limited is in need of a Female Marketer.

- Minimum Qualification: HND
- Experience Level: Entry level
- Experience Length: 1 year

Job Description

Fifth Quadrant Performance Limited - Our client, a fast-rising Real Estate Company that is into the development of luxurious apartments in choice areas on the Lagos Island, requires the services of a qualified candidate to fill the position of a Marketer

Job Description

- We are in need of **Female Marketers to help engage it's High Network Clients** with the products of the company.
- The qualified candidates will be located at the companies strategically located offices that enables her to meet and interact with the target market.

Requirements

- She must be fluent in English (additional languages will be an added advantage)
- **She must be presentable and carry herself well**
- She must have sales experience
- She must be strong willed and be able to follow up on clients
- She must have finished NYSC
- She must have at least B.Sc or HND.

7. Nigeria-- male

Male Front Line/ Customer Service Officer

- Lagos

[Apply On Company Site](#)

[Save this job](#)

Doculand Business Solutions Limited

Administrative

Doculand Business Solutions Limited

Administrative

Lagos|Full Time|Retail & FMCG|

NGN Confidential

1mo

Job Summary

Doculand Business Solutions Limited is recruiting to fill the role of a Male Front Line/ Customer Service Officer.

- Minimum Qualification: HND
- Experience Level: Entry level
- Experience Length: 1 year

Job Description

Doculand Business Solutions Limited is Nigeria's foremost professional print and copies business center. We originated in Lebanon and we have branches in Jordan and Lagos. We are sought after for our excellent work, creativity and great customer service. We have a team of professionals who ensure we attain levels in customer expectations and fulfillment.

Job Descriptions

- Welcome customer
- Take all details needed for the order
- Give prizes to the customer
- Upselling for both services and stationary section
- Report to Supervisor
- Client inquiry & feedback

8 Bangladesh—does not have an Indeed site

9. Russia—female

Packer

KC Aquarium - Saratov
25 000 rubles per month

Apply for job

Save job

At the meat-processing production in the women's team requires a specialist in cutting meat.
We consider no work experience.

Those who are looking for a job packer / to, packer / to, cook, molder / to, we suggest you consider the vacancy Resident / K

Conditions:

- free training at the enterprise;
- special clothes;
- production in the Vso region;
- decent wages

Duties:

- separation of meat from films and veins.

Requirements:

- work experience is not required;
- desire and ability to work and earn money

Call from 8:00 to 17:00.

After the specified time you can write a message indicating your contact number, we will contact you

9. Russia—male

Porter to the warehouse of ceramic products

Lighthouse ★★★★★ 5 reviews - Moscow

54 000 rub. per month - rotational method

[Apply for job](#)

[Save job](#)

Russian company for the production of ceramic tiles [Recruiting men](#)

Responsibilities: packing by boxes, pallet assembly and treatment

Requirements; willingness to hard physical labor.

Conditions: the hostel is available 20 minutes from the object. watch from 45 days the entire salary is paid at the end of the watch, weekly 1500r for minor expenses.

Registration under the Contract.

With the 2nd watch rate increase!

9. Russia—gendered duties

Cosmetic Packer (Moscow Watch) ×

Single Personnel Center - Novosibirsk

36 500 rub. per month - rotational method

[Apply for job](#)

[Save job](#)

Responsibilities:

Women: packaging sets of perfume products.

Men: Unloading / Loading of perfumery products.

Qualification requirements:

- Experience is not important
- Free on-site training, a caring brigadier will teach you everything.

Working conditions and compensation:

30/60/90 shifts to choose from

Schedule: 6/1; 11 hours each (there are day and night shifts) + an hour for lunch and breaks.

PROVIDE:

- Free accommodation in a comfortable hostel (check-in on the day of treatment)
- Free stylish, nice and comfortable work clothes.
- Free Moscow medical book.
- walking distance from the hostel to the place of work
- Free food.

The hostel is equipped for a comfortable stay of our staff with everything you need: there are rooms for couples, clean bathrooms, kitchens, refrigerators, washing machines. We keep order, so we have a "dry law"!

Ads of this type—where a company requests both men and women, but for different duties within the firm—were much more common on Indeed’s Russia site than ads requesting a single gender only.

10. Mexico—female preferred

[Buscar empleos](#)
[Evaluaciones de empresa](#)
[Buscar candidatos](#)
[Empresas / Publicar empleos](#)

qué

título, palabras clave o empresa

dónde

ciudad o estado

Buscar emp

Contador(a)

Two Spoons - Álvaro Obregón, D. F.

[Ver empleo](#)

\$15,000 - \$17,000 al mes

Nomenclatura del puesto: Contador(a)

Sexo: Indistinto (preferentemente femenino).

Edad: Entre 28 y 35 años.

Escolaridad: Licenciatura en contabilidad, mínimo pasante.

Estado civil: Indistinto.

Experiencia laboral: Mínimo 3 años en puesto similar.

Conocimientos: Dominio de Excel, manejo de sistemas ASPEL (COI y SAE); deseables Word y Power Point.

Conocimientos deseables: Dentro del área fiscal, implementando estrategias de planeación y control, manejo de contabilidad general, impuestos, conciliaciones, etc.

10. Mexico—female required

Auxiliar de Recursos Humanos

RAMATY - Ciudad de México, D. F.

\$8,000 al mes

[Ver o postular al empleo](#)

[Guardar este empleo](#)

DESCRIPCIÓN DE LA EMPRESA

Ramaty es una empresa que ha crecido por la disciplina, el trabajo de un equipo comprometido y, en especial, por la pasión al diseño y la apertura a nuevas tendencias. Comenzó como un pequeño proyecto de diseño textil enfocado a la moda de caballeros, con un perfil clásico; con los años se ha consolidado como una de las marcas más reconocidas en el país y preferidas por jóvenes y adultos que encuentran cortes clásicos pero con ese sello distintivo: diseños únicos con una gran variedad, textiles de calidad e innovación en detalles de diseño.

DESCRIPCIÓN DEL PUESTO

APOYO EN ELABORACIÓN DE NÓMINA (NOI)

CONTROL DE TIEMPO EXTRA Y PERMISOS

MANEJO DE RELOJ CHECADOR

MANEJO DE SUA

INTEGRACIÓN DE EXPEDIENTES

ARCHIVO

DIVERSAS ACTIVIDADES ADMINISTRATIVAS

RECLUTAMIENTO DE PERSONAL

PERFIL

EDAD: 18 A 30 AÑOS

SEXO: FEMENINO

ESCOLARIDAD: TRUNCA O TITULADO EN ADMINISTRACIÓN

CONSEJOS

INDISPENSABLE MANEJO NOI

10. Mexico—male preferred

Auxiliar de Recursos Humanos Y Seguridad

Border Express de México S.A. de C.V - Ciudad Juárez, Chih.

Indefinido

[Ver o postular al empleo](#)

[Guardar este empleo](#)

Descripción y detalle de las actividades

Habilidad para manejar gente

Buen pensamiento analítico

Habilidad para la resolución de problemas

Habilidad de retención

Habilidad de negociación

Facilidad de palabra

Excelente manejo de la comunicación

Habilidad para determinar las necesidades del cliente

Alto sentido de urgencia

Aptitudes:

Alto sentido de pertenencia y lealtad

Tolerante

Proactivo

Auto dirigido

Actitud de servicio

Responsable

Experiencia y requisitos

Excelente presentación

Edad: Mayor de 25 años

Estado Civil: indistinto

Sexo: Indistinto (Masculino preferentemente)

Idioma: inglés 50%

Experiencia:

En el Ramo del transporte.

En trámites de Recursos humanos y seguridad patrimonial, auditorias, etc.

Educación: LAE, enfermería o trunco.

10. Mexico—Male Required

Asesor Financiero ×

TIP Consulting - Puebla, Pue.

[Ver o postular al empleo](#)

[Guardar este empleo](#)

- REQUISITOS :

- Sexo: Masculino
- Edad: 25 a 60 años
- Educación mínima: Bachillerato General
- Experiencia: Mínimo 3 - 5 años en puesto similar
- Empresa con 18 años de experiencia en brindar alternativas de crédito Te invitamos a participar en nuestra vacante de : - Asesor Financiero / ventas de intangibles- Requisitos: * Sexo: indistinto * Edad: de 25 a 60 años * Escolaridad: bachillerato o carrera trunca * Experiencia mínimo de 1 año en ventas * Disponibilidad de horario * Facilidad de palabra * Acostumbrado a trabajar bajo presión * Comisionista Conocimientos: Ventas, Rutas de trabajo, conocimiento de Puebla y alrededores, conocimiento de negociación Experiencia: un año en ventas de productos intangibles (financieros, seguros, prestamos, etc) Percepción: Por comisiones ascendentes conforme a ventas. Ofrecemos: Atractivas comisiones

11. Japan

The Japanese Equal Employment Opportunity Law prohibits employers from saying that they prefer to hire men (women). However, job ads on Indeed's Japan site frequently say that men (women) are playing "active roles", or 'thriving' in these jobs or in the firm. The intent appears to be to signal that the jobs in question are suited to a particular gender.

11. Japan—female (google translation)

(Female in active) General Affairs / General Affairs Let's take a job upgraded in Marunouchi I admire Major company work

Kokuyo & Partners Co., Ltd. - Tokyo

Monthly salary 245,000 yen - Contract employee

Apply

Save this job

[Affairs, human resources, labor, general administrative and general affairs]

office work in the "Marunouchi" leading companies working longing of leave your work up a notch in the affairs and general affairs yearning of Marunouchi

ways of working of the ideal in a stable foundation company do not you get +: ? ... + +: ... + +: ... + +: ... + +: ... +

monthly salary 245,000 yen

annual leave 120 days or more and overtime almost without

Marunouchi work and a 2-minute walk from the nearest station and the access preeminent

+: ... + +: ... + +: ... + +: ... + +: ... +

this time by Mitsubishi Heavy Industries, Ltd. is a business partner
we are looking for affairs and general affairs staff.

Work location, the beautiful office to open in Marunouchi in November 2018
, such as containing the fashionable cafes and brand shops in the building,
with a fully equipped, offers active in the new office

longing in "Marunouchi" a stable foundation
as our member of the Kokuyo group,
or does not achieve a fulfilling work life?

[job Description]: your job of back office of a leading company that represents Japan:

- Marunouchi's place of work I just worked at an office
- Revenue is stable at the start of 245,000 yen / month
- Overtime work average about 10 hours and almost None As a member of the KOKUYO group, at a business partner Mitsubishi Heavy Industries,

A better translation of the job title is probably: "(Women thriving) General Affairs. Asked to perform a step-up task in the enviable Marunouchi area. Working for major corporations." This is a job ad for a contract firm. The successful applicant would work in a brand new office of this contract firm in a brand new building in Marunouchi area, and work for one of its clients, Mitsubishi Heavy Industry.

11. Japan—female (original Japanese version)

求人検索

検索オプション

(女性活躍中)総務・庶務 憧れの丸の内ワンランク上のお仕事をお任せ 大手企業勤務

コクヨ&パートナーズ株式会社 - 東京都

月給 24.5万円 - 契約社員

応募する

この求人を保存する

【総務、人事、労務、一般事務・庶務】

総務・庶務 憧れの丸の内ワンランク上のお仕事をお任せ 大手企業勤務 憧れの「丸の内」でのオフィスワーク
安定基盤のある会社で理想の働き方を手に入れませんか? +: .:.: + +: .:.: + +: .:.: + +: .:.: + +: .:.: +

月給24万5000円~

年休120日以上&残業ほぼなし

丸の内勤務&最寄駅から徒歩2分とアクセス抜群

+: .:.: + +: .:.: + +: .:.: + +: .:.: + +: .:.: +

今回はお取引先である三菱重工業株式会社にて
総務・庶務スタッフを募集しています。

勤務地は、2018年11月に丸の内にオープンするキレイなオフィス
ビル内にはおしゃれなカフェやブランドショップが入っているなど、
充実した設備を持つ、新オフィスでご活躍いただけます。

憧れの「丸の内」で安定基盤のある
コクヨグループの当社の一員として、
充実したワークライフを実現しませんか?

【仕事内容】：日本を代表する大手企業でのバックオフィスのお仕事：

- ・ 勤務地は丸の内 OPENしたばかりオフィスで働ける
- ・ 月給24万5000円スタートで収入も安定
- ・ 残業月平均10時間程度とほぼなし コクヨグループの一員として、取引先である三菱重工業株式会社にて、

社内の「オフィスサービスセンター」での問い合わせ業務全般をお任せします。

《具体的には》

サービスセンターでのお問い合わせ対応

※お問い合わせ先は、サービスセンターです。

11. Japan—male (google translation)

General manager · Accounting men active during career upgrading possible stable companies / _ regular employees _ general affairs · personnel affairs · legal · intellectual property · public relations · IR // 0016882673-1

Nara Hino Motors Limited - Nara Prefecture

Monthly salary ¥ 182,000 yen - Full-time employee

[Apply](#)

[Save this job](#)

Full-time employee [Inexperienced welcome]

General manager · Accounting men active During career improvement at stable companies possible!

- Posting period: 2018/11/07 - 2018/12/04

Stable foundation of the manufacturer wholly owned subsidiary want to work and laid the waist in Nara! To your break even break even, Hino of Niton familiar in such a CM, Hino Motors.

As a leader in heavy-duty vehicles such as trucks and buses, domestic large and medium-sized truck share boasts the No. 1 record for 44 consecutive years.

As a wholly owned subsidiary of Hino Motors, we are doing sales and after-follow in Nara Prefecture. In such company, Konotabi who support the company to recruit the staff of the General Affairs Department!

Many staff that could be active longer, teamwork is outstanding.

I do not have to worry about holding something I do not understand alone.

A better translation of the job title is probably: "General Affairs or Accounting. Men thriving. Possible to advance your career in a stable company."

11. Japan—male (original Japanese version)

求人検索

検索オプション

総務・経理男性活躍中安定企業でキャリアアップ可能/正社員_総務・人事・法務・知財・広報・IR//0016882673-1

奈良日野自動車株式会社 - 奈良県

月給 18.2万円 - 正社員

応募する

この求人を保存する

正社員[未経験歓迎]

総務・経理 男性活躍中 安定企業でキャリアアップ可能!

- 掲載期間:2018/11/07 ~ 2018/12/04

メーカー100%子会社の安定基盤

奈良で腰をすえて働きたいあなたへ!

トントントントン、日野のニトン

そんなCMでおなじみの、日野自動車。

トラックやバスなど大型車両のリーディングカンパニーとして、

国内大・中型トラックシェアは

44年連続No.1の実績を誇っています。

日野自動車の100%子会社として、

奈良県内での販売やアフターフォローをしている私たち。

そんな当社で、このたび社内を支えてくださる

総務部のスタッフを募集します!

長く活躍してくれているスタッフが多く、

チームワークは抜群。

わからないことを一人で抱え込む心配はありません。

研修なども充実しており、

ゆくゆくは会社の中核となって

経営にも携わるチャンスがあるので、

これからスキルアップしたい人にもピッタリですよ。

This Appendix was prepared with the assistance of Steve Li and Jia You, undergraduate students at UCSB.

I thank Takao Kato, Professor of Economics, Colgate University for helping me understand the Japanese ads.

Appendix 2: Legislation Affecting Gender-Targeted Job Ads in China

A2.1 Early laws and regulations concerning gender discrimination

China's constitution and labor law have prohibited gender discrimination since at least 1982. For example, Article 48 of the Constitution of the People's Republic of China (1982) grants women "equal rights with men in all spheres of life, political, economic, cultural, social, and family life", and affirms the principle of equal pay for equal work for men and women. With the exception of "types of work that are not suitable for females", the *Labor Law of the PRC* (1994; Article 13) prohibits using sex as a pretext for excluding females from employment or for raising recruitment standards; similar provisions are found in the *Law of the PRC on the Protection of Rights and Interests of Women* (2005; Article 22), and the *Law of the PRC on Promotion of Employment* (2007, Articles 26 and 27.) The latter law also prohibits employment contracts that restrict female workers from getting married or bearing a child.

While a ban on ads (of any kind) that "carry any nationality, religious or sex discriminating information" has been in place since 1994 (*Advertisement law of the PRC*, Articles 7 and 39), the earliest regulations we are aware of that specifically prohibit gender discrimination by labor market intermediaries date from 2007. At that time, the Ministry of Labor and Social Security's *Regulations on Employment Service and Employment Management* prohibited intermediaries from "releasing any information indicating employment discrimination" (Articles 58 and 74).

Enforcement of China's anti-discrimination laws before 2010 however, is widely perceived to have been weak (Human Rights Watch 2018), and our previous studies of online job boards (Kuhn and Shen 2013; Delgado Helleseeter, Kuhn and Shen forthcoming) suggest that these laws did not seriously constrain employers' use of explicitly gendered job ads during that period.

A2.2 Court Cases

According to FlorCruz (2014), the first lawsuit claiming gender discrimination in China's labor market was filed in July 2012. After graduating from a Beijing university, Ju Cao was told that she was not qualified for an administrative assistant job because "this was a position for men, we would not consider you although you are qualified". As part of an out-of-court settlement, the firm made a public apology to Ms. Cao. In 2014, another new graduate, Guo Mou was rejected from a copywriting job at Hangzhou's prestigious New East Cuisine Education school, for the reason that "men are more qualified for this position". The school was ordered to pay Ms. Guo 2,000 yuan for "spiritual injury" (CCTV.com, 2015). In China's first lawsuit on gender discrimination against a state-owned enterprise (SOE), Hu Ma was rejected for a

delivery job with China Post. In response to her lawsuit, submitted on January 26, 2015, China Post argued that delivery required workers to hold heavy objects, which met the legal exception of not being “suitable for females”. The Court of Beijing rejected China Post’s argument and ordered them to compensate Ms. Hu (Zhang, 2016).

Since the latter two lawsuits, the plaintiffs (Guo and Hu), have become activists against gender discrimination in employment. As part of their efforts, they have collected gender-targeted job ads on sites including Zhaopin.com, 51job.com, 58.com, Chinahr.com, and reported them to Ministry of Labor and Social Security.

A2.3 Responses of the Job Boards

In addition to the above court cases, a recent regulatory development seems to have prodded China’s largest job boards to actively discourage and remove gendered job ads from their sites. In May 2016, China’s Ministry of Industry and Information Technology issued a regulation aimed directly at gendered job ads on online job platforms. A key component of this regulation clarified the division of fines between the job board (30%) and the firm placing the ad (70%). This appears to have been at least partially effective: by October 2018, explicit requests for men or women ads were effectively absent from the two of largest privately operated job boards: 51 job and Zhaopin (see Appendix 3).

Some insight into how this change occurred is available from our conversations with officials at Liepin.com, a ‘high-end’ job board catering to executive-level positions. After receiving notice of the May 2016 regulation, Liepin sent a letter to all HR personnel using their website, stating that the HR personnel would not be allowed to post new job ads stating an explicit preference for one gender. Hiring managers were also asked to revise existing ads by removing any gender labels or other statements of gender preference.

At the same time, Liepin developed and improved its own filtering system to detect gendered job ads. Focusing first on newly-posted ads, Liepin tagged ads including statements like “male first”, or “only for women” “male engineer” etc. and asked HR personnel to change these ads. Starting in July 2016, Liepin actively revised previously-posted ads by removing the gender requests without changing anything else. All such ads were replaced by the end of August, 2016. Since then, in part due to increased scrutiny from applicants who are willing to report violations to the government, Liepin has improved its screening for words that may convey a preferred gender, using human screeners to examine jobs that are considered suspect by Liepin’s algorithms. Notably, throughout this process, Liepin continued to allow HR personnel to filter job applications by gender, so that the firm could choose to see only applications from one gender regardless of who applied. Thus, at least on Liepin, internal filters seem to have replaced public gender requests.

References

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- FlorCruz, Michelle (2014). "[Chinese Woman Wins Settlement In China's First Ever Gender Discrimination Lawsuit](#)" *International Business Times*, February 2, 2014 (accessed November 18, 2018).
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Appendix 3: Gendered Job Ads in China Today

A3.1. Methods

As noted in Appendix 1, accurate measures of the share of ads on a job site that are gender-targeted cannot be generated by conducting searches on the site's public portals. As we did in Appendix 1 for the international context, however, this Appendix attempts to document the presence and typical form of gender requests on various Chinese job sites by searching for jobs using gender-related keywords. Specifically, entering the sites via their jobseeker portals, we searched for words that *might* convey a gender preference by the employer. Then, we inspected the first page of results (usually 50 ads) to count the number of those hits in which the keyword was used to request a specific gender (as opposed to describing the product/service, or inviting both genders to apply). In performing these searches, we did not create a worker profile on the site or specify any worker characteristics, nor did we enter any search terms for the location and type of work sought. All searches were performed in October 2018. The only search terms we entered were the following (one at a time):

- (1) Direct gender indicators: “man (男)” and “woman (女)” (This includes “men” and “women” in Chinese).
- (2) Transformed gender indicators: “nan” (the pronunciation for man, or 南 meaning south, which has the same pronunciation with man in Chinese), and “nv” (the pronunciation for woman; nv is the Chinese phonetic of women). These indicators have been used by employers to evade some recent enforcement activities (Human Rights Watch, 2018).
- (3) Gendered adjectives: handsome (帅), gentleman (绅士), and “tall and strong” (高大健壮) for men; beautiful (美丽), lady (淑女), and “beautiful face” (面容姣好) for women.
- (4) New “web words”: little brother (小哥哥), little sister (小姐姐). These new words refer in a polite way to someone who is young and good-looking. They are more widely used by young people, and in job ads aimed at younger workers, such as social media jobs.

In the rest of this Appendix, we provide a verbal overview of these search results. Tabular results with additional details and commentary are available from the authors.

A3.2. 51job.com and Zhaopin.com

51job and Zhaopin are China's two largest job boards. Both are privately run and cater to private-sector firms and workers. Our searches of these sites revealed no uses of the ‘direct’ indicators “man (男)” and “woman (女)” to request a specific gender, and only a few uses of the transformed indicators “nan”, or “nv”. One likely reason is enforcement: these boards

now face a risk of being fined if they post gendered jobs; in response, the boards seem to have improved the screening of sensitive words so they no longer appear in workers' search results. In addition, these boards now discourage recruiters from making gender requests in job ads.³ A second possible reason is that these boards cater to highly skilled workers; this may leave the boards more vulnerable to disapproval on social media if they post gendered ads. A third contributing factor may be the fact that employers' demand for gender profiling was relatively low in highly skilled jobs to begin with, even when this practice was widely tolerated (Kuhn and Shen 2013; Delgado, Kuhn and Shen, forthcoming), thus reducing the cost of compliance with the new restrictions.

This being noted, our analysis also shows that these job boards still accept subtler gender signals in ads, such as the gendered adjectives and the new "web words" we examined. For example, even though searches for "woman" yielded no results, searches for compound words like "lady" = "gentle+woman" (two characters) yielded several pages of results (though most of these refer to the names, products or brand of the firms). In addition, the adjectives "handsome", "gentleman", and "tall and strong" were frequently used to request men in jobs that included fitness instructors, sales, and warehouse work. "Beautiful", "lady", and "beautiful face" were used to request women in jobs that included customer service, front desk and modeling. Finally, the new web words "little brother" and "little sister" were also used to convey a clear gender preference. For example "little brother" was frequently used to request (young) men for (electric bicycle) delivery jobs, and "little sister" for camgirl jobs.⁴ Also of interest, both Zhaopin and 51job allow recruiters to select a filter *that will only show the recruiter the applications from a particular gender*.⁵ Overall, prohibition of gendered job ads has pushed formerly overt discrimination into more hidden forms on these platforms.

A3.3 Chinahr.com

We conducted a comparable search of Chinahr.com, a national job board that caters more to blue collar workers than Zhaopin and 51job. Here, the terms "man" and "woman" each yielded more than one page of search results.⁶ Inspecting the first page of these revealed that 17 (or 43%) of the uses of "man" were explicit gender requests, as were 15 (or 38%) of the uses of "woman". Interestingly, here the transformed gender terms "nan" and "nv" were almost never used to request an applicant gender, perhaps because direct requests were still feasible.

³ Zhaopin's portal states "Please do not include words that have the meaning of gender discrimination". Chinahr says "To make sure the job ad can pass checking, please do not enter repeat or meaningless information, and do not enter discriminating information, such as 'women first', or 'only for men'".

⁴ The delivery jobs in question involve driving electric bicycles with packages or meals; pay is commission-based and the jobs are short term and relatively dangerous. Because most of the employees are young men, they are typically called "delivery little brother".

⁵ The same is true for Liepin.com, a recruiting site focusing on higher managerial positions.

⁶ On Chinahr, a page of search results comprises 40 job ads.

Perhaps for the same reason, gendered adjectives and new web words –while present— weren’t used much to request candidates of a specific gender either. We speculate that Chinahr is more tolerant of gender profiling by employers than 51job and Zhaopin because of its focus on blue collar jobs, where, as noted, employers’ demand for gender profiling appears to be much higher (Delgado, Kuhn and Shen, forthcoming; Kuhn and Shen 2013), and where both stigma and enforcement may be weaker.

A3.4 Local Internet Job Boards

Parallel to the private-sector boards discussed above, China has a system of government-run or government-sponsored job boards that operate at the city or province level. These boards’ names end in RC, GGZP or HR; XMRC is one of them. In general, these boards tend to serve lower skill levels than the national boards described previously. Like the national job boards, however, all of these boards serve private-sector employers and workers; recruiting for government jobs takes place via other channels. In a comprehensive web search we were able to find 33 such boards of non-negligible size.⁷

When we examined the recruiter portals of these 33 sites, we found that 11 of them (including XMRC) ask employers to specify the gender of the worker they were seeking when the employer fills out a template for a job ad. Four of the sites (also including XMRC) allowed workers to filter job ads based on these employer requests. Keyword searches for “male” and “female” produced hits on all but two of these sites, and examination of the first 50 hits on each site revealed that these terms were frequently used to express a preference for male or female applicants. Code words like “nan” and “nv” turned up almost no results, perhaps because direct gender requests are still possible on these sites.

In sum, compared with private job boards, government-sponsored local job sites have more explicitly gendered job ads. We can think of three possible reasons for this. First, these sites tend to be relatively small, so they may so far have escaped the attention of regulators. Second, these sites –especially the pure job-posting services—serve less-skilled jobs and workers, where employers’ demand for gender filters is considerably greater. Finally, in China, workers may be much less inclined to report government-sponsored sites for regulatory violations, compared to privately operated sites.

A3.5 Other Internet Job Boards

58.com is China’s largest online job board serving temporary and part time jobs. In contrast to the job sites discussed previously, employers on 58.com include a large number of individuals, not just firms. Most of the jobs posted have low skill requirements and are informal in nature (in the sense that they do not participate in the social insurance system). A search of

⁷ We found 57 boards in total, but 24 of these claimed to host 1000 or fewer job ads.

58.com, parallel to those of 51job, Zhaopin and Chinahr, indicated that both the words “man” and “woman” and their transformations are frequently used to request workers of a particular gender.⁸ This may be due, in part, to workers’ unwillingness to report individuals (as opposed to firms) for discrimination, and the small stakes involved in doing so. And again, demand for gendered ads may be higher due to the less-skilled nature of these jobs.

Finally, **Yingjiesheng.com** is a website that aggregates information about job openings for new university graduates from a number of sources, including the job boards described above. In addition to referring applicants to those job postings, Yingjiesheng provides information about the recruitment plans of firms attending campus job fairs, and about the recruitment plans posted by firms on their own websites. These plans frequently include explicit gender preferences, which can often vary within firms. For example, a firm’s official, posted recruitment plan might say, “We are hiring 5 men for position A, 10 men for position B, and 5 women for position C”.

This Appendix was prepared with the assistance of Naijia Wu, an undergraduate student at UCSB.

⁸ Notably, this is despite the fact that 58’s employer portal asks job posters, “Please do not include special symbols or any gender discriminating information”.

Appendix 4: Additional Tables and Figures

Table A1: Descriptive Statistics: Full Ad Sample

	Ad Requests Women (<i>F</i> jobs)	Gender not specified (<i>N</i> jobs)	Ad Requests Men (<i>M</i> jobs)	All Ads
Education specified?	0.946	0.886	0.931	0.906
Education Requested (years), if specified	12.83	12.74	11.71	12.57
Tech School Requested?	0.282	0.138	0.182	0.175
Desired Age Range specified?	0.576	0.321	0.530	0.408
Desired Age, if Requested (midpoint of interval)	26.37	29.54	30.32	28.85
Experience Requested (years)	0.837	1.158	1.348	1.129
New Graduate Requested?	0.036	0.017	0.019	0.021
Wage Advertised?	0.509	0.385	0.445	0.420
Wage, if advertised (yuan/month, midpoint of interval)	2,013	2,730	2,515	2,520
Number of positions specified?	0.960	0.933	0.963	0.944
Number of positions, if specified	1.602	1.821	1.698	1.756
Number of applicants	58.99	42.45	36.96	44.96
Sample Size	8,324	26,769	7,651	42,744

Table A2: Comparing XMRC Ads to the Employed, Private-Sector Population in Xiamen and Urban China

	(1)	(2)	(3)
Worker Characteristics	XMRC job ads	Xiamen employed population	Urban China employed population
Female (percent of gendered ads)	56.56	46.75	44.23
Education (years)	12.21	10.56	10.59
Age (years)	28.03	30.77	32.64
Monthly wage (RMB)	2,446	2,185	2,147
Broad occupation (percent):			
Management	1.68	4.3	4.59
Sales and Procurement	18.64	18.31	21.25
Service Occupations	15.40	21.68	22.28
Professional/Technical	27.30	7.99	8.21
Production, Construction, Manufacturing	29.39	47.71	43.68
Other	7.59	.	.
Number of observations	3,637	1,163	99,768

Employment data are from the 2005 Census, 1% sample, persons currently living in urban regions, who are currently employed in the private sector (i.e. excluding SOEs, government and collectives). "Urban China" comprises the four municipalities directly under the jurisdiction of the central government (Beijing, Shanghai, Tianjin and Chongqing) plus the 15 sub-provincial cities: Changchun, Chengdu, Dalian, Guangzhou, Hangzhou, Harbin, Jinan, Nanjing, Ningbo, Qingdao, Shenyang, Shenzhen, Wuhan, Xiamen, and Xi'an. Chinese wages have been adjusted for per capita GDP growth between 2005 and 2010 using IMF GDP statistics.

Table A3: Matching, Compliance and Enforcement Rates for Age, Education and Experience Requests

	Matching (Share of callbacks that match the employer's request)	Compliance (Share of applications that match the employer's request)	Enforcement (Share of mismatched applications that are rejected)
	(1)	(2)	(3)
Gender	0.948	0.925	0.947
Age¹	0.748	0.734	0.925
Education²	0.436	0.444	0.917
Experience³	0.602	0.597	0.917
Wage⁴	0.495	0.501	0.916

Notes:

1. Age matching means the applicant is within the age range requested in the job ad.
2. Education matching means the candidate's education falls into the education category that is requested in the ad. The five education categories are: primary or less (6 years), junior middle school (9 years), high school (12 years), college or technical school (15 years) and university (16 years).
3. Experience matching means the candidate's experience equals the amount requested in the ad, or exceeds the request by no more than three years.
4. Wage matching means the applicant's current wage is in the same wage category as the job's advertised wage. The wage categories (in RMB/month) are "around 1000", 1000-1999, 2000-2999, 3000-3999, 4000-4999, 5000-5999, 6000-7999, and 8000-9999. Since 99 percent of offered and current wages are below 6000, this means that the candidate's wage is, on average, within about 1000 RMB/month of the offered wage, or within about one standard deviation.

Table A4: Actual and Counterfactual Segregation across Job Titles, Occupations and Firms—Nongendered Job Ads Only

	Actual, noise- adjusted segregation (\tilde{S}) (1)	Segregation associated with self-sorting (Counterfactual D) (2)	Segregation associated with employer choice (Counterfactual E) (3)
Gender Segregation across:			
Jobs:			
Segregation Index (\tilde{S})	0.417	0.392	0.099
Share of Actual	1.000	0.941	0.239
Firm*Occupation cells:			
Segregation Index (\tilde{S})	0.386	0.359	0.083
Share of Actual	1.000	0.929	0.214
Firms:			
Segregation Index (\tilde{S})	0.298	0.289	0.071
Share of Actual	1.000	0.97	0.239
Occupations:			
Segregation Index (\tilde{S})	0.300	0.324	0.041
Share of Actual	1.000	1.077	0.137

Table A5: Effects of Employers' Gender Requests on the share of female applications received (α)—callback sample only

	(1)	(2)	(3)	(4)	(5)
Ad requests men (<i>M</i>)	-0.3680*** (0.020)	-0.3270*** (0.019)	-0.2350*** (0.017)	-0.1368*** (0.019)	-0.1034*** (0.032)
Ad requests women (<i>F</i>)	0.4790*** (0.014)	0.4243*** (0.016)	0.3603*** (0.016)	0.2037*** (0.012)	0.2401*** (0.024)
Primary School		0.0292 (0.034)	-0.0113 (0.029)	0.0063 (0.019)	0.0502 (0.032)
Middle School		-0.0683* (0.036)	-0.0518** (0.023)	-0.0087 (0.021)	0.0346 (0.027)
Tech School		0.0587** (0.026)	0.0287 (0.021)	-0.0125 (0.016)	-0.0322 (0.027)
Post-secondary		0.1275*** (0.024)	0.0600*** (0.020)	0.0033 (0.016)	0.0215 (0.029)
University		0.1062*** (0.038)	0.0361 (0.027)	-0.0113 (0.025)	-0.0757 (0.064)
Number of positions advertised		-1.2386*** (0.330)	-0.8558*** (0.268)	0.3736 (0.288)	0.5534 (0.512)
Occupation Fixed Effects			Yes	Yes	Yes
Job Title Fixed Effects				Yes	Yes
Firm Fixed Effects					Yes
Title*Firm Fixed Effects					
<i>N</i> (ads)	3,637	3,637	3,637	3,637	3,637
'Effective' <i>N</i>	3,637	3,637	3,637	1,627	840
<i>R</i> ²	0.571	0.620	0.738	0.936	0.980

Standard errors in parentheses, clustered by firm. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Note to Table A5:

In addition to the covariates shown, columns 2-5 also control for the following job ad characteristics: requested experience level (quadratic), requested age level (quadratic in midpoint of range), advertised wage (quadratic in midpoint of bin; 8 bins), dummy for whether new graduate requested, number of positions advertised, plus dummies for missing education, age, wage and number of positions. All regressions are weighted by the total number of applications received. 'Effective' N excludes job titles and firm IDs that only appear in one ad in columns 4 and 5 respectively. The column 6 specification in Table 8 cannot be estimated in the callback sample due to insufficient degrees of freedom.

Table A6: Selected job titles, by predicted 'maleness' and 'femaleness'

maleness (Mp)	femaleness (Fp)	job title	English meaning	femaleness (Fp)	job title	English meaning		
[0,0.1)		外贸业务员	international trade person		采购文员	purchasing clerk		
[0.1,0.2)		行政司机	administrative driver		统计	statistic clerk		
[0.2,0.3)		仓库管理员	warehouse manager		总监助理	general manager assistant		
[0.3,0.4)		电脑技术员	computer technician		董事长秘书	assistant to the chairman		
[0.4,0.5)	[0,0.1)	技术员	technician	[0.5,0.6)	签约法务	signing legal		
[0.5,0.6)		施工员	construction worker		生产班组长	production team leader		
[0.6,0.7)		司机	driver		测量员	surveyor		
[0.7,0.8)		保安	security person		CNC 编程员	CNC programmer		
[0.8,0.9)		货车司机	truck driver		组装线线长 (班长)	Assembly line leader (shift leader)		
[0.9,1)		大货车司机	big truck driver		高管司机 (总管理处)	driver for high management (general management division)		
femaleness		maleness	job title		English meaning	maleness	job title	English meaning
[0,0.1)			外贸业务员		international trade person		施工员	contruction worker
[0.1,0.2)			人事专员		personnel specialist		外勤	field staff
[0.2,0.3)		业务助理	business assistant		总务课长	manager for the general affairs division		
[0.3,0.4)		会计	accountant		物料员	material keeper		
[0.4,0.5)	[0,0.1)	行政助理	administrative assistant	[0.5,0.6)	总账会计	general ledger accountant		
[0.5,0.6)		采购文员	purchasing clerk		生产班组长	production group leader		
[0.6,0.7)		出纳	cashier		教务专员 (急聘)	teaching affair specialist (urgent recruitment)		
[0.7,0.8)		文员	clerk		出纳员	cashier		
[0.8,0.9)		前台接待	front desk receptionist		账务员	accounting clerk		
[0.9,1)		前台文员	front desk clerk		研究生教学秘书	graduate studies teaching secretary		

Figure A1: Simulated segregation indices with random allocation of applications to jobs, and random selection of callbacks from all applicant pools

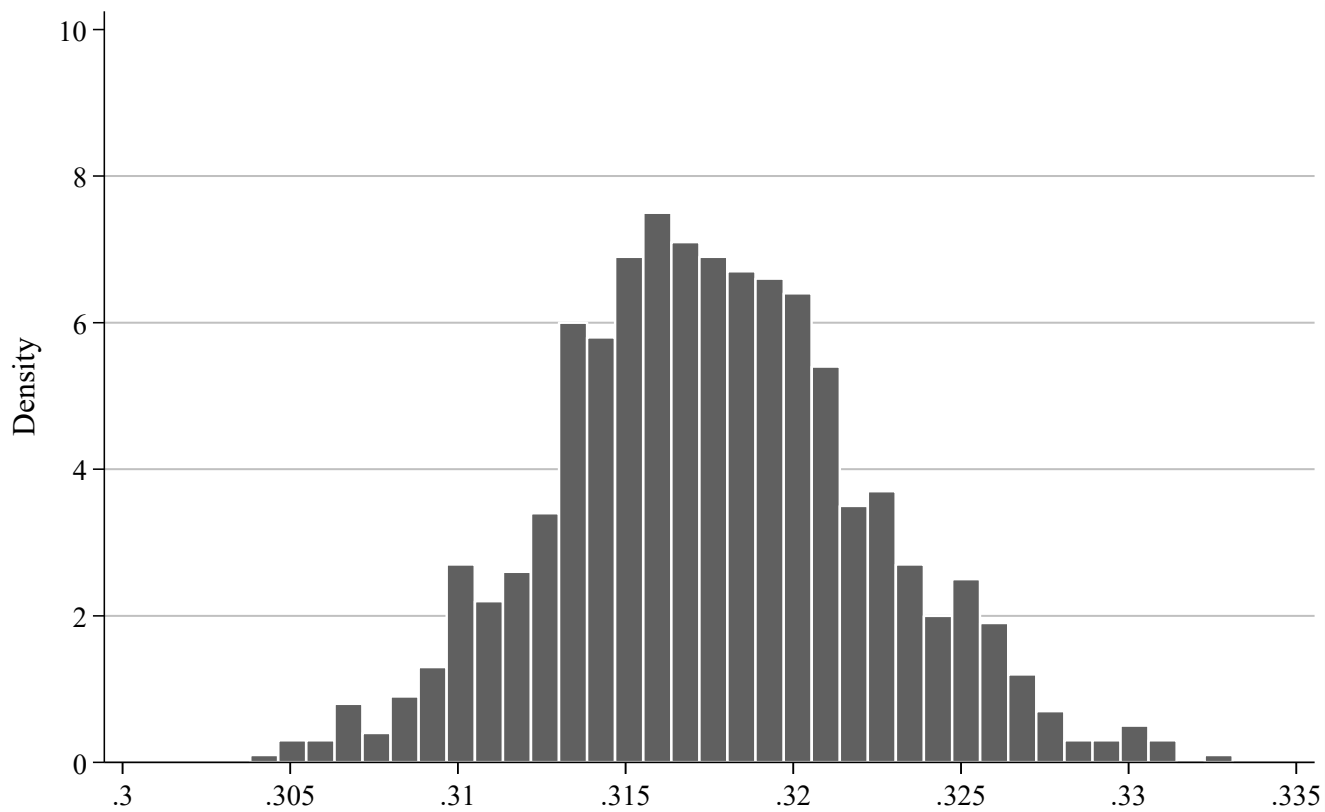
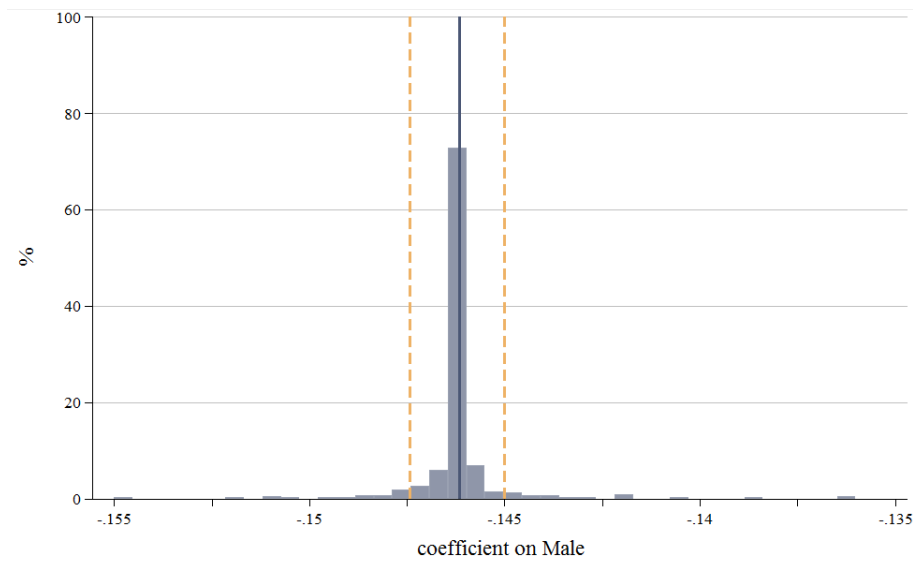
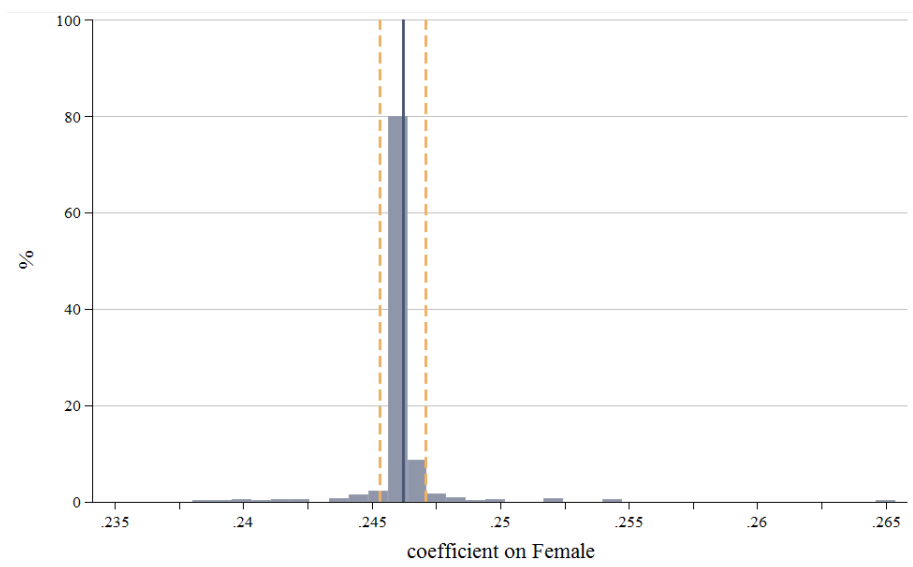


Figure A2: Distribution of leave-out-one-title estimates of gender request effects on female applicant shares

a) Effect of a request for men:

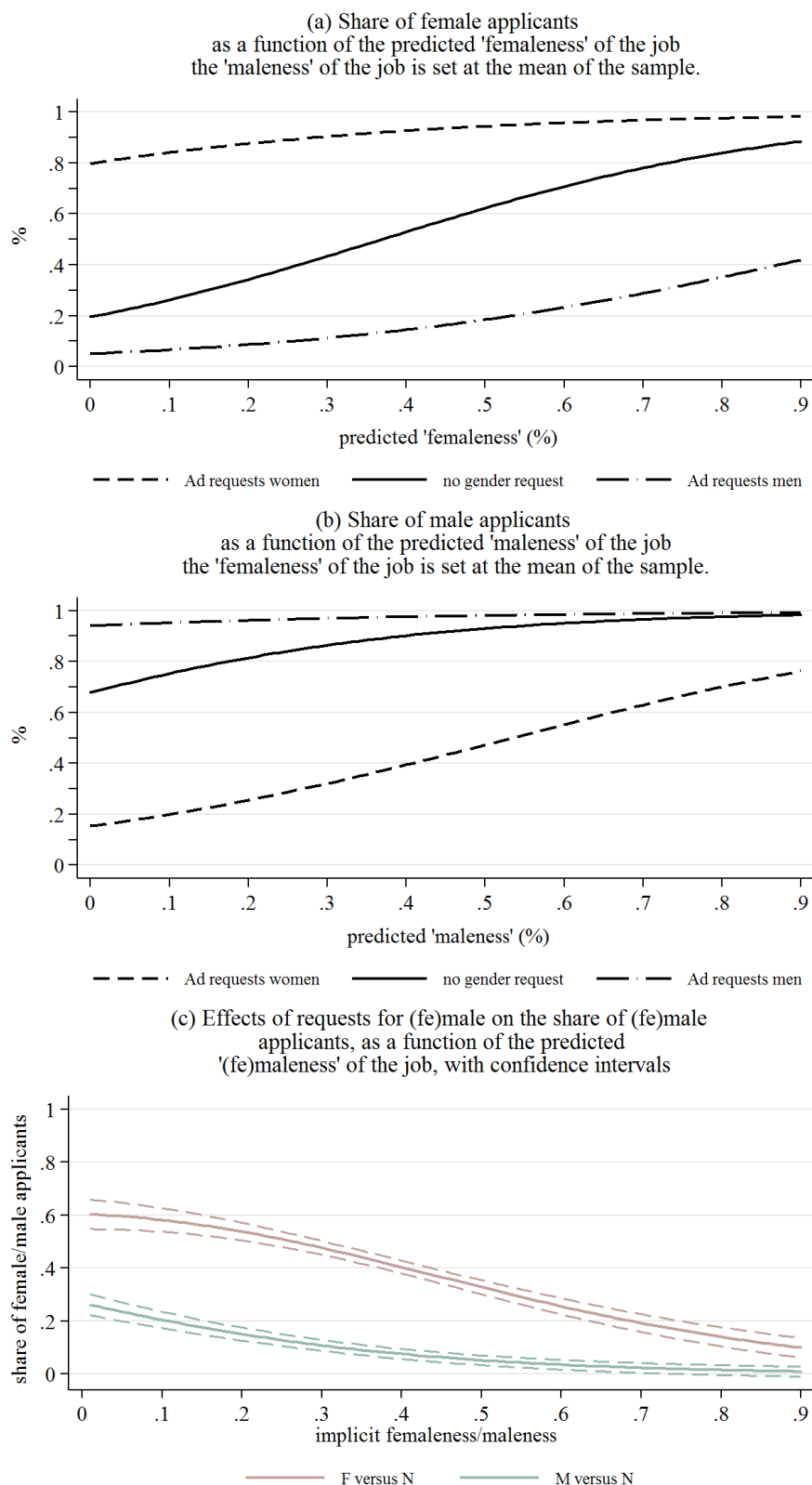


b) Effect of a request for women:



Note: Figures present estimates of the “Ad requests men” and “Ad requests women” coefficients in column 6 of Table 8. These coefficients are identified by 416 distinct job titles; the Figures report the distribution of estimates when one job title is dropped at a time. Vertical blue line represents the entire-sample estimate; vertical orange lines show the 5th and 95 percentiles of the estimates.

Figure A3: Effects of Gender Requests (*F* and *M*) and Predicted Gender (*F_p* and *M_p*) on the Female Share of Applicants (Full Ad Sample, log-odds specification)



Note to Figure A3:

Figures represent predicted values of the female share of applicants (α) from a specification identical to Figure 1, with the following changes. The dependent variable α , is now $\log(\alpha/(1-\alpha))$, and the quartics in Fp and Mp (each interacted with F , N and M) are replaced by linear terms (again interacted with F , N and M). 'Corner' values of α are accommodated by setting $\alpha = 0.5/A$ when $\alpha=0$ and setting $\alpha = (A-0.5)/A$ when $\alpha=1$, where A is the total number of applications to the ad.

As in Figure 1, predictions in part (a) hold Mp at its mean, and predictions in part (b) hold Fp at its tenth mean. All other characteristics are set at their means. The regression is weighted by the number of applications to each ad, and standard errors are clustered at the firm level.

Appendix 5: Gender Misclassification

Miscoding of the *requested* gender is not a concern for our application analysis, since our data are the exact record of requested gender that workers observe on the job board when deciding where to apply. Miscoding of the requested gender could account for the relatively high success rates of gender-mismatched applicants if employers sometimes specify a gender requirement without intending to. If so, advertised gender requirements would be *de facto* rather soft. We view this as a possible interpretation of the relatively weak mismatch penalty in callbacks in our data.

Another possibility is that workers miscode their own gender when using the drop-down menu in the application process. The very high compliance rates we observe suggest that this is not a major concern. Nevertheless, we checked to see if miscoded applicant gender could account for the relatively weak enforcement in our data by re-running the main analysis on a restricted subsample for whom we are confident we have the right gender.⁹

To construct this sample, we first use the universe of applications, with no restrictions, to calculate the share of applications each CV in the sample sends to jobs which request the opposite gender. We then drop all the CVs in our sample for whom this share is 0.5 or higher. We also drop all CVs who submit fewer than 5 applications in the unrestricted data, because we may not have enough observations on them to reliably assess their application behavior. These restrictions only drop approximately 15,000 applications, leaving a sample size of 213,719.

We then re-run the application-level regressions from Table 8, and the results are very similar to those presented in the main analysis, which gives us confidence that the results are not being driven by misreported gender. They are reported in Table A3. Results for other cutoffs are not materially different.

⁹ Note that miscoded applicant gender cannot explain weak enforcement if firms use resume-processing software to pre-screen resumes based on coded gender: such screens would eliminate both actual and false gender mismatches from consideration, generating a high level of *measured* enforcement. Miscoded applicant gender can only explain low compliance if employers can see that some apparently mismatched applicants are in fact of the requested gender (for example from the photo, name or other features of the resume).

Effects of Job Labels (*F*, *N* and *M*) on Callback Rates for Gender Misclassification Robust Sub-Sample

	(1)	(2)	(3)	(4)	(5)	(6)
Female Worker * Female Job	-0.0140*** (0.009)	-0.0095*** (0.002)	-0.0092*** (0.002)	-0.0097*** (0.002)	-0.0142*** (0.002)	-0.0164*** (0.003)
Female Worker * Male Job	-0.0429*** (0.013)	-0.0422*** (0.004)	-0.0422*** (0.004)	-0.0415*** (0.005)	-0.0341*** (0.006)	-0.0372*** (0.008)
Male Worker * Female Job	-0.0341*** (0.010)	-0.0290*** (0.003)	-0.0291*** (0.003)	-0.0235*** (0.004)	-0.0240*** (0.004)	-0.0231*** (0.005)
Male Worker * Male Job	0.0044** (0.009)	0.0011 (0.002)	0.0012 (0.002)	0.0030 (0.002)	-0.0065 (0.004)	-0.0166*** (0.005)
Male Worker	0.0036** (0.006)	0.0006 (0.002)	-0.0023 (0.002)	-0.0064*** (0.002)	-0.0165*** (0.002)	
Education less than requested		-0.0066*** (0.002)	-0.0063** (0.003)	-0.0086*** (0.003)	-0.0093*** (0.002)	-0.0111*** (0.004)
Education more than requested		-0.0034** (0.001)	-0.0061*** (0.002)	-0.0039** (0.002)	0.0007 (0.002)	0.0055** (0.003)
Age less than requested		-0.0007 (0.002)	-0.0019 (0.002)	-0.0022 (0.002)	-0.0042** (0.002)	-0.0020 (0.002)
Age more than requested		-0.0320*** (0.003)	-0.0300*** (0.003)	-0.0277*** (0.003)	-0.0205*** (0.003)	-0.0214*** (0.004)
Experience less than requested		-0.0060*** (0.002)	-0.0063*** (0.002)	-0.0077*** (0.002)	-0.0094*** (0.002)	-0.0073*** (0.003)
Experience more than requested		0.0006 (0.002)	0.0018 (0.002)	0.0014 (0.002)	-0.0009 (0.002)	0.0014 (0.004)
Wage below advertised		-0.0020 (0.002)	-0.0019 (0.002)	-0.0028 (0.002)	-0.0002 (0.002)	-0.0005 (0.003)
Wage above advertised		0.0010 (0.002)	0.0008 (0.002)	0.0002 (0.002)	-0.0057** (0.002)	-0.0046 (0.003)
Detailed CV controls			Yes	Yes	Yes	
Occupation Fixed Effects				Yes	Yes	Yes
Competition Controls					Yes	Yes
Job Title Fixed Effects					Yes	Yes
Firm Fixed Effects						
Worker Fixed Effects						Yes
<i>N</i> (ads)	213,719	213,719	213,719	213,719	213,719	213,719
'Effective' <i>N</i>	213,719	213,719	213,719	213,719	213,676	189,485
<i>R</i> ²	0.001	0.004	0.005	0.015	0.194	0.382

Standard errors in parentheses, clustered by ad. *** p<0.01, ** p<0.05, * p<0.1

Appendix 6: Modeling Implicit ‘Maleness’ and ‘Femaleness’ of Job Titles: A Naïve Bayes Approach

This note describes how we construct a measure of the perceived, or ‘implicit’ maleness of each job title using a Naïve Bayes approach based on the words in all the job titles. The same method can be used to derive job titles’ femaleness and follows the algorithm described in Mitchell (1997). More specifically, our approach, which is commonly used in textual analysis, is referred to as the multi-variate Bernoulli event model by McCallum and Nigam (1998).

A6.1 Description of the problem

Let J be the set of jobs in our data, K be the set of job titles that ever appear in the job set J , and W be the set of words that ever appear in the job title set K . Define $|A|$ to be the number of elements in set A . Similarly, $|J|$ is the number of jobs in our data, $|K|$ is the number of unique job titles and $|W|$ is the number of unique words in the job titles.

For any job $j \in J$, let $k(j) \in K$ be its title, and let $\omega(j) \in \{0,1\}$ indicate whether this job explicitly prefer men. In other words, $\omega(j) = 1$ if this job explicitly prefers men, and 0 otherwise. For any job title $k \in K$, let $W^k \subseteq W$ be the set of words that appear in this job title.

The implicit maleness of a job title k with word set W^k can then be expressed using Bayes rule as follows,

$$P(\omega = 1|W^k) = \frac{P(W^k|\omega = 1) \cdot P(\omega = 1)}{P(W^k)} \quad (1)$$

A6.2 Solving the problem

Notice that $P(\omega = 1|W^k)$ can be rewritten as follows,

$$P(\omega = 1|W^k) = \frac{1}{1 + \frac{P(W^k|\omega = 0) \cdot P(\omega = 0)}{P(W^k|\omega = 1) \cdot P(\omega = 1)}} \quad (2)$$

A6.2.1 The prior probabilities

One option for modelling the prior probabilities $P(\omega = 1)$ and $P(\omega = 0)$ is to use the overall share of jobs that explicitly prefer men and that of jobs that do not explicitly prefer men in the sample. This approach is indeed widely used in commonly text classification. While this information is available to us, it may not be available to individual jobseekers, whose perceptions we are attempting to model.

Thus we adopt the naïve assumption that $P(\widehat{\omega} = 1) = P(\widehat{\omega} = 0) = 0.5$. Graham (2002) also argues for this assumption in the spam-filtering setting. Thus, equation 2 simplifies to

$$P(\widehat{\omega} = 1|W^k) = \frac{1}{1 + \frac{P(W^k|\omega = 0)}{P(W^k|\omega = 1)}}. \quad (2b)$$

A6.2.2 The conditional probabilities: from words to job titles

It is more challenging to estimate $P(W^k|\omega)$. To simplify the estimation, the Naïve Bayes approach assumes that

- 1) the appearance of each word is independent and
- 2) the ordering of the words in a job title is irrelevant.

This implies that

$$P(W^k|\omega = 1) = \prod_{w \in W^k} P(w|\omega = 1) \quad (3a)$$

and

$$P(W^k|\omega = 0) = \prod_{w \in W^k} P(w|\omega = 0). \quad (3b)$$

A6.2.3 Estimation of each word's conditional probability

For the estimation of $P(w|\omega)$, if we have a large enough sample we can use

$$a \cdot P(\widehat{w}|\omega) = P(\omega|w) = \frac{|\{j: j \in J, w \in W^{k(j)}, \omega(j) = \omega\}|}{|\{j: j \in J, w \in W^{k(j)}\}|} \quad (4)$$

where $a = \frac{P(w)}{P(\omega)}$, which is assumed to be a constant and cancelled out in the division in (2b).

In practice, however, even large samples frequently yield zeros in (4). Given equations 3a and 3b, we would then get zeros for the entire job title regardless of the other words in the title. To avoid this problem, we use a weighted average of $P(\widehat{w}|\omega)$ and a constant number close to one as our estimate of $P(w|\omega)$. The formula is

$$P(\widehat{w|\omega}) = \frac{|\{j: j \in J, w \in W^{k(j)}\}|}{|\{j: j \in J, w \in W^{k(j)}\}| + C} \cdot P(\widehat{w|\omega}) + \frac{C}{|\{j: j \in J, w \in W^{k(j)}\}| + C} \cdot \frac{C-1}{C} \quad (5)$$

Furthermore, notice it is particularly important to adjust the $P(\widehat{w|\omega})$'s when the total number of $|\{j: j \in J, w \in W^{k(j)}\}|$ is small. That is, we do not want to have a linear adjustment. Instead, we want to pull $P(\widehat{w|\omega})$ towards $\frac{C-1}{C}$ more strongly the less frequently a word appears in job titles.

In the literature, the recommended value of C is $|W|$. For maleness, $\frac{1}{|W|} \sum_{w \in W} P(\widehat{w|\omega}) \approx 0.212$, $\frac{1}{|W|} = \frac{1}{5954} = 0.00017$. If we were to use $|W|$ as C , $P(\widehat{w|\omega})$ would be substantially higher than $P(\widehat{w|\omega})$ for most words. Therefore, to keep the distortion to a minimum, we choose C to be the average number of $|\{j: j \in J, w \in W^{k(j)}\}| \approx 15.04$. Combining (4) and (5), we can get $P(\widehat{w|\omega})$ as presented in (6c).

To sum up, our estimator for the implicit maleness of a job title k is

$$P(\omega = 1|W^k) = \frac{1}{1 + e^{f(\omega=1|W^k)}} \quad (6a)$$

where

$$f(\omega = 1|W^k) = \sum_{w \in W^k} \{\ln[1 - P(\widehat{w|\omega} = 1)] - \ln P(\widehat{w|\omega} = 1)\} \quad (6b)$$

$$P(\widehat{w|\omega} = 1) = \frac{|\{j: j \in J, w \in W^{k(j)}, \omega(j) = 1\}| + C - 1}{|\{j: j \in J, w \in W^{k(j)}\}| + C}. \quad (6c)$$

$$\text{where } C = \frac{1}{|W|} \sum_{w \in W} |\{j: j \in J, w \in W^{k(j)}\}|$$

A6.3 Final remarks

This note has described our machine-learning approach to estimating the likelihood that a job title will explicitly request men (or women) based on the words contained in the title. Notably, the purpose of our approach differs from the usual application of document classification algorithms, which in this case would be to produce the best possible forecast of the gender label an employer will attach to a job from all the data available to us. Instead we seek to model the perceptions of individual jobseekers who have less information than us, and who face time constraints and limited cognitive capacity. Thus we have adopted a relatively simple approach with a naïve prior, and abstained from elements that would be considered in an industrial textual analysis setting, such as a more detailed tokenization of words, dropping less frequent words, or using a term frequency–inverse document frequency (TF-IDF) approach to identify the more informative words in each job title.

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