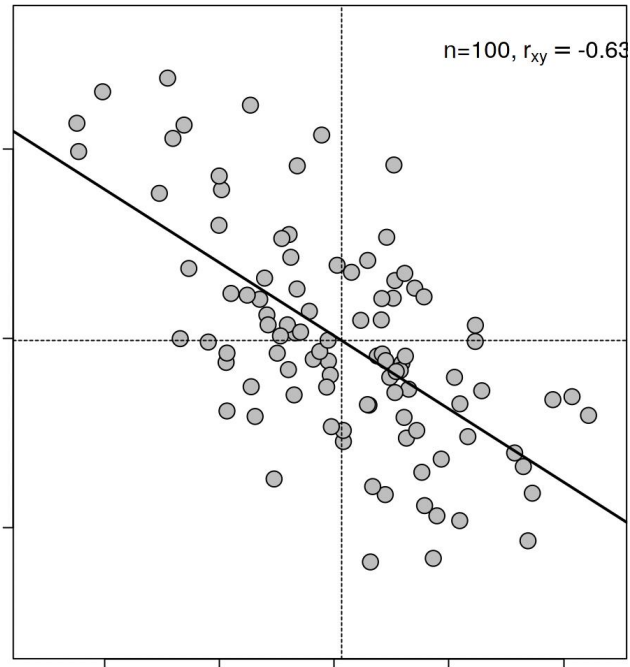


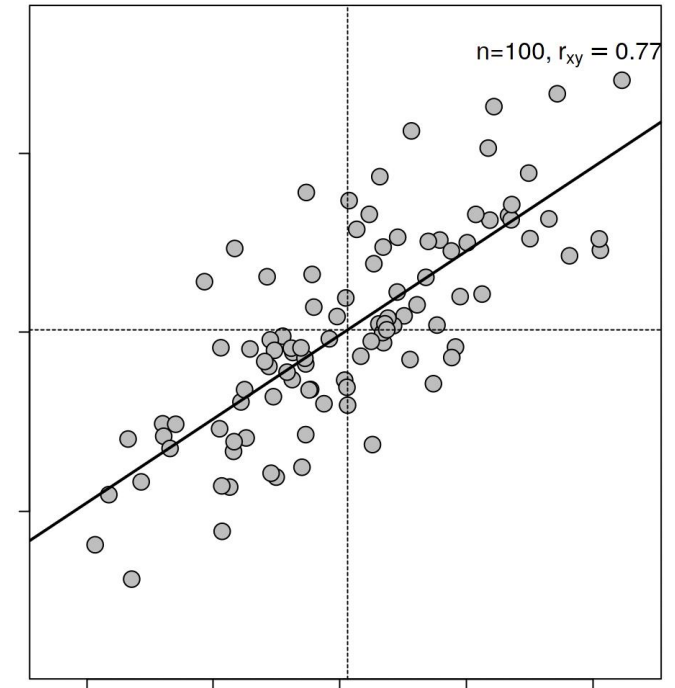
Fundamentals of Econometrics Models



Vicenç Soler

`v.soler@tbs-education.org`

~~`vincent.soler@tbs-education.org`~~

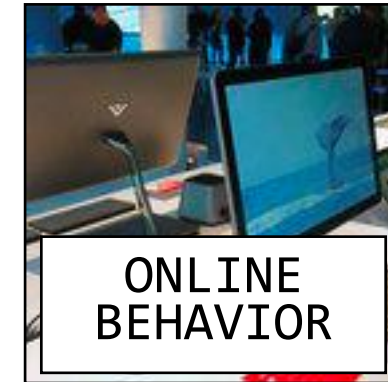
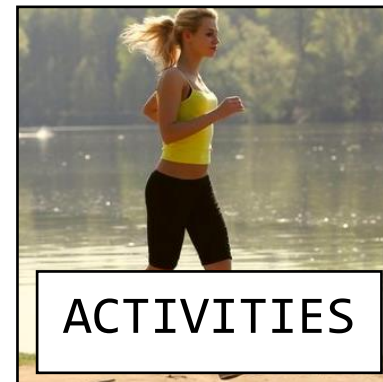


AI – Every action leaves a digital trail



Data Brokerage and Consumers

The profiles that data brokers have on individuals include :



WHAT GOOGLE KNOWS ABOUT YOU?

<https://adssettings.google.com>

WHAT GOOGLE KNOWS ABOUT YOU?

El meu centre d'anuncis

Els meus anuncis

Individualitza els anu...

Gestiona la privadesa

Temes d'anuncis per a tu ⓘ

Mostra més o menys anuncis sobre aquests temes

Programes de postgrau

Vehicles de motor

Dispositius de xarxes informàtiques

Jocs

Telèfons mòbils i accessoris

Mostra-ho tot

Marques per a tu ⓘ

Mostra-ho tot

Grup Volkswagen

Google Store

Toulouse Business...

Audi

INSEAD

Airbnb

These are specific companies targetting you

These are the topics they target you with

WHAT GOOGLE KNOWS ABOUT YOU?

These are
some
demographics

The screenshot shows the 'El meu centre d'anuncis' (My Ad Center) interface. On the left, there's a sidebar with 'Els meus anuncis', 'Individualitza els anu...', and 'Gestiona la privadesa'. The main content area is titled 'Informació del Compte de Google' and includes a description: 'Aquests detalls s'utilitzen per personalitzar els anuncis en funció de la informació que has compartit o que s'ha deduït.' Below this, there are three demographic cards: 'Sexe Home', 'Edat Entre 35 i 44 anys', and 'Idioma 3 idioma'. A red arrow points from the text 'These are some demographics' to these cards. Below the demographics, there's a section 'Categories utilitzades per mostrar-te anuncis' with a description: 'Pot ser que vegis anuncis dirigits a persones incloses en aquestes categories, que es basen en la teva activitat a Google. Pots veure anuncis d'una categoria diferent o desactivar qualsevol categoria que no vulguis que s'utilitzi.' Below this, there are five category cards, each with an icon, a name, and a status 'Activat'. A red arrow points from the text 'These are specific things they know' to these category cards.

El meu centre d'anuncis

Els meus anuncis

Individualitza els anu...

Gestiona la privadesa

Informació del Compte de Google

Aquests detalls s'utilitzen per personalitzar els anuncis en funció de la informació que has compartit o que s'ha deduït.
[Gestiona al meu Compte de Google](#)

Sexe	Edat	Idioma
Home	Entre 35 i 44 anys	3 idioma

Categories utilitzades per mostrar-te anuncis

Pot ser que vegis anuncis dirigits a persones incloses en aquestes categories, que es basen en la teva activitat a Google. Pots veure anuncis d'una categoria diferent o desactivar qualsevol categoria que no vulguis que s'utilitzi.

Relacions	Educació	Sector	Mida de l'ocupador	Propietat d'
Casat & ada	Postgrau	Tecnologia	Grans empresaris...	Propietaris d'

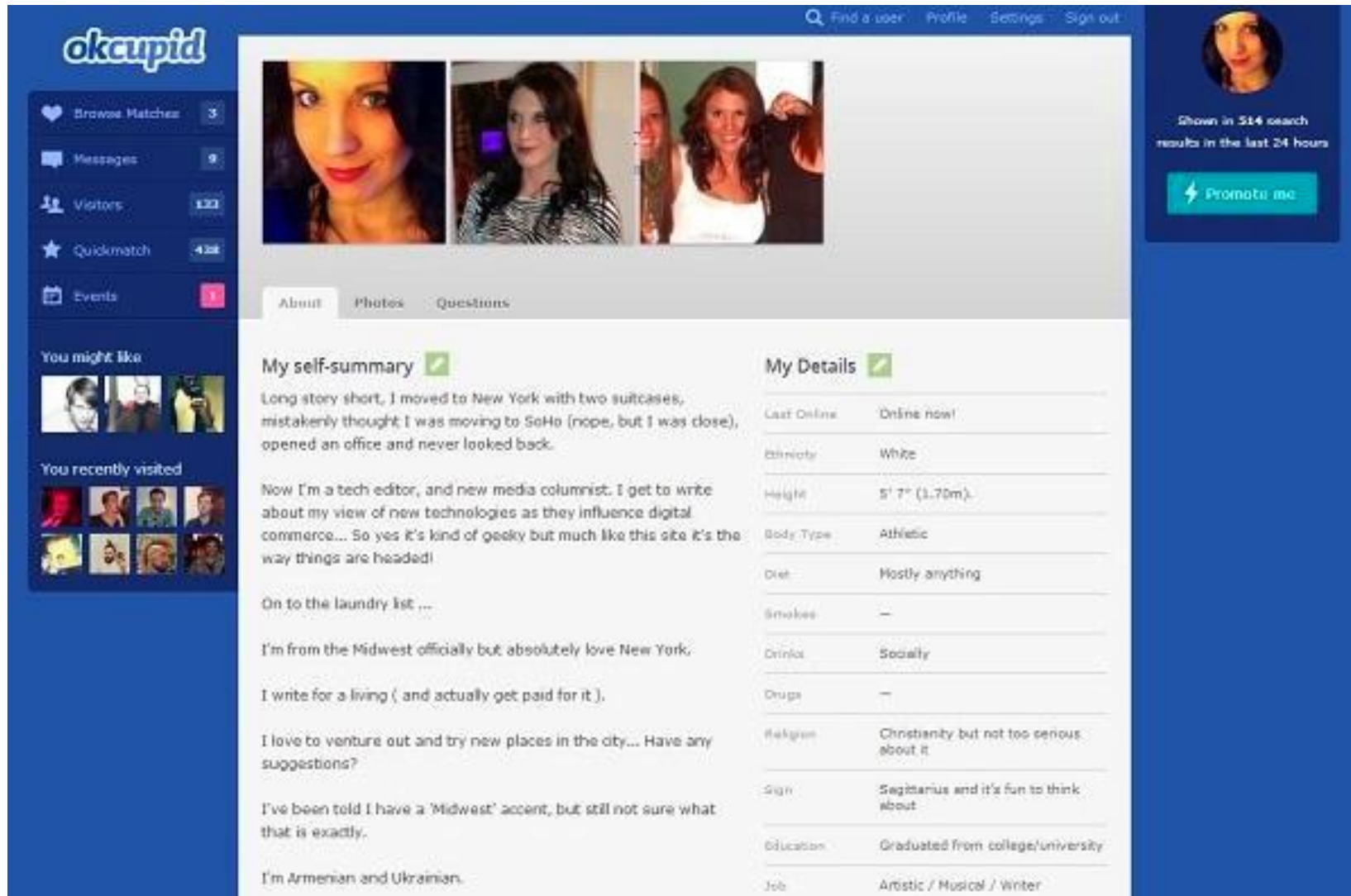
These are
specific things
they know

Big Data – Data Brokerage and Consumers

This huge amount of information let us know (almost) everything about people.

Even when they lie.

OkCupid – Love is blind.. or should be



The screenshot shows a user's profile on the OkCupid website. The interface is blue-themed. On the left, there's a sidebar with navigation links: 'Browse Matches' (3), 'Messages' (9), 'Visitors' (133), 'Quickmatch' (428), and 'Events' (1). Below these are sections for 'You might like' and 'You recently visited', each showing a grid of small profile pictures. The main content area features a large photo gallery at the top with three images of a woman. Below the photos are tabs for 'About', 'Photos', and 'Questions'. The 'About' tab is active, displaying a 'My self-summary' section with a green checkmark icon. The summary text reads: 'Long story short, I moved to New York with two suitcases, mistakenly thought I was moving to SoHo (nope, but I was close), opened an office and never looked back. Now I'm a tech editor, and new media columnist. I get to write about my view of new technologies as they influence digital commerce... So yes it's kind of geeky but much like this site it's the way things are headed! On to the laundry list ... I'm from the Midwest officially but absolutely love New York. I write for a living (and actually get paid for it). I love to venture out and try new places in the city... Have any suggestions? I've been told I have a 'Midwest' accent, but still not sure what that is exactly. I'm Armenian and Ukrainian.' To the right of the summary is a 'My Details' section, also with a green checkmark icon, containing a table of personal information.

My Details	
Last Online	Online now!
Ethnicity	White
Height	5' 7" (1.70m)
Body Type	Athletic
Diet	Mostly anything
Smokes	—
Drinks	Socially
Drugs	—
Religion	Christianity but not too serious about it
Sign	Sagittarius and it's fun to think about
Education	Graduated from college/university
Job	Artistic / Musical / Writer

On the right side of the profile, there's a circular profile picture of the user, a text box stating 'Shown in 514 search results in the last 24 hours', and a green button with a lightning bolt icon labeled 'Promote me'.

OkCupid – Love is blind.. or should be

To celebrate the app's 10th anniversary, they removed all the pictures from OkCupid.

They called it:

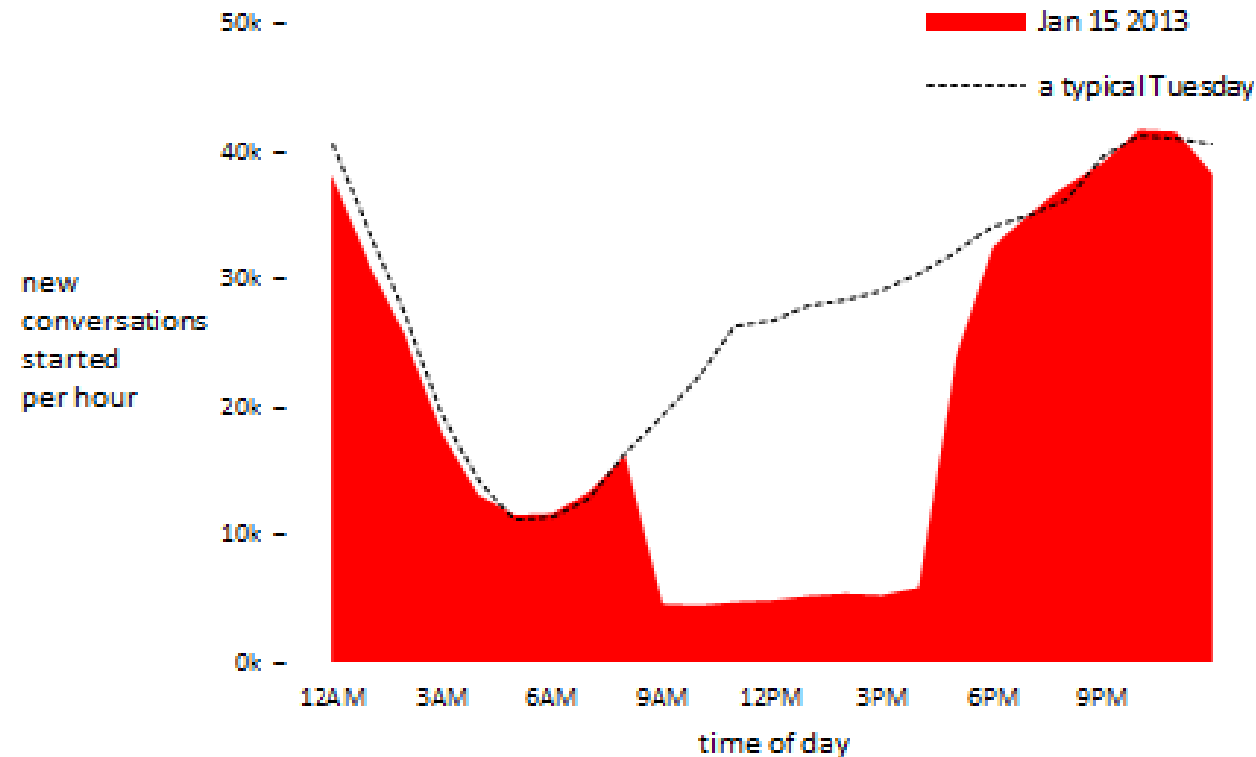
“Love Is Blind”

OkCupid – Love is blind... or should be

Can you guess what happened when OkCupid
turned down all photographs?

OkCupid – Love is blind.. or should be

All their site metrics were way down during the “celebration”, for example:



OkCupid – Love is blind... or should be

But by comparing Love Is Blind Day to a normal Tuesday, they learned some very interesting things. In those 7 hours without photos:

- people responded to first messages 44% more often
- conversations went deeper
- contact details (phone numbers, emails) were exchanged more quickly
- in short, OkCupid worked better

OkCupid – Love is blind.. or should be

And it wasn't that "looks weren't important" to the users who'd chosen to stick around.

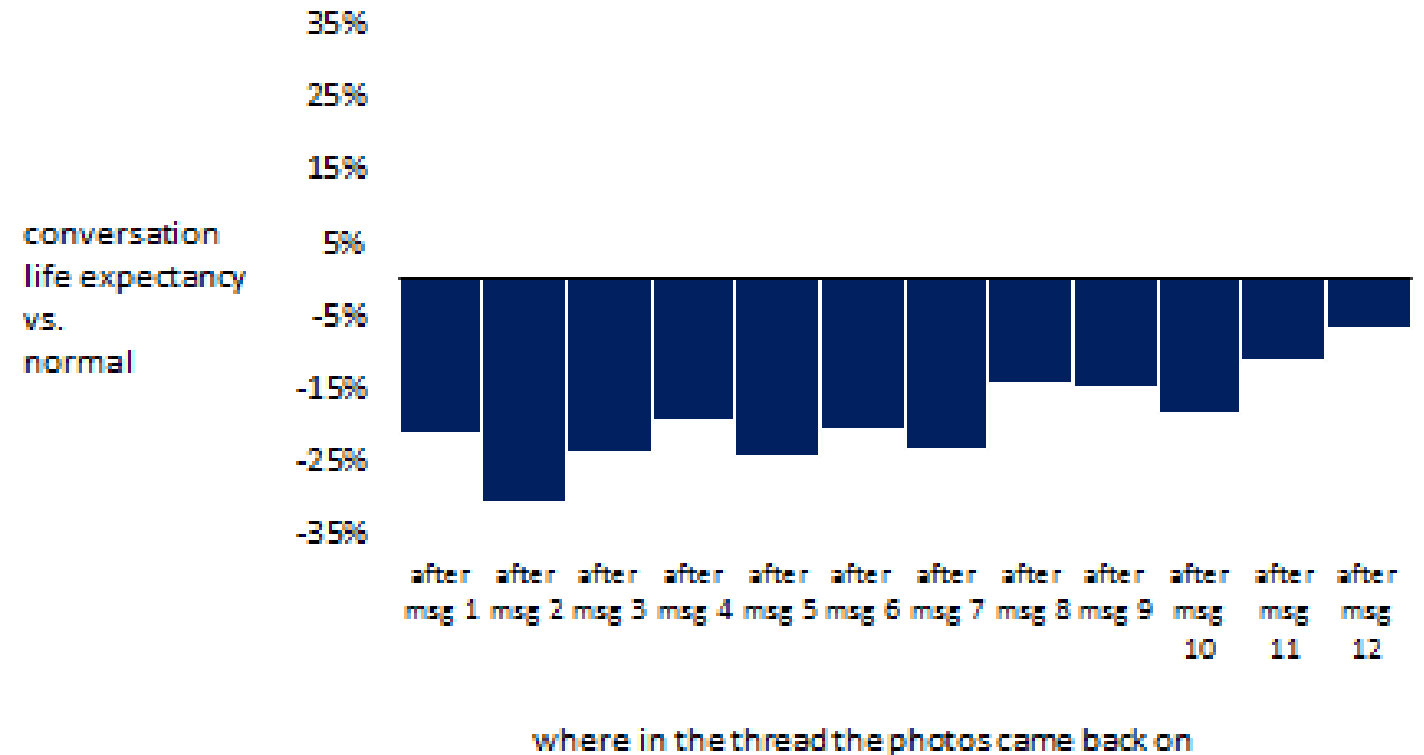
When the photos were restored at 4PM, 2,200 people were in the middle of conversations that had started "blind"

What happened with these conversations when the photos came back at 4pm?

OkCupid – Love is blind... or should be

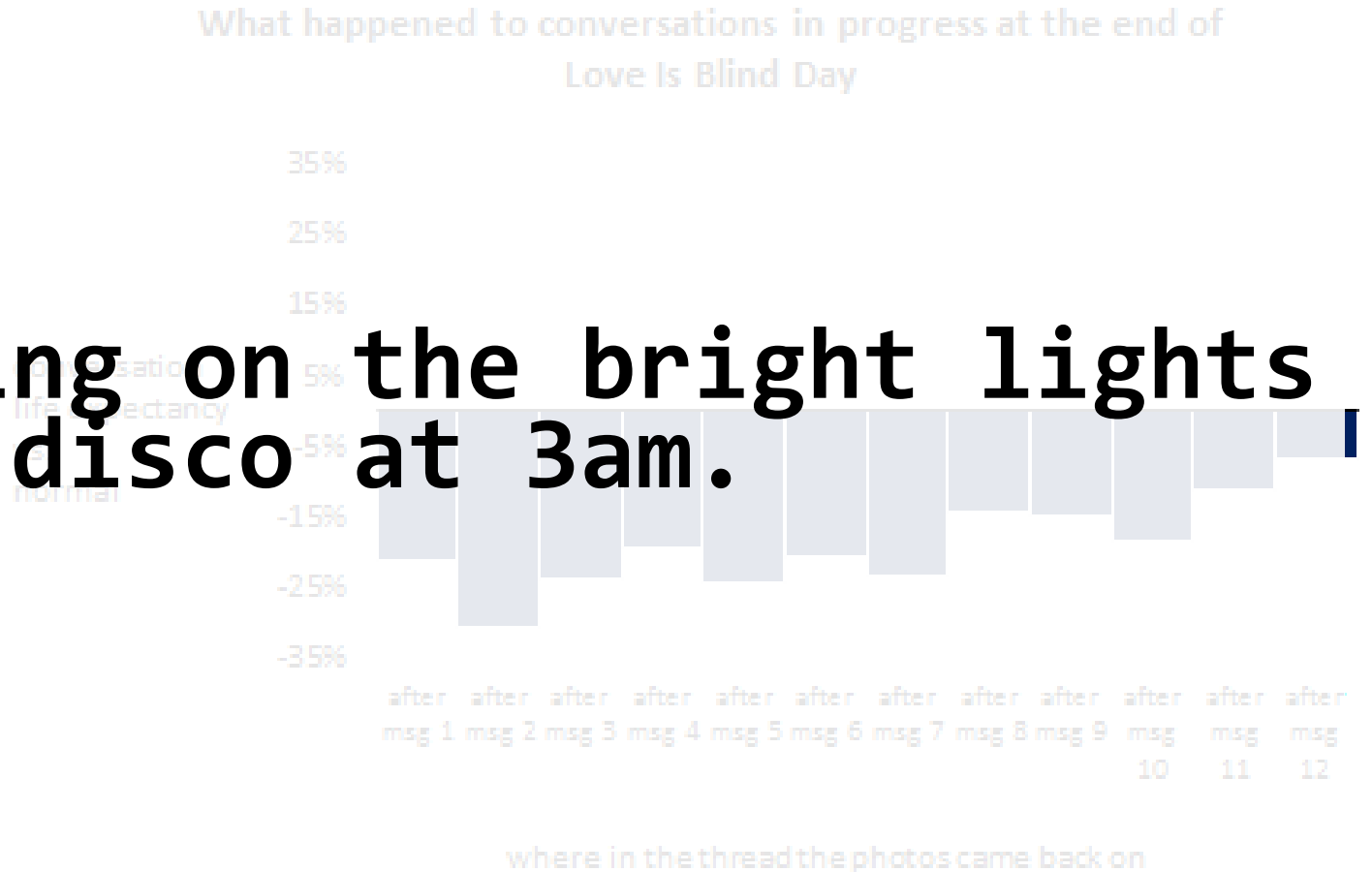
Those conversations melted away:

What happened to conversations in progress at the end of Love Is Blind Day



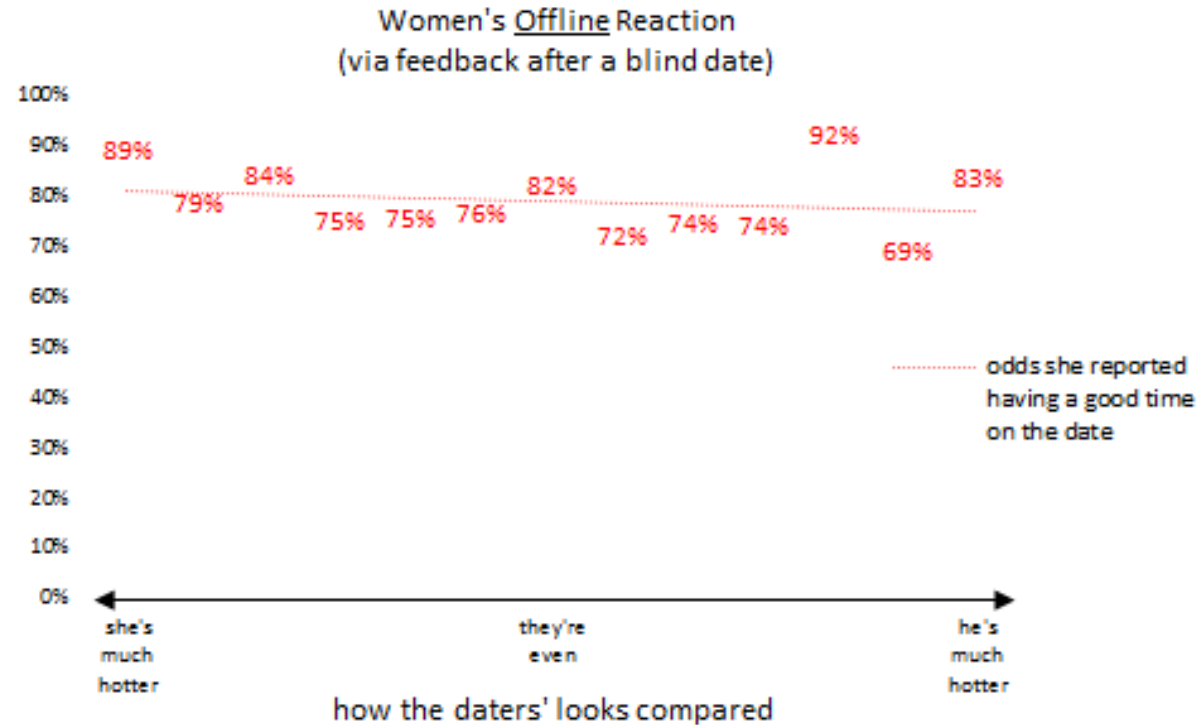
OkCupid – Love is blind... or should be

**It was like turning on the bright lights
at the disco at 3am.**



OkCupid – Love is blind... or should be

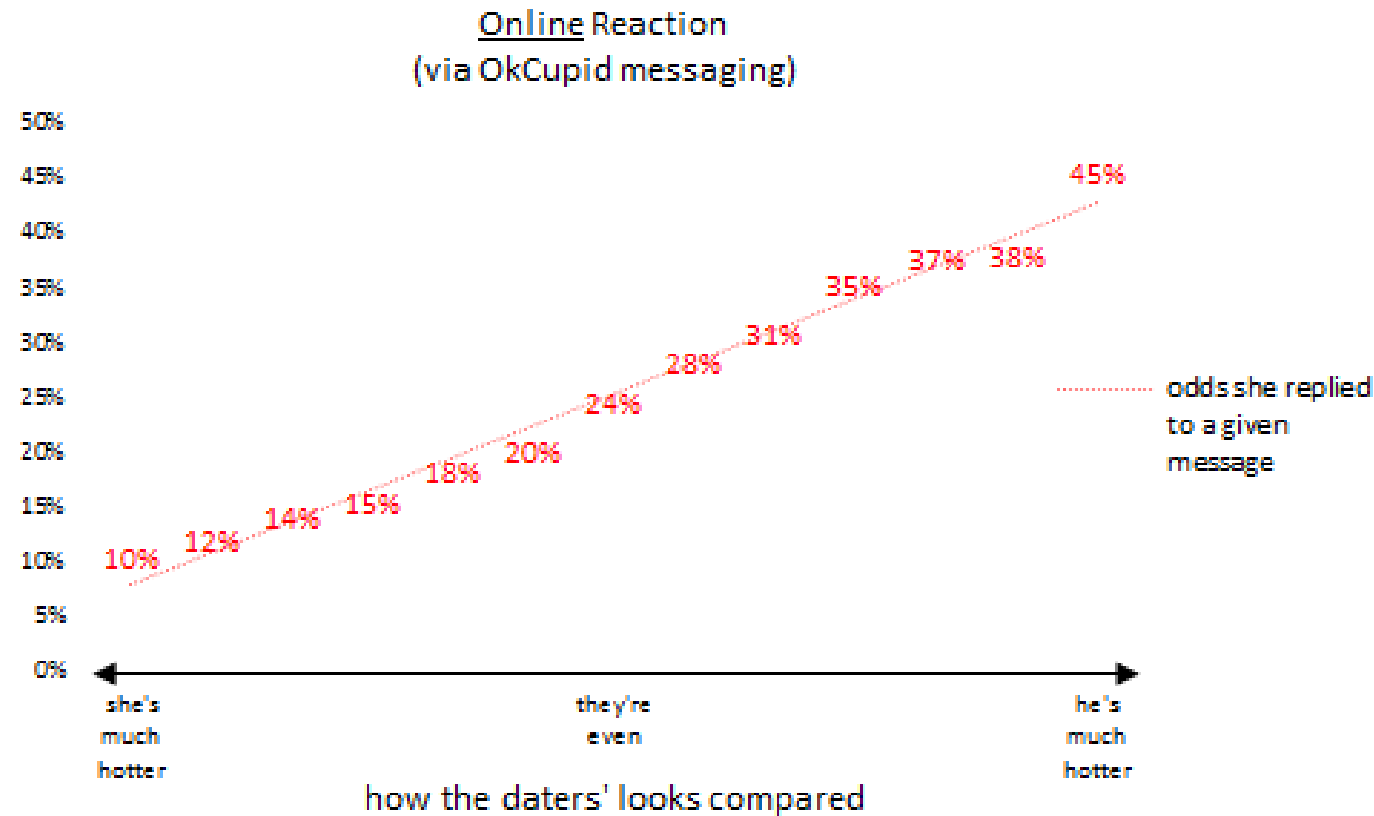
And what about women who actually used the blind date app? Any guess?



Once they got to the date, they had a good time more or less regardless of how good-looking their partner was.

OkCupid – Love is blind.. or should be

But, what happened to women when OkCupid “turned on the lights” (gave back the photographs)?



OkCupid – Love is blind... or should be

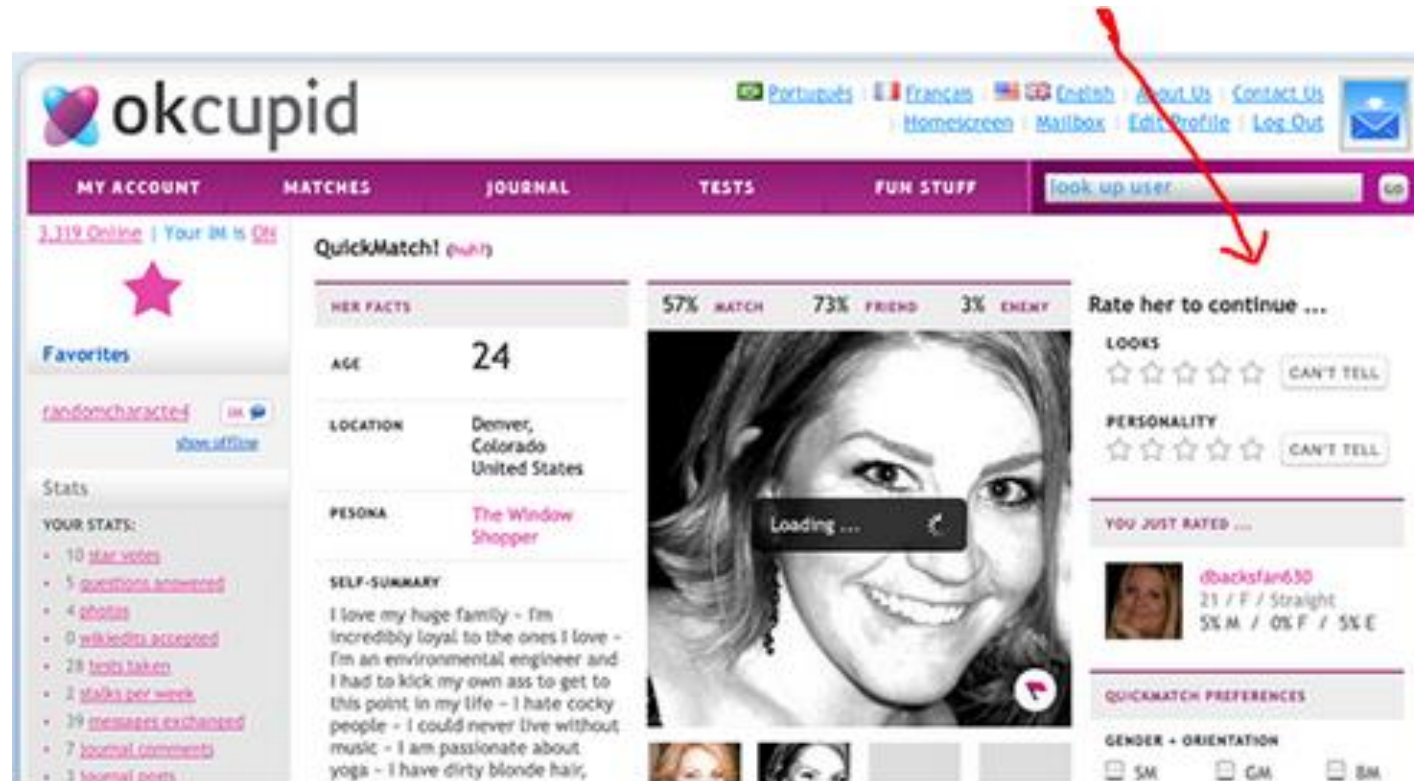
Basically, people are exactly as superficial as their technology allows them to be.

OkCupid – Love is blind.. or should be

RATING SYSTEMS AT OkCupid

OkCupid – What's a picture worth?

All dating sites let users rate profiles, and OkCupid's original system gave people two separate scales for judging each other, “personality” and “looks.”



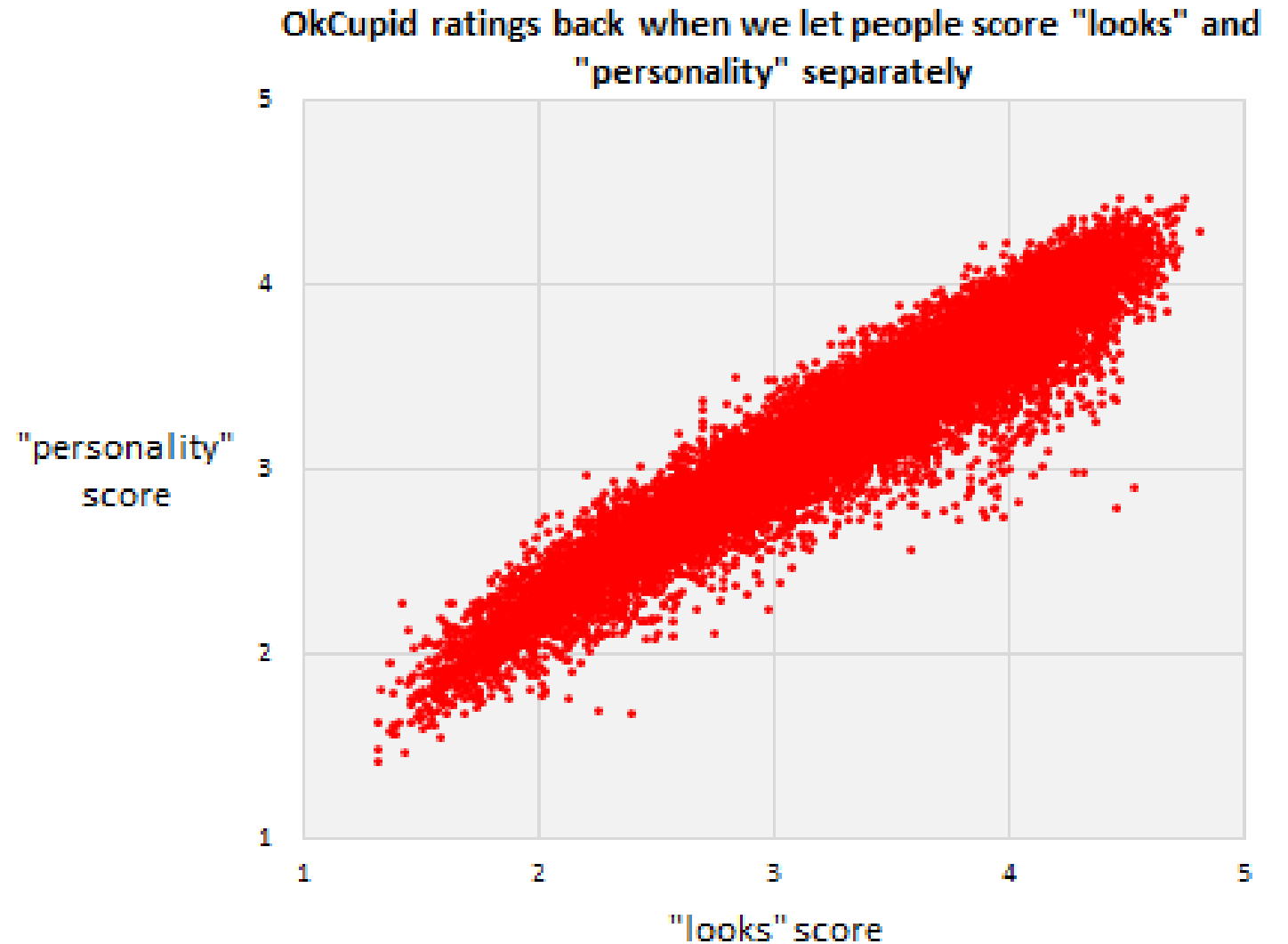
OkCupid – What's a picture worth?

The idea was that a person might not be classically gorgeous or handsome but could still be cool.

DO YOU THINK IT WORKED?

OkCupid – What's a picture worth?

The two scores are within a half point of each other for 92% of the sample after just 25 votes (and that percentage approaches 100% as vote totals get higher).



OkCupid – What’s a picture worth?

In short, according to OkCupid data, “looks” and “personality” were the same thing, which of course makes perfect sense because, you know, this young female account holder, had a 99% positive rates in personality.



OkCupid – What's a picture worth?

CAN YOU GUESS THE DESCRIPTION,
HOBBIES OR INFORMATION IN THE
PROFILE PAGE?

NOTHING



OkCupid – What's a picture worth?

So, your picture is worth
thousand words...

but your words are worth
almost nothing.

OkCupid – The Big Lies People Tell

In online dating, where the whole goal is to eventually meet other people in person, creating a false impression is a problem.

Do you think that situation prevents people from lying in dating websites?



Lets talk about...

TINDER

Tinder – The Big Lies People Tell

People do everything they can in their Tinder profiles to make themselves seem awesome.

With behind-the-scenes perspective (data), we're able to shed some light on some typical claims and the likely realities behind them.



Tinder – The Big Lies People Tell

“I’m 1.9 meters tall.”

REALITY?

Tinder – The Big Lies People Tell

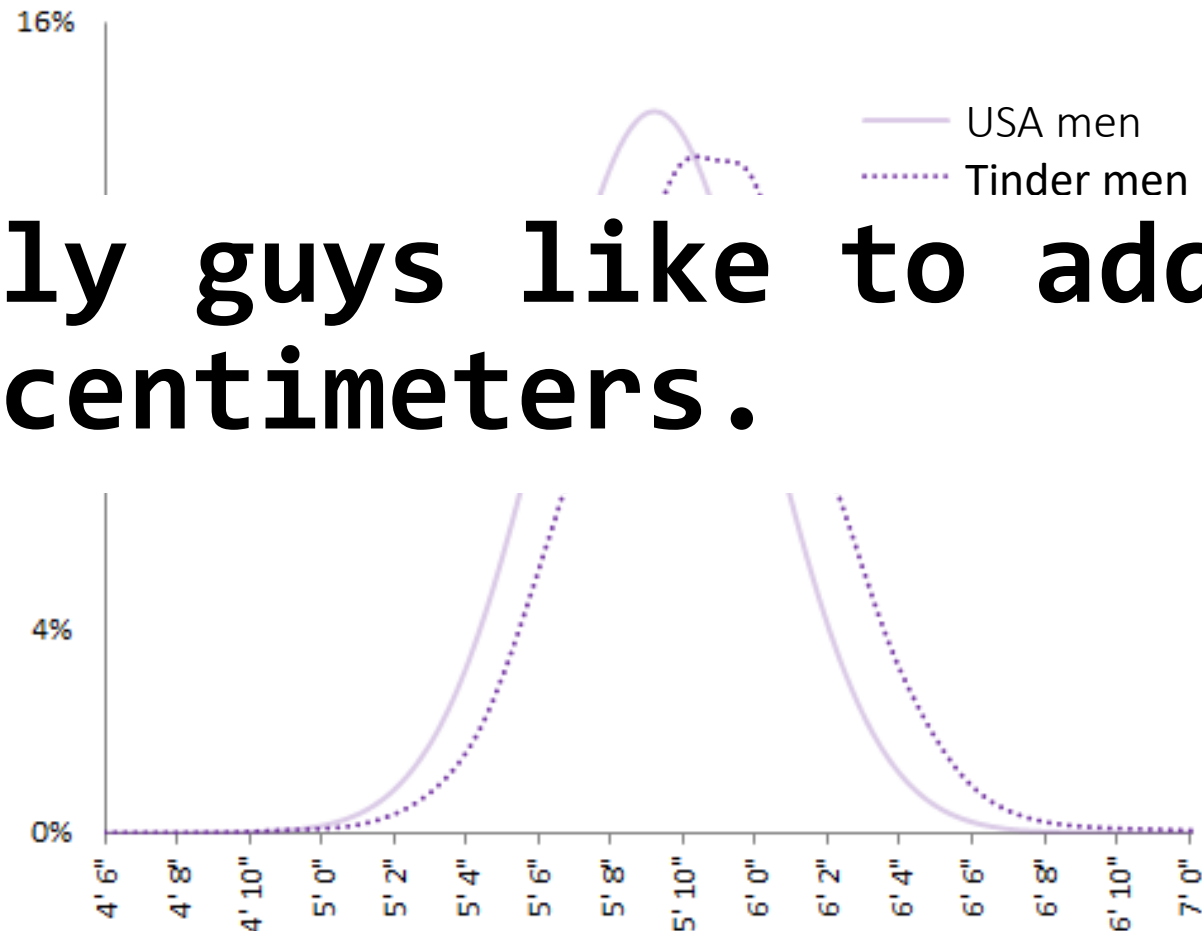
Do taller guys have more sex?

The answer to a degree:

Almost universally guys like to add a couple centimeters.

but in this case what was more interesting than the sex was the (supposed) tallness of the guys.

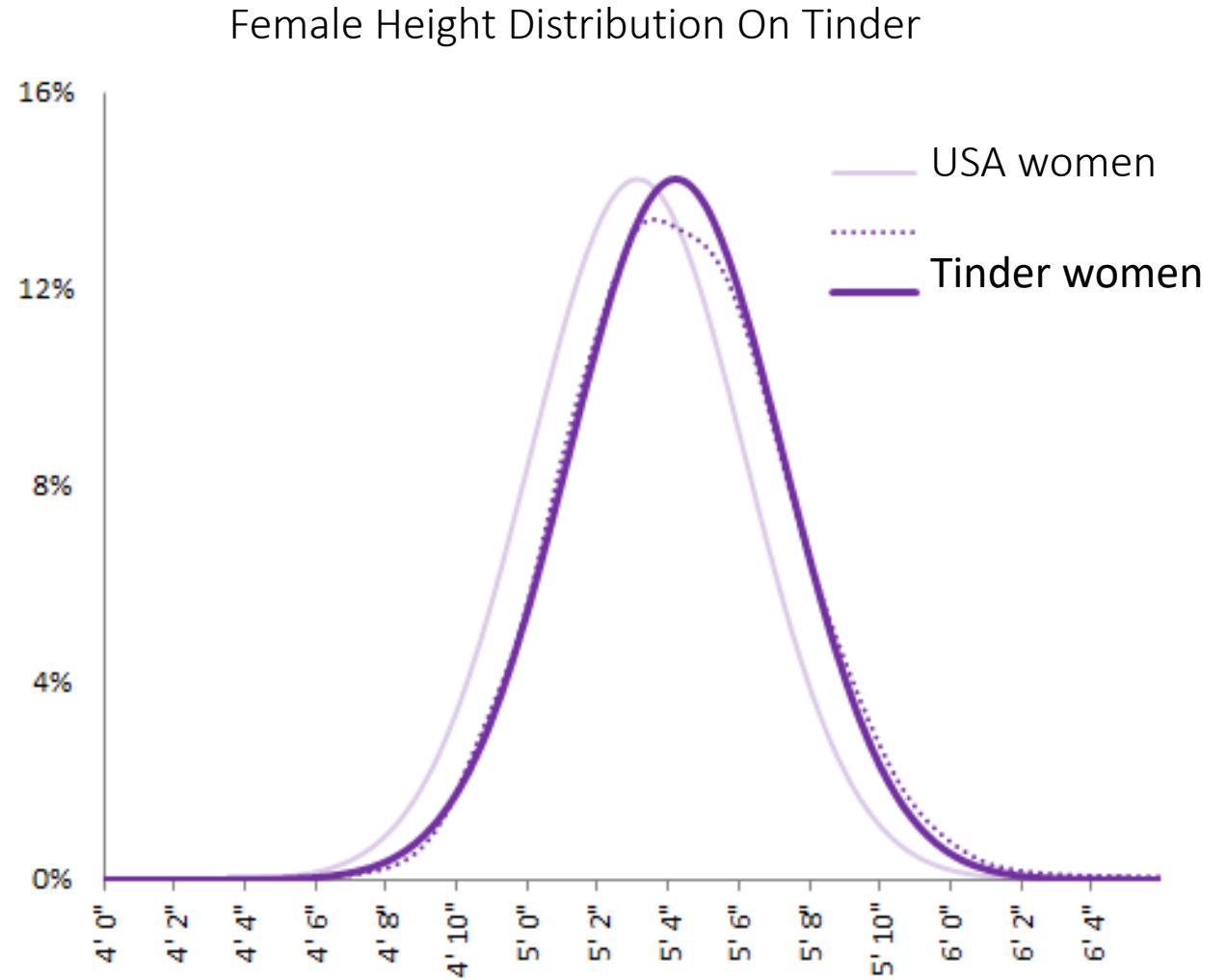
Male Height Distribution On Tinder



Tinder – The Big Lies People Tell

What about looking at women data? Height exaggeration is just as widespread?

YES



Tinder – The Big Lies People Tell

“I’m 1.9 meters tall.”

REALITY: People are 10 centimeters shorter in real life.

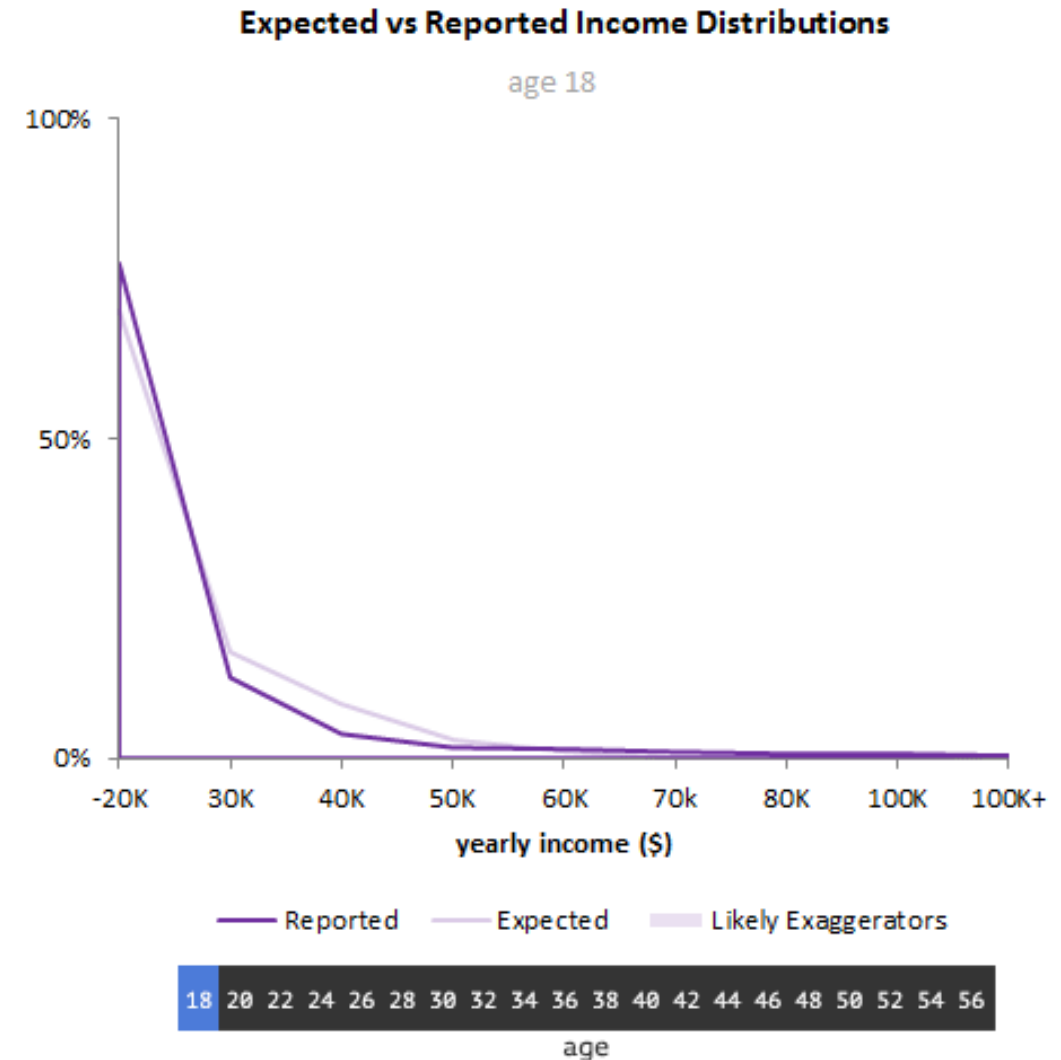
Tinder – The Big Lies People Tell

“I make \$100,000 a year.”

REALITY?

Tinder – The Big Lies People Tell

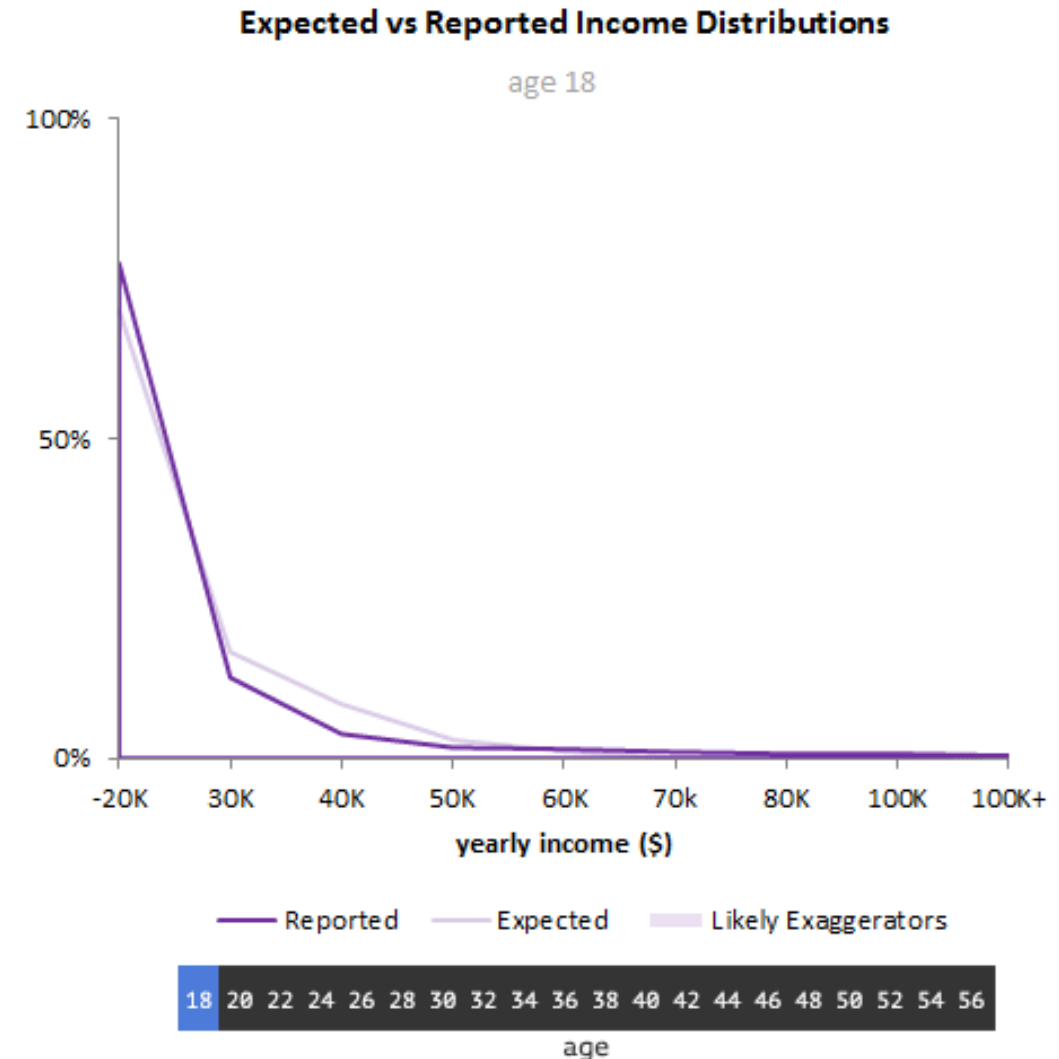
Here's what people are saying on Tinder, versus what their incomes should be:



Tinder – The Big Lies People Tell

Look at the graph to watch as people exaggerate more as they get older.

As you can see, people advertise disproportionately high salaries for themselves.



Tinder – The Big Lies People Tell

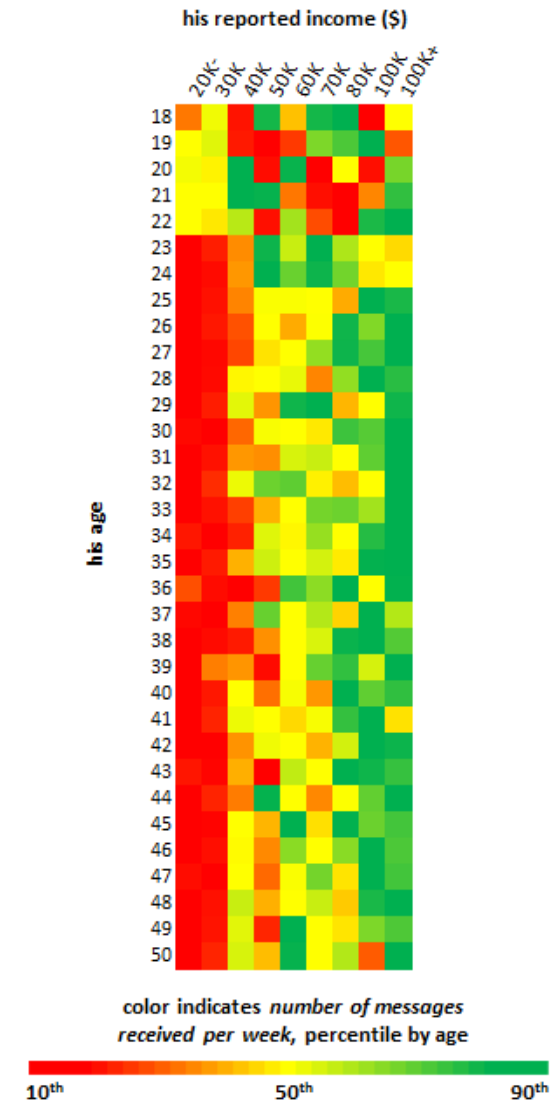
Do you think that a person's stated income has any real effect on his or her online dating?

It matters a lot, particularly for men.

This is a by-age messaging distribution.

Can you spot an interesting age pattern?

How Many Messages a Man Gets, By Age & Income



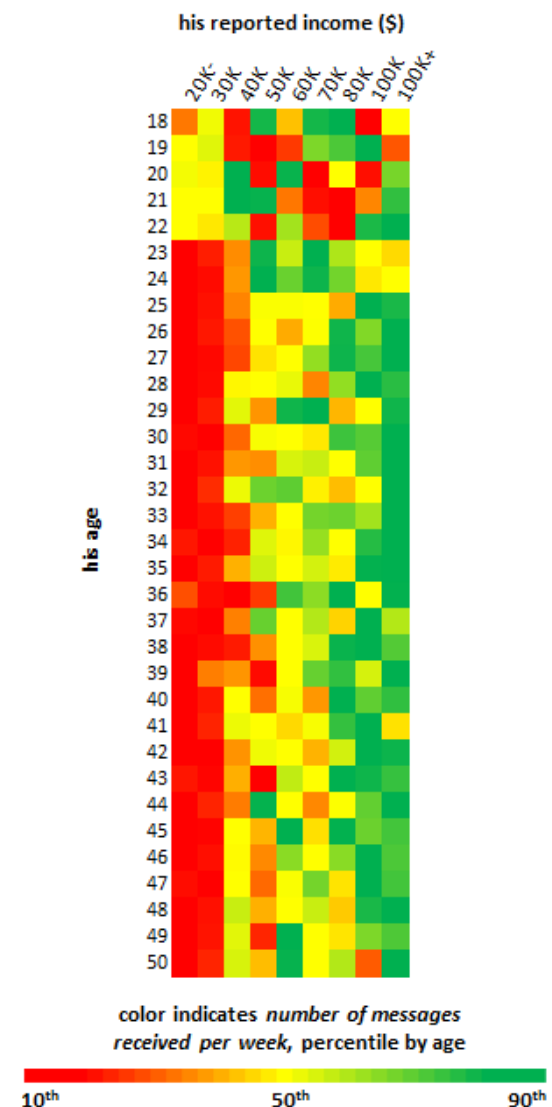
Tinder – The Big Lies People Tell

If you're a young guy and
don't make much money,
cool.

If you're 23 or older and
don't make much money, go
die in a fire.

It's not hard to see where
the incentive to exaggerate
comes from.

How Many Messages a Man Gets, By Age & Income



Tinder – The Big Lies People Tell

“I make \$100,000 a year.”

**REALITY: People are 20% poorer
than they say they are.**

Tinder – The Big Lies People Tell

“Here’s a recent pic.”

REALITY?

Tinder – The Big Lies People Tell

The below picture, for example, was over two years old when it was uploaded. How do they know?

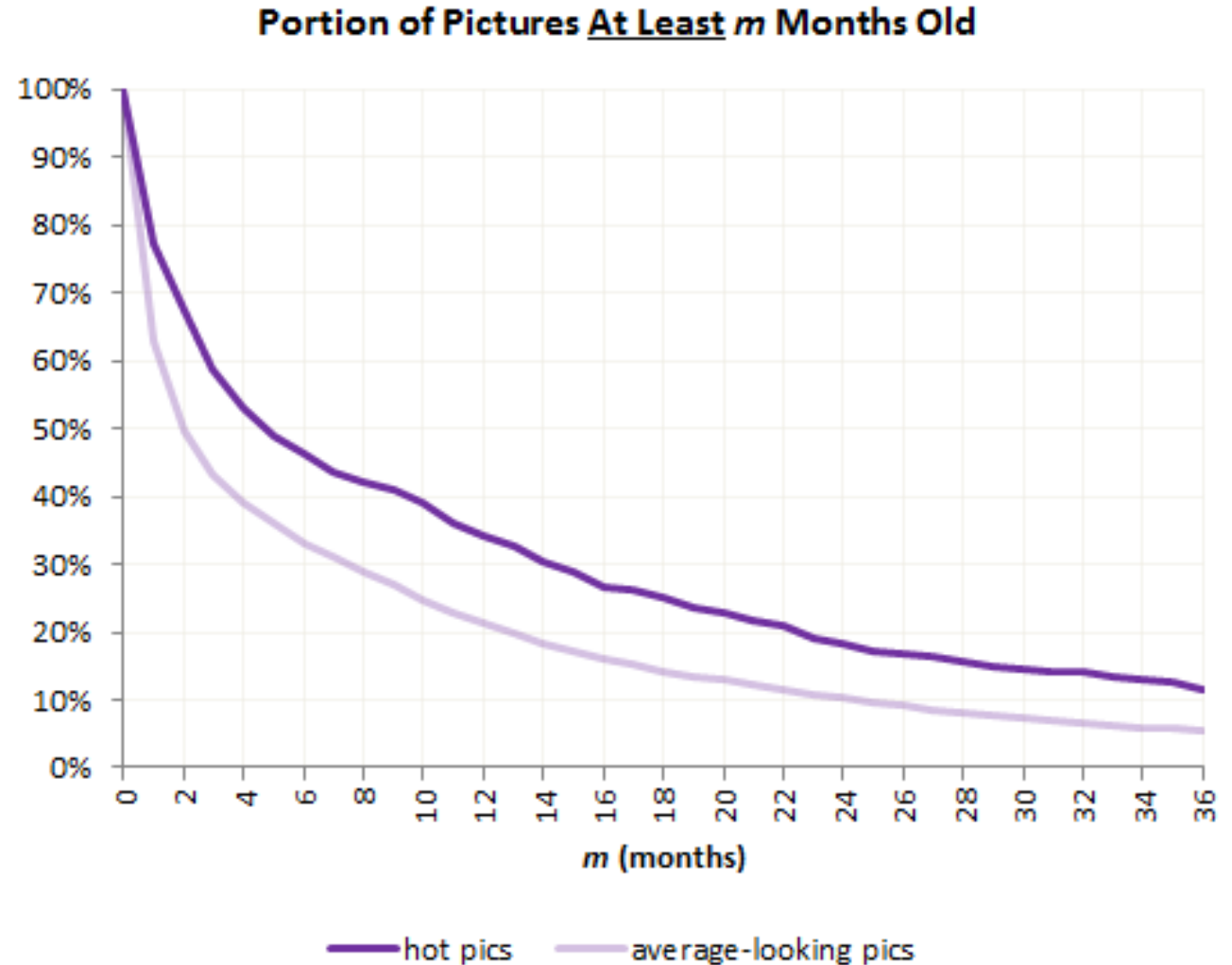
Most modern cameras append text tags to the jpgs they take. These tags, called EXIF metadata, specify things like the exposure and f-stop settings, gps information if your camera has it, and, of course, the time and date the photo was taken.



Tinder – The Big Lies People Tell

Analyzing this stuff, they can find out that most of the pictures on Tinder were of recent vintage; site-wide the median photo age at upload was just 92 days.

However, hotter photos were much more likely to be outdated than normal ones.

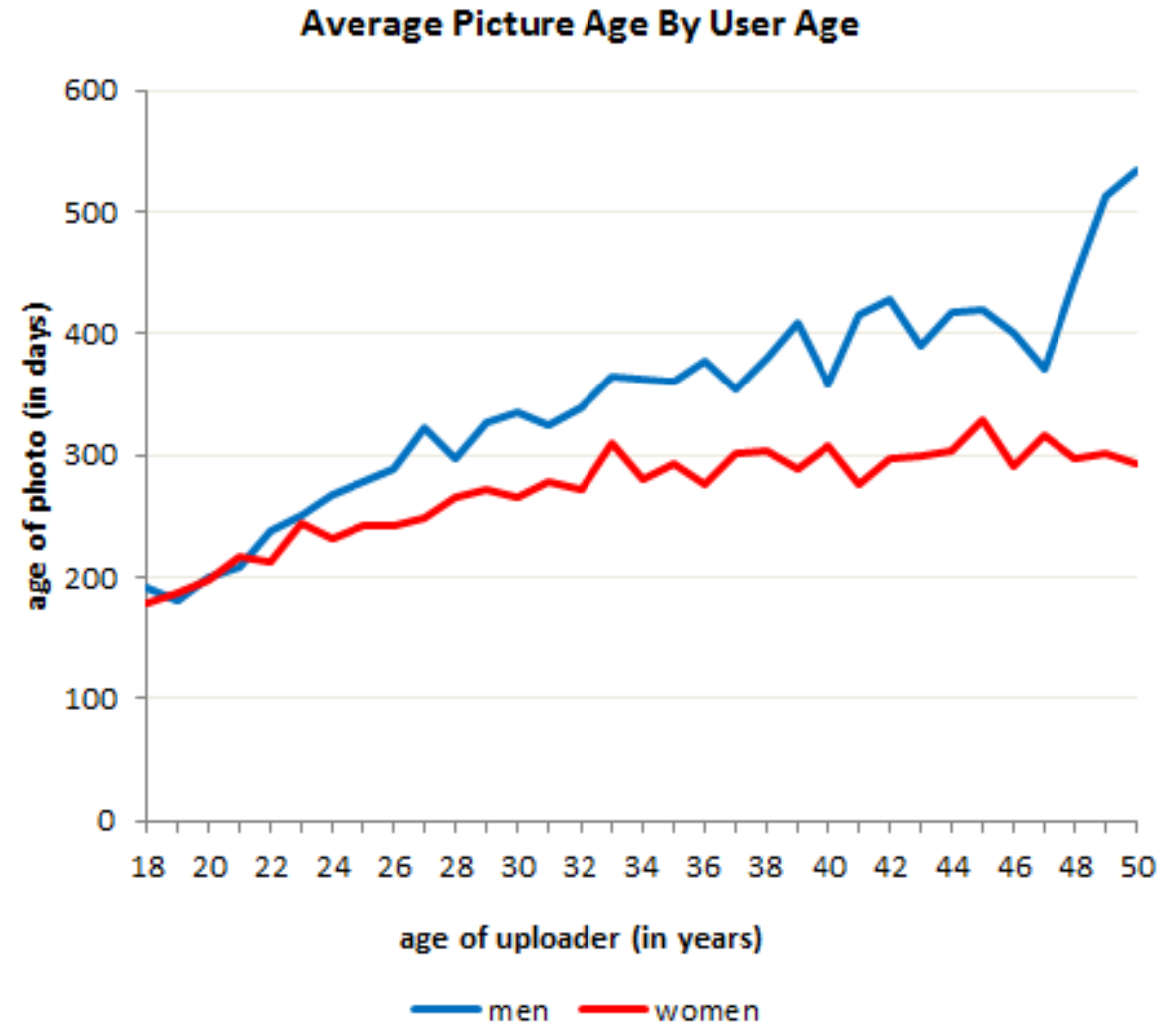


Tinder – The Big Lies People Tell

What is the effect of age on uploading new/old photos?

It also turns out that older people also upload older photos.

The upshot here is, if you see a good-looking picture of a man over 30, that photo is very likely to be out-of-date.



Tinder – The Big Lies People Tell

“Here’s a recent pic.”

REALITY: The more attractive the picture, the more likely it is to be out-of-date.

ALWAYS REMEMBER:

COMPANIES TRUST IN

YOUR DATA

NOT ON WHAT YOU SAY

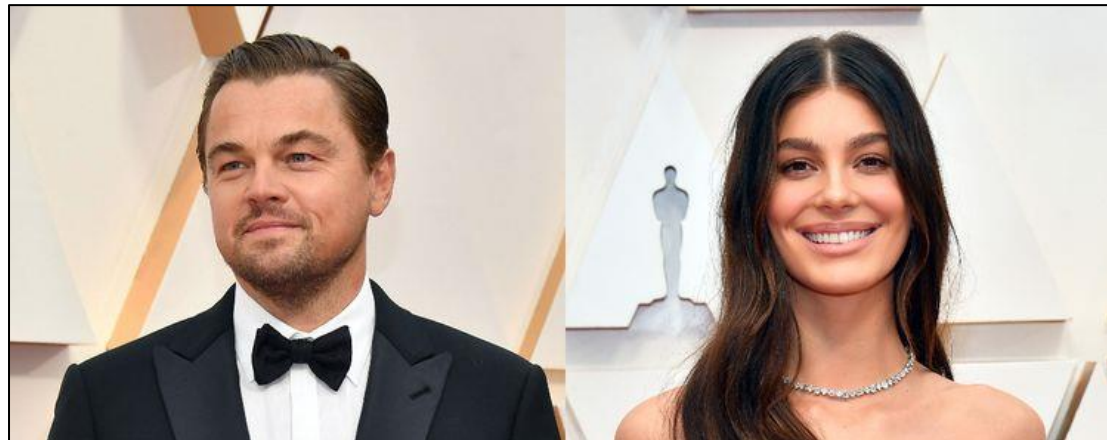
TODAY WE WILL PRACTICE WITH



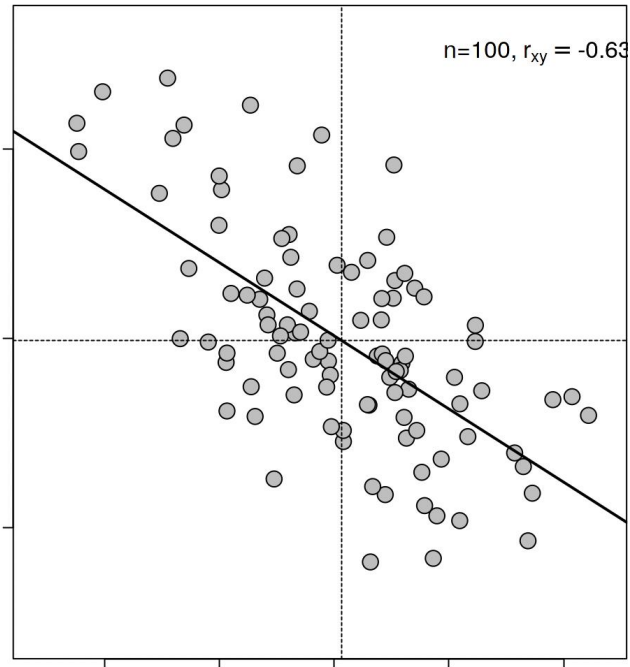
TODAY WE WILL PRACTICE WITH



AND



Fundamentals of Econometrics Models



Vicenç Soler

`v.soler@tbs-education.org`

~~`vincent.soler@tbs-education.org`~~

