To be or not to be on social media: How social-media content impacts recruitment

Edmund Baker Veronika Grimm Yuval Ofek-Shanny

School of Business, Economics and Society FAU - Erlangen-Nuremberg

Annual Conference of the Israeli Economic Association

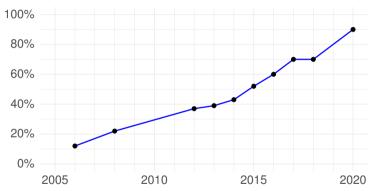
June 2024

Table of Contents

- 1. Introduction
- 2. Experimental Design
- 3. Data
- 4. Results
- 5. Conclusion

Motivation

Percentage of employers using social media in the screening process



Data for 2006-2018 - Careerbuilder (2018) surveys - "used social networking sites to research job candidates during the hiring process" Data for 2020 - The Manifest survey (Mckeon 2020) - "social media is important when evaluating a job candidate"

Research Questions

How does social media content affect the screening process?

- Unappealing information revealed on social media
- Indications of mental health issues
- Small resume refurbishments revealed through social media
- Lack of social media presence

This Paper

- 1,500 evaluators Amazon Mturk (general public)
- 500 evaluators Prolific (experienced recruiters)
- Tailor-made online platform
- Rate randomly created job candidates
- Standard resume + information collected from social media
- Participants are not informed this is an experiment

Preview of the findings

Crucial effect of social media content on candidates' rating

Preview of the findings

- Crucial effect of social media content on candidates' rating
- Large negative effect of not having a social media profile

⇒ First paper to reveal the negative effect of lacking a social media profile

⇒ First paper to reveal the negative effect of lacking a social media profile

- Social media content can affect candidate job-market opportunities
 Field Acquisti and Fong (2020), Baert (2018a), and Manant, Pajak, and Soulié (2019)
 Lab Becton et al. (2019), Bohnert and Ross (2010), Tews, Stafford, and Kudler (2020), and Zhang et al. (2020)
- Assessment of candidates differs depending on the attributes of the evaluators
 Carlsson and Rooth (2007), Edo, Jacquemet, and Yannelis (2019), Erlandsson (2019), and Oreopoulos (2011)
 - Novel methodology allows to study impacts of information -

- ⇒ First paper to reveal the negative effect of lacking a social media profile
 - Social media content can affect candidate job-market opportunities
 Field Acquisti and Fong (2020), Baert (2018a), and Manant, Pajak, and Soulié (2019)
 Lab Becton et al. (2019), Bohnert and Ross (2010), Tews, Stafford, and Kudler (2020), and Zhang et al. (2020)
 - Assessment of candidates differs depending on the attributes of the evaluators
 Carlsson and Rooth (2007), Edo, Jacquemet, and Yannelis (2019), Erlandsson (2019), and Oreopoulos (2011)
 - Novel methodology allows to study impacts of information -
- ⇒ Across the skills spectrum
- ⇒ Across a diverse range of evaluator characteristics

Correspondence audit studies used to investigate labor market discrimination
 Baert (2018b), Bertrand and Duflo (2017), Bertrand and Mullainathan (2004), and Neumark (2018)

⇒ Future studies should include social media profiles

Table of Contents

- 1. Introduction
- 2. Experimental Design
- 3. Data
- 4. Results
- 5. Conclusion

Participants



- 2,000 US residents recruited
- Amazon Mechanical Turk workers for small online tasks
- Prolific research-oriented platform
- Only informed this is a long task (40 minutes)

Qualification Screening



English proficiency and concentration test

Amazon Mturk -

- 4,390 accessed
- 544 rejected by IP
- 537 gave up before attempting
- 931 failed just clicked continue
- 740 failed didn't properly answer
- 1,638 passed, 1,500 completed

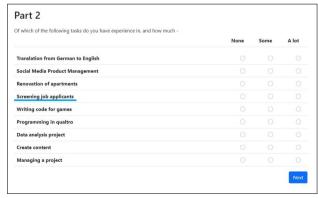
Qualification Screening



Verification of recruitment experience

Prolific -

- 3,200 qualified for the first survey
- 1868 completed the first survey
- 1176 qualified for the task
- 500 completed the evaluation task



Job description



Place of Work: Luxury Retreat and Wellness Resort

Our beach-side resort offers 100 luxury rooms nestled in tranquil surroundings allowing our guests to unwind and get away from it all and enjoy the area. We offer a spa, a wellness center, yoga classes and our restaurant offers a wide range of local and seasonal cuisine. Nearby beaches, trails, wine tastings, and golf opportunities are all on our doorstep.

Job Description: Office Manager

The Office Manager will be responsible for the daily management of all administrative and office support operations. We are looking for an experienced manager with excellent customer service skills who will fit well into our team. Candidates should be hard-working, organized and reliable.

Duties Include:

- · Overseeing office activities
- · Dealing with guests in courteous and timely manner
- · On-boarding of new employees
- · Coordinating and creating agenda for monthly staff meetings
- · Promoting a friendly and welcoming environment for guests

Each application has a résumé.

In addition we provide data scraped from publicly available social media accounts

You can use this to get a second opinion of the candidate but bear in mind this information was not submitted by the candidate.

Please use both resources to score the candidate as you see fit.



Evaluation Screen





Resume



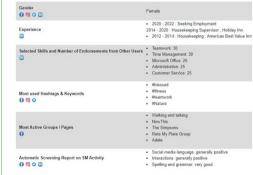
Randomly assigned -

- Experience
- Education
- Skills
- Interests



- Gender (random)
- Experience (as resume)
- Endorsements (random)
 - Teamwork, Microsoft Office
- Hashtags (by treatment)
 - #Blessed. #Nature
- Active groups (by treatment)
 - Adele, The Simpsons, Rate my plate
- Automatic report (by treatment)
 - Language, Interactions, Spelling

Social Media Data

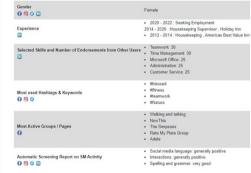






- Gender (random)
- Experience (as resume)
- Endorsements (random)
 - Teamwork, Microsoft Office
- Hashtags (by treatment
 - #Blessed. #Nature
- Active groups (by treatment)
 - Adele, The Simpsons, Rate my plate
- Automatic report (by treatment)
 - Language, Interactions, Spelling



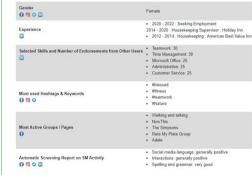






- Gender (random)
- Experience (as resume)
- Endorsements (random)
 - Teamwork, Microsoft Office
- Hashtags (by treatment)
 - #Blessed, #Nature
- Active groups (by treatment)
 - Adele, The Simpsons, Rate my plate
- Automatic report (by treatment)
 - Language, Interactions, Spelling

Social Media Data







Social Media Data

Automatic Screening Report on SM Activity

OMOD

0000

- Gender (random)
- Experience (as resume)
- Endorsements (random)
 - Teamwork, Microsoft Office
- Hashtags (by treatment)
 - #Blessed. #Nature
- Active groups (by treatment)
 - · Adele, The Simpsons, Rate my plate
- Automatic report (by treatment)
- Language Interactions Spelling

 2020 - 2022 : Seeking Employment Experience 2014 - 2020 : Housekeeping Supervisor . Holiday Inn . 2012 - 2014 : Housekeeping , Americas Best Value Inn · Teamwork: 30 Selected Skills and Number of Endorsements from Other Users Time Management: 30 · Microsoft Office: 25 Administration: 25 . Customer Service: 25 #blessed . #Stooss Most used Hashtags & Keywords · #tonmwork 080 #Nature Walking and talking · NowThis Most Active Groups / Pages · The Simpsons . Date My Plate Group . Adele · Social media language: generally positive

Female

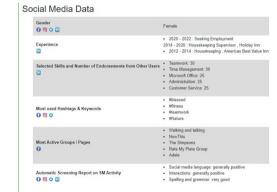
· Interactions: generally positive

· Spelling and grammar: very good



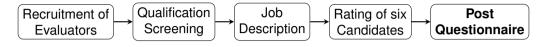


- Gender (random)
- Experience (as resume)
- Endorsements (random)
 - Teamwork, Microsoft Office
- Hashtags (by treatment)
 - #Blessed, #Nature
- Active groups (by treatment)
 - Adele. The Simpsons. Rate my plat
- Automatic report (by treatment)
 - Language, Interactions, Spelling





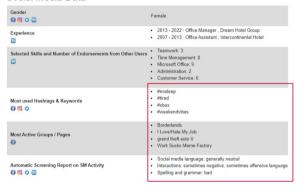
Post task questionnaire



- Personal characteristics
 - Demographics
 - Liberal vs. Conservative
 - Social Media usage
- Opinions
 - What is important for a candidate
 - On social media use

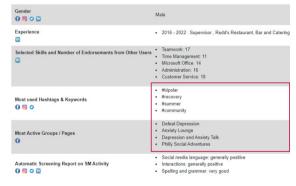
- Unappealing
- Mental Health
- Gap
- Gap + Lie
- No Content

Social Media Data

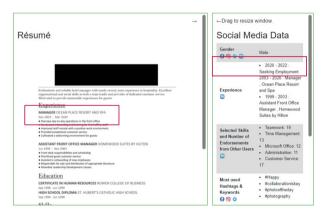


- Unappealing
- Mental Health
- Gap
- Gap + Lie
- No Content

Social Media Data



- Unappealing
- Mental Health
- Gap
- Gap + Lie
- No Content



- Unappealing
- Mental Health
- Gap
- Gap + Lie
- No Content



- Unappealing
- Mental Health
- Gap
- Gap + Lie
- No Content



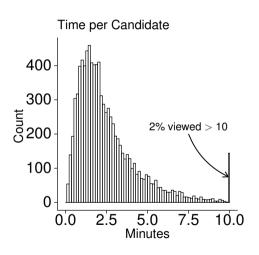
Table of Contents

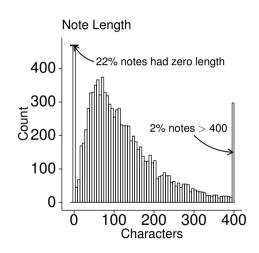
- 1. Introduction
- 2. Experimental Design
- 3. Data
- 4. Results
- 5. Conclusion

Data

- Dependent variable candidate rating (on a scale of 1 to 10)
- Candidate variables experience, education, skills, interests, gender, order (of six),
 LinkedIn endorsements.
- Evaluator characteristics age, ethnicity, education, marital status, employment status, political orientation, activity on social media.
- Evaluator opinions toward social media, privacy, noticed things about candidates.
- Evaluator engagement time reading instructions, clicks on a candidate, number of characters in notes, time spent on each candidate.

Evaluator engagement





Empirical framework

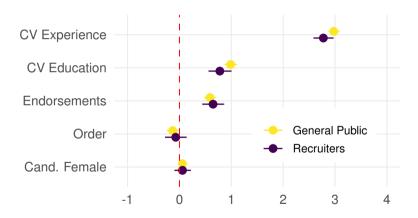
$$Rating_i = eta_0 + T_{ki}eta_k + X_i\gamma + \epsilon_i$$

- Rating_i score of candidate i
- ullet T_k treatment dummies (Mental Health, Gap, Gap+Lie, Bad SM, No SM)
- X_i candidate characteristics (Experience, Education, Skills, Interests, Gender, Order, Endorsements)
- ϵ_i error term, clustered by evaluator
- β_k 's coefficients of interest impact of SM content compared to baseline

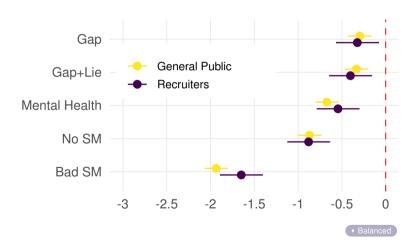
Table of Contents

- 1. Introduction
- 2. Experimental Design
- 3. Data
- 4. Results
- 5. Conclusion

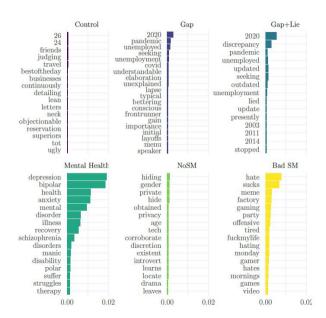
Covariates



Results



Mechanism



Heterogeneity

Some interaction between treatment effects and candidate characteristics

	Gap	Gap+Lie	Mental Health	No SM	Bad SM
CV Experience	0.08	0.03	<u>-0.27</u> *	<u>0.41</u> ***	-0.33**
CV Education	0.01	0.08	-0.12	0.28	0.03
Endorsements	-0.16	-0.01	0.03		-0.01
Order	0.06	0.1	0.06	-0.24	-0.02
Cand. Female	-0.04	-0.14	-0.15		0.22*

^{*}p<0.10; **p<0.05; ***p<0.01.

Heterogeneity

Also, some interesting interactions with evaluator characteristics

	Gap	Gap+Lie	Mental Health	No SM	Bad SM
Eval. Female	-0.03	-0.13	-0.13	0.03	-0.56***
Age	0.09	0.17	-0.16	0.08	-0.16
Eval. 'Conservative'	-0.16	0.22	<u>-0.36</u> **	0.2	0.18
Active on SM	0.08	-0.03	0.27	<u>-0.7</u> ***	0.28

 $^{^*}p{<}0.10;\,^{**}p{<}0.05;\,^{***}p{<}0.01.$

Robustness

Unappealing social media content has the largest effect on rating, while a gap in employment years has the smallest effect

- Across candidates and evaluators characteristics
- Using Non-parametric Wilcoxon signed-rank test
- Using entropy balancing (Hainmueller 2012)

Validity

- Strongly resembles a real-life recruitment task
- Real workers or experienced recruiters, high engagement
- General qualifications job
- Findings are robust to evaluator composition (only in the US)
- Findings hold for the general public and experienced recruiters

Table of Contents

- 1. Introduction
- 2. Experimental Design
- 3. Data
- 4. Results
- 5. Conclusion

Summary

- Social media content significantly affects job candidates' evaluation
- Unappealing profile negative effect, equivalent to 9 years of experience
- No profile worst than employment gap or mental health problems
- No effect for small resume refurbishments revealed on social media

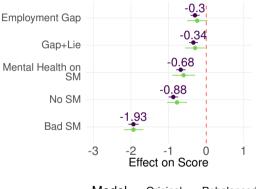
Conclusion

- Job-seekers be on social media (carefully)
- Employers is this desired?
- · Researchers should include social media
- Policymakers are current laws enforceable?

Thank You

Results comparable to US population

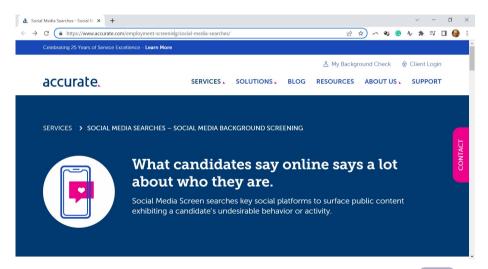
Using entropy balancing (Hainmueller 2012) on the general public sample.



Model → Original → Rebalanced



Example - social media screening services

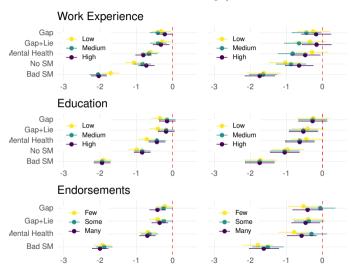




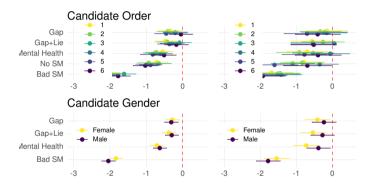
Example - social media screening services



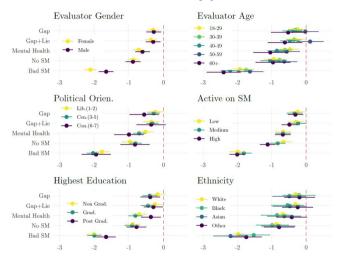
Effects are robust to candidate types



Effects are robust to candidate types



Effects are robust to evaluator types





Evaluators Sample and the U.S.Population

	Our Evaluators (N=1500)	U.S Population
Age		
- Mean (SD)	39.833 (12.029)	38.2
- Range	18.000 - 78.000	
Eval. Gender		
- Female	932 (62.1%)	50.8%
- Male	551 (36.7%)	49.2%
- Other	17 (1.1%)	
Eval. Ethnicity		
- Asian	95 (6.3%)	5.9%
- Black or African American	126 (8.4%)	13.4%
- White	1156 (77.1%)	60.1%
- Other	123 (8.2%)	20.6%
Education		
- Graduate	912 (39.2%)	37.8%
- Not Graduate	588 (60.8%)	62.2%
Eval. Marit. Stat.		
- Married or Domestic Partnership	741 (49.4%)	47.8%
- Not Married	759 (50.6%)	52.2%
Eval. Employ. Stat.		
- Employed for wages	918 (61.2%)	41.57%
- Out of work	97 (6.5%)	5.9%
- Retired	72 (4.8%)	29.4%
- Self-employed	257 (17.1%)	8.75%
- A homemaker	70 (4.7%)	4.28%
- Other	86 (5.7%)	10.1%

Evaluators Sample and the U.S.Population

Eval. 'Conservative'		
- Mean (SD)	3.411 (1.628)	3.366
- Range	1.000 - 7.000	0.000 - 7.000
Twitter		
- Mean (SD)	3.348 (2.132)	1.864
- Range	1.000 - 7.000	1.000 - 7.000
Instagram		
- Mean (SD)	3.819 (2.087)	2.612
- Range	1.000 - 7.000	1.000 - 7.000
Facebook		
- Mean (SD)	4.555 (2.029)	4.105
- Range	1.000 - 7.000	1.000 - 7.000
Snapchat		
- Mean (SD)	2.141 (1.827)	2.0375
- Range	1.000 - 7.000	1.000 - 7.000