DON'T TRUST TRUST STATE OF THAT YOU REALLY WANT IN LIFE

SETH STEPHENS-DAVIDOWITZ



DON'T TRUST YOUR GUT. Copyright © 2022 by Seth Stephens-Davidowitz. All rights reserved. Printed in the United States of America. No part of this book may be used or reproduced in any manner whatsoever without written permission except in the case of brief quotations embodied in critical articles and reviews. For information, address HarperCollins Publishers, 195 Broadway, New York, NY 10007.

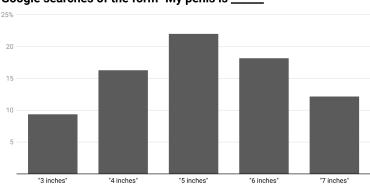
HarperCollins books may be purchased for educational, business, or sales promotional use. For information, please email the Special Markets Department at SPsales@harpercollins.com.

FIRST EDITION

Library of Congress Cataloging-in-Publication Data has been applied for.

ISBN 978-0-06-288091-8 (hardcover) ISBN 978-0-06-323937-1 (international edition) 22 23 24 25 26 LSC 10 9 8 7 6 5 4 3 2 1

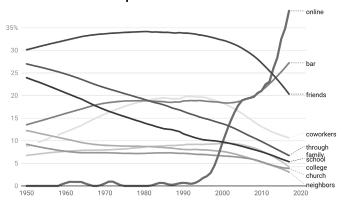
FROM EVERYBODY LIES TO DON'T TRUST YOUR GUT



Google searches of the form "My penis is _____"

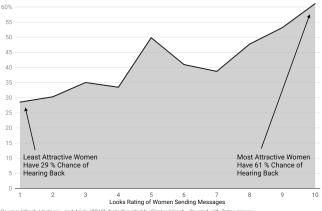
Chart: Don't Trust Your Gut by Seth Stephens-Davidowitz • Source: Google Trends • Created with Datawrapper

WHAT PEOPLE LOOK FOR IN A PARTNER



How heterosexual couples have met over time

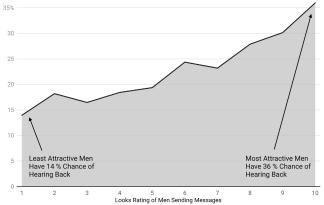
Source: Data provided by Michael Rosenfeld; first published in Rosenfeld, Thomas, & Hausen (2019) • Created with Datawrapper



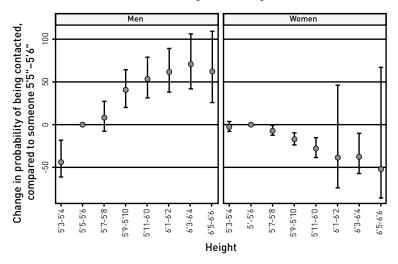
Probability that the most attractive men respond to a message from women of various looks ratings

Source: Hitsch, Hortaçsu, and Ariely (2010); Data Provided by Günter Hirsch • Created with Datawrapper

Probability that the most attractive women respond to a message from men of various looks ratings



Source: Hitsch, Hortaçsu, and Ariely (2010); Data Provided by Günter Hirsch • Created with Datawrapper



Effect of height on dating success

Source: Hitsch, Hortaçsu, and Ariely (2010)

	Asian male	Black male	Hispanic male	White male
Asian female	48	55	49	41
Black female	31	37	36	32
Hispanic female	51	46	48	40
White female	48	51	47	41

Reply rates: female sent initial message to male

Source: Data from Christian Rudder OKTrends post: https://www.gwern.net /docs/psychology/okcupid/howyourraceaffects themessagesyouget.html • Created with Datawrapper

Reply rates: male sent initial message to female

	Asian female	Black female	Hispanic female	White female
Asian male	22	34	22	21
Black male	17	28	19	21
Hispanic male	20	31	24	22
White male	29	38	30	29

Source: Data from Christian Rudder OKTrends post: https://www.gwern.net /docs/psychology/okcupid/howyourraceaffects themessagesyouget.html • Created with Datawrapper

Here is the list of occupations, ranked from most to least desirable to heterosexual women on online dating sites.

Occupation	Percent Increase in Approaches from Women, Relative to a Student
Legal/attorney	8.6 %
Law enforcement/firefighter	7.7 %
Military	6.7 %
Health professional	5 %
Administrative/clerical/secretarial	4.9 %
Entertainment/broadcasting/film	4.2 %
Executive/managerial	4.0 %
Manufacturing	3.7 %
Financial/accounting	2.4 %
Self-employed	2.2 %
Political/government/civil	1.7 %
Artistic/musical/writer	1.7 %
Sales/marketing	1.4 %
Technical/science/engineering/ research/computers	1.2 %
Transportation	1.0 %
Teacher/educator/professor	1.0 %
Student	0 %
Laborer/construction	-0.3 %
Service/hospitality/food	-3 %

DESIRABILITY OF OCCUPATIONS IN MEN (HOLDING CONSTANT INCOME)

Source: Hitsch, Hortaçsu, and Ariely (2010)

THE EFFECTS OF A NEIGHBORHOOD

Here are the five best metropolitan areas, those that offered, on average, the most improvement to a child.

SUPERMETROS

	Average increase in adult income from growing up here (compared to growing up in an average place)
Seattle, Washington	11.6%
Minneapolis, Minnesota	9.7%
Salt Lake City, Utah	9.2%
Reading, Pennsylvania	9.1%
Madison, Wisconsin	7.4%

Source: Equality of Opportunity Project

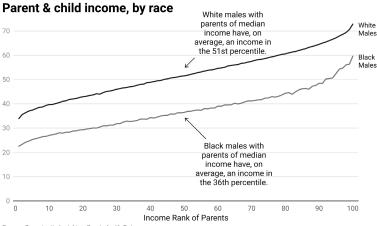
The picture that follows shows the expected adult incomes for a male of low-income parents being raised in different neighborhoods in Seattle.



CASE STUDY # 2: THE POWER OF BLACK MALE ROLE MODELS

A second study by Chetty and coauthors looked at the pre-dictors of Black mobility in the United States. Sadly, in the United States, African-American males are less socially mobile than Caucasian males. The chart on the next page shows that, if a white male and Black male have parents who earn the same income, we can expect the Black male to end up earning substantially less money.

While Black males have low social mobility in just about every neighborhood in the United States, there are some neighborhoods where they do better. Compare, for example, Queens Village, a part of New York City, and West End, a part of Cincinnati. In Queens Village, a Black male born with parents in the 25th percentile of income can expect to end up with income in the 55.4th percentile. In West End, a Black male born with parents in the 25th percentile can expect to end up in the 31.6th percentile.



Source: Opportunity Insights • Created with Datawrapper

FENCE YOUR WAY TO COLLEGE?

ODDS OF GETTING COLLEGE SCHOLARSHIP FOR MALES FOR DIFFERENT SPORTS

Sport	High School Athletes	College Scholarships Available	Ratio of High School Athletes to College Athletes
Gymnastics	1,995	101	20:1
Fencing	2,189	99	22:1
Ice Hockey	35,393	981	36:1
Football	1,122,024	25,918	43:1
Golf	152,647	2,998	51:1
Skiing—Alpine	5,593	107	52:1
Rifle	2,668	47	57:1
Basketball	541,054	9,504	57:1
Baseball	482,629	8,062	60:1
Soccer	417,419	6,152	68:1
Swimming & diving	138,373	1,994	69:1
Tennis	191,004	2,417	79:1
Lacrosse	106,720	1,251	85:1
Cross country	252,547	2,722	93:1
Track & field	653,971	5,930	110:1
Water polo	21,451	126	170:1
Wrestling	269,514	1,530	176:1
Volleyball	52,149	294	177:1

Source: ScholarshipStats.com; Table first created by Jason Notte for Marketplace.

ODDS OF GETTING COLLEGE SCHOLARSHIP FOR FEMALES FOR DIFFERENT SPORTS

Sport	High School Athletes	College Scholarships Available	Ratio of High School Athletes to College Athletes
Rowing	4,242	2,080	2:1
Equestrian	1,306	390	3:1
Rugby	322	36	9:1
Fencing	1,774	134	13:1
Ice hockey	9,150	612	15:1
Golf	72,172	3,056	24:1
Gymnastics	19,231	810	24:1
Skiing	4,541	133	34:1
Rifle	1,587	46	35:1
Soccer	374,564	9,266	40:1
Basketball	433,344	10,165	43:1
Lacrosse	81,969	1,779	46:1
Swimming & diving	165,779	3,550	47:1
Tennis	215,737	4,480	48:1
Softball	371,891	7,402	50:1
Volleyball	429,634	8,101	53:1
Field hockey	61,471	1,119	55:1
Water polo	18,899	344	55:1
Cross country	218,121	3,817	57:1
Track & field	545,011	8,536	64:1
Bowling	25,751	275	94:1

Source: ScholarshipStats.com; Table first created by Jason Notte for Marketplace.

THE ALMOST NONEXISTENT EQUESTRIAN AND DIVING GENES

	Percent of Same-Sex Siblings Who Are Identical Twins (Higher Number Suggests More Reliance on Genetics)
Olympic track-and-field athletes	22.4%
Olympic wrestlers	13.8%
Olympic rowers	12.4%
NBA players	11.5%
Olympic boxers	8.8%
Olympic gymnasts	8.1%
Olympic swimmers	6.5%
Olympic canoers	6.3%
Olympic fencers	4.5%
Olympic cyclists	5.1%
Olympic shooters	3.4%
NFL players	3.2%
MLB players	1.9%
Olympic Alpine skiers	1.7%
Olympic divers	0%
Olympic equestrian riders	0%
Olympic weightlifters	0%

GENETICS OF SUCCESS CHART

Source: Author's calculations. Data for Olympic athletes was provided by Bill Mallon.

RICH PEOPLE OWN THE RIGHT THING

THE SEXY PATH TO QUICK FAILURE

Field	Median Time a Business in the Field Lasts (For Comparison, the Average Dentist's Business Lasts 19.5 Years)
Record stores	2.5 years
Amusement arcades	3.0
Hobby, toy, and game stores	3.25
Bookstores	3.75
Clothing stores	3.75
Cosmetics and beauty supply stores	4.0

Source: Luo and Stark (2014)

TOP 5 BUSINESSES WITH THE GREATEST NUMBER OF MILLIONAIRES (NOTE: THIS IS A MISLEADING CHART FOR PICKING A GREAT BUSINESS)

Field	Owners in the Top 0.1 %
Lessors of real estate	12,573
Activities related to real estate	10,911
Automobile dealers	5,236
Offices of physicians	4,711
Restaurants	4,471

Source: online appendix of Smith et al. (2019); this only includes data for S Corporations.

Among hundreds of fields that people start businesses in, there were only seven fields that fit both criteria, having both high numbers of rich people as well as a high probability of wealth. Here they are:

Field	Percent of establishments with owner in the top 0.1%
Lessors of real estate	43.2%
Activities related to real estate	25.2%
Automobile dealers	20.8%
Other financial investment activities	18.5%
Independent artists, writers, and performers	12.5%
Other professional, scientific, and technical services	10.6%
Miscellaneous durable goods merchant wholesalers	10.0%

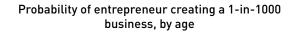
Sources: author's calculations based on data from online appendix of Smith et al. (2019) and the U.S. Census Bureau. These calculations are for S-Corporations.

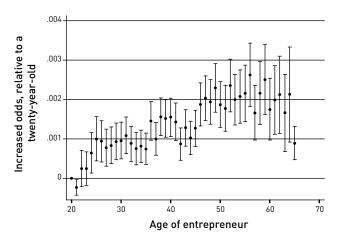
THE ESCAPE FROM GLOBAL BEHEMOTHS

HOW FAR MONOPOLIES REACH

Nowhere	To a Local Market	To a Global Market
You will be stuck in ruthless competition.	You have a decent chance of becoming rich.	You will almost certainly be defeated by a global behemoth.

MYTH: THE ADVANTAGE OF YOUTH





Source: Azoulay et al. (2020)

MYTH: THE OUTSIDER'S EDGE

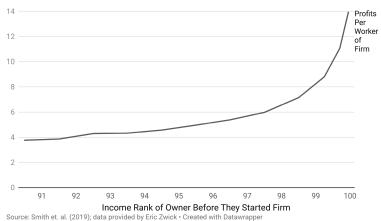
THE INSIDER'S EDGE IN ENTREPRENEURSHIP

Work Experience of the Founder	Probability Business Will Be a 1-in-1,000 Success
No experience in field	0.11%
Experience in same broad field—but not narrow field	0.22%
Experience in same narrow field	0.26%

Source: Azoulay et al. (2020)

THE COUNTER-COUNTERINTUITIVE IDEA

The most successful employees found the most successful firms.



19

SPRINGSTEEN'S RULE: TRAVEL WIDELY TO FIND YOUR BREAK

To see the difference between the two categories, here are examples of the exhibition schedules of one artist in each. First, this was the exhibition schedule of a Category 1 artist, an outsider who never fully broke through.

Date of Exhibition	City	Country	Institution
2004-02-13	Waitakere City	New Zealand	Corban Estate Arts Centre (CEAC)
2005-02-15	Herne Bay	New Zealand	Melanie Roger Gallery
2006-03-14	Herne Bay	New Zealand	Melanie Roger Gallery
2007-04-17	Herne Bay	New Zealand	Melanie Roger Gallery
2007-10-02	Herne Bay	New Zealand	Melanie Roger Gallery
2008-04-15	Herne Bay	New Zealand	Melanie Roger Gallery
2008-07-05	Lower Hutt	New Zealand	The Dowse Art Museum
2008-09-09	Herne Bay	New Zealand	Melanie Roger Gallery
2009-02-11	Herne Bay	New Zealand	Melanie Roger Gallery
2009-08-29	Christchurch	New Zealand	Christchurch Art Gallery Te Puna o Waiwhetu
2009-10-21	Herne Bay	New Zealand	Melanie Roger Gallery
2010-11-24	Herne Bay	New Zealand	Melanie Roger Gallery
2010-11-30	Wellington	New Zealand	Bartley and Company Art
2011-01-26	Herne Bay	New Zealand	Melanie Roger Gallery
2011-10-04	Wellington	New Zealand	Bartley and Company Art

SCHEDULE OF A CATEGORY 1 ARTIST AS A YOUNG MAN

Note that the Category 1 artist presented his art repeatedly in the same places in his home country.

Next, here is the exhibition schedule of a Category 2 artist, the German artist David Ostrowski, who did break through:

Date of Exhibition	City	Country	Institution
2005-10-19	Cologne	Germany	Raum für Kunst und Musik e.V.
2005-11-13	Eupen	Belgium	IKOB—Museum für Zeitgenössische Kunst Eupen
2006-10-20	Culver City	United States	Fette's Gallery
2006-10-25	Cologne	Germany	Raum für Kunst und Musik e.V.
2007-09-03	Düsseldorf	Germany	ARTLEIB
2007-12-07	Cologne	Germany	Raum für Kunst und Musik e.V.
2008-09-07	Düsseldorf	Germany	First Floor Contemporary
2008-10-11	Taipei	Taiwan	Aki Gallery
2010-06-26	Düsseldorf	Germany	PARKHAUS im Malkastenpark
2010-07-03	Helsingør	Denmark	Kulturhuset Toldkammeret
2010-11-13	Vancouver	Canada	304 days Gallery
2011-02-25	Munich	Germany	Tanzschule Projects
2011-03-06	The Hague	Netherlands	Nest
2011-06-23	Cologne	Germany	Philipp von Rosen Galerie
2011-07-01	Berlin	Germany	Autocenter
2011-11-18	Hamburg	Germany	salondergegenwart
2011-12-02	Cologne	Germany	Mike Potter Projects
2011-12-03	Amsterdam	Netherlands	Arti et Amicitiae
2012-01-28	Cologne	Germany	Berthold Pott
2012-02-25	Zurich	Switzerland	BolteLang
2012-03-02	Cologne	Germany	Philipp von Rosen Galerie

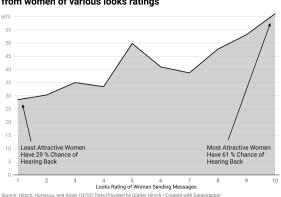
SCHEDULE OF A CATEGORY 2 ARTIST AS A YOUNG MAN

			1
2012-03-03	Amsterdam	Netherlands	Amstel 41
2012-03-09	Cologne	Germany	Koelnberg Kunstverein e.V.
2012-03-22	London	United Kingdom	Rod Barton
2012-03-24	Cologne	Germany	Jagla Ausstellungsraum
2012-04-16	Cologne	Germany	Kunstgruppe
2012-04-19	Cologne	Germany	Philipp von Rosen Galerie
2012-04-26	Berlin	Germany	September
2012-04-28	Leipzig	Germany	Spinnerei
2012-07-10	New York	United States	Shoot the Lobster
2012-07-21	Düsseldorf	Germany	Philara–Sammlung zeitgenössischer Kunst
2012-10-18	Los Angeles	United States	ltd los angeles
2012-11-03	Zurich	Switzerland	BolteLang
2013-01-15	Milan	Italy	Brand New Gallery
2013-03-01	Berlin	Germany	Peres Projects
2013-03-07	Cologne	Germany	Kölnisches Stadtmuseum
2013-04-01	Brussels	Belgium	Middlemarch
2013-04-03	São Paulo	Brazil	White Cube

PICASSO DYNAMICS IN DATING

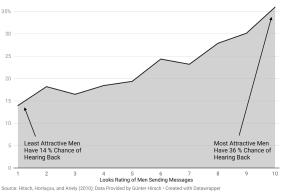
In Chapter 1, we discussed the overwhelming evidence that certain people are more desired in dating.

You may recall one of the "no-duh" findings from that chapter: beautiful people are more likely to get responses **th**eir messages; and people are less likely to get responses when they message beautiful people. Here are those charts—the data on superficiality—to refresh your memory.



Probability that the most attractive men respond to a message from women of various looks ratings

Probability that the most attractive women respond to a message from men of various looks ratings



Again, no huge surprise there. Beauty matters, the data says, in dating.

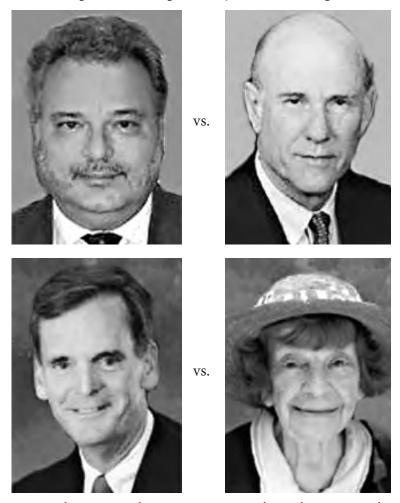
YOUR APPEARANCE: IT MATTERS

Of the two people shown below, who do you think looks more competent?



All politician photos are from FiscalNote/Congress at Your Fingertips. They are used with permission. Ready to play along some more with the researchers' ex-periment? Look at the two pairs of faces on the following page. For each, determine which of the two people next to each other strikes you as more competent.

Once again, I have a guess for your answers. I guess that,



among the two gentlemen on top, you chose the man on the right as looking more competent. Among the lady and gentleman on the bottom, I guess you chose the man on the left as looking more competent.

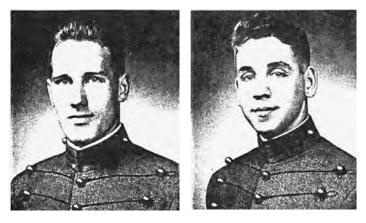
If those were your choices, you agree with most people.

Researchers were interested in seeing what best predicted which West Point cadets had the most career success. The re-searchers created a database that included the rank each cadet had reached twenty years after graduation along with various attributes of the cadets in school.

They collected data on how wealthy the cadets were when they were growing up, how they performed on various academic tests in schools, and how they performed in various athletic en-deavors. Finally, the researchers collected the graduation picture of each cadet and asked people to rate how they came across.

The researchers found that one fact above all predicted how far a cadet rose in his career. It wasn't how distinguished their family was, how smart they were, or how fast they ran. In fact, each of these traits only weakly predicted cadets' career performance.

The biggest predictor of cadets' career success was how dominant their faces appeared. Having a face that people judged as looking dominant increased the odds of a colonel be-coming a brigadier general, a brigadier general becoming a ma-jor general, and a major general becoming a lieutenant general.



A Face of Dominance

A Face Lacking Dominance

Among people good enough to get into West Point, in other words, those who look dominant tend to be allowed to dominate.

YOUR APPEARANCE: IT VARIES

Trustworthiness



Pictures are from the FERET database and used with permission. They originally appeared in P. J. Phillips, Hyeonjoon Moon, S. A. Rizvi and P. J. Rauss, "The FERET evaluation methodology for face-recognition algorithms," in *IEEE Transactions on Pattern Analysis and Machine Intelligence*, vol. 22, no. 10, pp. 1090–1104, Oct. 2000, doi: 10.1109/34.879790.

THE THREE-STEP PLAN TO LEARN WHAT MAKES YOU MOST ATTRACTIVE WITHOUT LOGGING OFF YOUR COMPUTER

Step 1 (Artificial Intelligence): I downloaded FaceApp, an app that uses artificial intelligence to alter a picture. If you don't know FaceApp, here's how it works. You upload a picture and then can change the settings to alter the picture in shock-ingly realistic ways. You can adjust your hairstyle, hair color, facial hair, glasses, and smile.



Different (Al-Generated) Versions of Me

I created more than one hundred different versions of my face. Above are some of the looks that I ended up with.

Step 2 (Rapid Market Research): I conducted rapid market research on different versions of my face. For this, I used GuidedTrack and Positly, two programs created by my friend Spencer Greenberg to allow anybody to quickly and cheaply perform survey research. For each picture, I asked people to judge how competent the person in the picture looked on a scale of 1 to 10. (You can also use the site Photofeeler.com to rate different photos.)

I discovered that there were massive differences in how people ranked me in the different FaceApp photos. For example, in the picture directly to the right, I ranked 5.8/10 in competence, among the lowest scores of those I tested.

In the picture directly below it, I ranked 7.8/10 in competence, the highest score that I received.

Just as Todorov and Porter had discovered and just as *Seinfeld* had pointed out, I can be perceived very differently.

Step 3 (Statistical Analysis): I used R, a statistical programming language, to recognize patterns in how different styling decisions I make affect how I am perceived. This allowed me to figure out which aspects of me have the most impact on how I am perceived.





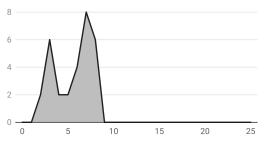
MISPERCEPTIONS OF WHAT MADE US HAPPY

Strange quiz. Two people—call them Patient A and Patient B are both getting a colonoscopy. During the colonoscopy, they are asked to record, every sixty seconds, just how much pain they are in—on a scale of 0 to 10. (This is called moment utility.) At minute zero, they are asked, 0 to 10, how bad is it? At minute 1, they are asked the same. And so on. Until the colonoscopy is done.

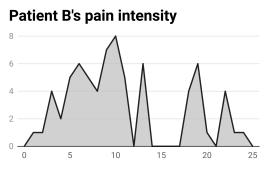
When the colonoscopy is finished, we now have a pain chart for both patients, which allows us to see how much pain each was in for every minute of their colonoscopy. The pain charts are shown on the following page.

Patient A, as you can see in their chart, had a pain level that fluctuated between 0 and 8 for roughly 8 minutes. Patient B, as you can see in their chart, had a pain level that fluctuated between 0 and 8 for more than 20 minutes.

Patient A's pain intensity



Source: Redelmeier and Kahneman (1996) · Created with Datawrapper



Source: Redelmeier and Kahneman (1996) • Created with Datawrapper

Now, the strange quiz question: who experienced more total pain during their colonoscopy, Patient A or Patient B? See the charts? Got your answer?

This isn't a trick question. The answer is obvious: Patient B experienced more pain. Patient B was in roughly as much pain as Patient A for the first 8 minutes and then experienced 17 minutes of additional pain on top of all that. By any metric, Patient B had the more painful colonoscopy. If you chose Patient B, you scored an A+ on this strange quiz. Good job!

THE FULL LIST OF HAPPINESS-PRODUCING ACTIVITIES

Here are the rest of the results on how happy various activities make people—all from the Mappiness data analyzed by Bryson and MacKerron. Afterward, we will discuss the implications of the findings.

HAPPINESS ACTIVITY CHART

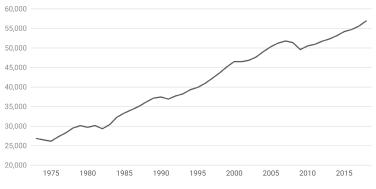
Activity Rank	Activity	Gain in Happiness Relative to Not Doing Activity
1.	Intimacy/Making Love	14.2
2.	Theater/Dance/Concert	9.29
3.	Exhibition/Museum/Library	8.77
4.	Sports/Running/Exercise	8.12
5.	Gardening	7.83
6.	Singing/Performing	6.95
7.	Talking/Chatting/Socializing	6.38
8.	Birdwatching/Nature Watching	6.28
9.	Walking/Hiking	6.18
10.	Hunting/Fishing	5.82
11.	Drinking Alcohol	5.73
12.	Hobbies/Arts/Crafts	5.53
13.	Meditating/Religious Activities	4.95
14.	Match/Sporting Event	4.39
15.	Childcare/Playing with Children	4.1
16.	Pet Care/Playing with Pets	3.63
17.	Listening to Music	3.56
18.	Other Games/Puzzles	3.07
19.	Shopping/Errands	2.74
20.	Gambling/Betting	2.62
21.	Watching TV/Film	2.55
22.	Computer Games/iPhone Games	2.39
23.	Eating/Snacking	2.38
24.	Cooking/Preparing Food	2.14
25.	Drinking Tea/Coffee	1.83
26.	Reading	1.47
27.	Listing to Speech/Podcast	1.41
28.	Washing/Dressing/Grooming	1.18
29.	Sleeping/Resting/Relaxing	1.08
30.	Smoking	0.69
31.	Browsing the Internet	0.59
32.	Texting/Email/Social media	0.56
33.	Housework/Chores/DIY	-0.65
34.	Traveling/Commuting	-1.47
35.	In a Meeting, Seminar, Class	-1.5
36.	Admin/Finances/Organizing	-2.45
37.	Waiting/Queueing	-3.51
38.	Care or Help for Adults	-4.3
39.	Working/Studying	-5.43
40.	Sick in Bed	-20.4

THE MISERY-INDUCING TRAPS OF MODERN LIFE

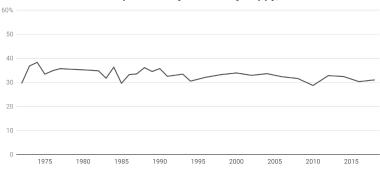
Search	Date, Time
looking for a room to rent	March 2, 14:27:12
i need a job	March 2, 15:02:10
seniors	March 2, 23:26:45
www.plentyoffish.com	March 3, 11:18:33
i need a job	March 3, 17:32:00
marriage	March 3, 17:32:31
depression	March 3, 17:33:39
at 60 is life worth living	March 4, 16:43:55
i am being evicted	March 4, 16:57:49
cheap apartment wanted	March 4, 17:00:44
where is the cheapest place to live	March 4, 17:06:32
www.nyclottery.gov	March 5, 16:11:19
poor seniors	March 6, 15:49:04
www.plentyoffish.com	March 6, 20:50:39
www.plentyoffish.com	March 6, 20:51:02
www.plentyoffish.com	March 7, 10:10:53
www plentyoffish.com	March 7, 10:11:03
christianmingle	March 7, 10:14:00
suicide	March 7, 10:20:36
drugs	March 7, 10:26:27
how to commit suicide	March 7, 10:34:34

Search	Date, Time
i can't stand the neck and back pain	April 21, 23:40:05
how can one live with back pain all their lives	April 21, 23:51:45
so depressed because i feel like i have fibromyalgia	May 8, 0:58:43
please help me—i have fibromyalgia	May 11, 1:04:03
is there any hope for fibromyalgia	May 15, 0:57:50
suicide and fibromyalgia	May 15, 0:47:48
i hurt so much from arthritis and tmj	May 18, 13:30:21
pain at bottom of neck and top of back	May 19, 22:24:21
help with pain from arthritis and fibromyalgia	May 19, 0:26:51
back neck hurts	May 20, 11:17:58
miserable from neck pain back pain and tmj	May 20, 0:18:02
suicide	May 23, 12:13:05

Everything is amazing: Real GDP per capita in United States, 1972-2018



Source: U.S. Bureau of Economic Analysis • Created with Datawrapper



People aren't happier: % of Americans who reported they were "very happy," 1972-2018

Source: General Social Survey • Created with Datawrapper

AVERAGE HOURS SPENT PER DAY

	Least Happy Activities (e.g., Working/ Housework)	Medium Happy Activities (e.g., Eating/Childcare)	Happiest Activities (e.g., Socializing/ Theater)
2003	16.71	5.22	2.07
2019	16.72	5.42	1.86

THE WORK TRAP

THE WORKINGMAN'S BLUES (OR LIGHT BLUES)

Working (Base Case)	-5.43
Working at Home	+3.59
Working While Listening to Music	+3.94
Working with Your Friends	+6.25

Source: Author's calculations from Bryson and MacKerron (2017)

39

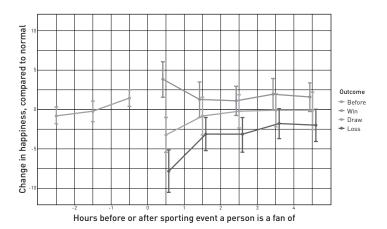
THE "NOT SPENDING ENOUGH TIME WITH FRIENDS AND ROMANTIC PARTNER" TRAP

Person	Gain in happiness from being with them, relative to being alone
Romantic partner	4.51
Friends	4.38
Other family members	0.75
Clients, customers	0.43
Children	0.27
Colleagues, classmates	-0.29
Other people participant knows	-0.83

HAPPINESS PEOPLE CHART

Source: MacKerron and Mourato (2013)

THE SPORTS TRAP



The Sports Fan Trap: The Contentment of Victory, the Agony of Defeat

MacKerron kindly sent figures and charts from this working paper.

	Team Was Expected to Win	Team Was Expected to Lose
Average Happiness Change After a Win	+3.1	+7.0
Average Happiness Change After a Loss	-10.0	-6.3

THE BOOZE TRAP

WHAT PEOPLE ARE DOING WHEN THEY DRINK

Talking/Chatting/Socializing	49.2%
Watching TV/Film	31.2%
Eating/Snacking	27.9%
Listening to Music	10.4%
Sleeping/Resting/Relaxing	7.4%

Source: Geiger and MacKerron (2016)

Biggest Booze Boost (People Are MUCH Happier Doing These Tipsy Than Sober)	Smallest Booze Boost (People Are Roughly as Happy Doing These Tipsy as Sober)	
Traveling/Commuting	 Intimacy/Making Love 	
Waiting/Queueing	 Theater/Dance/Concert 	
Sleeping/Resting/Relaxing	 Talking/Chatting/Socializing 	
• Smoking	• Watching TV/Film	
Washing/Dressing/Grooming	• Reading	

Source: Geiger and MacKerron (2016)

THE NOT-SPENDING-ENOUGH-TIME-IN-NATURE TRAP

HAPPINESS	GEOGRAPHY	CHART

Land Cover	Happiness Gain (compared to being in an urban environment)
Marine and coastal margins	6.02
Mountains, moors, and heathland	2.71
Woodland	2.12
Semi-natural grasslands	2.04
Enclosed farmland	2.03
Freshwater, wetlands, and floodplains	1.8
Suburban/rural developed	0.88
Inland bare ground	0.37

Source: MacKerron and Mourato (2013)

HAPPINESS WEATHER CHART

Weather	Happiness Effect When Participant Is Outdoors
Snow	1.02
Sun	0.46
Fog	-1.35
Rain	-1.37
0-8 degrees C	-0.51
8–16 degrees C	0.29
16-24 degrees C	0.99
24+ degrees C	5.13

Source: MacKerron and Mourato (2013)

APPENDIX

The chart that follows compares the predicted happiness of activities, according to the survey conducted by Spencer Greenberg and me, to the actual rank of activities, as found by Bryson and MacKerron. Activities that have a positive Difference, such as "Exhibition/Museum/Library," tend to give people more happiness than people expect. Activities that have a negative Difference, such as "Sleeping/Resting/Relaxing," tend to give people less happiness than people expect.

Activity	Predicted Happiness Rank of Activity	Actual Happiness Rank of Activity	Difference
Intimacy/Making Love	1	1	0
Pet Care/Playing with Pets	2	15	-13
Hobbies/Arts/Crafts	3	11	-8
Talking/Chatting/Socializing	4	7	-3
Theater/Dance/Concert	5	2	3
Singing/Performing	6	6	0
Sleeping/Resting/Relaxing	7	27	-20
Match/Sporting Event	8	13	-5
Computer Games/iPhone Games	9	20	-11
Watching TV/Film	10	19	-9
Birdwatching/Nature Watching	11	8	3
Eating/Snacking	12	21	-9
Other Games/Puzzles	13	16	-3
Hunting/Fishing	14	9	5
Gardening	15	5	10
Sports/Running/Exercise	16	4	12
Childcare/Playing with Children	17	14	3
Meditating/Religious Activities	18	12	6
Reading	19	24	-5
Exhibition/Museum/Library	20	3	17
Drinking Tea/Coffee	21	23	-2
Browsing the Internet	22	29	-7
Drinking Alcohol	23	10	13
Cooking/Preparing Food	24	22	2
Texting/Email/Social Media	25	30	-5
Listening to Speech/Podcast	26	25	1
Gambling/Betting	27	18	9
Traveling/Commuting	28	32	-4
Shopping/Errands	29	17	12
Care or Help for Adults	30	36	-6
Washing/Dressing/Grooming	31	26	5
Smoking	32	28	4
Working/Studying	33	37	-4
In a Meeting, Seminar, Class	34	33	1
Admin/Finances/Organizing	35	34	1
Housework/Chores/DIY	36	31	5
Waiting/Queueing	37	35	2
Sick in Bed	38	38	0

NOTES

INTRODUCTION: SELF-HELP FOR DATA GEEKS

- 2 unconventional daters' success: Christian Rudder, Dataclysm: Who We Are (When We Think No One's Looking) (New York: Broadway Books, 2014).
- 4 career trajectories of hundreds of thousands of painters: Samuel P. Fraiberger et al., "Quantifying reputation and success in art," *Science* 362(6416) (2018): 825–29.
- 5 Oakland A's: Michael Lewis, Moneyball: The Art of Winning an Unfair Game (New York: Norton, 2004).
- 6 "more Moneyball than the Moneyball A's themselves": Jared Diamond, "How to succeed in baseball without spending money," Wall Street Journal, October 1, 2019.
- 6 track the trajectory of every shot: Ben Dowsett, "How shot-tracking is changing the way basketball players fix their game," *FiveThirtyEight*, August 16, 2021, https://fivethirtyeight.com/features/how-shot -tracking-is-changing-the-way-basketball-players-fix -their-game/.

- 6 forty-one shades of blue: Douglas Bowman, "Goodbye, Google," https://stopdesign.com/archive/2009/03/20 /goodbye-google.html, March 20, 2009.
- \$200 million per year in additional ad revenue: Alex Horn, "Why Google has 200m reasons to put engineers over designers," *Guardian*, February 5, 2014.
- 6 "All others have to bring data": "Are we better off with the internet?" YouTube, uploaded by the Aspen Institute, July 1, 2012, https://www.youtube.com /watch?v=djVrLNaFvIo.
- 7 Renaissance's flagship Medallion fund: Gregory Zuckerman, The Man Who Solved the Market (New York: Penguin, 2019).
- *"they're just better than the rest of us":* Amy Whyte,
 "Famed Medallion fund 'stretches . . . explanation to the limit,' professor claims," Institutional Investor, January 26, 2020, https://www.institutionalinvestor .com/article/b1k2fymby99nj0/Famed-Medallion-Fund -Stretches-Explanation-to-the-Limit-Professor-Claims.
- *unprecedented happiness dataset:* More details about
 Mappiness can be found at http://www.mappiness.org.uk.
- 10 shifts are justified: Rob Arthur and Ben Lindbergh, "Yes, the infield shift works. Probably," June 30, 2016, https://fivethirtyeight.com/features/yes-the-infield -shift-works-probably/.
- 10 *"we're all in sales now":* Daniel H. Pink, *To Sell Is Human* (New York: Penguin, 2012).
- 11 having a poker face instead of a smile: Neeraj Bharadwaj et al., "EXPRESS: A New Livestream Retail Analytics Framework to Assess the Sales Impact of Emotional Displays," *Journal of Marketing*, September 30, 2021.

- 14 men sometimes type into Google: Data on self-reported -in-Google-searches penis sizes can be found here: https://trends.google.com/trends/explore?date=all&q =my%20penis%20is%205%20inches,my%20 penis%20is%204%20inches,my%20penis%20 is%203%20inches,my%20penis%20is%206%20 inches,my%20penis%20is%207%20inches.
- 15 really like sentences that include the word "you": Ariana Orwell, Ethan Kross, and Susan A. Gelman, " 'You' speaks to me: Effects of generic-you in creating resonance between people and ideas," *PNAS* 117(49) (2020): 31038–45.
- 15 the best-selling books of all time: https://en.wikipedia .org/wiki/List_of_best-selling_books.
- the most comprehensive study of rich people: Matthew Smith, Danny Yagan, Owen Zidar, and Eric Zwick, "Capitalists in the Twenty-First Century," *Quarterly Journal of Economics* 134(4) (2019): 1675–1745.
- 16 median age of entrepreneurs: Pierre Azoulay, Benjamin F. Jones, J. Daniel Kim, and Javier Miranda, "Age and High-Growth Entrepreneurship," American Economic Review 2(1) (2020): 65–82.
- 17 average successful entrepreneur is forty-two years old: Ibid.
- 17 the odds of starting a successful business increase: Ibid.
- 17 *the advantage of age in entrepreneurship is true even in tech:* Ibid.
- 17 Dataism: Yuval Noah Harari, Homo Deus: A Brief History of Tomorrow (New York: Random House, 2016).

- 18 "organisms are algorithms": "Yuval Noah Harari. Organisms Are Algorithms. Body Is Calculator. Answer = Sensation~Feeling~Vedan?," YouTube, uploaded by Rashid Kapadia, June 13, 2020, https://www.youtube .com/watch?v=GrQ7nY-vevY.
- 18 riddled with biases: Daniel Kahneman, Thinking, Fast and Slow (New York: Farrar, Straus & Giroux, 2011).

CHAPTER 1: THE AI MARRIAGE

- 21 *"the most important decision that you make":* https://www.wesmoss.com/news/why-who-you-marry-is-the -most-important-decision-you-make/.
- compared the field of relationship science to an adolescent: Harry T. Reis, "Steps toward the ripening of relationship science," *Personal Relationships* 14 (2007): 1–23.
- 22 Joel's plan worked: Samantha Joel et al., "Machine learning uncovers the most robust self-report predictors of relationship quality across 43 longitudinal couples studies," PNAS 117(32): 19061–71.
- 22 The researchers had data on: The variables examined can be found here: https://osf.io/8fzku/. The relevant file is Master Codebook With Theoretical Categorization, Final.xlsx, which is found in the section "Master Codebook with Theoretical Categorization." I thank Joel for pointing me to this file.
- **23** *Joel scheduled a talk in October 2019:* https://www .psychology.uwo.ca/pdfs/cvs/Joel.pdf.
- 24 Samantha Joel told me in a Zoom interview: I interviewed Joel on Zoom on September 24, 2020.

- 24 reliably predict social unrest five days before it happens: Ed Newton-Rex, "59 impressive things artificial intelligence can do today," *Business Insider*, May 7, 2017, https:// www.businessinsider.com/artificial-intelligence-ai-most -impressive-achievements-2017-3#security-5.
- 24 inform people of an emerging health issue: Bernard Marr, "13 mind-blowing things artificial intelligence can already do today," *Forbes*, November 11, 2019, https:// www.forbes.com/sites/bernardmarr/2019/11/11/13 -mind-blowing-things-artificial-intelligence-can -already-do-today/#4736a3c76502.
- 26 It is even possible to predict: Jon Levy, David Markell, and Moran Cerf, "Polar Similars: Using massive mobile dating data to predict synchronization and similarity in dating preferences," *Frontiers in Psychology* 10 (2019).
- "unsolicited pictures of men's anatomy": "What are single women's biggest complaints about online dating sites?" Quora, https://www.quora.com/What-are-single -womens-biggest-complaints-about-online-dating-sites; https://www.quora.com/What-disappointments-do -men-have-with-online-dating-sites.
- 28 rate the importance of twenty-one traits in a potential romantic partner: Harold T. Christensen, "Student views on mate selection," *Marriage and Family Living* 9(4) (1947): 85–88.
- 29 The researchers found that looks matter: Günter J. Hitsch, Ali Hortaçsu, and Dan Ariely, "What makes you click?—Mate preferences in online dating," *Quantitative Marketing and Economics* 8(4) (2010): 393–427. See Table 5.2.

- 31 how height affected daters' desirability: Ibid.
- 32 *Someone of a Desired Race:* https://www.gwern.net /docs/psychology/okcupid/howyourraceaffects themessagesyouget.html.
- 36 effects of wealth on romantic desirability: Hitsch, Hortaçsu, and Ariely, "What makes you click?"
- 37 One's job matters in the mating market: Ibid.
- 39 sexiest names: The results of this study were discussed in Daily Mail Reporter, "Why Kevins don't get girlfriends: Potential partners less likely to click on 'unattractive names' on dating websites," DailyMail.com, January 2, 2012, https://www.dailymail.co.uk/news/article-2081 166/Potential-partners-likely-click-unattractive -names-dating-websites.html. The academic study is Jochen E. Gebauer, Mark R. Leary, and Wiebke Neberich, "Unfortunate first names: Effects of namebased relational devaluation and interpersonal neglect," *Social Psychological and Personality Science* 3(5) (2012): 590–96.
- 39 similarity, rather than difference, leads to attraction: Emma Pierson, "In the end, people may really just want to date themselves," *FiveThirtyEight*, April 9, 2014, https://fivethirtyeight.com/features/in-the -end-people-may-really-just-want-to-datethemselves/.
- **40** *Hinge users are 11.3 percent more likely:* Levy, Markell, and Cerf, "Polar Similars."
- 44 Irrelevent Eight: The success rate of different variables in predicting relationship happiness can be found in Tables 3, S4, and S5 of Joel et al., (2020).

- *"He looked chubby in a uniform":* Alex Speier, "The transformation of Kevin Youkilis," *WEEI*, March 18, 2009.
- 49 rate the attractiveness of each of their opposite-sex classmates: Paul W. Eastwick and Lucy L. Hunt,
 "Relational mate value: consensus and uniqueness in romantic evaluations," *Journal of Personality and Social Psychology* 106(5) (2014): 728.

CHAPTER 2: LOCATION. LOCATION. LOCATION.

- 57 in the first year of a baby's life: Nehal Aggarwal, "Parents make 1,750 tough decisions in baby's first year, survey says," *The Bump*, July 9, 2020, https://www.thebump .com/news/tough-parenting-decisions-first-year-baby-life.
- 57 parents have ranked the age of eight: Allison Sadlier,
 "Americans with kids say this is the most difficult age to parent," New York Post, April 7, 2020.
- 58 "*Try timeouts*": Jessica Grose, "How to discipline without yelling or spanking," *New York Times*, April 2, 2019.
- 58 "never use timeouts": Wendy Thomas Russell, "Column: Why you should never use timeouts on your kids," PBS NewsHour, April 28, 2016.
- 58 frustrated mother: Rebecca Dube, "Exhausted new mom's hilarious take on 'expert' sleep advice goes viral," *Today*, April 23, 2013, https://www.today.com/moms /exhausted-new-moms-hilarious-take-expert-sleep -advice-goes-viral-6C9559908.
- 59 three different worlds: All median salaries are from the Bureau of Labor Statistics' Occupational Outlook Handbook, available at https://www.bls.gov/ooh/.

- 62 counterexamples to the Emanuel lesson: "I want to enroll a boy in dance class (ballet, etc.) but I fear he could be bullied because it's a 'girl thing' and also that he might become gay. What should I do?," Quora, https://www .quora.com/I-want-to-enroll-a-boy-in-dance-class -ballet-etc-but-I-fear-he-could-be-bullied-because-its -a-%E2%80%9Cgirl-thing-and-also-that-he-might -become-gay-What-should-I-do.
- 63 *Jim Lewis and Jim Springer:* The story of Jim Springer and Jim Lewis is discussed in many places, including in Edwin Chen, "Twins reared apart: A living lab," *New York Times*, December 9, 1979.
- *"Tve swung way over to the nature side":* Steve Lohr,"Creating Jobs: Apple's founder goes home again," *New York Times Magazine*, January 12, 1997.
- 65 *Harry and Bertha Holt:* The Holt story is told here: https://www.holtinternational.org/pas/adoptee/korea-2 -adoptees/background-historical-information-korea-all/.
- 66 Sacerdote's study: Bruce Sacerdote, "How large are the effects from changes in family environment? A study of Korean American adoptees," *The Quarterly Journal of Economics* 122(1) (2007): 119–57.
- 69 gave Jared a stake in his lucrative real estate business: Andrew Prokop, "As Trump takes aim at affirmative action, let's remember how Jared Kushner got into Harvard," Vox, July 6, 2018, https://www.vox.com /policy-and-politics/2017/8/2/16084226/jared -kushner-harvard-affirmative-action.
- 69 randomized controlled trial on breastfeeding: Michael S. Kramer et al., "Effects of prolonged and exclusive

breastfeeding on child height, weight, adiposity, and blood pressure at age 6.5 y: Evidence from a large randomized trial," *American Journal of Clinical Nutrition* 86(6) (2007): 1717–21.

- 69 exposure to TV had no long-term effects on child test scores: Matthew Gentzkow and Jesse M. Shapiro, "Preschool television viewing and adolescent test scores: Historical evidence from the Coleman Study," *Quarterly Journal of Economics* 123(1) (2008): 279–323.
- 69 *teaching kids cognitively demanding games:* John Jerrim et al., "Does teaching children how to play cognitively demanding games improve their educational attainment? Evidence from a randomized controlled trial of chess instruction in England," *Journal of Human Resources* 53(4) (2018): 993–1021.
- 70 careful meta-analysis of bilingual education: Hilde Lowell Gunnerud et al., "Is bilingualism related to a cognitive advantage in children? A systematic review and meta-analysis," *Psychological Bulletin* 146(12) (2020): 1059.
- *"limited evidence":* Jan Burkhardt and Cathy Brennan, *"The effects of recreational dance interventions on the health and well-being of children and young people:* A systematic review," *Arts & Health* 4(2) (2012): 148–61.
- "It takes a family to raise a child": "Acceptance Speech | Senator Bob Dole | 1996 Republican National Convention," YouTube, uploaded by Republican National Convention, March 25, 2016, https://www .youtube.com/watch?v=rYft9qxoLSo.

- 73 some neighborhoods produce more successful kids: Seth Stephens-Davidowitz, "The geography of fame," New York Times, March 13, 2014.
- **76** SuperMetros: Data on the causal effects of growing up in different metropolitan areas can be found at http://www.equality-of-opportunity.org/neighborhoods/.
- Within a given metropolitan area: Raj Chetty et al.,
 "The Opportunity Atlas: Mapping the childhood roots of social mobility," NBER Working Paper 25147, October 2018.
- some 13 percent: In a section of the paper, the authors say that a one standard deviation increase in mean income in a Census tract is 21 percent of mean household income; and that 62 percent of this effect is due to causal effects of a neighborhood.
- 79 some 25 percent: If the standard deviation of the income effects of parents overall is twice the standard deviation of the income effects of a neighborhood, the variance of the income effects of parents overall is four times the variance of the income effects of a neighborhood.
- 80 *most predictive of giving kids a big boost in life:* The Tract-Level Correlations Between Neighborhoods, Characteristics and Upward Mobility can be found in Figures V and Figure II of the Online Appendix in Chetty et al. (2018). These do not include data for Student Teacher Ratio or School Expenditures. Such data was studied in county-level estimates in Raj Chetty and Nathaniel Hendren, "The impacts

of neighborhoods on intergenerational mobility II: county-level estimates," *Quarterly Journal of Economics* 133(3): 1163–28. The estimates can be found in Tables A.12 and Table A.14.

- 82 The Power of Female Inventor Role Models: Alex Bell et al., "Who becomes an inventor in America? The importance of exposure to innovation," *Quarterly Journal of Economics* 134(2) (2019): 647–713.
- 83 The Power of Black Male Role Models: Raj Chetty et al.,
 "Race and economic opportunity in the United States: An intergenerational perspective," Quarterly Journal of Economics 135(2) (2019): 711–83.

CHAPTER 3: THE LIKELIEST PATH TO ATHLETIC GREATNESS IF YOU HAVE NO TALENT

- 93 Phelps's short legs: David Epstein, "Are athletes really getting faster, better, stronger?" TED2014, https://www.ted.com/talks/david_epstein_are_ athletes_really_getting_faster_better_stronger/ transcript?language=en#t-603684.
- 95 Fence Your Way to College: The O'Rourke story was told in Jason Notte, "Here are the best sports for a college scholarship," *Marketwatch.com*, November 7, 2018.
- 99 4 times in every 1,000 pregnancies: Christiaan Monden et al., "Twin Peaks: more twinning in humans than ever before," Human Reproduction 36(6) (2021): 1666–73.
- 100 *Twinsburg:* The Twinsburg festival has been discussed in many places, including Brandon Griggs, "Seeing double for science," *CNN*, August 2017.

- 101 *trusting behavior is 10 percent nature:* David Cesarini et al., "Heritability of cooperative behavior in the trust came," *PNAS* 105(10) (2008): 3721–26.
- 102 ability to recognize sour tastes is 53 percent nature: Paul M. Wise et al., "Twin study of the heritability of recognition thresholds for sour and salty tastes," *Chemical Senses* 32(8) (2007): 749–54.
- 102 bullying is explained 61 percent by nature: Harriet A. Ball et al., "Genetic and environmental influences on victims, bullies and bully-victims in childhood," *Journal of Child Psychology and Psychiatry* 49(1) (2008): 104–12.
- the T allele at rs11126630: Irene Pappa et al., "A genome-wide approach to children's aggressive behavior," *American Journal of Medical Genetics* 171(5) (2016): 562–72.
- 103 nine of them have been identical: Estimates of which twins were identical came from news articles. There is conflicting information about whether Stephen and Joey Graham are identical or fraternal. There also wasn't information on whether Carl and Charles Thomas were identical or fraternal. So I reached out to Charles on LinkedIn. He responded and told me they are identical. Thanks, Charles!
- *1 in 33,000:* This number of course depends on the year. But it can be calculated by comparing the total number of births in the United States in a given year to the total number of NBA players born in America in that year. For example, in 1990, there were roughly 4.2 million births in America, roughly half of whom were males. There have been 64 NBA players who were born in America in 1990.

- 103 rough model based on the twins equations: The code is on my website, sethsd.com, under the section "Twins Simulation Model."
- 104 the difficulty scouts have evaluating identical twins: Jeremy Woo, "The NBA draft guidelines for scouting twins," Sports Illustrated, March 21, 2018.
- 106 *6,778 Olympic wrestling athletes:* All estimated numbers of Olympic athletes are from Wikipedia.

CHAPTER 4: WHO IS SECRETLY RICH IN AMERICA?

- 113 Jack MacDonald: Katherine Long, "Seattle man's frugal life leaves rich legacy for 3 institutions," Seattle Times, November 26, 2013.
- 113 Anna Sorokin: Rachel Deloache Williams, "My brightlights misadventure with a magician of Manhattan," Vanity Fair, April 13, 2018.
- 115 paid \$8.9 million in 2019 by Stanford University: Steve Berkowitz, "Stanford football coach David Shaw credited with more than \$8.9 million in pay for 2019," USA Today, August 4, 2021.
- *Jerry Richardson:* Nick Maggiulli (@dollarsanddata),
 "2. Not thinking like an owner Do you know who the wealthiest NFL player in history is? Not Brady/ Manning/Madden. It's Jerry Richardson. Never heard of him? Me neither. He made his wealth from owning Hardees franchises, not playing in the NFL. Be an owner. Think like one too." February 8, 2021, 12:30 P.M., tweet.
- 117 which business fields give an owner: Tian Luo and Philip B. Stark, "Only the bad die young: Restaurant

mortality in the Western US," arXiv: 1410.8603, October 31, 2014.

- 119 Top 5 Businesses with the Greatest Number of Millionaires: This is from the online appendix of Smith, Yagan, Zidar, and Zwick, "Capitalists in the Twenty-First Century." In particular, the data comes from Table J.3 in http://www.ericzwick.com/capitalists /capitalists_appendix.pdf. I thank Eric Zwick for pointing me to it.
- 124 *are at least 10,000 independent creatives:* This includes rich owners of S-Corporations and partnerships.

CHAPTER 5: THE LONG, BORING SLOG OF SUCCESS

- 137 Tony Fadell: Fadell's story was told in many places, including here: Seema Jayachandran, "Founders of successful tech companies are mostly middle-aged," New York Times, September 1, 2019.
- *In an interview on* The Tim Ferriss Show, *Fadell said: The Tim Ferriss Show* #403, "Tony Fadell—On Building the iPod, iPhone, Nest, and a Life of Curiosity," December 23, 2019.
- 140 *"people over 45 basically die in terms of new ideas":* Corinne Purtill, "The success of whiz kid entrepreneurs is a myth," *Quartz*, April 24, 2018.
- *"Young people are just smarter":* Lawrence R. Samuel,*"Young people are just smarter," Psychology Today,*October 2, 2017.
- 142 years following the release of the movie: "Surge in teenagers setting up businesses, study suggests," https:// www.bbc.com/news/newsbeat-50938854.

- 143 Suzy Batiz: Carina Chocano, "Suzy Batiz' empire of odor," New Yorker, November 4, 2019; Liz McNeil, "How Poo-Pourri founder Suzy Batiz turned stinky bathrooms into a \$240 million empire," People, July 9, 2020.
- 144 "*The Outsider Advantage*": David J. Epstein, *Range* (New York: Penguin, 2019).
- 146 "great new things often come from the margins": Paul Graham, "The power of the marginal," paulgraham .com, http://www.paulgraham.com/marginal.html.
- *NBA players disproportionately come from middle-class families:* Joshua Kjerulf Dubrow and Jimi Adams,
 "Hoop inequalities: Race, class and family structure background and the odds of playing in the National Basketball Association," *International Review for the Sociology of Sport* 45(3): 251–57; Seth Stephens-Davidowitz, "In the N.B.A., ZIP code matters," *New York Times*, November 3, 2013.
- 151 people are more likely to laugh when things are going well: Seth Stephens-Davidowitz, "Why are you laughing?" New York Times, May 15, 2016.
- 151 more intelligence is always an advantage: Matt Brown, Jonathan Wai, and Christopher Chabris, "Can you ever be too smart for your own good? Comparing linear and nonlinear effects of cognitive ability on life outcomes," PsyArXiv Preprints, January 30, 2020.

CHAPTER 6: HACKING LUCK TO YOUR ADVANTAGE

157 *Airbnb:* The Airbnb story has been told many places, including by Leigh Gallagher, *The Airbnb Story: How*

Three Ordinary Guys Disrupted an Industry, Made Billions . . . and Created Plenty of Controversy (New York: HMH Books, 2017).

- 159 "Idea times Product times Execution times Team times Luck": Tad Friend, "Sam Altman's manifest destiny," New Yorker, October 3, 2016.
- 160 how luck influences large companies: Jim Collins, Great by Choice (Good to Great) (New York: Harper Business, 2011).
- 163 Airbnb's bookings dropped: Corrie Driebusch, Maureen Farrell, and Cara Lombardo, "Airbnb plans to file for IPO in August," Wall Street Journal, August 12, 2020.
- *IPO'd at a more than \$100 billion valuation:* Bobby
 Allyn and Avie Schneider, "Airbnb now a \$100 Billion company after stock market debut sees stock price double," NPR, December 10, 2020.
- 164 a clear difference between sports and art: Albert-László Barabási, The Formula (New York: Little, Brown, 2018).
- 165 Only 7 of the 1,097 people who passed by stopped to listen: Gene Weingarten, "Pearls Before Breakfast: Can one of the nation's great musicians cut through the fog of a D.C. rush hour? Let's find out," Washington Post, April 8, 2007.
- 166 the Mona Lisa was gone: R. A. Scotti, Vanished Smile (New York: Vintage, 2009).
- 168 *"Da Vinci Effect":* https://www.beervanablog.com /beervana/2017/11/16/the-da-vinci-effect.
- 168 Salvator Mundi: Caryn James, "Where is the world's most expensive painting?," BBC.com, August 19, 2021,

https://www.bbc.com/culture/article/20210819-where -is-the-worlds-most-expensive-painting.

- 169 what predicts success in the art world: Fraiberger et al.,"Quantifying reputation and success in art."
- 171 schedule of a Category 1 Artist as a Young Man: Painting schedules of particular artists from the dataset were kindly provided by Samuel P. Fraiberger.
- how Springsteen diagnosed his problem: "The Promised Land (Introduction Part 1) (Springsteen on Broadway -Official Audio)," YouTube, uploaded by Bruce Springsteen, December 14, 2018, https://www.you tube.com/watch?v=omuusrmb6jo&list=PL9tY0BWXO ZFs9l_PMss5AB8SD38lFBLwp&index=12.
- Artists who produce more work tend to have more hits: Dean Keith Simonton, "Creativity as blind variation and selective retention: Is the creative process Darwinian?," *Psychological Inquiry* 10 (1999): 309–28.
- *"You wrote it": No Direction Home*, directed by Martin Scorsese, Paramount Pictures, 2005.
- 178 Beethoven disliked a piece he had created: Aaron Kozbelt,
 "A quantitative analysis of Beethoven as self-critic: Implications for psychological theories of musical creativity," Psychology of Music 35 (2007): 144–68.
- 178 Upon completing his third album, Born to Run: Louis Masur, "Tramps Like Us: The birth of Born to Run," Slate, September 2009, https://slate.com/culture /2009/09/born-to-run-the-groundbreaking-springsteen -album-almost-didnt-get-released.html.
- 181 When the least desirable men on the site: Elizabeth E. Bruch and M. E. J. Newman, "Aspirational pursuit of

mates in online dating markets," *Science Advances* 4(8) (2018).

- 182 heterosexual women significantly increase: Derek A. Kraeger et al., " 'Where have all the good men gone?' Gendered interactions in online dating," *Journal of Marriage and Family* 76(2) (2014): 387–410.
- 185 Chris McKinlay: Kevin Poulsen, "How a math genius hacked OkCupid to find true love," Wired, January 21, 2014. McKinlay tells the story in his book Optimal Cupid: Mastering the Hidden Logic of OkCupid (CreateSpace Independent Publishing Platform, 2014).
- 186 for every offer a scientist receives: Jason D. Fernandes et al., "Research culture: A survey-based analysis of the academic job market," *eLife Sciences*, June 12, 2020.

CHAPTER 7: MAKEOVER: NERD EDITION

- the world's foremost expert on faces: Alexander Todorov, Face Value (Princeton, NJ: Princeton University Press, 2017). I also interviewed Todorov on May 7, 2019.
- 194 the person whose face was judged as more competent: Alexander Todorov et al., "Inferences of competence from faces predict election outcomes," *Science* 308(5728) (2005): 1623–26.
- 195 what best predicted which West Point cadets: Ulrich Mueller and Allan Mazur, "Facial dominance of West Point cadets as a predictor of later military rank," *Social Forces* 74(3) (1996): 823–50.
- 198 rate multiple pictures of the same person on many dimensions: Alexander Todorov and Jenny M. Porter,
 "Misleading first impressions: Different for different

facial images of the same person," *Psychological Science* 25(7) (2014): 1404–17.

CHAPTER 8: THE LIFE-CHANGING MAGIC OF LEAVING YOUR COUCH

- 210 tenure does not give lasting happiness: Dan Gilbert et al., "Immune neglect: A source of durability bias in affective forecasting," *Journal of Personality and Social Psychology* 75(3) (1998): 617–38.
- **210** *what it is like being denied tenure:* "What is it like to be denied tenure as a professor?," *Quora*, https://www .quora.com/What-is-it-like-to-be-denied-tenure-as-a -professor.
- 213 recruited a whole bunch of colonoscopy patients: Donald A. Redelmeier and Daniel Kahneman, "Patients' memories of painful medical treatments: Real-time and retrospective evaluations of two minimally invasive procedures," *Pain* 66(1) (1996): 3–8.

CHAPTER 9: THE MISERY-INDUCING TRAPS OF MODERN LIFE

- 234 search engines are worth \$17,530 every year to the average American: Erik Brynjolfsson, Avinash Collis, and Felix Eggers, "Using massive online choice experiments to measure changes in well-being," PNAS 116(15) (2019): 7250–55.
- 234 30 percent of Americans said they were "very happy": GSS data is available here: https://gssdataexplorer.norc.org /trends/Gender%20&%20Marriage?measure=happy.

- 235 income does increase happiness, but the effects are small: Matthew A. Killingsworth, "Experienced well-being rises with income, even above \$75,000 per year," PNAS 118(4) (2021).
- 236 meditation does boost happiness: Xianglong Zeng et al., "The effect of loving-kindness meditation on positive emotions: A meta-analytic review," Frontiers in Psychology 6 (2015): 1693.
- 238 Work sucks: Alex Bryson and George MacKerron,
 "Are you happy while you work?" *Economic Journal* 127(599) (2016): 106–25.
- 245 experiment on the effects of using Facebook: Hunt Allcott et al., "The welfare effects of social media," American Economic Review 110(3) (2020): 629–76.
- 247 how sports fans' happiness was affected: Peter Dolton and George MacKerron, "Is football a matter of life or death—or is it more important than that?," National Institute of Economic and Social Research Discussion Papers 493, 2018.
- 249 "Better than the Knicks": Sean Deveney, "Andrew Yang brings his hoop game, 2020 campaign to A.N.H. gym for new series," https://www.forbes.com/sites/seand eveney/2019/10/14/andrew-yang-2020-campaign-new -hampshire-luke-bonner/?sh=73927bbf1e47.
- 251 "I don't like drinking": "Comedians Tackling Depression & Anxiety Makes Us Feel Seen," YouTube, uploaded by Participant, https://www.youtube.com /watch?v=TBV-7_qGlr4&t=691s.
- 252 happiness of booze: Ben Baumberg Geiger and George MacKerron, "Can alcohol make you happy?

A subjective wellbeing approach," *Social Science & Medicine* 156 (2016): 184–91.

- 255 being in nature is a crucial component of happiness: George MacKerron and Susana Mourato, "Happiness is greater in natural environments," *Global Environmental Change* 23(5) (2013): 992–1000.
- 259 being around beauty itself: Chanuki Illushka Seresinhe et al., "Happiness is greater in more scenic locations," Scientific Reports 9 (2019): 4498.
- 261 HappyHier: Sjerp de Vries et al., "In which natural environments are people happiest? Large-scale experience sampling in the Netherlands," Landscape and Urban Planning 205 (2021).
- 262 frequently, other factors matter more than the weather: All happiness comparisons are the author's calculations based on Table 2 here: https://eprints.lse.ac.uk/49376 /1/Mourato_Happiness_greater_natural_2013.pdf.