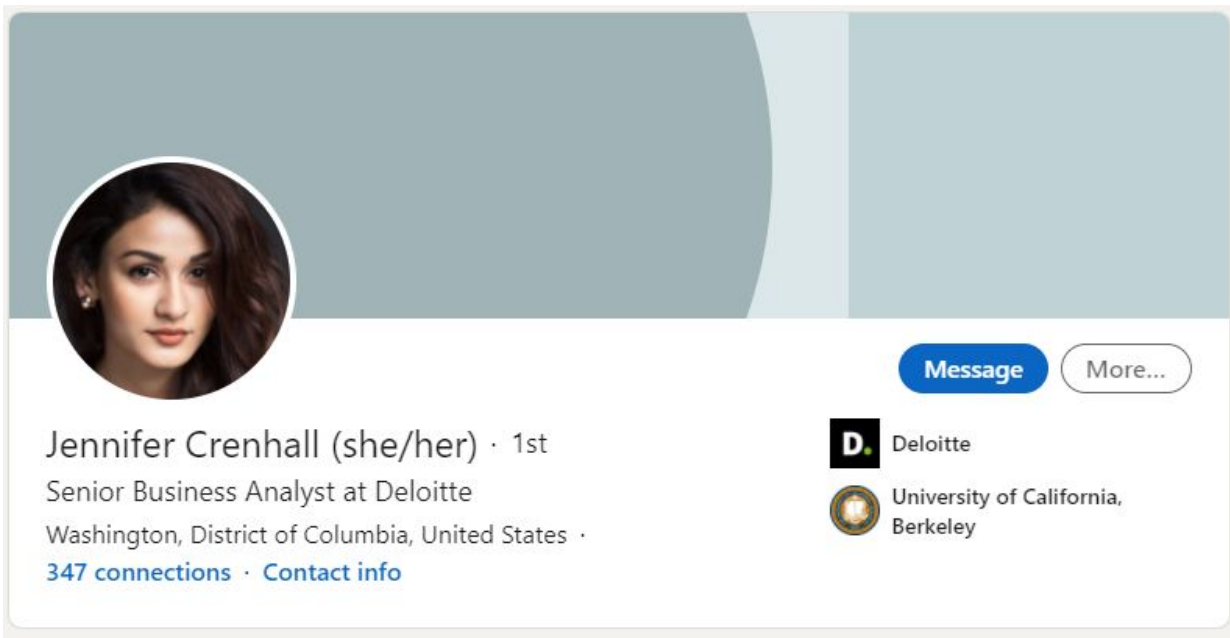


Attractiveness Bias

Lucas Barbosa, Aidan Jackson,
Alan Zhang, Piotr Parkitny

April 14, 2021



Will you accept my connection request?

RESEARCH QUESTION



"The hope, of course, is that there's some inner-beauty to free."

Does attractiveness play a role in accepting a connection from a stranger in LinkedIn?

Hypothesis

Invites from attractive profile will be more accepted than otherwise same profile with an unattractive picture

What's new?

Other experiments tried to measure appearance-based discrimination in a work setting before

None with a **blind field experiment** like this

EXPERIMENTAL DESIGN

Within-subjects, 2x2 factorial design

With participants sourced from the primary connections of group members

	4 groups: block randomized	Intervention: LinkedIn connection requests	Outcome: posttest acceptance rate
Treatment (n=708)	R	X Attractive woman	O
Control (n=706)	R	X Unattractive woman	O
<hr/>			
Treatment (n=707)	R	X Attractive man	O
Control (n=707)	R	X Unattractive man	O

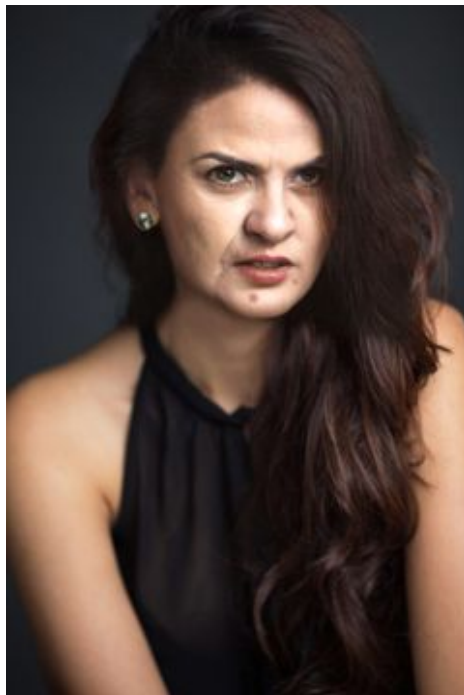
TREATMENT

Let's meet our experimental characters...



Attractive Jennifer

<https://www.linkedin.com/in/jennifer-crenhall-she-her-89a143207/>



Unattractive Jennifer

<https://www.linkedin.com/in/jennifer-crenhall-she-her-4b6144207/>



Attractive John

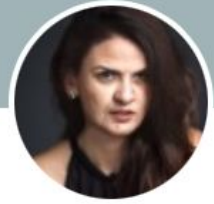


Unattractive John

MEASUREMENT

Connection Rate =

Number of Accepted Connections / Number of Total
Connections Sent



Jennifer Crenhall
(she/her)

Senior Business Analyst at Deloitte

Who viewed your profile **314**

Connections **316**

Grow your network

Access exclusive tools & insights

 **Try Premium Free for 1 Month**

 **My items**

RANDOMIZATION

Gender	A-W	U-W	A-M	U-M	Grand Total
	141	147	150	148	586
F	277	271	265	266	1079
M	290	288	292	293	1163
Total	708	706	707	707	2828

CODE	TYPE	GENDER
U-W	Unattractive	Woman
A-W	Attractive	Woman
U-M	Unattractive	Man
A-M	Attractive	Man

Challenges - LinkedIn

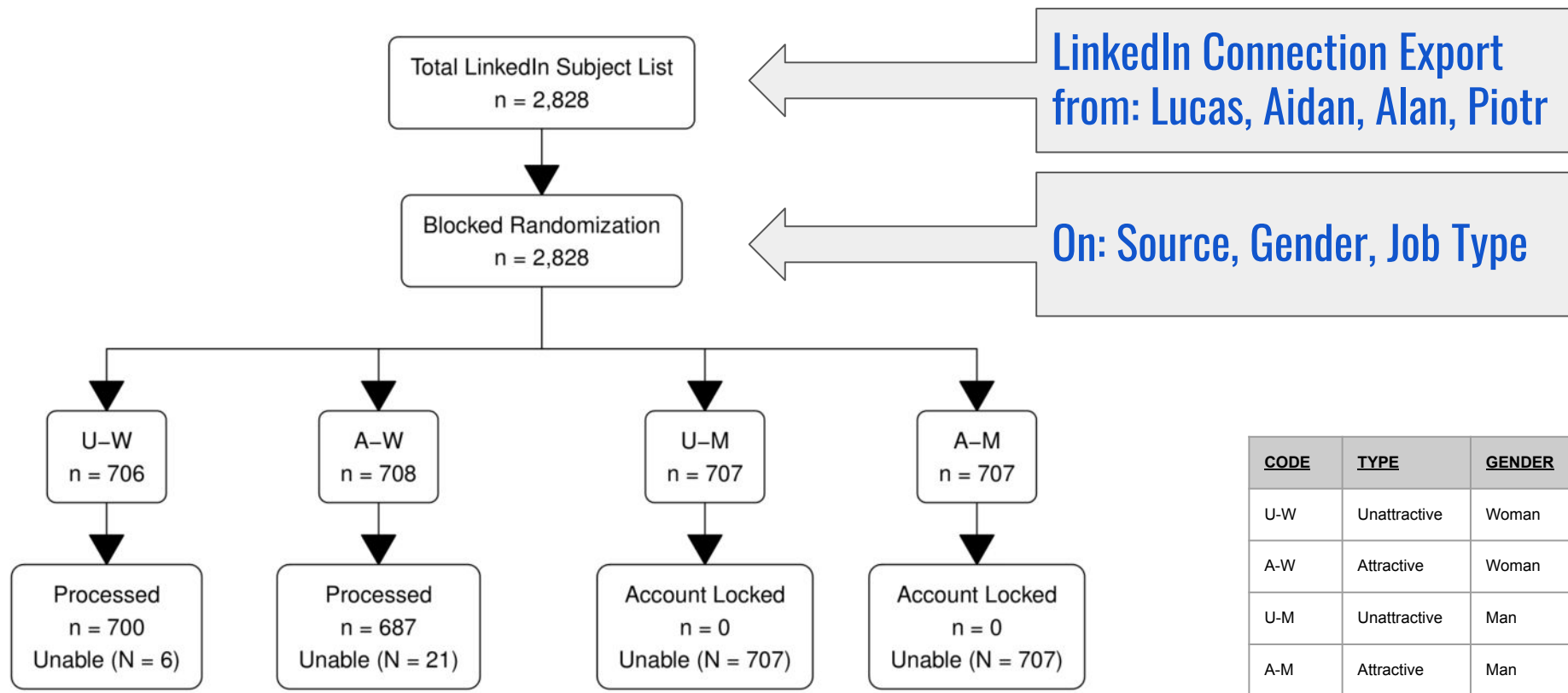
Challenges

1. Automation tool implementation is not straight-forward
2. The number of LinkedIn invitations sent is limited
3. Two LinkedIn accounts were banned due to different login IP addresses

Solutions

1. Sent invitations manually
2. Scaled back the target number of subjects
3. Started to use VPN to minimize changes in IP addresses
4. Pivoted the experiment design from 2x2 to 1x1

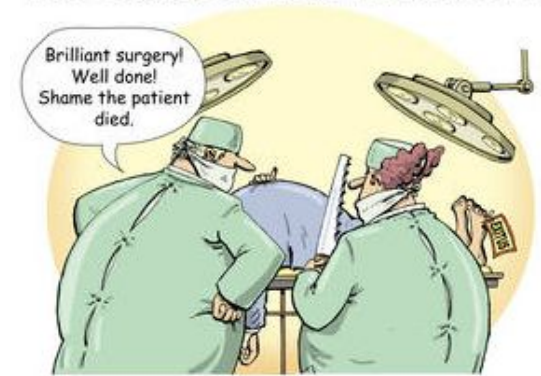
OBSERVATIONS TRACKING



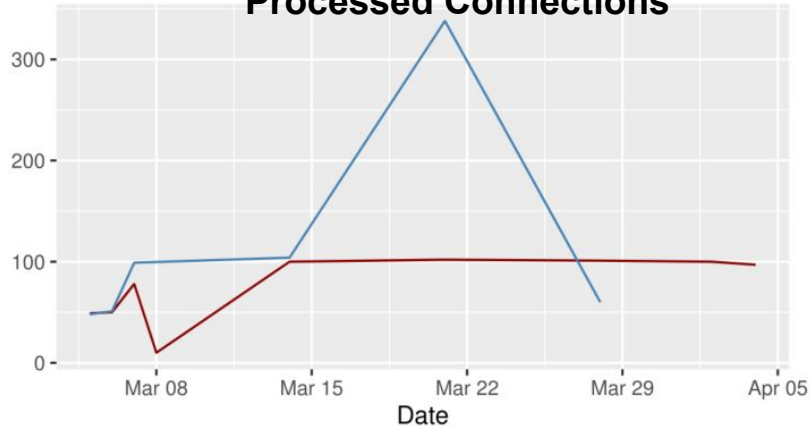
OUTCOME MEASURES

- Outcomes measures are accepted connections.
- Acceptance of the connection from attractive profile VS unattractive

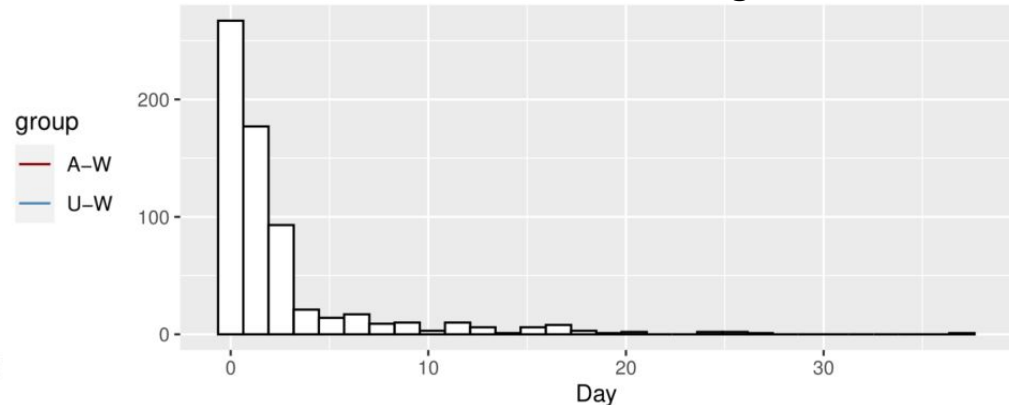
Do outcomes matter?



Processed Connections



Connection Lag



RESULTS

- Overall Acceptance Rate:
 - U-W: 44.6 %
 - A-W: 49.9 %
 - p-value: 0.046
- Acceptance Rate By Gender:
 - Female: 39.8%
 - Male: 50.7 %
- Acceptance Rate by Source:
 - Lucas: 53.7%
 - Alan: 42.9%
 - Aidan: 43.0%
 - Piotr: 40.6%

	<i>Dependent variable:</i>		
	Simple-Model	connected Regular-Model	Full-Model
	(1)	(2)	(3)
treatment	0.054** (0.027)	0.053** (0.027)	0.053** (0.027)
Sourcealan			0.007 (0.048)
Sourcelucas			0.085* (0.047)
Sourcepiotr			-0.020 (0.051)
gender_corr		0.109*** (0.028)	0.093*** (0.029)
Constant	0.446*** (0.019)	0.372*** (0.027)	0.317*** (0.066)
Other Covariate	No	No	job-title-grp
Observations	1,387	1,387	1,387
R ²	0.003	0.013	0.043
Adjusted R ²	0.002	0.012	0.027

Note:

*p<0.1; **p<0.05; ***p<0.01

QUESTIONS AND CONCERNS

1. Did we take the right approach with a switch from 2x2 to 1x1?
 - a. Any other possible solution?
2. Did we take the right approach with removing uncontactable subjects?
 - a. Was it attrition or compliance?
 - b. Any other possible solution?



"Any questions?"

Thank You for your time.

Questions ?

APPENDIX

Gender	Connection Rate	Total
m	0.507	947
f	0.398	440

*

Treatment	Connection Rate Male	Total
A-W	0.535	471
U-W	0.479	476

Treatment	Connection Rate Female	Total
A-W	0.421	216
U-W	0.375	224

* p-val < 0.05