

The Psychology of Buying

How to Apply Behavioural
Science for More Sales
(In Difficult Times)



Capuchin
Behavioural Science



DAN THWAITES

CO-FOUNDER,

CAPUCHIN BEHAVIOURAL SCIENCE





Practically apply
psychology and data
for hard, commercial results



FOR EXAMPLE, BEHAVIOURAL SCIENCE TELLS US YOU COULD GET...



8% higher spend levels if you remove the £ signs from your pricing



50% higher conversion if you use personality-targeting - extraverts prefer bright colours but disagreeable people don't like conformity and social proof

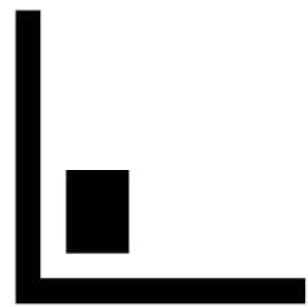


Double the number of acceptances if you ending your request with “...but it's up to you”

This is because consumers are subconsciously influenced by mental shortcuts known as [heuristics](#). Understand these heuristics – and particularly [how they differ between different customer groups](#) – and you can tap into psychology for sales success.



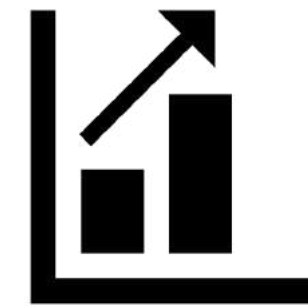
APPLY PSYCHOLOGY AND DATA



This is a typical message.



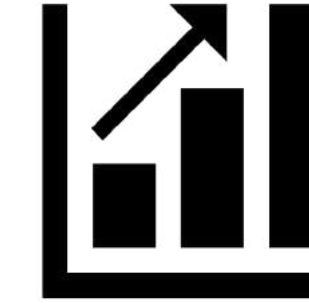
Recycle all your plastic before it's too late.



This is a behaviourally optimized message.



Recycle just one plastic thing a day to protect turtles like Ronnie.



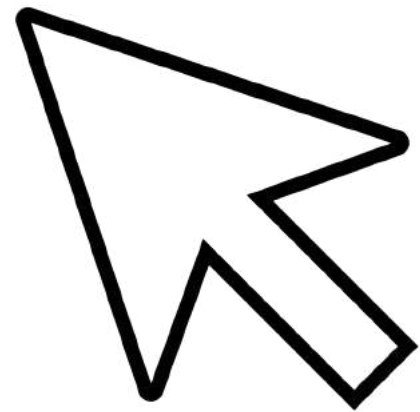
This is a behaviourally optimized message targeted to liberals.



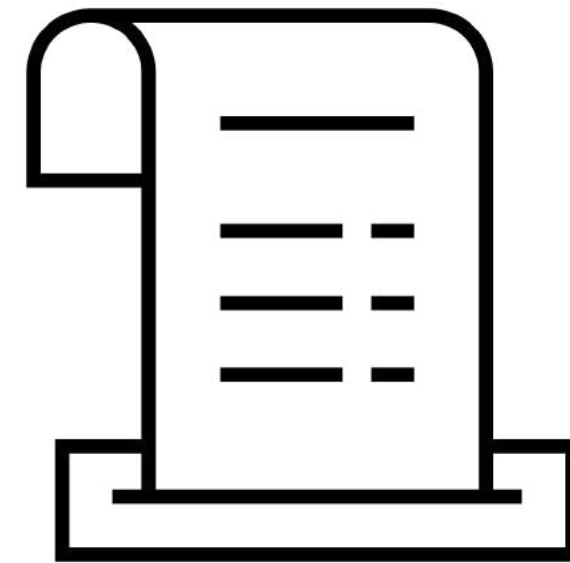
Can you recycle just one plastic item each day to care for turtles like Ronnie?



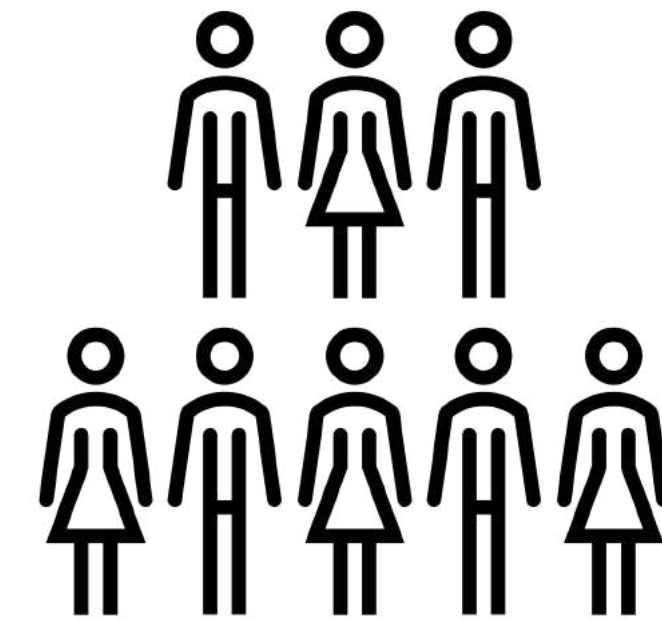
GET HARD COMMERCIAL RESULTS



Get more attention,
clicks, visitors



Get more conversions,
sales, profit



Get more customers,
shift their behaviours



DOES IT WORK?

39%

lower cost per acquisition for a financial services brand

x2

double the conversion rate for a multichannel marketer

+7

percentage point improvement in downloads for an international client

4,000

new customers signed up in a week for a challenger brand



SCIENTIFIC THINKING FOR IRRATIONAL MINDS



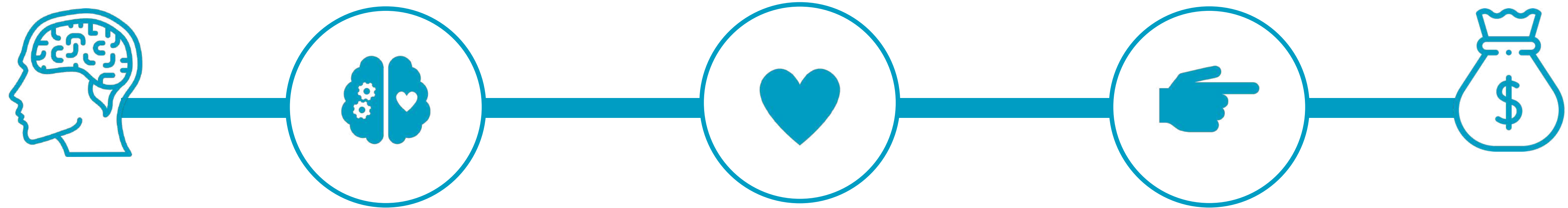
Make a more direct, scientific link
between minds and money.



To find opportunities that might otherwise be missed.
And show how to address them.



APPLY PSYCHOLOGY AND DATA TO GET HARD COMMERCIAL RESULTS



Reveal the hidden
psychology of how your
audiences really think

Be more persuasive, based
on how their mental
processes work

Develop nudges based
their psychological traits
to shift behaviour



PREVIOUS PROJECTS



How do you apply the [psychology of online ordering](#) to persuade different groups of people?



How do you [prime and persuade](#) purchase across channels, moods and modes?



How do you get people to adopt [new ways of payment](#) and other [new behaviours](#)?



How do use [price psychology](#) to increase conversion and maintain [premium pricing](#)?



How do you [sell more of a "Christmas" product](#) at a new time of year?



What is the [psychology of your home](#), its value and making improvements?



How do you apply behavioural [nudges to improve mobile app](#) downloads?



What are the different [psychological drivers for health products](#) and how do you practically apply them?



How can you [persuade senior financial services decision-makers](#) to take on a security product to sell to their customers

CAPUCHIN.CC
/BLOG



Practical
Behavioural Nudges



Psychological
Profiles



The Science of
Attention



The Psychology of
Money

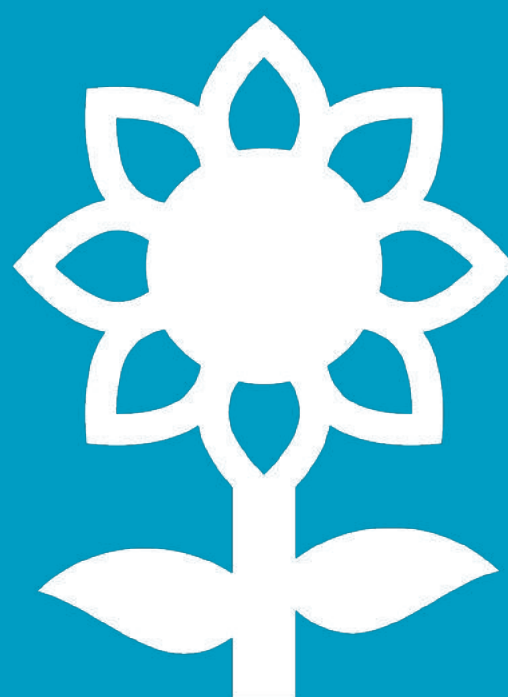




PSYCHOLOGY AND TOUGH TIMES









FEAR OR
ANGER?





FEAR OR ANGER?

LOOKING AT THE EMOTIONAL IMPACT OF THE LAST RECESSION IN 2008

A study looked at [fear vs anger](#) as a response to the 2008 recession, and found:

- our perception of whether [someone is responsible](#) for a threat is a key determinant of whether we react to that threat with fear or anger
- anger is the more likely emotional reaction if the threat has [an identifiable external cause](#).
- anger is more likely than fear among individuals who believe that the actor responsible [should be under their control](#) and [should care about their welfare](#)

These create very different mindsets as a result.

Wagner, M. Fear and Anger in Great Britain: Blame Assignment and Emotional Reactions to the Financial Crisis. *Polit Behav* 36, 683–703 (2014). <https://doi.org/10.1007/s11109-013-9241-5>

(van Zomeren et al. 2004; Leach et al. 2006; Smith et al. 2008).



FEAR OR ANGER?

THE EMOTIONAL IMPACT OF THE
LAST RECESSION IN 2008

Fear vs Anger Response

- Fear makes us more **risk-averse** and **vigilant** (avoidance/surveillance systems)
- Anger increases our **readiness to address the threat directly** while relying on **previously learned routines** (approach/disposition systems).

e.g. some studies show that it is **anger rather than fear** that leads citizens to **engage in protest behaviour** by taking part in demonstrations or in other forms of political mobilization

Wagner, M. Fear and Anger in Great Britain: Blame Assignment and Emotional Reactions to the Financial Crisis. *Polit Behav* 36, 683–703 (2014). <https://doi.org/10.1007/s11109-013-9241-5>

(van Zomeren et al. 2004; Leach et al. 2006; Smith et al. 2008).



FEAR IN THE
THEATER OF
THE MIND





FEAR IN THE THEATER OF THE MIND

DIFFERENTIAL FEAR CONDITIONING
WITH IMAGINED STIMULI

From fears of **monsters in the closet** to the internal **replay of traumatic events** of our past, **mental imagery** plays an important role in how people acquire and **generalize** fear responses.

In other words, when fear acquired from one stimulus **transfers** to another stimulus.

Real as well as **imagined** images **engage learning processes in similar ways.**

Lauryn Burleigh, Xinrui Jiang, and Steven G. Greening

<https://www.psychologicalscience.org/sage?ru=https://journals.sagepub.com/doi/full/10.1177/09567976221086513>



FEAR IN THE THEATER OF THE MIND

DIFFERENTIAL FEAR CONDITIONING
WITH IMAGINED STIMULI

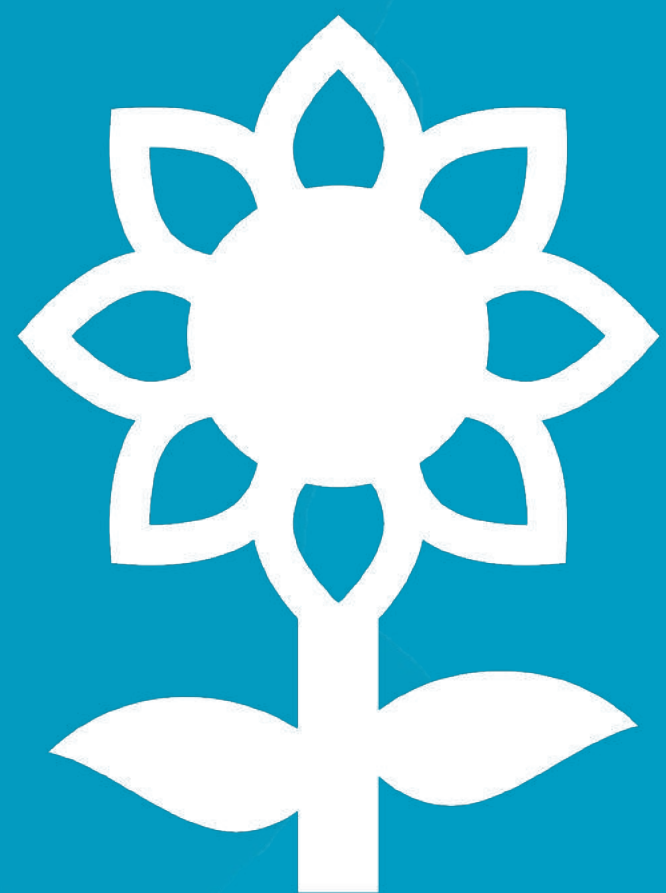
In the study participants **acquired fear conditioning** to both viewed and **imagined objects**, as measured via **self-reported fear responses** and **skin conductance**.

After acquiring fear for either visual or imagined objects, people's fear responses **generalized to the corresponding imagined or visual objects**, respectively.

In other words, people become **conditioned to respond with real fear to imagined stimuli**.

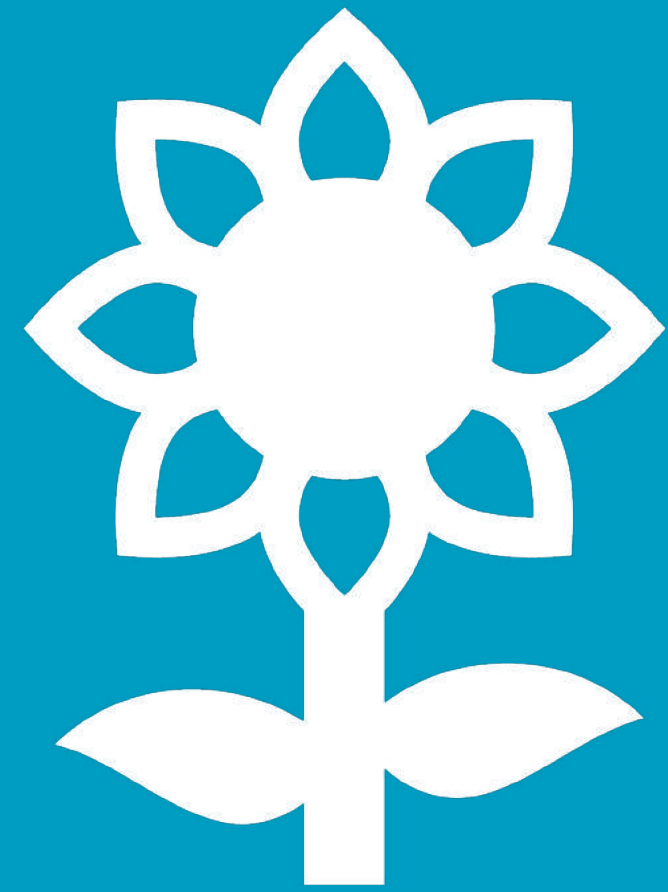
Lauryn Burleigh, Xinrui Jiang, and Steven G. Greening

<https://www.psychologicalscience.org/sage?ru=https://journals.sagepub.com/doi/full/10.1177/09567976221086513>



SEEDS OF
OPTIMISM





SEEDS OF OPTIMISM

MILLENNIALS' CAREER PERSPECTIVE
AND EXPECTATIONS

During times of recession

Millennials [lower their expectations](#) regarding the [work-life balance](#) and [social atmosphere](#).

However, their expectations regarding [job content, training, career development, and financial rewards remain high](#), suggesting that these expectations are largely embedded within the generation

Perhaps indicative of a [“heads down” and work](#) response to recessionary pressures and concerns. [Approach](#), rather than avoidance

Millennials' Career Perspective and Psychological Contract Expectations: Does the Recession Lead to Lowered Expectations?

Sara De Hauw & Ans De Vos



OPTIMISM

IS GOOD

FOR YOU





OPTIMISM IS GOOD FOR YOU

Previous studies reported that **more optimistic individuals** are less likely to suffer from **chronic diseases and die prematurely**.

One study further suggests that optimism **is specifically related to 11 to 15% longer life span**, on average, and to greater odds of achieving “**exceptional longevity**,” that is, living to the age of 85 or beyond.

These relations were **independent of socioeconomic status, health conditions, depression, social integration, and health behaviors** (e.g., smoking, diet, and alcohol use).

Lewina O. Lee lewina@bu.edu, Peter James, Emily S. Zevon, +4 , Eric S. Kim, Claudia Trudel-Fitzgerald, Avron Spiro III, Francine Grodstein, and Laura D. Kubzansky-4

<https://www.pnas.org/doi/full/10.1073/pnas.1900712116>



BUT NOT
TOO MUCH
OPTIMISM!





BUT NOT
TOO MUCH
OPTIMISM!

Optimism is related to numerous [work/life choices](#):

More [optimistic people work harder](#), expect to retire later, are more likely to [remarry](#), [invest more](#) in individual stocks, and [save more](#).

Interestingly, however, [moderate optimists display reasonable financial behavior](#), whereas [extreme optimists display financial habits and behavior that are generally not considered prudent](#).

Moderate [optimists work significantly harder](#).

[Extreme optimists](#), on the other hand, work [significantly fewer hours](#).

Lewina O. Lee lewina@bu.edu, Peter James, Emily S. Zevon, +4 , Eric S. Kim, Claudia Trudel-Fitzgerald, Avron Spiro III, Francine Grodstein, and Laura D. Kubzansky-4

<https://www.pnas.org/doi/full/10.1073/pnas.1900712116>



PATRICK FAGAN

CO-FOUNDER,

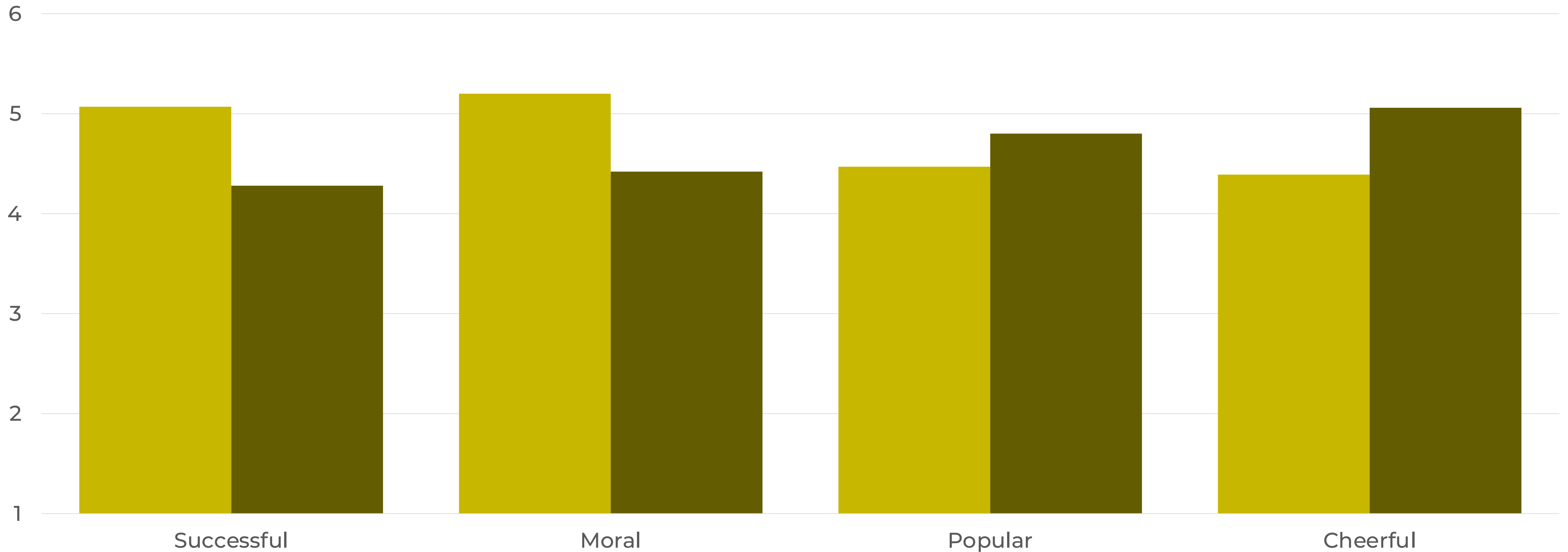
CAPUCHIN BEHAVIOURAL SCIENCE



HELLO!

Average Rating on Each Trait (1-6)

■ Given name (e.g., Patrick) ■ Nickname (e.g., Pat)



THE POWER OF BEHAVIOURAL SCIENCE



+25%

0.0004%



LIMITED CONSCIOUS MINDS

Had to Memorise...

2-digit no. (e.g. 62)

7-digit no. (e.g. 4811505)



Chose Cake



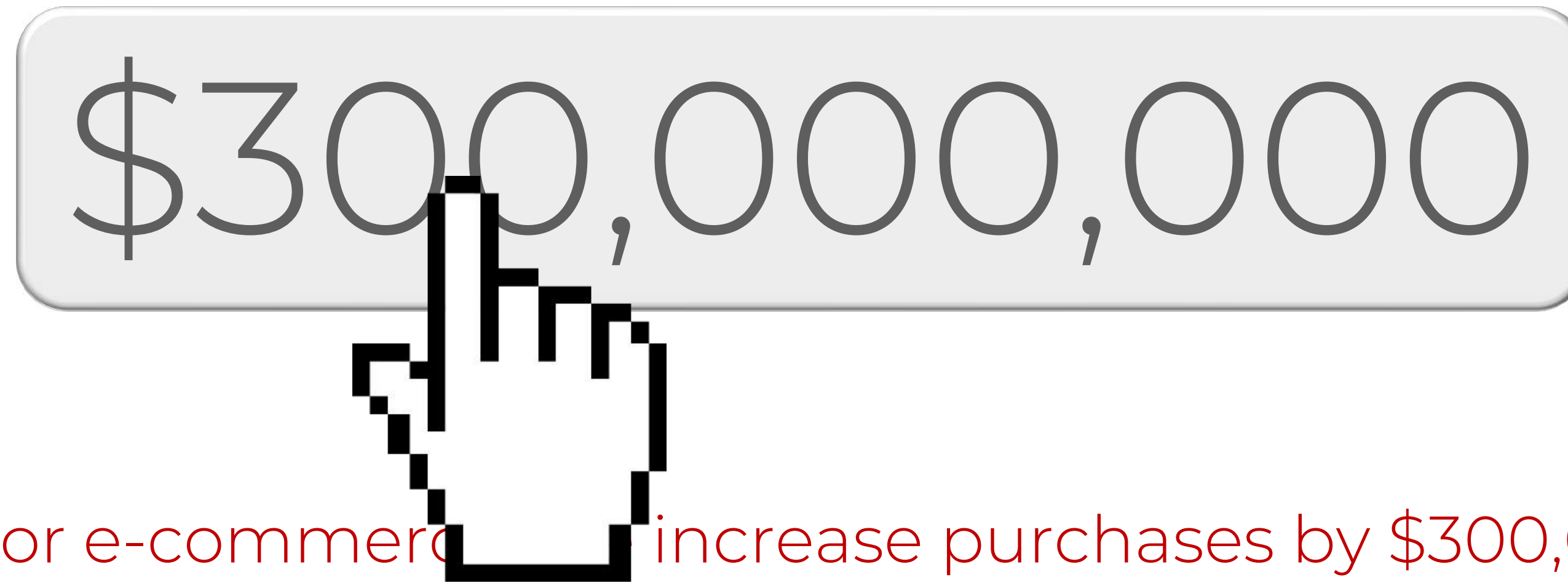
Chose Fruit Salad



Stores keep tens of thousands of SKUs



THE \$300M BUTTON



How did a major e-commerce site increase purchases by \$300,000,000 a year?

The site used to ask people to register in order to continue with their purchase (presumably in an attempt to increase loyalty). By simply changing “register” to “continue” and removing the barrier to purchase, sales went up phenomenally. One shopper told the UX team, “I’m not here to enter into a relationship. I just want to buy something.”

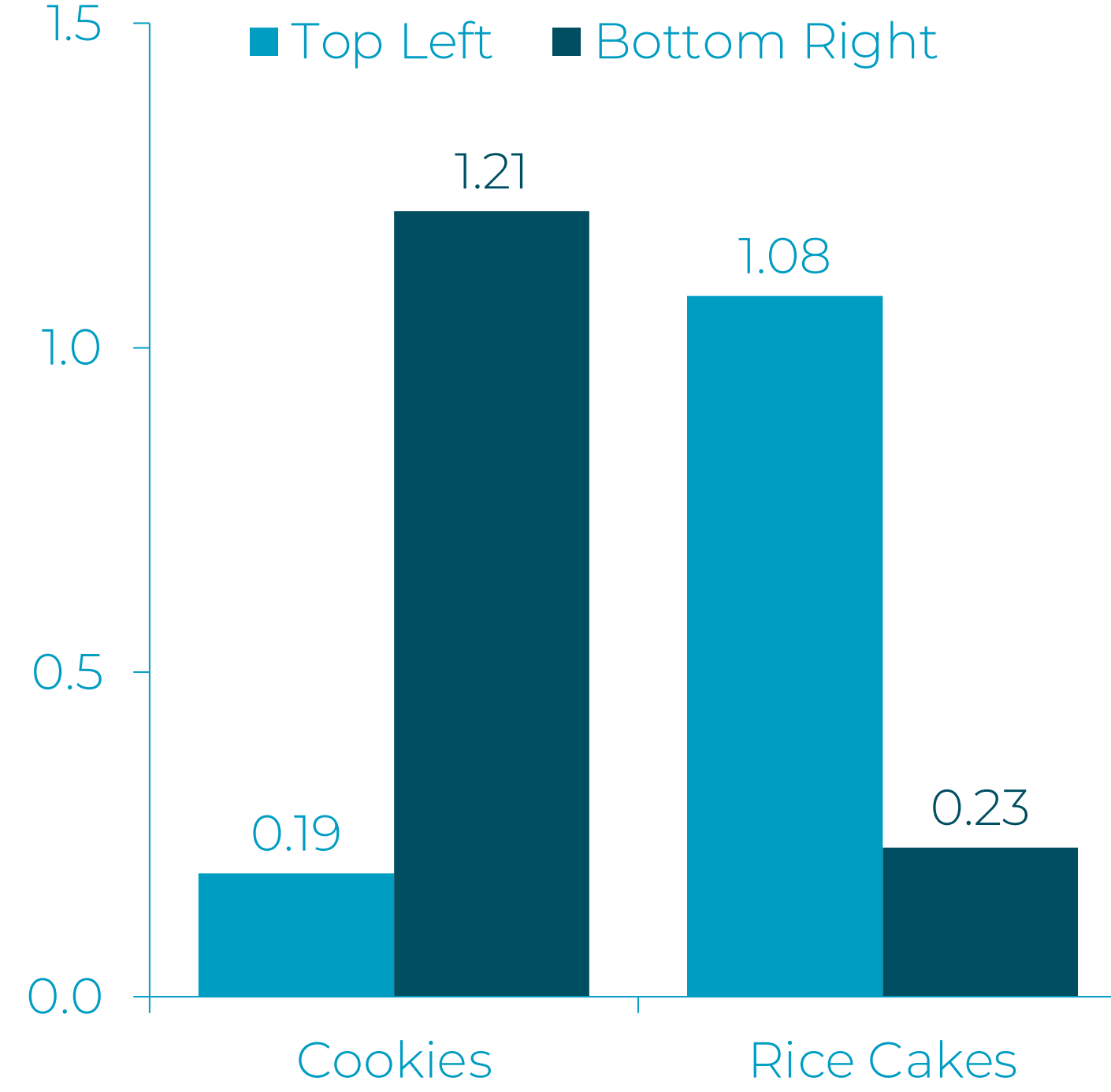
VALUE PERCEPTIONS

What People Would Pay for a Beer in...



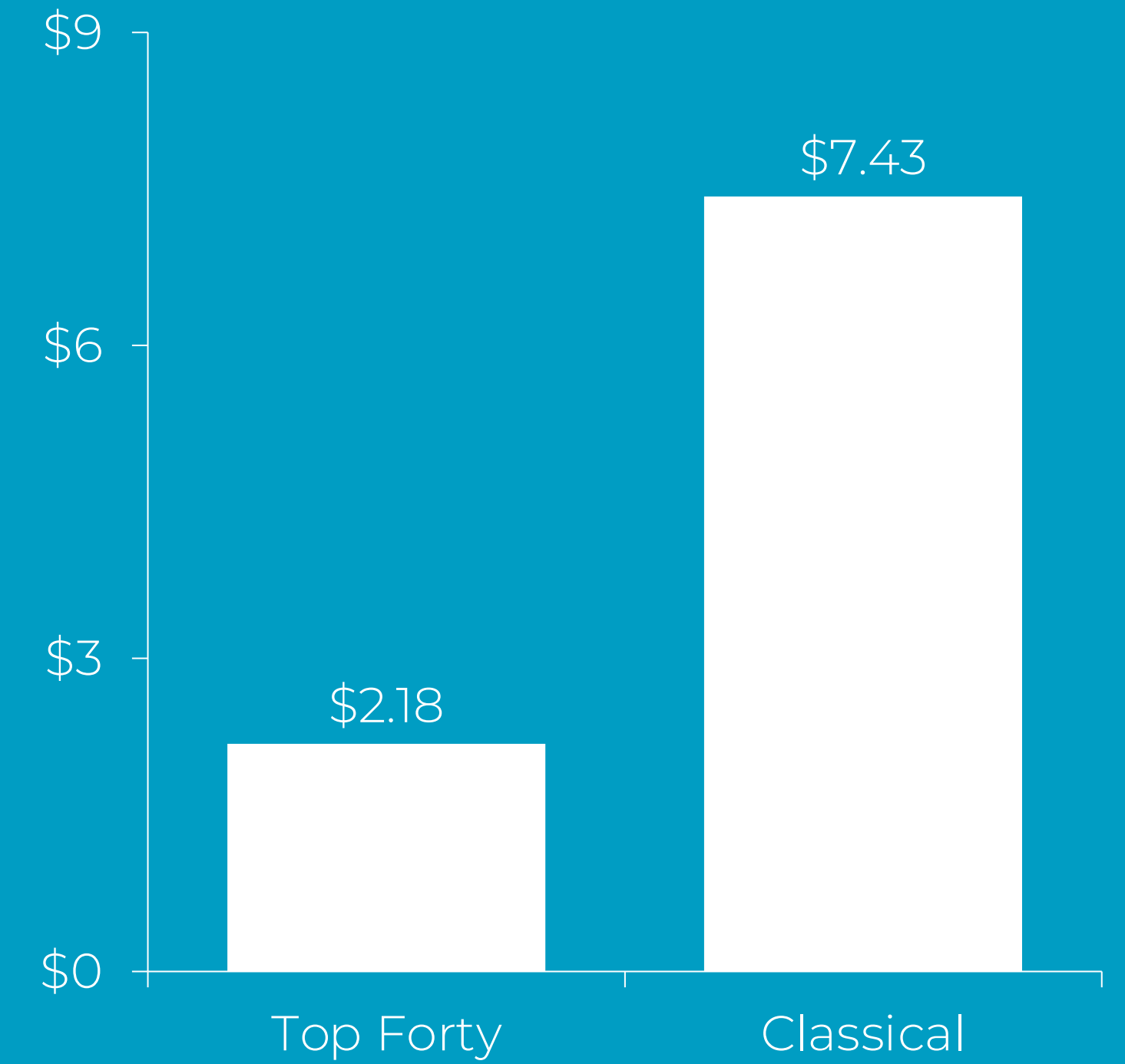
REPRESENTATIVENESS

Evaluation When Package had Product on the...



PRIMING

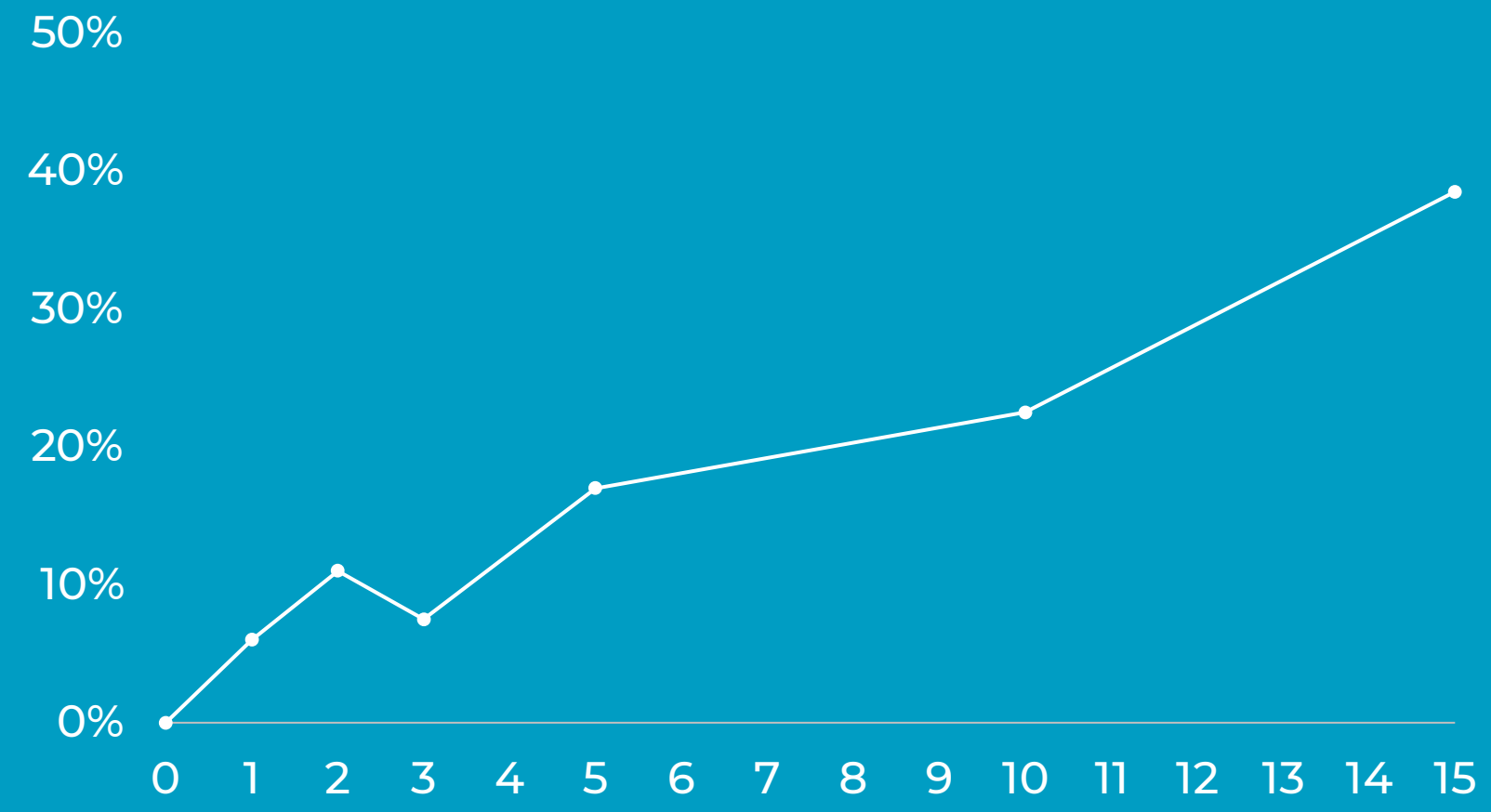
Amount Spent on Wine When the Store Played...





Social Proof

Effect of Group Size on Joining In



HEURISTICS IN ACTION

Authority

9.8 Cleanliness
114 reviews

9.6 Comfort
113 reviews

Social Proof

Liking

Mika
Sweden

"The super sweet staff made us feel at home in just a few minutes and the whole place had a great mellow & relaxing vibe ! There is an overall attention to detail that makes your stay all the more special ! What a treat! Beautiful location with a pool overlooking the beach! Simply perfect !! Thanks so much 😊"

Kaycie
France

Accommodation Type	Sleeps	Price for 7 nights	Your choices	Quantity	
<p>Superior Double Room with Sea View</p> <p>Last booked for your dates 23 hours ago on our site</p> <p>1 large double bed</p> <p>269 feet² Balcony Sea view Pool with a view Air conditioning Private bathroom Flat-screen TV Soundproofing Minibar Free WiFi</p> <p>✓ Free toiletries ✓ Bathrobe ✓ Kitchen ✓ Safety deposit box ✓ Toilet ✓ Bath or shower ✓ Towels ✓ Linen ✓ Socket near the bed ✓ Tile/marble floor ✓ Seating Area ✓ Private entrance ✓ TV ✓ Slippers ✓ Refrigerator ✓ Telephone ✓ Ironing facilities ✓ Satellite channels ✓ Tea/Coffee maker ✓ Heating ✓ Kitchenware ✓ Wake up service/Alarm clock ✓ Electric kettle ✓ Outdoor furniture ✓ Cable channels ✓ Wake-up service ✓ Laptop safe ✓ Wardrobe or closet ✓ Stovetop ✓ Dining area ✓ Dining table ✓ Entire unit located on ground floor ✓ Upper floors accessible by stairs only ✓ Semi-detached ✓ Fold-up bed ✓ Drying rack for clothing ✓ Toilet paper</p> <p>Prices are per room for 7 nights Included: 13 % VAT, 0.5 % City tax</p>	2	<p>£1,092</p> <p>£817 [?]</p> <p>includes taxes and charges</p> <p>Travel Offer</p>	<p>☑ Breakfast £9 (optional) [?]</p> <p>☑ FREE cancellation before 23:59 on 27 September 2020</p> <p>☑ NO PREPAYMENT NEEDED - pay at the property</p> <p>Only 1 room left on our site</p>	0	<p>I'll reserve</p> <ul style="list-style-type: none"> • Confirmation is immediate • No registration required • No booking or credit card fees!

Scarcity

Reciprocity

Commitment

HEURISTICS IN ACTION

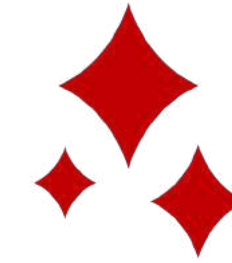
Present Bias
If you put it off, you're less likely to actually do it



Patrick, you still have **29 days left** to enjoy your Prime benefits for free

Use your benefits today >

Distraction
This button is designed to look like the main one



Loss Aversion
Reminding you of everything you'll lose if you leave



Super-fast delivery
Unlimited Prime Delivery on millions of items



Prime Video
Stream thousands of movies and TV shows



Amazon Music Prime
All of the music you love + top podcasts, ad-free



Prime Reading
Enjoy unlimited reading on any device



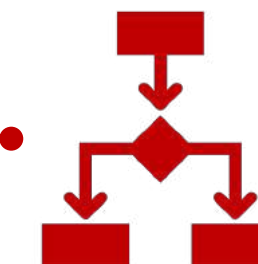
Try Before You Buy
Try before you buy, with free returns



Prime Gaming
Bonus game content every month, plus surprises



Decoy Effect
More buttons make 'cancel' less likely



Left-to-Right Bias
Our eyes look at the bottom right last of all



Remind me later

Keep Membership

Continue to cancel

THERE ARE MANY WAYS TO NUDGE



¥2.15



¥2.58

THERE ARE MANY WAYS TO NUDGE

Venue A (the focal venue)			Venue B
No couple	A couple in the photo		No couple
	Neutral pose	Happy pose	
			

53%

24%

29%

THERE ARE MANY WAYS TO NUDGE

57%

This website uses cookies!

This website requires some cookies to function. If you allow us, we will additionally use other cookies to use them for marketing purposes. You can change or revoke your consent later at any time.

Essential Cookies +

Marketing Cookies (optional) +

(a) Button-Same

This website uses cookies!

This website requires some cookies to function. If you allow us, we will additionally use other cookies to use them for marketing purposes. You can change or revoke your consent later at any time.

Essential Cookies +

Marketing Cookies (optional) +

(b) Button-Highlight-Accept

65%

43%

This website uses cookies!

This website requires some cookies to function. If you allow us, we will additionally use other cookies to use them for marketing purposes. You can change or revoke your consent later at any time.

Essential Cookies +

Marketing Cookies (optional) +

(c) Button-Highlight-Reject

This website uses cookies!

This website requires some cookies to function. If you allow us, we will additionally use other cookies to use them for marketing purposes. You can change or revoke your consent later at any time. Here, you can reject the storage and use of marketing cookies: [reject](#).

Essential Cookies +

Marketing Cookies (optional) +

(d) Link-End

90%

This website uses cookies!

This website requires some cookies to function. If you allow us, we will additionally use other cookies to use them for marketing purposes. Here, you can [reject](#) the storage and use of marketing cookies. You can change or revoke your consent later at any time.

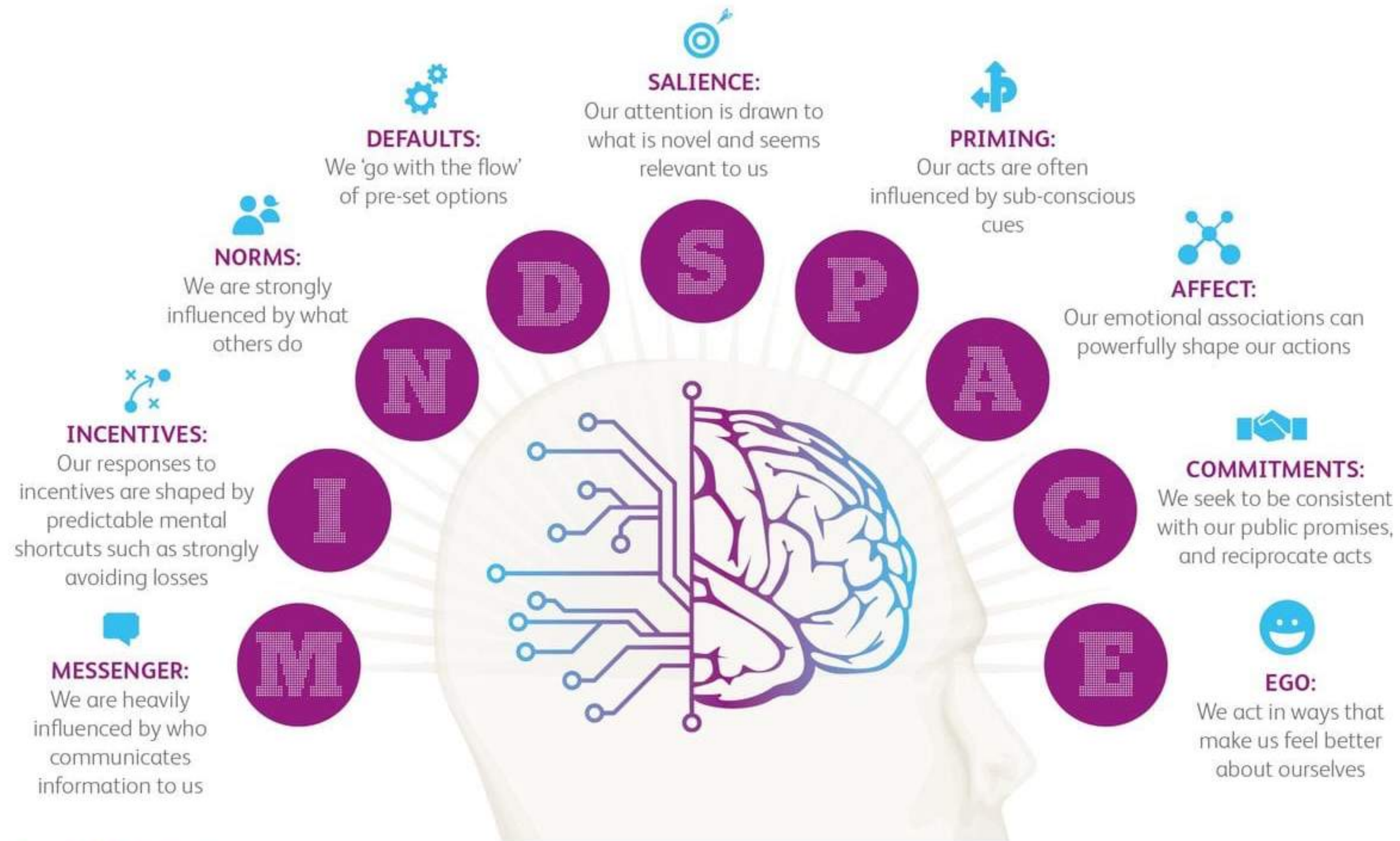
Essential Cookies +

Marketing Cookies (optional) +

(e) Link-Middle

90%

MINDSPACE



BearingPoint. Institute

Source: 'Influencing behaviour: The mindspace way', Journal of Economic Psychology, New York, NY, USA, P Dolan, M Hallsworth, D Halpern, D King, R Metcalfe, I Vlaev. Volume 31, Issue 1, pages 264-277, 02/12 http://bit.ly/JOEP_MINDSPACE

EVEN WHEN YOU THINK WE'D BE RATIONAL...

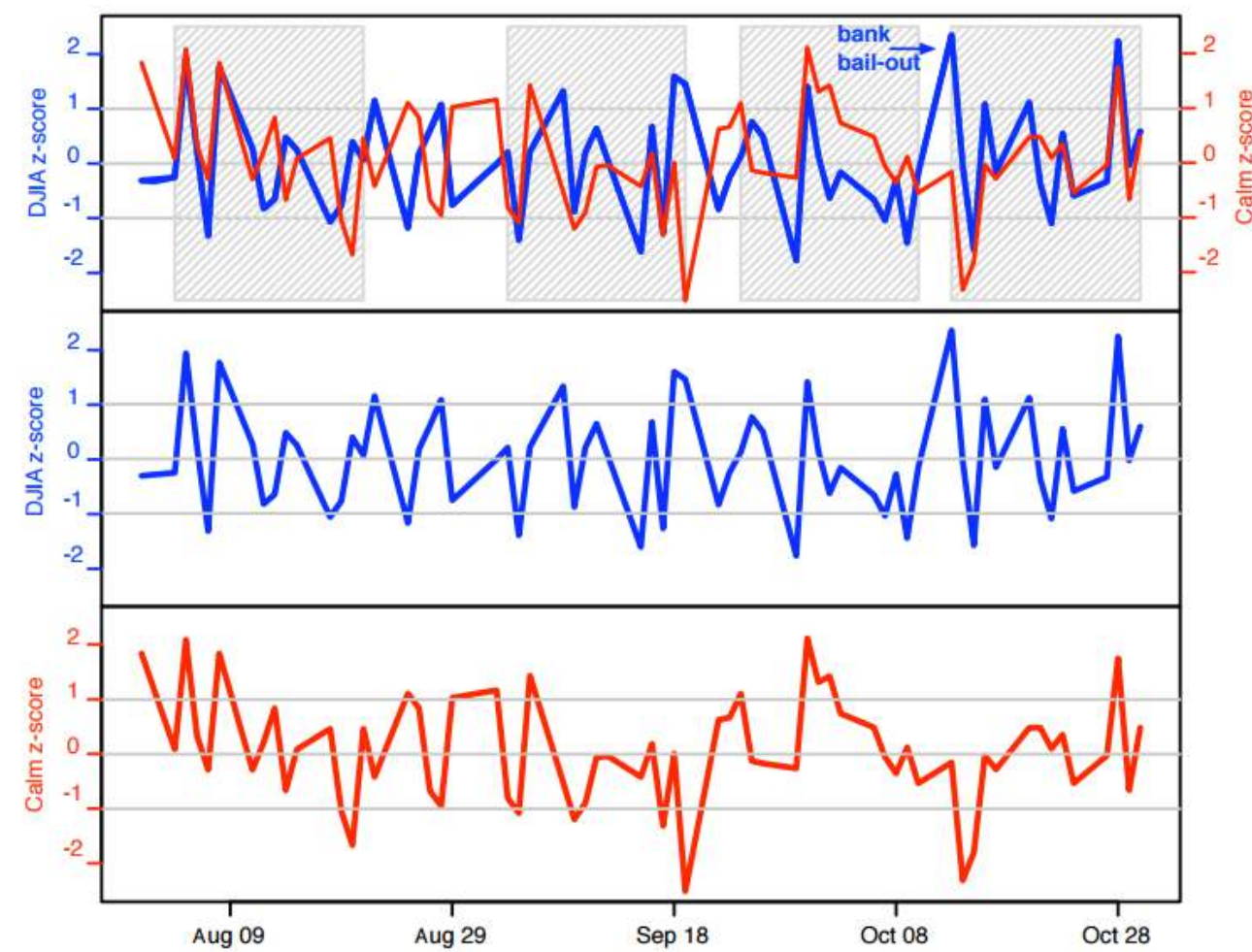


Fig. 3. A panel of three graphs. The top graph shows the overlap of the day-to-day difference of DJIA values (blue: Z_{D_t}) with the GPOMS' Calm time series (red: Z_{X_t}) that has been lagged by 3 days. Where the two graphs overlap the Calm time series predict changes in the DJIA closing values that occur 3 days later. Areas of significant congruence are marked by gray areas. The middle and bottom graphs show the separate DJIA and GPOMS' Calm time series.

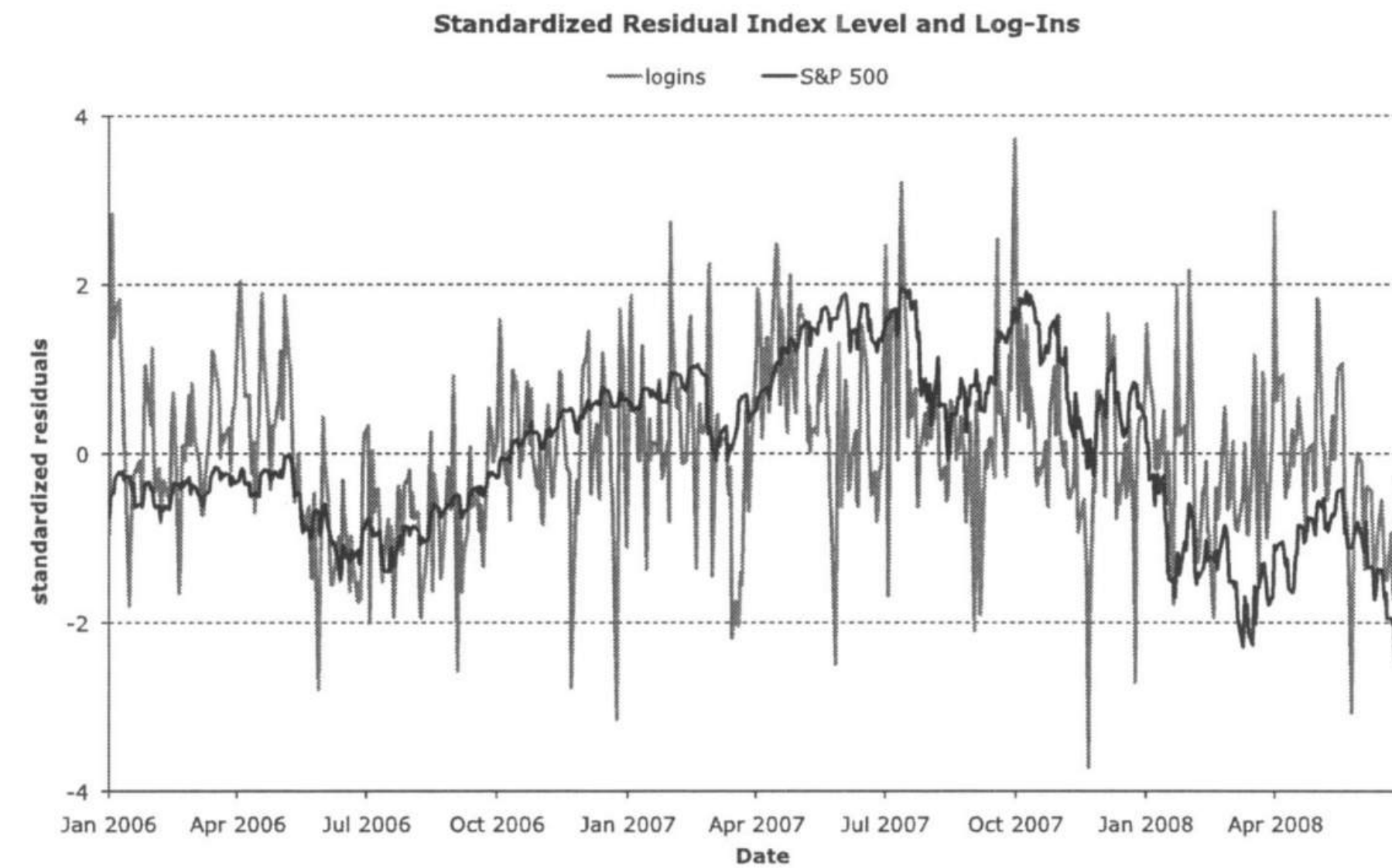
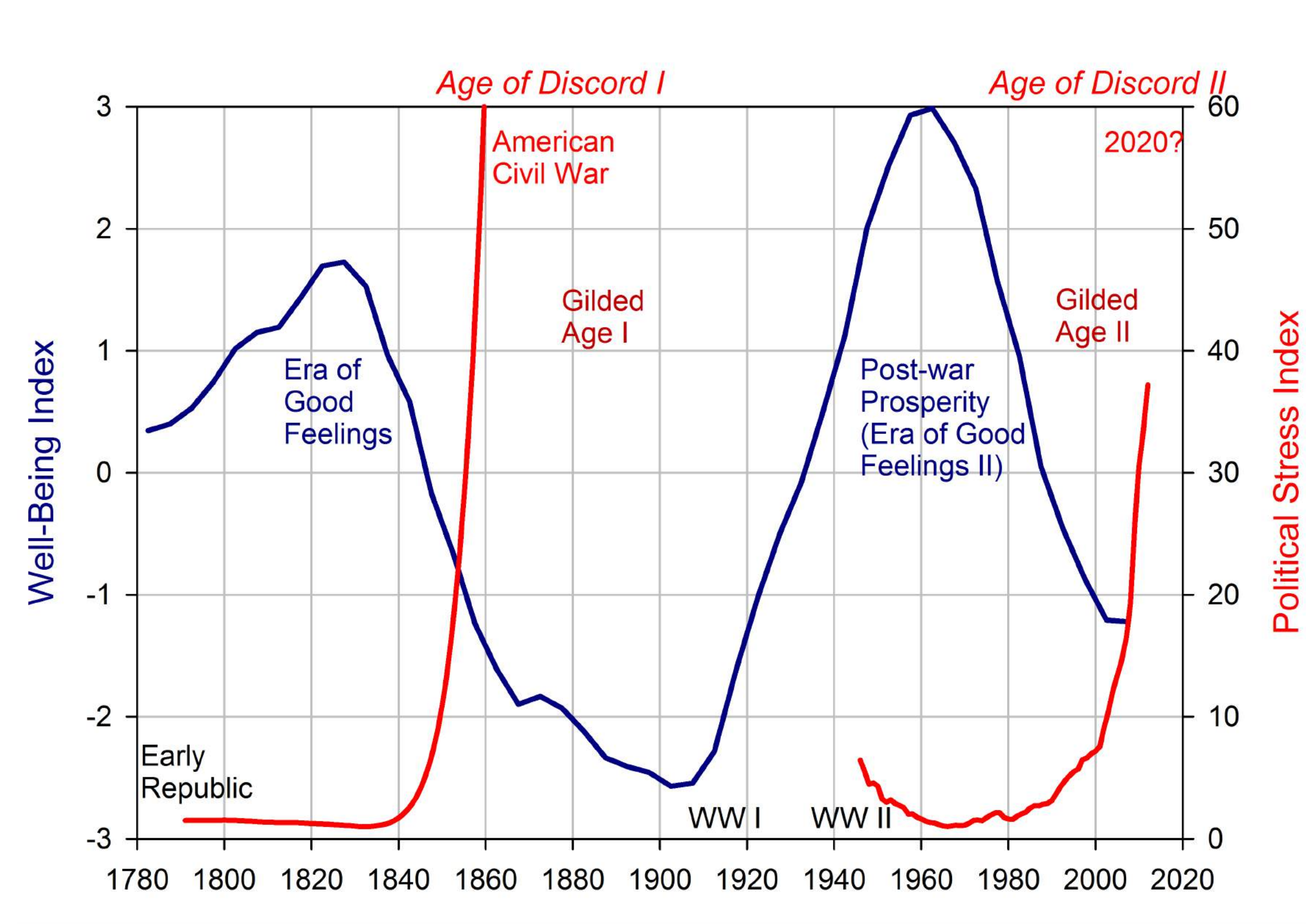
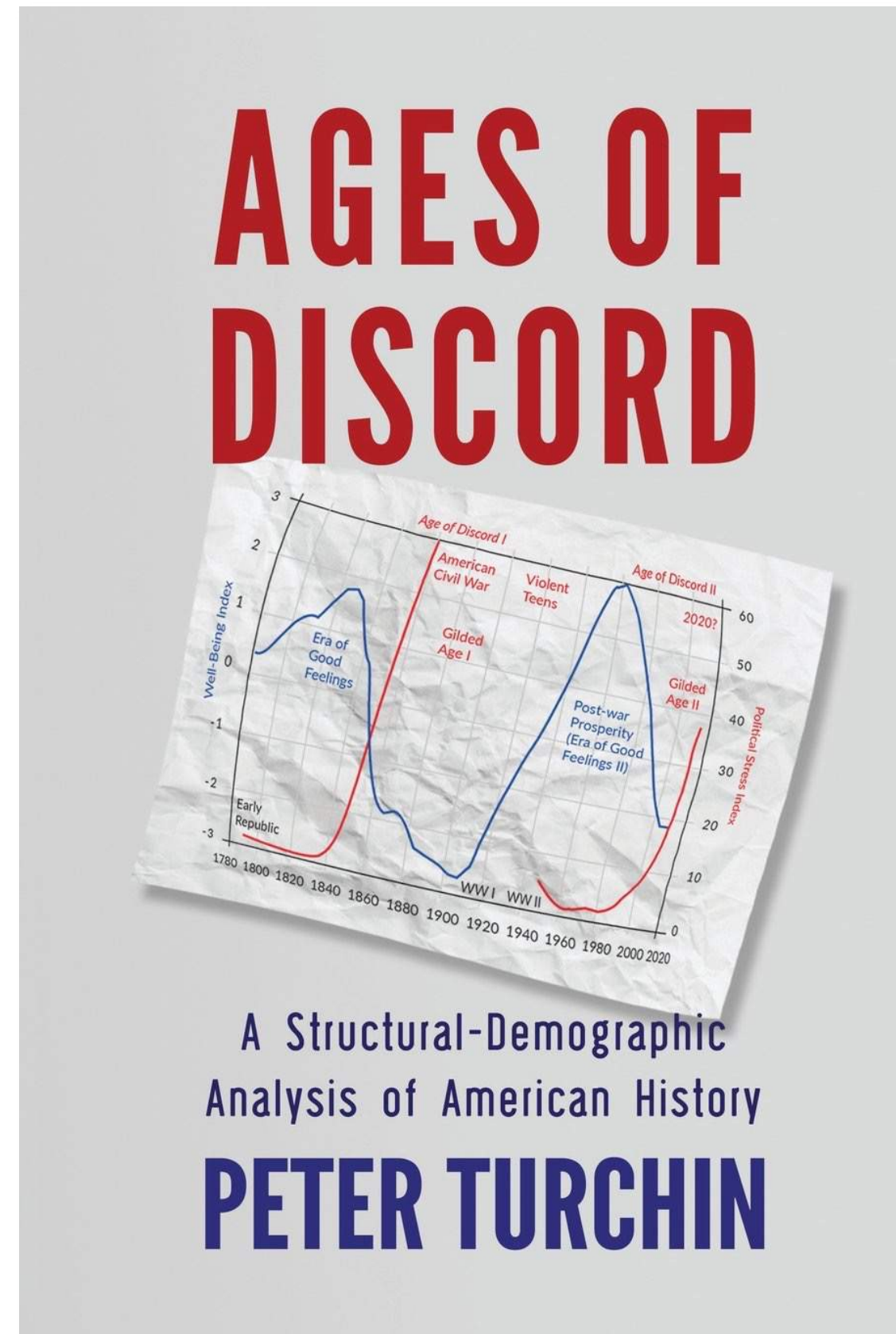
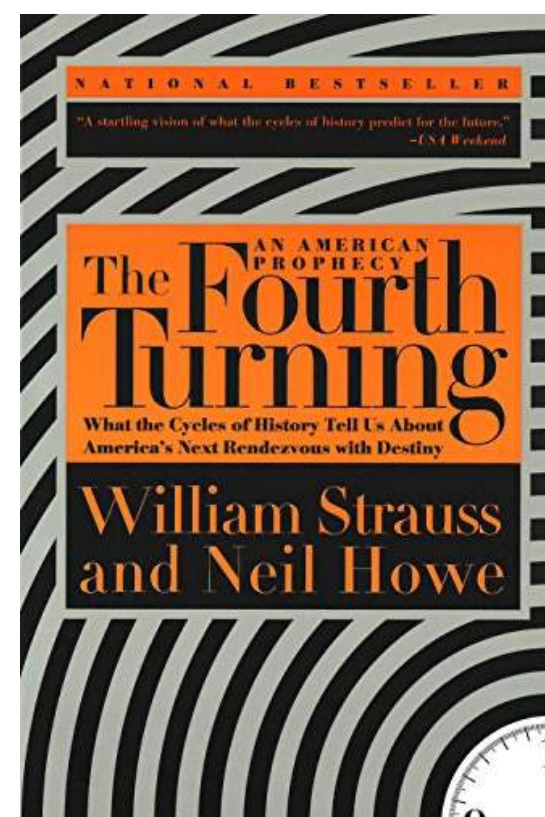
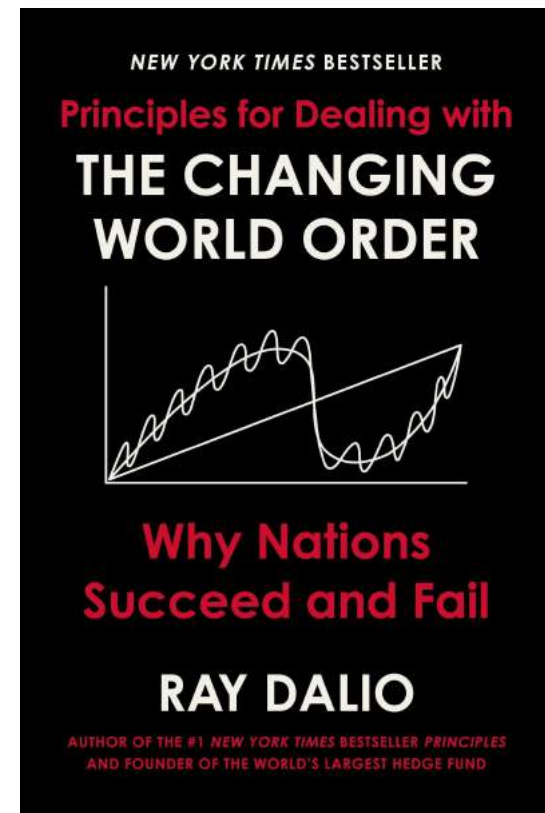


Fig. 3 S&P 500 index and Vanguard account logins. The figure plots standardized residuals from the following two regressions: $LOGINS_t = \alpha_0 + \sum_{i=TWR} \alpha_{1,i} DAY_{i,t} + \alpha_2 TREND_t + \alpha_3 VOLUME_t + e_t$ and $INDEX_t = b_0 + \sum_{i=TWR} b_{1,i} DAY_{i,t} + b_2 TREND_t + e_t$ where $LOGINS_t$ is the daily number of Vanguard investor account logins, $DAY_{i,t}$ are day-of-the-week dummy variables, $TREND_t$ is a linear time trend, $VOLUME_t$ is the S&P 500 trading volume, and $INDEX_t$ is the level of the S&P 500 stock index. The sample period is January 2, 2006 to June 30, 2008

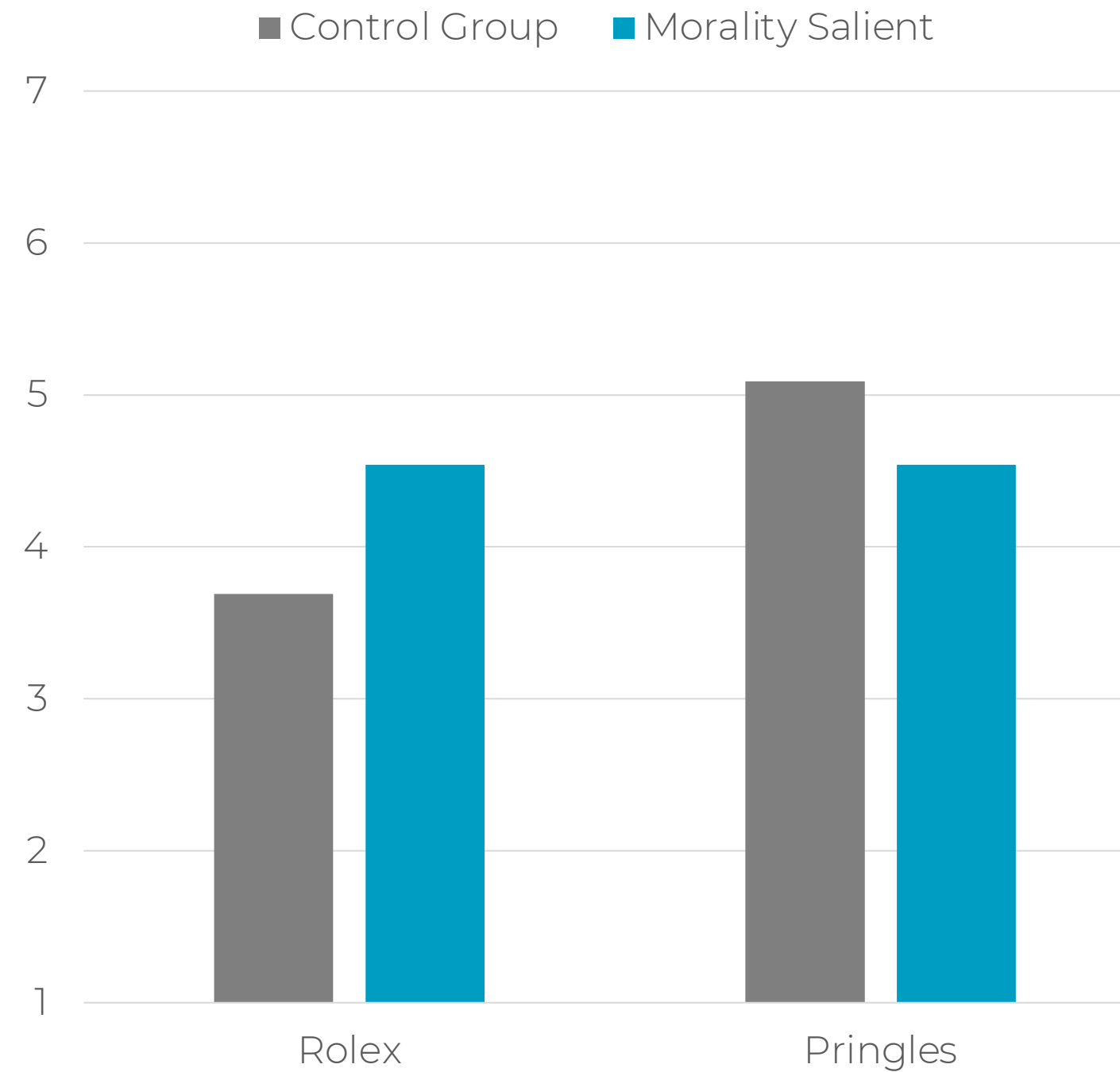
WE'VE BEEN HERE BEFORE!



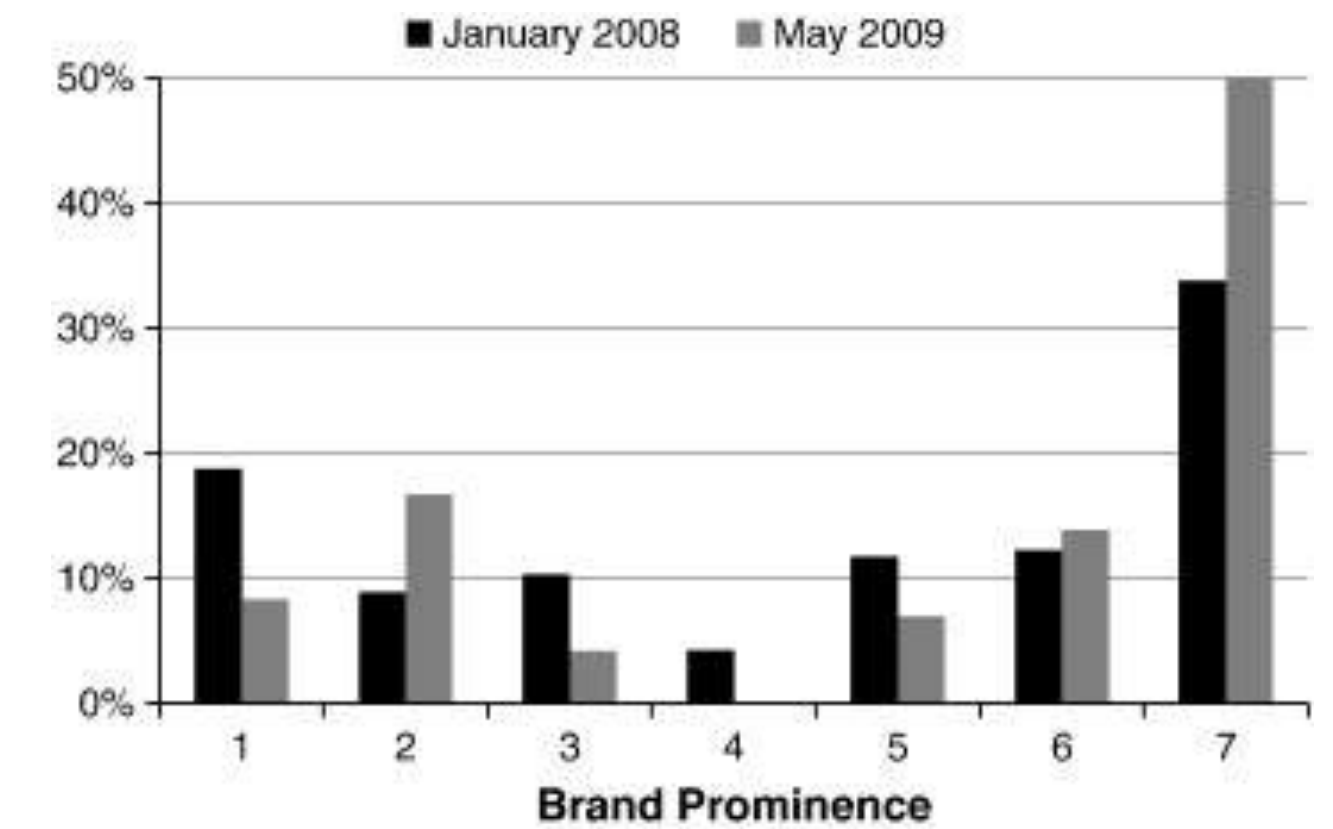


STATUS

Average Purchase Intention
("He Who Dies with the Most Toys Wins")



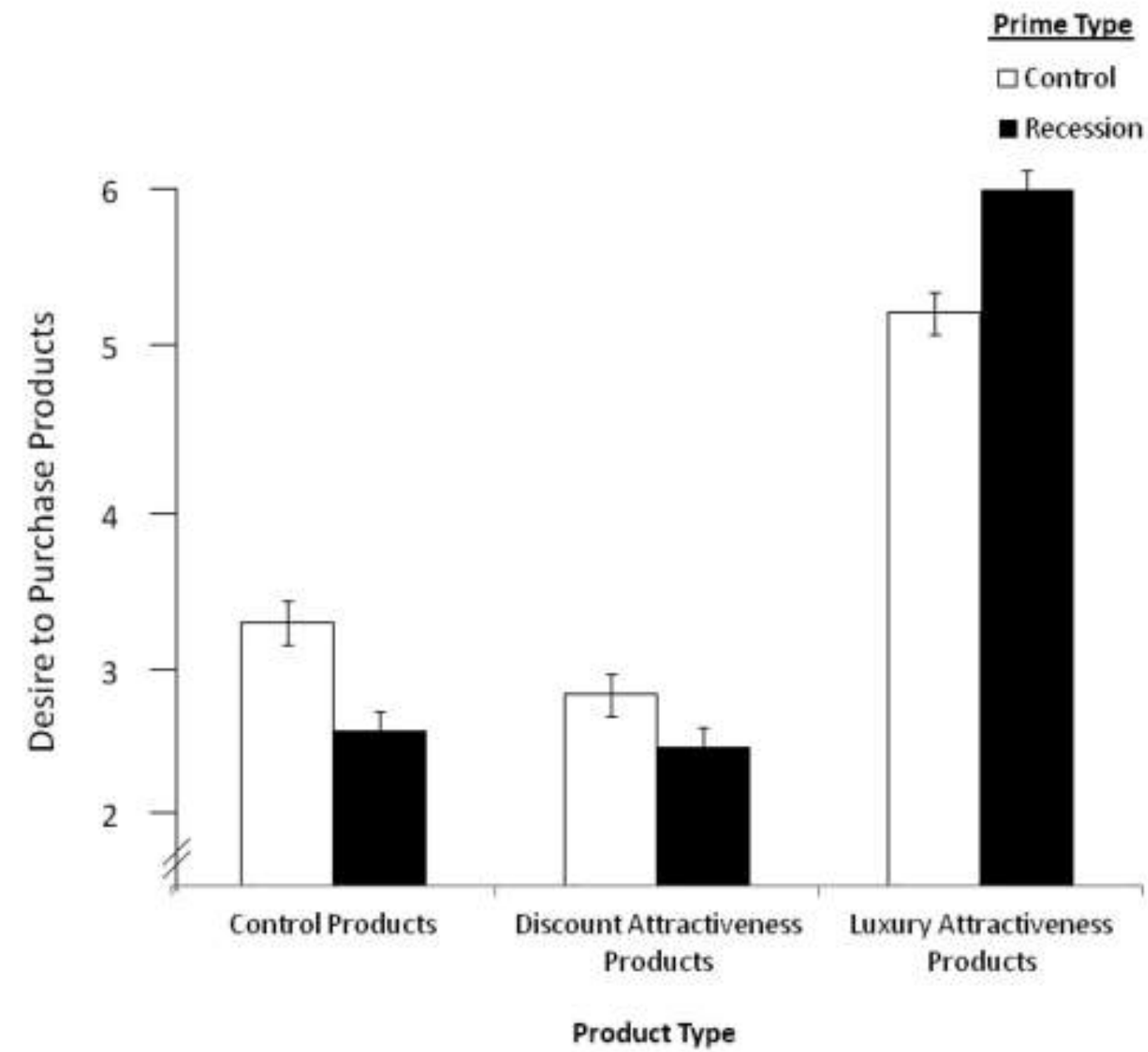
"Individuals may avoid experiencing existential anxiety by making an enduring mark on the world, for example, through acquisition of items that symbolize high value within their culture."



GUCCI



LIPSTICK EFFECT



+150%



LUXURY

Watches of Switzerland sales surge as luxury demand 'remains robust'

By Luke Tugby | 16 August 2022

THE HAVES AND THE HAVE-YACHTS

Luxury ships attract outrage and political scrutiny. The ultra-rich are buying them in record numbers.

By Evan Osnos

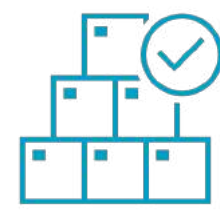
July 18, 2022



The Rhett Butler Effect



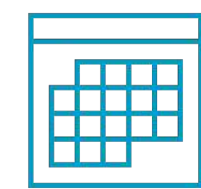
STOCK- PILING



A study of COVID-19 behaviour found that people [stockpiled](#), on average, approximately 6 items, and toilet paper was the item most commonly procured. Approximately 25% of the sample acquired a gun or other weapon in response to the pandemic and approximately 20% of participants stockpiled gold or other precious metals.

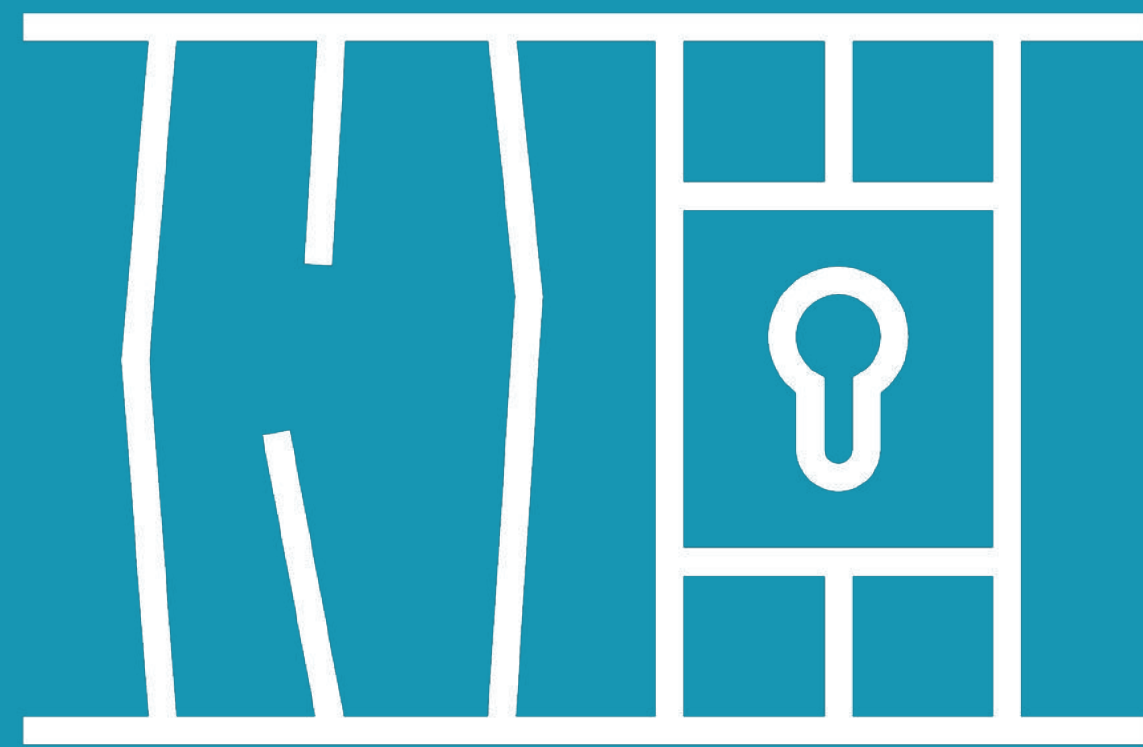


Gold is a proven [hedge](#) against inflation – although note that gold jewellery is purchased more for hedonic and symbolic purposes, while coins and bars are purchased for utilitarian investment goals.

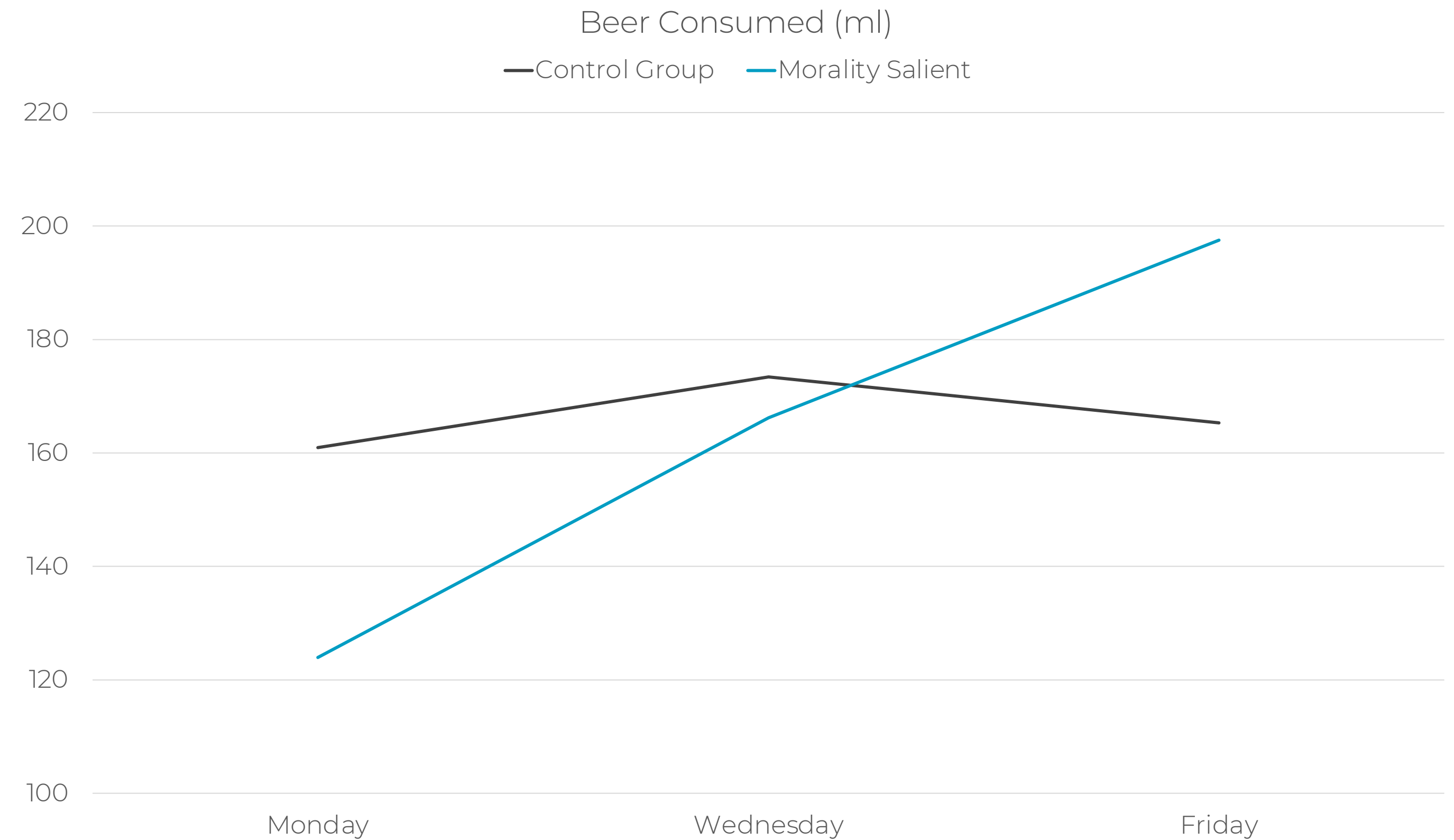


There is empirical evidence for an [intertemporal substitution effect](#), where people spend more money today because they expect goods to be more expensive tomorrow. Other studies have also shown that expenditure increases during inflation, perhaps since people ‘feel’ they have more money to spend.

“LET US EAT AND DRINK,
FOR TOMORROW WE DIE.”

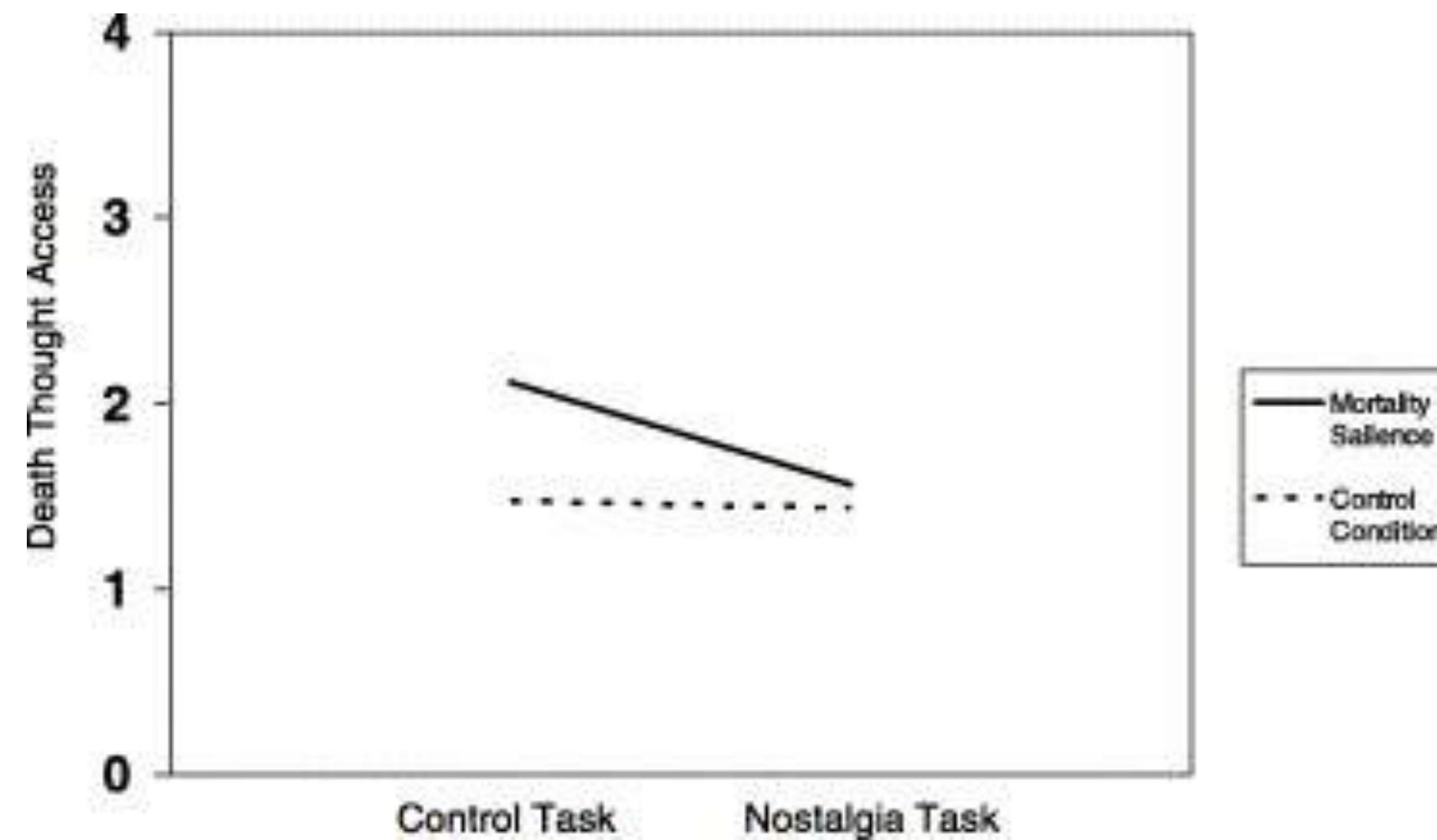


ESCAPE





NOSTALGIA



“In the past year a more unpredictable and unstable world is shaping the future, leading people to seek refuge in a more comfortable past. Zoomers are fascinated by the pre-internet world, we have seen that with the Y2K revival and the 80’s revival before that, both of which are still popular thanks to TikTok trends (focused on music and fashion) and popular shows.”

OF COURSE, THERE IS MORE ONLINE SHOPPING

Amazon reports biggest prime day in history

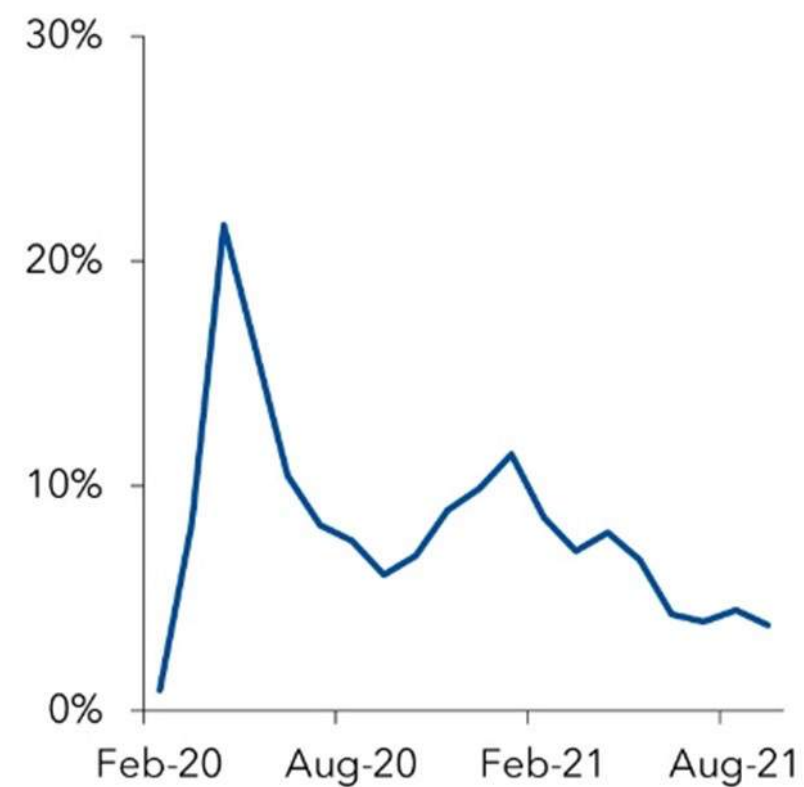
15 July, 2022 | by Natalie Fresen

Amazon shoppers bought more than 300 million items during this year's Prime Day sale, up from roughly 250 million in 2021, making it the biggest Prime Day event in Amazon's history, the company announced Thursday.

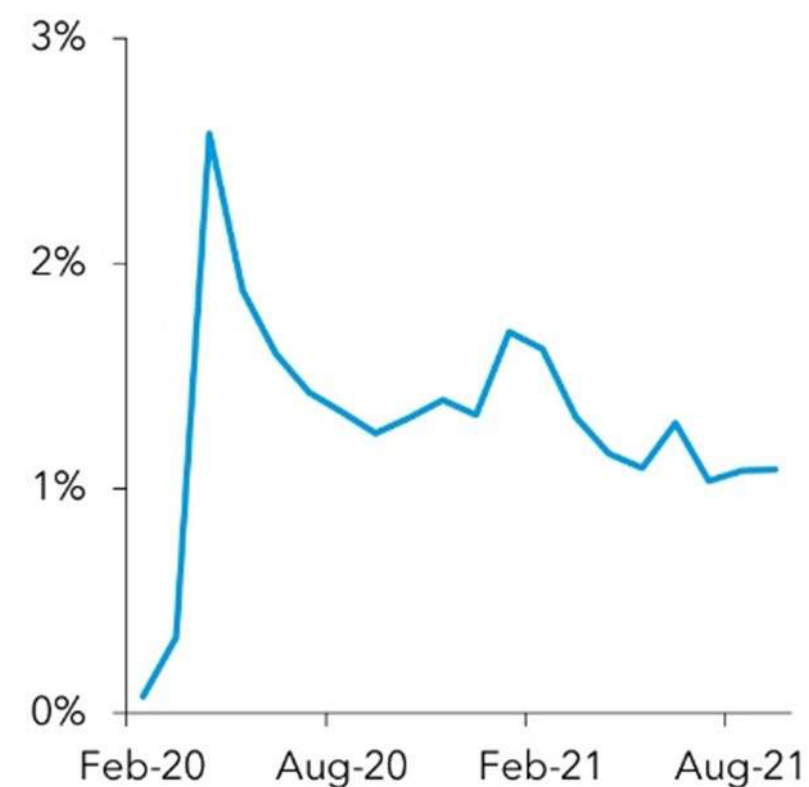
Closely related

Online sales closely tracked mobility trends during the pandemic. (deviation from trends)

Time at home, Google Mobility



Online sales share of total



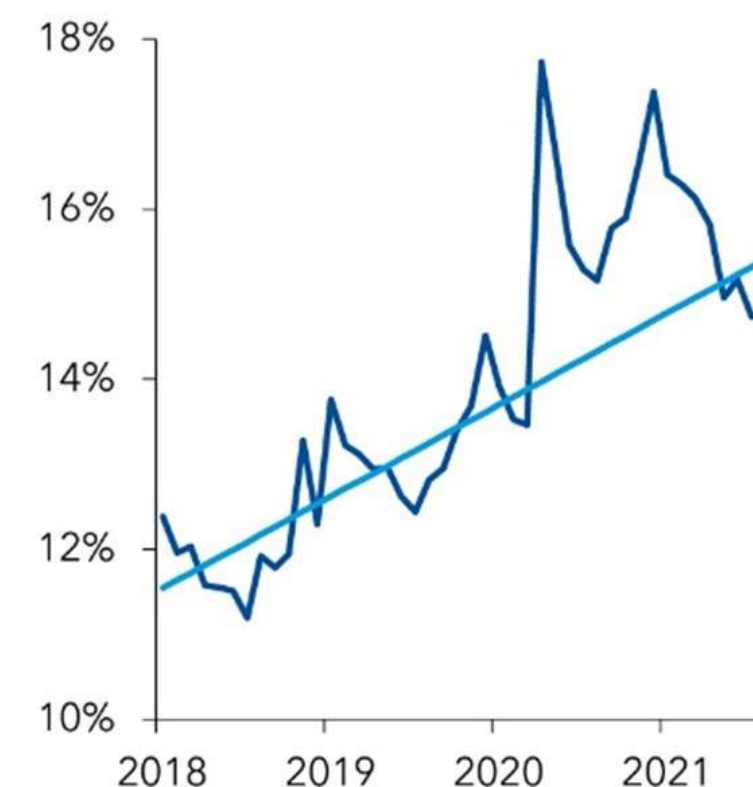
Source: Google Community Mobility Reports and Mastercard Economics Institute.

IMF

Online retail

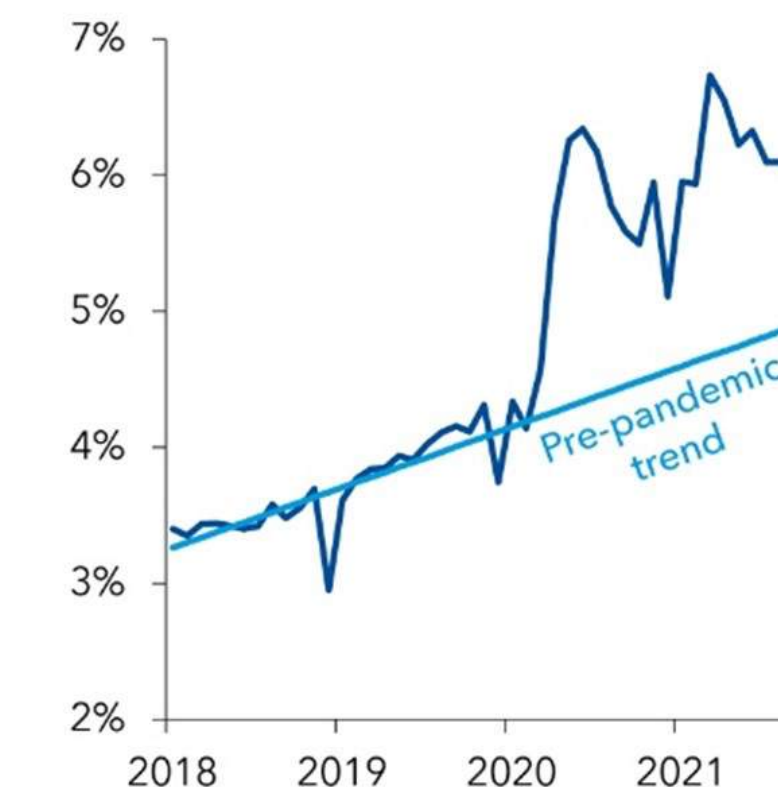
The share of retail done online is settling back in line with pre-pandemic trends across various economies.

United States, retail online share



Source: Mastercard Economics Institute.

Brazil, retail online share



IMF

...AND MORE PRICE-CONSCIOUSNESS



Searches for **cheap holidays** have grown globally by over 400% year over year.

TOP SEARCHES INCLUDE:

cheap holidays 2022
cheap holidays abroad
cheap holidays to turkey
cheap holidays to spain

Searches for **designer outlet** have grown globally by over 90% year over year.

TOP SEARCHES INCLUDE:

mcarthurlen designer outlet
designer outlet roermond
york designer outlet

Searches for **cheap and best** have grown globally by over 40% year over year.

TOP SEARCHES INCLUDE:

cheap and best salon
cheap and best restaurants near me
cheap and best mobile
cheap and best laptop

Searches for **specials this week** have grown globally by over 60% year over year.

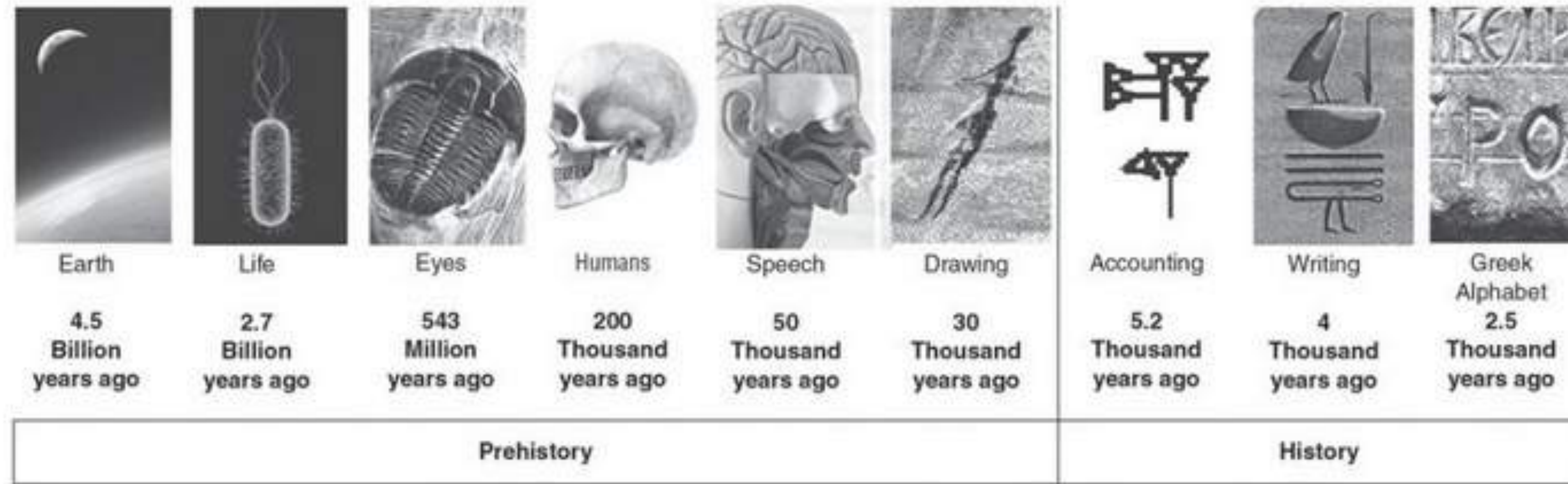
TOP SEARCHES INCLUDE:

shoprite specials this week
pick n pay specials this week
aldi specials this week
coles specials this week

Walmart Jumps Most Since 2020 After Tempering Gloom Over Profit

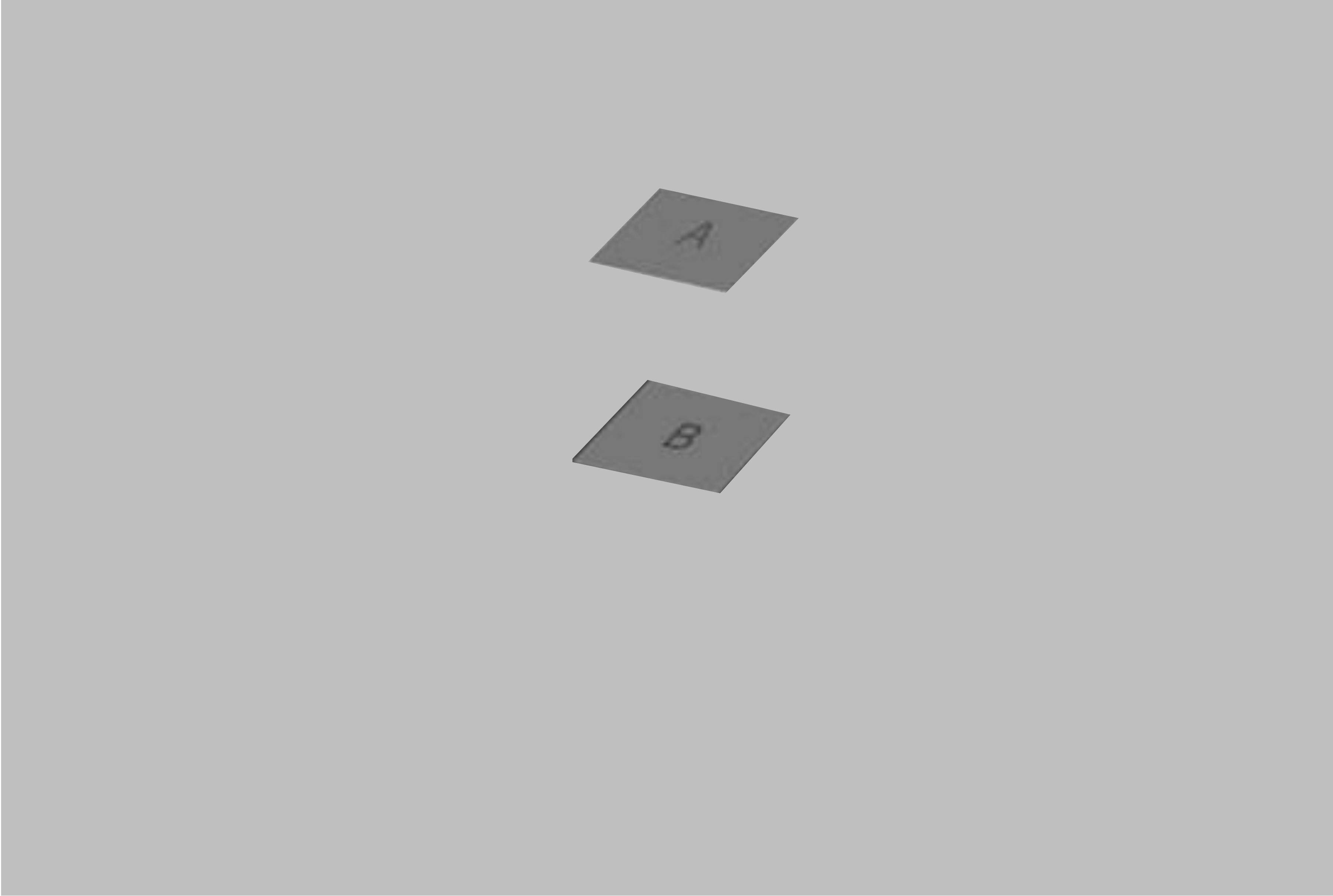
- Company sees progress on inventory bloat, supply-chain costs
- CEO touts boost from wealthier customers, falling fuel prices
- During times of economic crises, consumers do tend to be more cautious and reflective on average, for example doing more research and price-comparison (see Puelles, Diaz-Bustamante & Carcelen, 2016).
- Einarsdottir (2016) summarised that economic crises result in more brand switching, more private label purchases, more retailer disloyalty, more price consciousness, more importance on quality and durability, fewer purchases in general, more postponing of purchases and hanging on to current goods, less impulsive buying, and more simplicity-seeking (including growing your own food, cooking at home, and focusing on health and fitness).

NUMBERS ARE FAIRLY NEW TO US



A woman spills coffee on herself at McDonalds, and requires a skin graft. She decides to sue McDonalds. How much compensation should she get?





A

B



THE SAME APPLIES TO PRICES

	£4			£4	



BURGESS

BURGESS



In 1994, Stella Liebeck asked for \$2.9m. She got \$640k - well above the norm. The skin graft cost \$11. Malouff and Schutte (1989) found the amount awarded in a case is often anchored towards the lawyer's demands.



ANCHORING IN ACTION

A stall in California sold CDs next to t-shirts; customers could pay whatever they wanted for the CDs.



\$7.29



\$9.00

THE DECOY EFFECT



How can 'reference prices' be improved?



CONGRUENCE EFFECT

Was Now
~~\$10~~ \$5

Was Now
\$10 \$5

NUMERICAL COGNITION

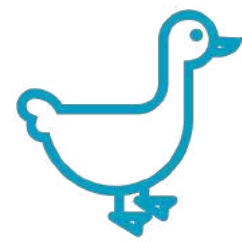


\$3,500,000



\$3,617,265

INCREASING PRICE TO -99 CAN INCREASE SALES!



Representativeness: We associate prices ending in -99s with discounts, so when we see a -99 ending, we assume it must be a promotion.



Anchoring: We anchor to the first digit we see on the left, and fail to fully adjust for those on the right (so £3.99 'feels' less than £4.00).



Obfuscation: When the digits on the right are printed in a smaller font (e.g., £3.⁹⁹), the right-digit bias is exacerbated.



Phonemes: The lighter, higher sounds in ninety-nine (like “teeny tiny”) are associated with smallness.

We assume yellow is a discount, even when it isn't

*** Clearance**

UNIT PRICE
50.00¢
PER EACH

WAS:
97¢

RETAIL PRICE
50¢

16 OZ ALCOHOL BASED

1 

0230-0007-0041 88492077012

RED 06/28/21 Cap 6 683604436



THE VALUE OF 'FREE'

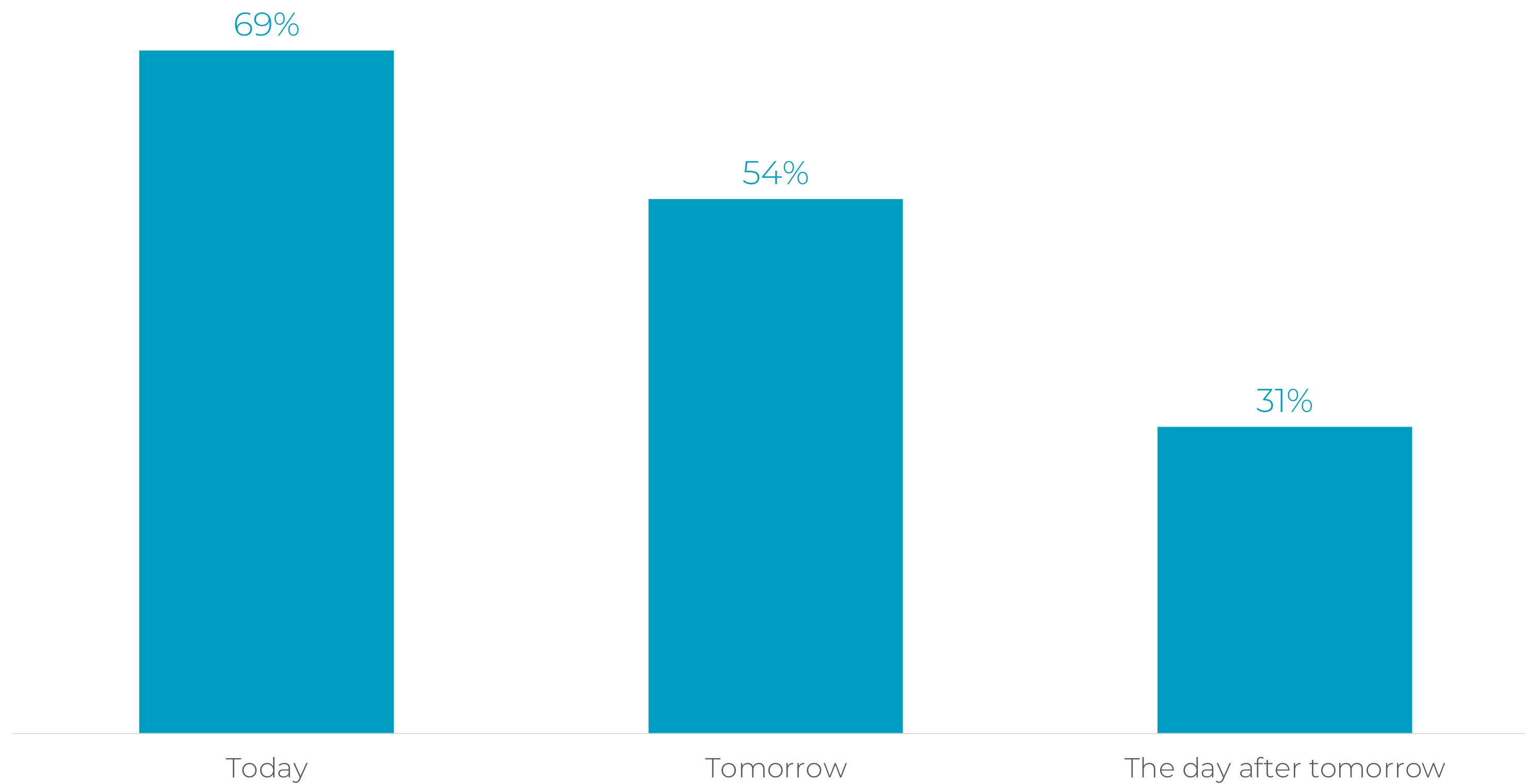


Raghubir (2004) showed that once a “free” product has been bundled together with another product and offered for one price, consumers are willing to pay less for the free product when it is sold alone.

Kamins, Folkes, and Fedorikhin (2009) found that describing one of the products in a bundle as free decreased the price consumers were willing to pay for each product when these were sold individually.

TIME DISCOUNTING

% Choosing a More Enjoyable Movie to Watch...



\$15
today
=
\$20
in a month

PRICE FAIRNESS



PRICE FAIRNESS

- If people feel they have been unjustly treated, they may shop elsewhere, even if they end up paying higher prices (Bechwati & Morrin, 2003).
- When a price goes up, consumers automatically assume unfair motives, such as profits (Bolton et al., 2003).
- A price rise is seen as fair when covering necessary costs, but not when it increases profits (Kahneman et al., 1986).
- When rising a price, estimates of profits can be reduced by explicitly mentioning labour costs - the more detail the better (Bolton et al., 2003).
- Describing costs which are beyond one's control (e.g. climate) make for a more acceptable price increase (Vaidyanathan & Aggarwal, 2003).
- As does the price increase benefitting poor agents (e.g. Fair Trade; Gielissen et al., 2008).

THE IMPORTANCE OF ATTENTION



“Occasionally we attach signs marked ‘Everyday Low Price’ in front of two randomly selected brands in several product categories throughout our store, leaving their prices unchanged... sales typically double for those brands...”

Manager of the H.E.B. Grocery Co.
(From Inman et al., 1990)

SO...



Provide a Route to
Status and Control



Provide Certainty
and Escape



Nudge Perceptions
of Good Value

IT'S NOT ONE-SIZE-FITS-ALL

the trusted way to borrow cash

25 September 2003

Account Number

BUSINESS HOURS
MON - FRI 08:30 - 16:30
SAT 08:00 - 12:00

A low rate for you.

Congratulations! You are now eligible for a special interest rate on a cash loan from (). This is a limited time offer, so please come in by 31 October 2003

You can use this cash to pay off a more expensive debt, or for anything else you want.

Enjoy low monthly repayments with this offer! For example:

Interest Rate	Loan Amount	Loan Term	Monthly Repayment
3.99%	R500	4 Months	R144.95
3.99%	R1000	4 Months	R289.90
3.99%	R2000	4 Months	R579.80
3.99%	R4000	4 Months	R1159.60

LOAN AVAILABILITY SUBJECT TO TERMS & CONDITIONS


Loans available in other amounts. There are no hidden costs. What you see is what you pay.

If you borrow from us you will pay R840.40 less in total on a R1000.00, 4 month loan.

How to apply:
Bring your ID book and latest payslip to your usual branch, by **31 October 2003** and ask for I

Customer Consultant

P.S. Unfortunately, if you have already taken a loan since the date this letter was issued, you do not qualify for this offer. Comparison based on a competitor's interest rate of 25%.



the trusted way to borrow cash

25 September 2003

Account Number

BUSINESS HOURS
MON - FRI 08:30 - 16:30
SAT 08:00 - 12:00

A special rate for you.

Dear ,

Congratulations! You are now eligible for a special interest rate on a cash loan from (). This is a limited time offer, so please come in by 31 October 2003

You can use this cash to pay off a more expensive debt, or for anything else you want.

Enjoy low monthly repayments with this offer! Here is one example of a loan you can get under this offer:

Loan Amount	Loan Term	Monthly Repayment
R1000.00	4 Months	R379.90


LOAN AVAILABILITY SUBJECT TO TERMS & CONDITIONS

Loans available in other amounts. There are no hidden costs. What you see is what you pay.

How to apply:
Bring your ID book and latest payslip to your usual branch, by **31 October 2003** and ask for

Customer Consultant

P.S. Unfortunately, if you have already taken a loan since the date this letter was issued, you do not qualify for this offer.



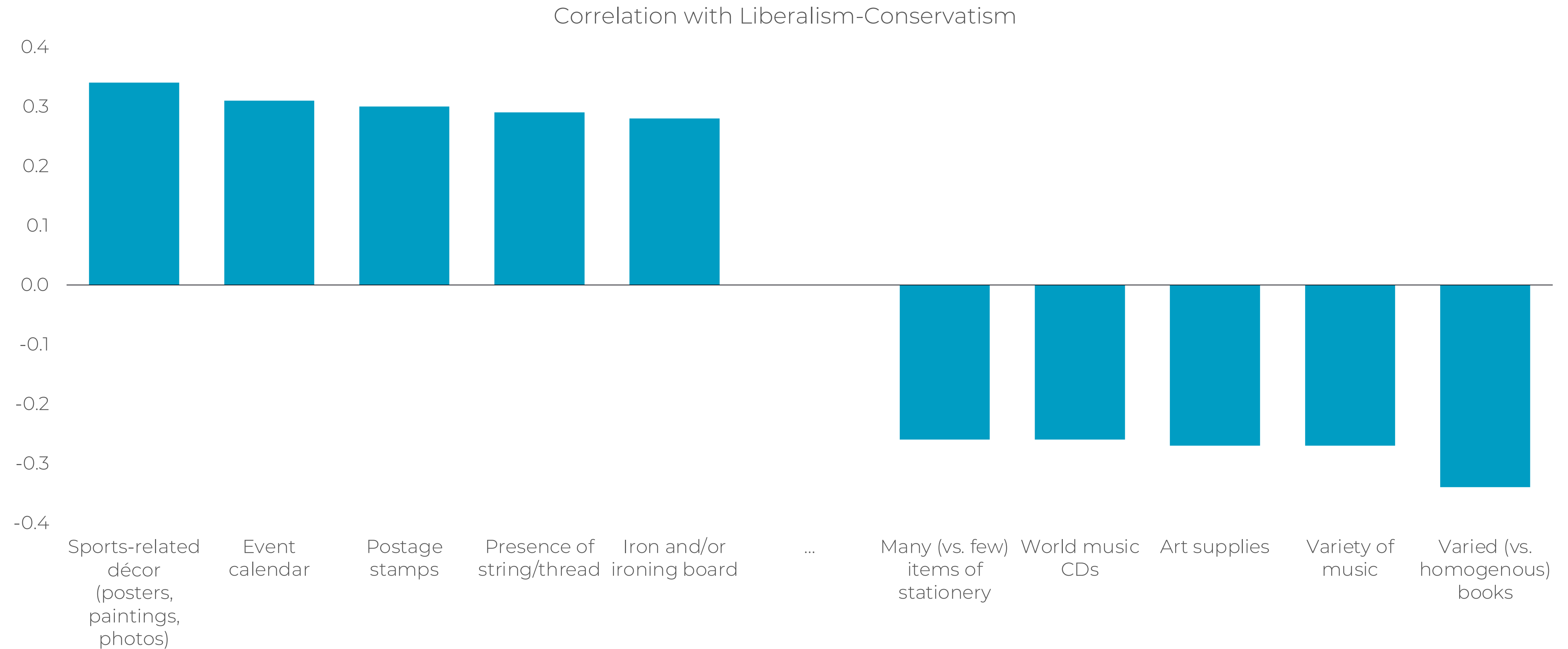
DIFFERENT PSYCHOLOGICAL TYPES EXIST

What type of person lives in this bedroom...?



Gosling, S. D., Ko, S. J., Mannarelli, T., & Morris, M. E. (2002). A room with a cue: personality judgments based on offices and bedrooms. *Journal of personality and social psychology*, 82(3), 379.

PERSONALITY IS OBSERVABLE THROUGH CUES





DIGITAL FOOTPRINTS

Openness



Conscientiousness



Extraversion



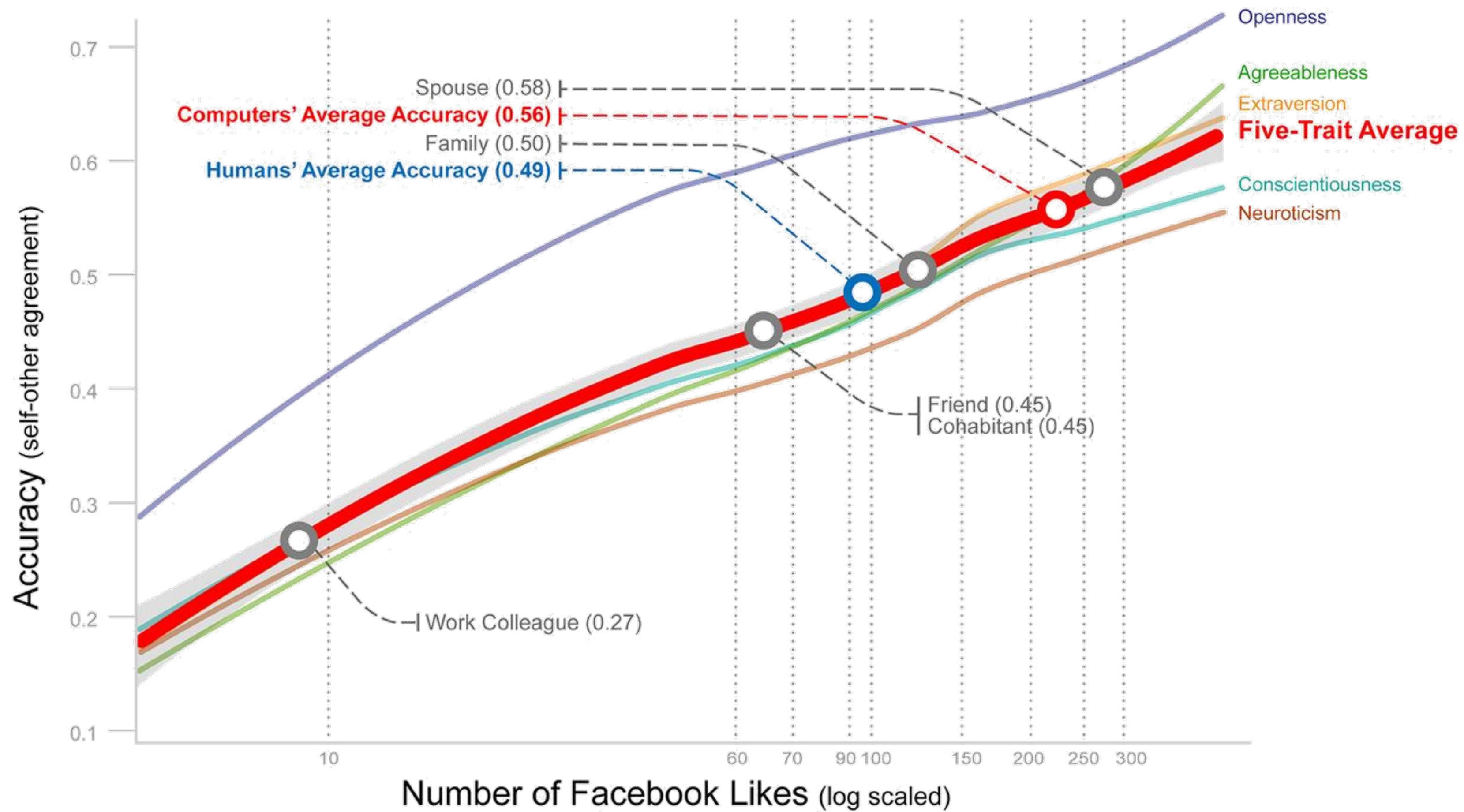
Agreeableness



Neuroticism



THEY CAN BE QUITE ACCURATE



RESONANT AESTHETICS



Openness
($r=.354$, $r=.301$)

Conscientiousness
($r=.242$, $r=.157$)

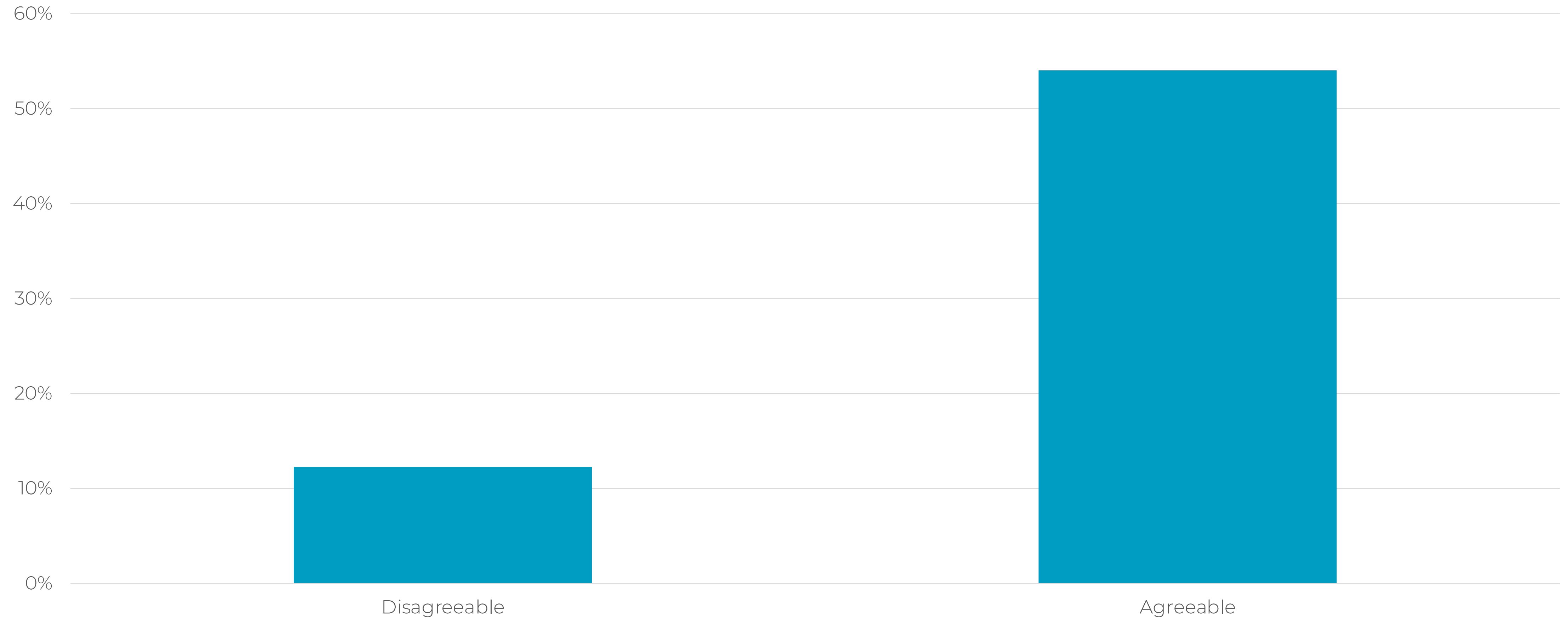
Extraversion
($r=.285$, $r=.261$)

Disagreeableness
($r=.261$, $r=.210$)

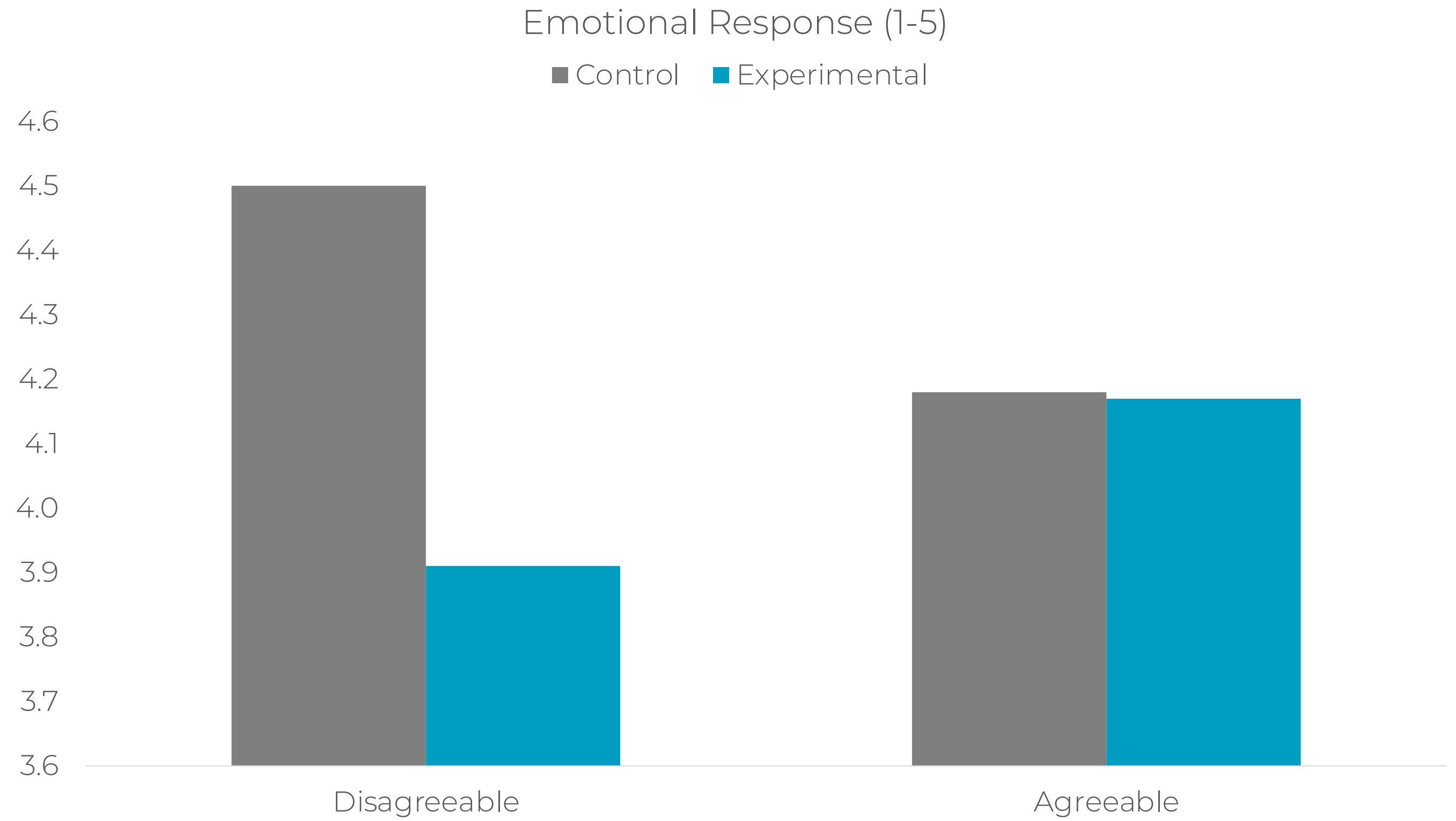
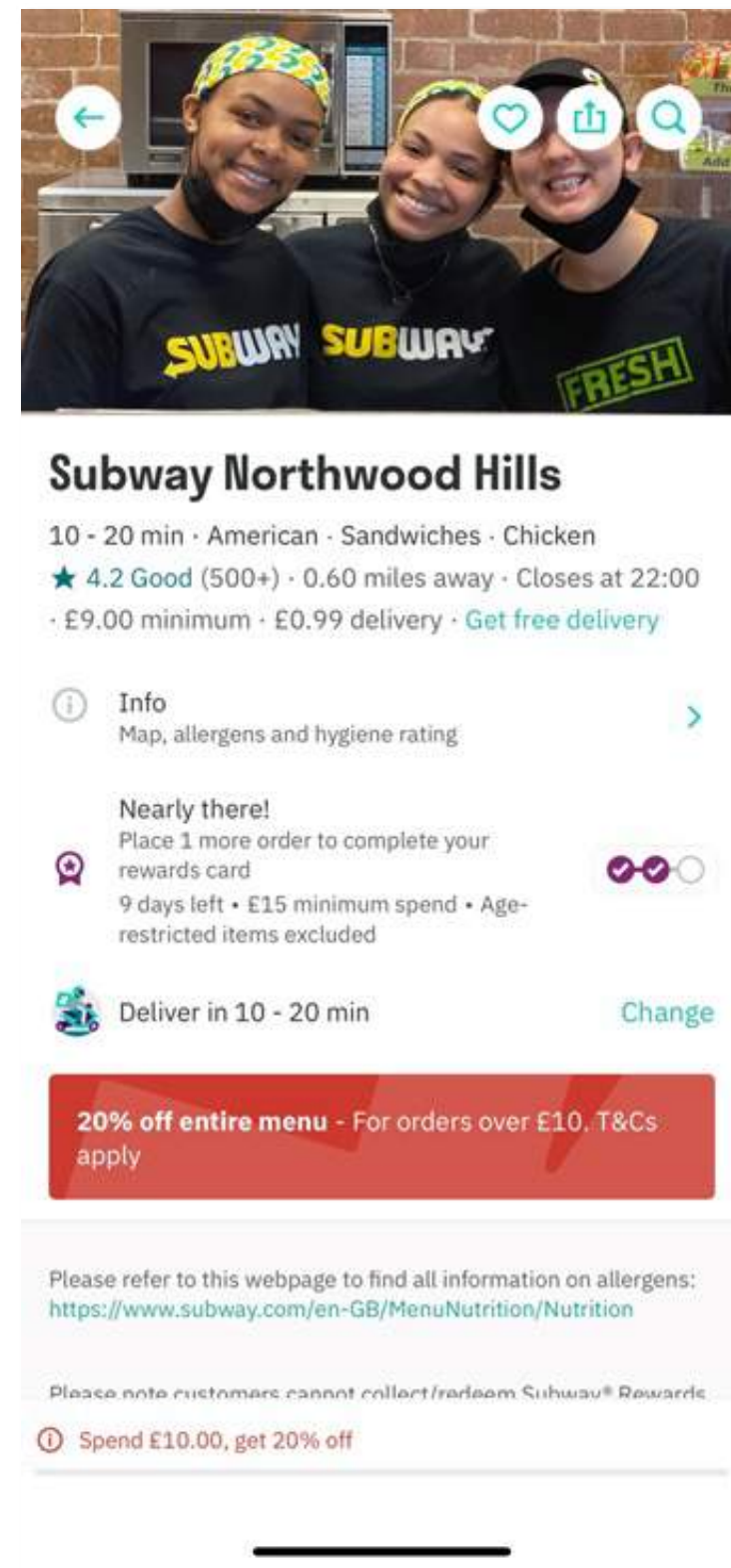
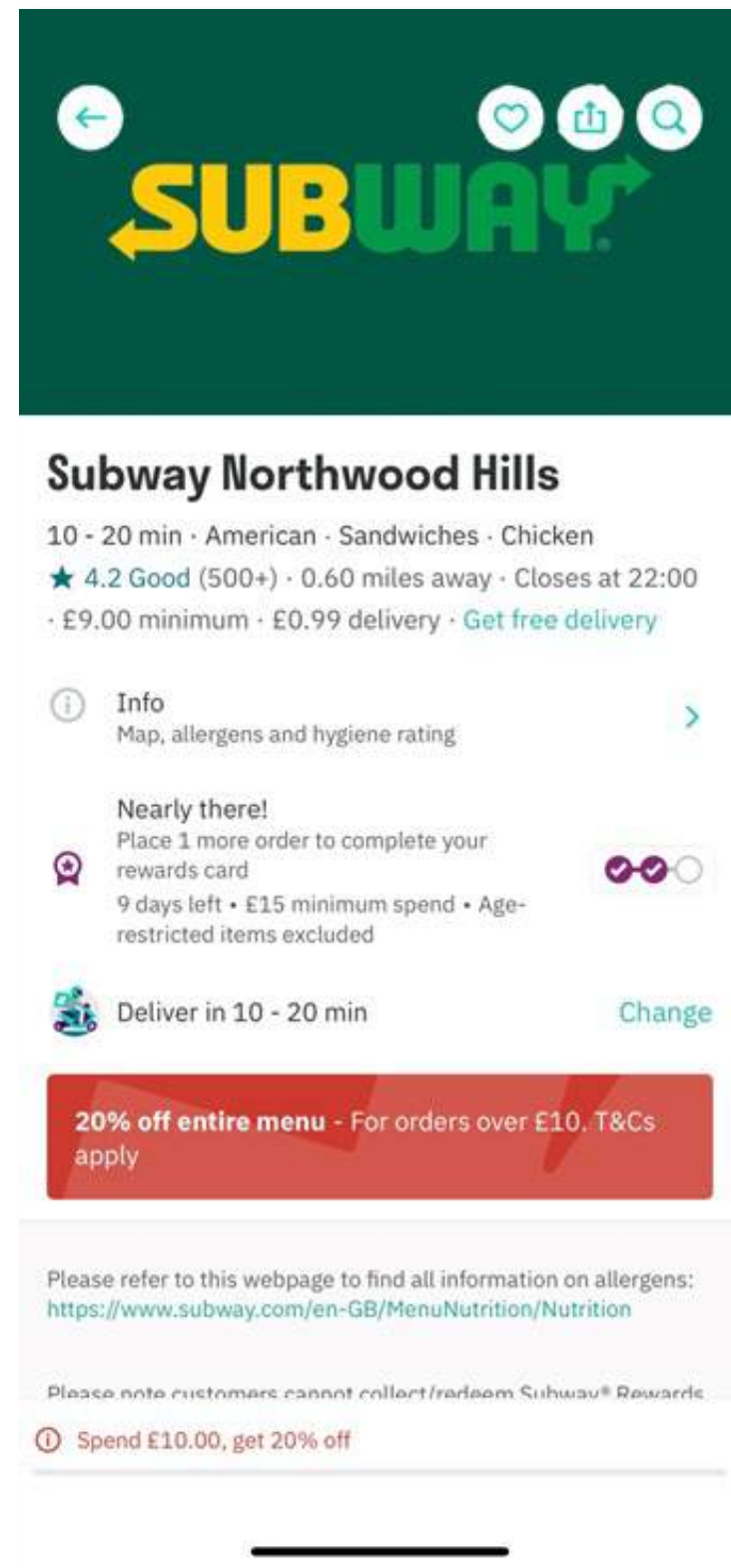
Neuroticism
($r=.184$, $r=.173$)

RESONANT NUDGES

Change in Likelihood of Visiting a Restaurant if it has Many Reviews (vs. No Reviews)



RESONANT NUDGES



PSYCHOMETRIC SEGMENTATION

Fighters | Psychometrics

Value power and escape
Emotional and stressed
Relatively low IQ

This segment is neurotic: they are likelier to be stressed, irritable and pessimistic, and are more sensitive to potential threats. Unsurprisingly, they see the world as chaotic and scary, and they perceive themselves to be at the bottom of the 'totem pole'. Accordingly, they value escape and power, perceiving a 'dog eat dog' world.

Personality and IQ

brainchimp

N.B. These values are normalised, meaning they represent differences from the overall sample (e.g., where the 'norm' is set at 50%)

Values

Power	45%
Stimulation	44%
Success	44%
Tradition	44%
Fun	43%
Order	43%
Independence	42%
Peace	42%
Duty	42%
Kindness	36%

Motivations

Growth	48%
Esteem	48%
Social	48%
Safety	40%
Physical	40%

Fighters | Framing

Highly image-conscious
Prize coolness, glamour
Like it scarce, popular

In keeping with their power-seeking, this segment likes brands to fulfil the dominant ruler archetype, it should not be intellectual. They choose image over function, and prefer luxurious and cool brands; likewise, they are most influenced by cues which suggest a phone is exclusive and in high demand (like jewellery or art).

Influence Heuristics

brainchimp

N.B. These values represent difference from the total-sample mean (e.g., the 'norm' is 50%)

Archetypes (top 10 differentiators)

- Dominant ruler
- Sensitive romantic
- Provocative rebel
- Idealistic dreamer
- Imaginative artist
- Transgressive
- Fun joker
- Adventurous explorer
- Protective caregiver
- Logical intellectual

Brand Pers.

- Sophisticated, glamorous
- Exciting, cool
- Wholesome, trustworthy
- Serious, effective
- Tough, sturdy 23%

Fighters | Aesthetics

Abrupt and direct tone
Hunting and nature
High-status feel

This segment will respond best to a direct, abrupt, and self-confident tone of messaging, which is simple, emotional and 'luxurious' (i.e., aspiring to high status and image). Ruggedness should be shown in terms of having dominion over something (particularly nature); they like hunting imagery and leather and fur materials.

Personality Insights

Being **neurotic extroverts**, this segment will respond best to aesthetics which are emotional and show social status. Indeed, they like highbrow media the most - as well as intense and edgy media.

Having relatively **low IQ**, they will prefer simple aesthetics, low complexity, and concrete wording and ideas.

brainchimp

N.B. These values represent difference from the total-sample mean (e.g., the 'norm' is 50%)

Tone (top 10 differentiators)

- Self-centred, rude
- Mellow, peaceful
- Slow, steady
- Cold, unemotional
- Coherent, consistent
- Rough, imperfect
- Experienced, savvy
- Rational, practical
- Tough, firm
- Effective, direct

Media Tastes

- Highbrow** e.g., classical, jazz, poetry (65%)
- Light/Sol** e.g., pop, g shows (64%)

Fighters | Channel

Aspirational interests
Enjoy distraction
Not intellectual

Consistent with the aforementioned insights, this segment prefers aspirational interests like lifestyle, celebrities and adventure - things which would boost their social status. Likewise, they avoid intellectual pursuits like science or current affairs. Their channel preferences broadly reflect this.

Preferred Media

Preferred Social Media

brainchimp

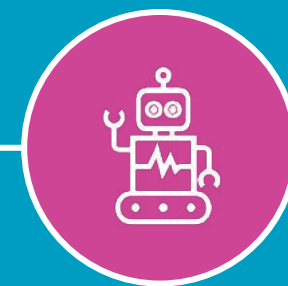
N.B. These values represent difference from the total-sample mean (e.g., the 'norm' is 50%)

Interests (top 20 differentiators)

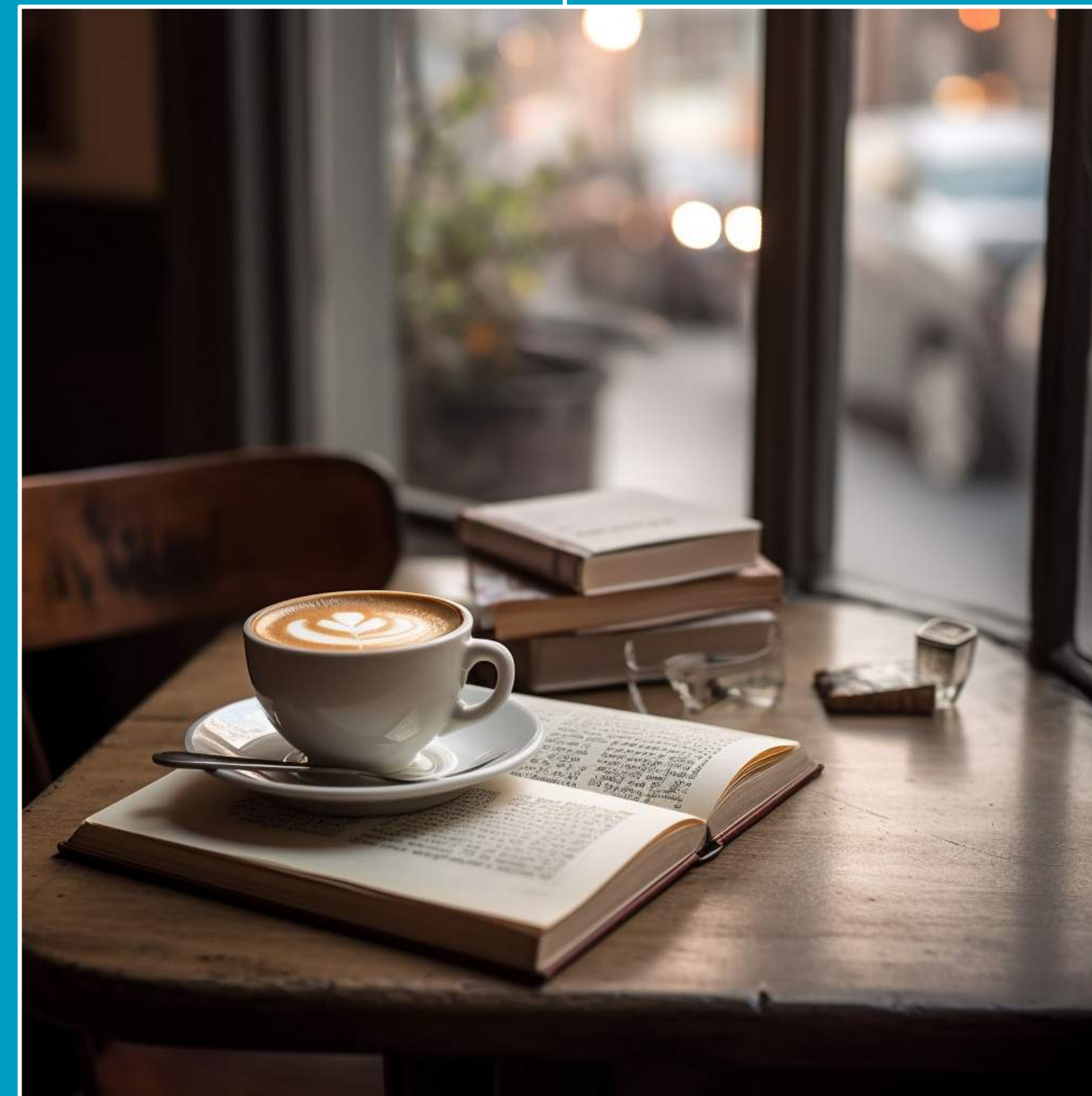
STARBUCKS FOR
EXTRAVERTS



Come vibe with us at Starbucks – where
the fun and coffee are always brewing!



STARBUCKS FOR
INTROVERTS



Find your peaceful oasis at Starbucks – the
perfect spot for a quiet coffee break.



Midjourney

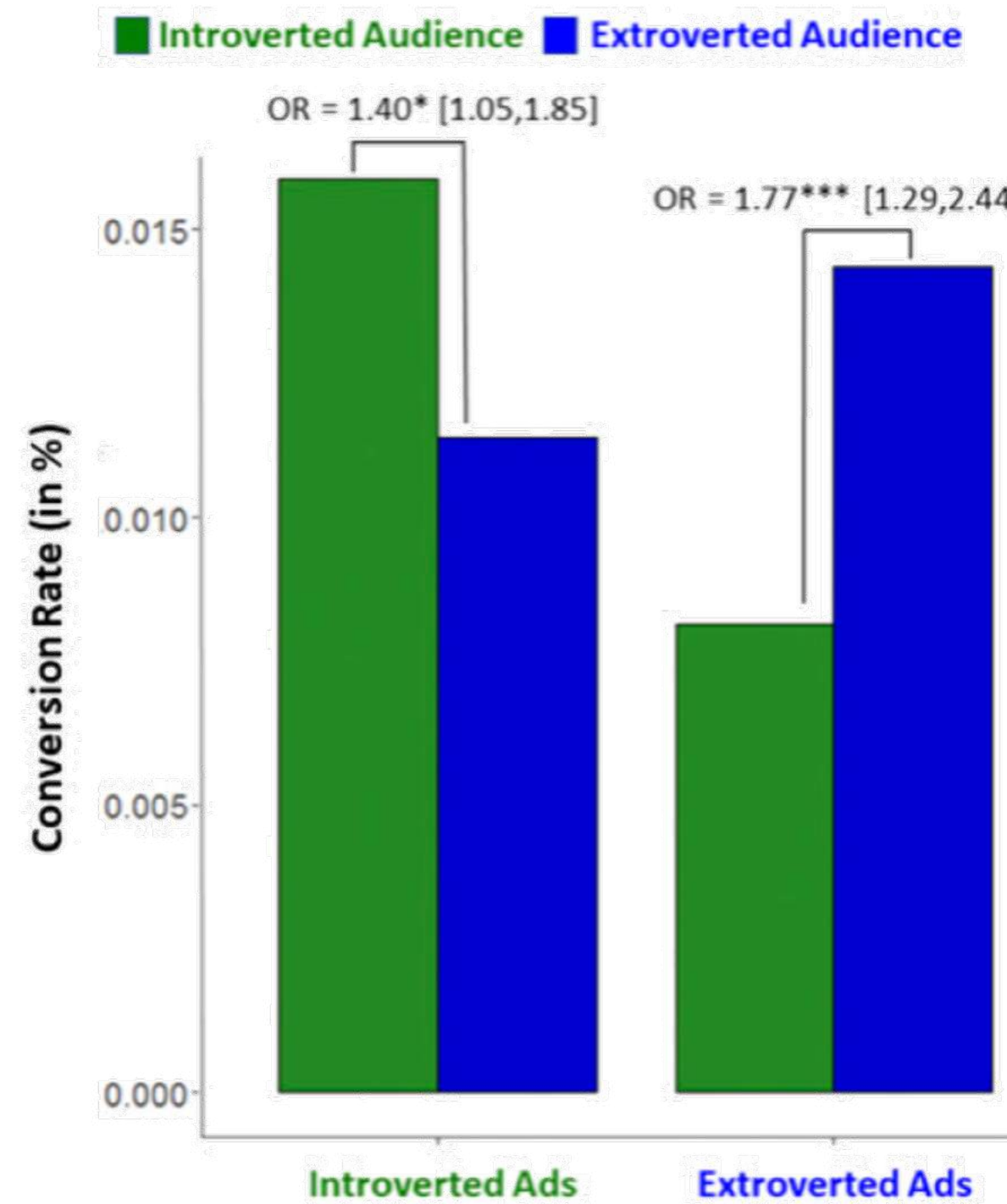


THE ULTIMATE OUTCOME...


A High Extraversion



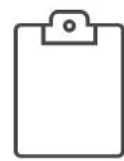
Dance like no one's watching
(but they totally are)



Low Extraversion

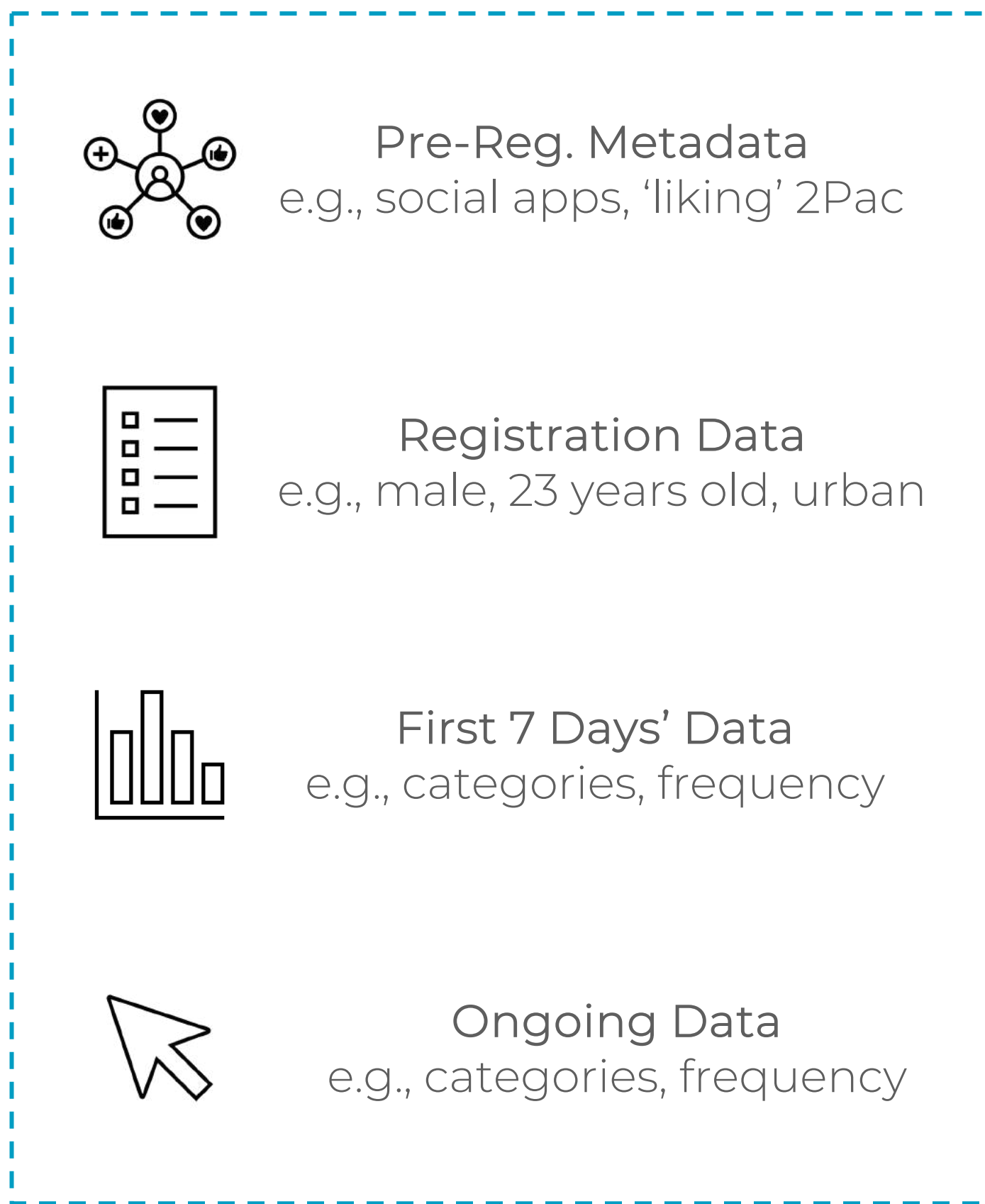


Beauty doesn't have to shout



PREDICTIVE MODEL BUILT VIA PSYCHOGRAPHIC SURVEY

DATA ECOSYSTEM



TARGETED NUDGE
e.g., "The most exciting fizzy drinks are here!"

BEHAVIOURAL RESPONSE TO NUDGE IMPROVES MACHINE LEARNING ALGORITHM





IRRATIONALITY



RETAIL



