

Організації, які вже борються за поліпшення уваги

Наводжу тут початковий, тимчасовий, перелік. Сподіваюсь, з'явиться більше організацій, коли люди стануть краще поінформованими. Якщо немає організації, яка опікувалася б тим, що, на вашу думку, потрібно робити, створіть її, напишіть мені на електронну адресу chasingthescream@gmail.com, і я додам її до переліку на сайті цієї книжки, а також у подальші видання, щоб читачі могли до вас приєднатися.

Боротьба за зміни в інтернеті:

The Centre For Humane Technology: <https://www.humanetech.com>

Кампанія Avaaz за детоксифікацію алгоритмів: secure.avaaz.org/campaign/en/detox_the_algorithm_loc

Stop Hate For Profit: stophateforprofit.org/backup-week-of-action-toolkit

Боротьба за чотириденний робочий тиждень:

Ендрю Барнз і Шарлот Локгарт заснували організацію: 4dayweek.com

У Європі веде боротьбу New Economics Foundation: neweconomics.org

Four Day Week Ireland: fourdayweek.ie

Боротьба за те, щоб дітям дозволяли гратися:

Let Grow: letgrow.org

Let Our Kids Be Kids: letthekidsbekids.wordpress.com

The Daily Mile: thedailymile.co.uk

The Less Testing, More Learning Campaign: citizensforpublicschools.org/less-testing-more-learning-ma-campaign/sign-the-less-testing-more-learning-petition-today

More Than A Score (організація проти надмірних тестувань у Сполученому Королівстві): morethanascore.org.uk та facebook.com/parentssupportteachers

Keeping Early Years Unique: keyu.co.uk

Upstart Scotland: upstart.scot

Боротьба за захист дітей від підсідання на технології в ранньому віці:

Turning Life On: turninglifeon.org

Боротьба за зміну продовольчого забезпечення:

The Campaign for a Healthier Generation: healthiergeneration.org

Healthy Food America: healthyfoodamerica.org

Healthy Schools Campaign: healthyschoolscampaign.org/issues/school-food

Better Food Britain і Children's Food Campaign: sustainweb.org/project-sandcampaigns та sustainweb.org/childrensfoodcampaign

School Food Matters: schoolfoodmatters.org/campaigns

Henry: henry.org.uk

Боротьба проти шкідливих для уваги забруднювачів:

Little Things Matter: littlethingsmatter.ca

Client Earth: clientearth.org

Кампанія The BreatheLife: ccacoalition.org/en/activity/breathelife-campaign або breathelife2030.org

HealthyAir: healthyair.org.uk

Endocrine Society (ES): endocrine.org

European Society of Endocrinology (ESE): ese-hormones.org

Health and Environmental Alliance (HEAL): env-health.org

Боротьба за гарантований базовий дохід:

Citizens Income: citizensincome.org

Basic Income: basicincome.org.uk

Якщо ви хочете час від часу дізнаватися від мене про розвиток подій у боротьбі за нашу увагу, підпишіться на мою розсилку: stolen-focusbook.com/maillinglist

Примітки

Зверніть увагу, що це лише часткові примітки. Більше посилань, довідкової інформації й додаткового матеріалу, а також аудіозаписи наведених у книжці цитат дивіться за посиланням: www.stolenfocusbook.com/endnotes

Вступ

- 1 Jill Twenge, *iGen: Why Today's SuperConnected Kids Are Growing Up Less Rebellious, More Tolerant, Less Happy — and Completely Unprepared for Adulthood — and What That Means for the Rest of Us* (New York: Atria Books, 2017), p. 64, citing L. Yeykelis, J. J. Cummings and B. Reeves, 'Multitasking on a Single Device: Arousal and the Frequency, Anticipation, and Prediction of Switching Between Media Content on a Computer', *Journal of Communications*, 64, 2014, pp. 167–92. DOI:io.nn/jcom.12070.

Див. також: Adam Gazzaley and Harry D. Rosen, *The Distracted Mind: Ancient Brains in a High-Tech World* (Cambridge: MIT Press, 2017), pp. 165–7.

- 2 V. M. Gonzalez and G. Mark, 'Constant, constant, multitasking craziness: Managing multiple working spheres', in *Proceedings of СНИ 2004*, Vienna, Austria, pp. 113–120. Професорка Марк детальніше розповіла про своє дослідження в нижчезазначеному інтерв'ю, а також багато роз'яснила у моєму інтерв'ю з нею.

'Too Many Interruptions At Work?' *Business Journal*, 8 June 2006. <https://news.gallup.com/businessjournal/23146/too-many-interruptions-work.aspx>.

Див. також: C. Marci, 'A (biometric) day in the life: Engaging across media,' paper presented at ReThink 2012, New York, NY, 28 March 2012.

Дослідження зі схожими (не ідентичними) результатами: L. D. Rosen et al., 'Facebook and texting made me do it: Media-induced task-switching while studying,' *Computers in Human Behaviour*, 29 (3), 2013, pp. 948–58.

- 3 G. Mark, S. Iqbal, M. Czerwinski and P Johns, 'Focused, Aroused, but so Distractible,' in *The 18th ACM Conference*, 2015, pp. 903–16. 001:10.1145/2675133.2675221; James Williams, *Stand Out Of Our Light* (Cambridge: Cambridge University Press, 2018), p. 51.

Див. також: L. Dabbish, G. Mark and V. Gonzalez, 'Why do I keep interrupting myself? Environment, habit and self-interruption,' in *Proceedings of the 2011 annual conference on human factors in computing systems*, pp. 3,127–30.

Див. також: K. Pattison, 'Worker, Interrupted: The Cost of Task-Switching,' *Fast Company*, 28 July 2008. <https://www.fastcompany.com/944128/worker-interrupted-cost-task-switching>.

- 4 J. MacKay, 'The Myth of Multitasking: The ultimate guide to getting more done by doing less,' *RescueTime* (blog), 17 January 2019. <https://blog.rescuetime.com/multitasking/>;
- J. MacKay, 'Communication over-load: our research shows most workers can't go 6 minutes without checking email or IM,' *RescueTime* (blog), 11 July 2018. <https://blog.rescuetime.com/communication-multitasking-switches/>.
- 5 D. Charles William, *Forever a Father, Always a Son* (New York: Victor Books, 1991), p. 112.

Розділ 1

- 6 J. MacKay, 'Screen time stats 2019: here's how much you use your phone during the work day,' *RescueTime* (blog), 21 March 2019. <https://blog.rescuetime.com/screen-time-stats-2018/>.
- 7 J. Naftulin, 'Here's how many times we touch our phones every day,' *Insider*, 13 July 2016. <https://www.businessinsider.com/dscout-research-people-touch-cell-phones-2617-times-a-day-2016-7?r=US&IR=T>.
- 8 'La vida no puede esperar a que las ciencias expliquen científicamente el Universo. No se puede vivir ad kalendas graecas. El atributo mas esencial de la existencia es su perentoriedad: la vida es siempre urgente. Se vive aqul y ahora sin posible demora ni traspaso. La vida nos es disparada a quemarropa. Ya la cultura, que no es sino su interpretación, no puede tampoco esperar' J. Ortega y Gasset, *Mission of the University* (Misión de la Universidad), 1930, translated by H. L. Nostrand (Princeton, Princeton University Press, 1944), p. 73.
- 9 Molly J. Crockett et al., 'Restricting Temptations: Neural Mechanisms of Precommitment,' *Neuron*, 2013, 79 (2), 391. DOI: 10.1016/j.neuron.2013.05.028.

У статті 2012 року вичерпно розглянуто тему і загальноприйняту нині теорію: Z. Kurth-Nelson and A. D. Redish, 'Don't let me do that! — models of precommitment,' *Frontiers in Neuroscience*, 6 (2012), p. 138.

- 10 T Dubowitz et al., 'Using a Grocery List Is Associated With a Healthier Diet and Lower BMI Among Very High-Risk Adults,' *Journal of Nutrition, Education and Behavior*, 47 (3), 2015, pp. 259–64; J. Schwartz et al., 'Healthier by Precommitment,' *Psychological Science*, 25 (2), 2015, pp. 538–46. DOI: 10.1177/0956797613510950.

R. Ladouceur, A. Blaszczynski and D. R. Lalande, 'Pre-commitment in gambling: a review of the empirical evidence,' *International Gambling Studies*, 12 (2), 2012, pp. 215–30.

- 11 P. Lorenz-Spreen, B. Mørk Mønsted, P. Hovel and S. Lehmann, 'Accelerating dynamics of collective attention,' *Nature Communications*, 10 (1), 2019. DOI: 10.1038/S41467-019-09311-W.
- 12 M. Hilbert and P. López, 'The World's Technological Capacity to Store, Communicate and Compute Information,' *Science*, 332, 2011, pp. 60–5.
- 13 M. E. J. Masson, 'Cognitive processes in skimming stories,' *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 8, 1982, pp. 400–17.

Див. також: M. L. Slowiaczek and C. Clifton, 'Subvocalization and reading for meaning,' *Journal of Verbal Learning and Verbal Behavior*, 19 (5), 1980, pp. 573–82; T. Calef, M. Pieper and B. Coffey, 'Comparisons of eye movements before and after a speed-reading course,' *Journal of the American Optometric Association*, 70, 1999, pp. 171–81; M. Just, M. Masson and P. Carpenter, 'The differences between speed reading and skimming,' *Bulletin of the Psychonomic Society*, 16, 1980, p. 171; M. C. Dyson and M. Haselgrove, 'The

- effects of reading speed and reading patterns on the understanding of text read from screen,' *Journal of Research in Reading*, 23, 2000, pp. 210–23.
- 14 K. Rayner et al., 'So Much to Read, So Little Time: How Do We Read, and Can Speed Reading Help?', *Psychological Science in the Public Interest*, 17 (1), 2016, pp. 4–34.
- 15 S. C. Wilkinson, W. Reader and S. J. Payne, 'Adaptive browsing: Sensitivity to time pressure and task difficulty,' *International Journal of Human–Computer Studies*, 70, 2012, pp. 14–25; G. B. Duggan and S. J. Payne, 'Text skimming: the process and effectiveness of foraging through text under time pressure,' *Journal of Experimental Psychology: Applied*, 15 (3), 2009, pp. 228–42.
- 16 T. H. Eriksen, *Tyranny of the Moment* (London: Pluto Press, 2001), p. 71, citing the research of Ulf Torgersen, 'Taletempo,' *Nytt norsk tidsskrift*, 16, 1999, pp. 3–5.
Див. також: М. Toft, 'Med eit muntert blikk på styre og stell,' *Uni Forum* 29 June 2005. <https://www.uniforum.uio.no/nyheter/2005/06/med-eit-muntert-blikk-paa-styre-og-stell.html>.
- Див. також ще одну цікаву дискусію: М. Liberman, 'Norwegian Speed: Fact or Factoid?' *Language Log* (blog), 13 September 2010. <https://languageblog.ldc.upenn.edu/nll/?p=2628>.
- 17 R. Colville, *The Great Acceleration: How the World is Getting Faster, Faster* (London: Bloomsbury, 2016), pp. 2–3, citing R. Levine, *A Geography of Time* (New York: Basic Books, 1997), and Richard Wiseman, www.richardwiseman.com/quirkology/pace_home.htm.
- 18 Colville, *The Great Acceleration*, p. 11.
- 19 Там само, с. 20.
- 20 G. Claxton, *Intelligence in the Flesh* (New Haven: Yale University Press, 2016), pp. 260–1.
Див. також: Р. Wayne et al., 'Effects of tai chi on cognitive performance in older adults: systematic review and meta-analysis,' *Journal of the American Geriatric Society*, 62 (1), 2014, pp. 25–39; N. Gothe et al., 'The effect of acute yoga on executive function,' *Journal of Physical Activity and Health*, 10 (4), 2013, pp. 488–95; P. Lovatt, 'Dance psychology,' *Psychology Review*, 2013, pp. 18–21; C. Lewis and P. Lovatt, 'Breaking away from set patterns of thinking: improvisation and divergent thinking,' *Thinking Skills and Creativity*, 9, 2013, pp. 46–58.
- 21 Добре викладено його погляди на цю тему тут: Е. Miller, 'Multitasking: Why Your Brain Can't Do It and What You Should Do About It' (seminar recording and presentation slides), *Radius*, 11 April 2017. <https://radius.mit.edu/programs/multitasking-why-your-brain-cant-do-it-and-what-you-should-do-about-it>.
- 22 Про «ефект перемикання» багато пишуть у науковій літературі. Типовий приклад: R. D. Rogers and S. Monsell, 'The cost of a predictable switch between simple cognitive tasks,' *Journal of Experimental Psychology: General*, 124, 1995, pp. 207–31. Узагальнений огляд цієї теми: 'Multitasking: Switching costs,' *American Psychological Association*, 20 March 2006. <https://www.apa.org/research/action/multitask> [автора не вказано].
- 23 James Williams, *Stand Out Of Our Light* (Cambridge: Cambridge University Press, 2018), p. 69. Дослідження проводив доктор Гленн Вілсон. Воно не було опубліковане, тому що його замовила приватна компанія. Ознайомитись із розповіддю доктора Вілсона про це дослідження можна за посиланням (оберіть розділ Infomania): <http://drglennwilson.com/links.html>.
- Див. також: Р. Непп, 'Death By Information Overload,' *Harvard Business Review*, September 2009. <https://hbr.org/2009/09/death-by-information-overload>.

- Докторів Вілсону не сподобалось, як деякі журналісти писали про його дослідження, і я намагався врахувати його критику в цій книжці. За його словами, порівняння з коноплями доцільне тільки, коли йдеться про короткочасний ефект, натомість у довгочасній перспективі конопля завдає IQ більшого удару. Саме тому наводжу в примітках цей аспект.
- 24 E. Hoffman, *Time* (London: Profile Books, 2010), pp. 80–1; W. Kirn, 'The Autumn of the Multitaskers,' *The Atlantic*, November 2017.
 - 25 V. M. Gonzalez and G. Mark, 'Constant, constant, multitasking craziness: Managing multiple working spheres,' in *Proceedings of CHI 2004*, Vienna, Austria, pp. 113–20.
Див. також: L. Dabbish, G. Mark and V. Gonzalez, 'Why do I keep interrupting myself? Environment, habit and self-interruption,' in *Proceedings of the 2011 annual conference on human factors in computing systems*, pp. 3,127–30; T. Klingberg, *The Overflowing Brain*, (Oxford, OUP, 2009), p. 4; Colville, *The Great Acceleration*, p. 47.
 - 26 T. Harris, 'Episode 7: Pardon the Interruptions,' *Your Undivided Attention Podcast*, 14 August 2019. <https://www.humanetech.com/podcast>; C. Thompson, 'Meet The Life Hackers,' *New York Times Magazine*, 16 October 2005.
 - 27 J. MacKay, 'The Myth of Multitasking: The ultimate guide to getting more done by doing less' *RescueTime* (blog), 17 January 2019. <https://blog.rescuetime.com/multitasking/#at-work>; and J. MacKay, 'Communication overload: our research shows most workers can't go 6 minutes without checking email or IM,' *RescueTime* (blog), 11 July 2018. <https://blog.rescuetime.com/communication-multitasking-switches/>.
 - 28 Colville, *The Great Acceleration*, p. 47.
 - 29 B. Sullivan, 'Students can't resist distraction for two minutes... and neither can you,' *NBC News*, 18 May 2013. <https://www.nbcnews.com/technolog/students-cant-resist-distraction-two-minutes-neither-can-you-1C9984270>. Дослідження не було опубліковано.
 - 30 Gazzaley and Rosen, *The Distracted Mind*, p. 127.
 - 31 D. L. Strayer, 'Is the Technology in Your Car Driving You to Distraction?,' *Policy Insights from the Behavioral and Brain Sciences*, 2 (1), 2015, pp. 157–65. Порівняння він навів тут: K. Ferebee, 'Drivers on Cell Phones Are As Bad As Drunks,' *UNews Archive*, University of Utah, 25 March 2011. https://archive.uneews.utah.edu/news_releases/drivers-on-cell-phones-are-as-bad-as-drunks/.
 - 32 S. P. McEvoy et al., 'The impact of driver distraction on road safety: results from a representative survey in two Australian states,' *Injury prevention: Journal of the International Society for Child and Adolescent Injury Prevention*, vol. 12, 4, 2006, pp. 242–7.
 - 33 Gazzaley and Rosen, *The Distracted Mind*, p. 11; L. M. Carrier et al., 'Multitasking Across Generations: Multitasking Choices and Difficulty Ratings in Three Generations of Americans,' *Computers in Human Behavior*, 25, 2009, pp. 483–9.
 - 34 A. Kahkashan and V. Shivakumar, 'Effects of traffic noise around schools on attention and memory in primary school children,' *International Journal of Clinical and Experimental Physiology*, 2 (3), 2015, pp. 176–9.

Розділ 2

- 35 K. S. Beard, 'Theoretically Speaking: An Interview with Mihaly Csikszentmihalyi on Flow Theory Development and Its Usefulness in Addressing Contemporary Challenges in Education,' *Educational Psychology Review*, 27, 2015, pp. 353–64.

- 36 B. F. Skinner, "Superstition" in the pigeon,' *Journal of Experimental Psychology*, 38 (2), 1948, p. 168–72.
- 37 Beard, 'Theoretically Speaking,' pp. 353–64.
- 38 R. Kegan, *The Evolving Self: Problem and Process in Human Development* (Cambridge: Harvard University Press, 1983), p. xii.
- 39 M. Csikszentmihalyi, *Flow: the psychology of optimal experience* (New York: Harper, 2008), p. 40.
- 40 Там само, с. 54.
- 41 Там само, сс. 158–9.
- 42 Там само, с. 7.

Див. також: Brigid Schulte, *Overwhelmed: Work, Love and Play When No One Has the Time* (London: Bloomsbury Press, 2014), pp. 66–7.

- 43 R. Kubey and M. Csikszentmihalyi, *Television and the Quality of Life: How Viewing Shapes Everyday Experience* (Abingdon-on-Thames: Routledge, 1990).
- 44 Csikszentmihalyi, *Flow*, p. 83.
- 45 Csikszentmihalyi, *Creativity*, p. 11.

Розділ 3

- 46 L. Matricciani, T. Olds and J. Petkov, 'In search of lost sleep: secular trends in the sleep time of school-aged children and adolescents,' *Sleep Medicine Reviews*, 16 (3), 2012, pp. 203–11.
- 47 H. G. Lund et al., 'Sleep patterns and predictors of disturbed sleep in a large population of college students,' *Journal of Adolescent Health*, 46 (2), 2010, pp. 124–32.
- 48 J. E. Gangwisch, 'A review of evidence for the link between sleep duration and hypertension,' *American Journal of Hypertension*, 27 (10), 2014, pp. 1,235–42.
- 49 E. C. Hanlon and E. Van Cauter, 'Quantification of sleep behavior and of its impact on the cross-talk between the brain and peripheral metabolism,' *Proceedings of the National Academy of Sciences of the United States of America*, 108, suppl. 3, 2011, pp. 15,609–16; M. Walker, *Why We Sleep* (London: Penguin, 2018), p. 3.
- 50 J. Hamzelou, 'People with narcolepsy may be more creative because of how they sleep,' *New Scientist*, 18 June 2019.
- 51 Сон подвоює шанси запам'ятати матеріал, який раніше не засвоївся. Див. дослідження Ессекського університету: N. Dumay, 'Sleep not just protects memories against forgetting, it also makes them more accessible,' *Cortex*, 74, 2016, pp. 289–96.
- 52 Значуще дослідження: K. Louie and M. A. Wilson, 'Temporally Structured Replay of Awake Hippocampal Ensemble Activity during Rapid Eye Movement Sleep,' *Neuron*, 29, 2001, pp. 145–56.
- 53 A. Hvolby, 'Associations of sleep disturbance with ADHD: implications for treatment, Attention deficit and hyperactivity disorders,' 7 (1), 2015, pp. 1–18; E. J. Paavonen et al., 'Short sleep duration and behavioral symptoms of attention-deficit/hyperactivity disorder in healthy 7- to 8-year-old children,' *Pediatrics*, 2009, 123 (5):e857–64; A. Pesonen et al., 'Sleep duration and regularity are associated with behavioral problems in 8-year-old children,' *International Journal of Behavioral Medicine*, 17 (4), 2010, pp. 298–305; R. Gruber et al., 'Short sleep duration is associated with teacher-reported inattention and cognitive problems in healthy school-aged children,' *Nature and Science of Sleep*, 4, 2012, pp. 33–40.

- 54 СДУГ — синдром дефіциту уваги з гіперактивністю. — Прим. пер.
- 55 A. Huffington, *The Sleep Revolution: Transforming Your Life, One Night At A Time* (New York: Penguin Random House, 2016), pp. 103–4.
- 56 K. Janto, J. R. Prichard and S. Pusalavidyasagar, 'An Update on Dual Orexin Receptor Antagonists and Their Potential Role in Insomnia Therapeutics,' *Journal of clinical sleep medicine (JCSM: official publication of the American Academy of Sleep Medicine)*, 14 (8), 2018, pp. 1,399–1408.
- 57 S. R. D. Morales, 'Dreaming with the Zeitgeber, Part I: A Lecture on Moderns and Their Night,' *The Wayward School*, <https://journals.uvic.ca/index.php/peninsula/article/view/11518/3217>.
- 58 T. Farragher, 'Sleep, the final frontier. This guy studies it. Here's what he has to say,' *Boston Globe*, 18 August 2018. <https://www.bostonglobe.com/metro/2018/08/17/sleep-final-frontier-this-guy-studies-here-what-has-say/MC114NnJyK6tbOHpvdLgQN/story.html>.

Розділ 4

- 59 C. Ingraham, 'Leisure reading in the U.S. is at an all-time low,' *Washington Post*, 29 June 2018. <https://www.washingtonpost.com/news/wonk/wp/2018/06/29/leisure-reading-in-the-u-s-is-at-an-all-time-low/>; <https://www.bls.gov/tus/>.
- 60 D. W. Moore, 'About Half Of Americans Reading A Book,' *Gallup News Service*, 3 June 2005. <https://news.gallup.com/poll/16582/about-half-americans-reading-book.aspx>
- C. Ingraham, 'The long, steady decline of literary reading,' *Washington Post*, 7 September 2016. https://www.washingtonpost.com/news/wonk/wp/2016/09/07/the-long-steady-decline-of-literary-reading/?utm_term=.f9d5fec802ad&tid=lk_inline_manual_12.
- За результатами досліджень Pew, показники трохи вищі: A. Perrin, 'Who doesn't read books in America?,' *Pew Research Center*, 26 September 2019. <https://www.pewresearch.org/fact-tank/2019/09/26/who-doesnt-read-books-in-america/>.
- 61 Ingraham, 'Leisure reading in the U.S. is at an all time low.'
- 62 E. Brown, 'Americans spend far more time on their smartphones than they think,' *ZDnet*, 28 April 2019. <https://www.zdnet.com/article/americans-spend-far-more-time-on-their-smartphones-than-they-think/>.
- 63 *Reading at Risk*, National Endowment for the Arts, 2002. https://www.arts.gov/sites/default/files/RaRExec_o.pdf.
- 64 A. Flood 'Literary fiction in crisis as sales drop dramatically, Arts Council England reports,' *Guardian*, 15 December 2017. <https://www.theguardian.com/books/2017/dec/15/literary-fiction-in-crisis-as-sale-drop-dramatically-arts-council-england-reports>.
- 65 W. Self, 'The printed word in peril,' *Harpers*, October 2018. <https://harpers.org/archive/2018/10/the-printed-word-in-peril/>.
- 66 A. Mangen, G. Olivier and J. Velay, 'Comparing Comprehension of a Long Text Read in Print Book and on Kindle: Where in the Text and When in the Story?,' *Frontiers in Psychology*, 10, 2019, p. 38.
- 67 P. Delgado et al., 'Don't throw away your printed books: a meta-analysis on the effects of reading media on reading comprehension,' *Educational Research and Reviews*, 25, 2018, pp. 23–38.
- 68 Delgado et al., 'Don't throw away your printed books.'

- 69 N. Carr, *The Shallows: How the Internet Is Changing the Way We Think, Read and Remember* (London: Atlantic Books, 2010), p. 6.
- 70 Gerald Emanuel Stern (ed.), *McLuhan Hot&Cool: A primer for the understanding of and a critical symposium with a rebuttal* (New York: Dial Press, 1967), pp. 20, 23, 65, 212–13, 215.
- 71 R. A. Mar et al., 'Exposure to media and theory-of-mind development in preschoolers,' *Cognitive Development*, 25 (1), 2010, pp. 69–78.
- 72 Mar et al., 'Exposure to media and theory-of-mind development in preschoolers.'

Розділ 5

- 73 W. James, *The Principles of Psychology*, 1890, chapter XI: available online. <https://psychclassics.yorku.ca/James/Principles/prmn.html>.
- 74 M. E. Raichle et al., 'A default mode of brain function,' *Proceedings of the National Academy of Sciences*, 98 (2), 2001, pp. 676–82. Про роботу дослідника я дізнався з пречудової книжки Леонарда Млодінова: *Elastic: Flexible Thinking in a Constantly Changing World* (London: Penguin, 2018), pp. 110–21.
Див. також: G. Watson, *Attention: Beyond Mindfulness* (London: Reaktion Books, 2017), p. 90.
- 75 J. Smallwood, D. Fishman and J. Schooler, 'Counting the Cost of an Absent Mind,' *Psychonomic Bulletin & Review*, 14, 2007. I first learned about this from W. Gallagher, *Rapt: Attention and the Focused Life* (London: Penguin, 2009), p. 149.
- 76 Y. Citton, *The Ecology of Attention* (Cambridge: Polity, 2016), pp. 116–17.
- 77 B. Medea et al., 'How do we decide what to do? Resting-state connectivity patterns and components of self-generated thought linked to the development of more concrete personal goals,' *Experimental Brain Research*, 236, 2018, pp. 2,469–81.
- 78 B. Baird et al., 'Inspired by Distraction: Mind Wandering Facilitates Creative Incubation,' *Psychological Science*, 23 (10), October 2012, pp. 1,117–22.
- 79 J. Smallwood, F. J. M. Ruby, T. Singer, 'Letting go of the present: Mind-wandering is associated with reduced delay discounting,' *Consciousness and Cognition*, 22 (1), 2013, pp. 1–7.
Джонатан додав в адресованому мені імейл: «Важливо також зазначити, що чимало з цих переваг найбільш очевидні для тих, хто здатен контролювати своє блукання думками (тобто уникати цього, коли зовнішній світ вимагає уваги)».
- 80 M. Killingsworth and D. Gilbert, 'A Wandering Mind is an Unhappy Mind,' *Science*, 12 November 2010.
Див. також: Watson, *Attention*, pp. 15, 70.

Розділ 6

- 81 T. Ferris, 'The Tim Ferris Show Transcripts — Fighting Skynet and Firewalling Attention,' *Tim.Blog* (blog), 24 September 2019. <https://tim.blog/2019/09/24/the-tim-ferris-show-transcripts-tristan-harris-fighting-skynet-and-firewalling-attention-387/>.
- 82 Ferris, 'The Tim Ferris Show Transcripts.'
- 83 B. J. Fogg, *Persuasive Technology* (Morgan Kaufman, 2003), pp. 7–8.
- 84 Fogg, *Persuasive Technology*, p. ix.
- 85 I. Leslie, 'The scientists who make apps addictive,' *1843 Magazine*, 20 October 2016. <https://www.1843magazine.com/features/the-scientists-who-make-apps-addictive>.

- 86 Ferris, 'The Tim Ferris Show Transcripts.'
- 87 T. Harris, 'How a handful of tech companies control billions of minds every day,' TED talk, TED2017. https://www.ted.com/talks/tristan_harris_how_a_handful_of_tech_companies_control_billions_of_minds_every_day?language=en.
- 88 C. Newton, 'Google's new focus on wellbeing started five years ago with this presentation,' *The Verge*, 10 May 2018. <https://www.theverge.com/2018/5/10/17333574/google-android-p-update-tristan-harris-design-ethics>.
- 89 A. Marantz, 'Silicon Valley's Crisis of Conscience,' *New Yorker*, 19 August 2019.
- 90 З презентацією можна ознайомитися за посиланням: minimizedistracton.com.
- 91 N. Thompson, 'Tristan Harris: Tech Is Downgrading Humans,' *Wired*, 23 April 2019; N. Hiltzik, 'Ex-Google Manager Leads A Drive To Rein in Pernicious Impact of Social Media,' *Los Angeles Times*, 10 May 2019.
- 92 Ferris, 'The Tim Ferris Show Transcripts.'
- 93 T. Harris, Senate Commerce Committee testimony, 25 June 2019. <https://www.commerce.senate.gov/services/files/96E3A739-DC8D-45F1-87D7-EC70A368371D>.
- 94 P. Marsden, 'Humane: A New Agenda for Tech,' *Digital Wellbeing*, 25 April 2019. <https://digitalwellbeing.org/humane-a-new-agenda-for-tech-speed-summary-and-video/>.
- 95 Так процитував його слова Аза в інтерв'ю, яке давав мені.
- 96 Про цей показник точаться суперечки, оскільки його складно визначити. Один зі способів вимірювання: так званий «показник відмов» (кількість людей, які заходять на сайт і одразу полишають його, не перейшовши на жодну іншу сторінку). Наприклад, показник відмов time.com скоротився на 15 відсотків, коли 2014 року сайт запровадив нескінченний скрол; Читачі Quartz переглядають приблизно на 50 відсотків більше новин, ніж могли б без нескінченного скролу. Обидва показники взято з: S. Kirkland, 'Time.com's bounce rate down 15 percentage points since adopting continuous scroll,' *Poynter*, 20 July 2014. <https://web.archive.org/web/20150507024326/http://www.poynter.org:80/news/mediawire/257466/time-coms-bounce-rate-down-15-percentage-points-since-adopting-continuous-scroll/>.
- 97 T. Ong 'Sean Parker on Facebook,' *The Verge*, 9 November 2017. <https://www.theverge.com/2017/11/9/16627724/sean-parker-facebook-childrens-brains-feedback-loop>. Більше цитат IT-фахівців див. тут: A. Alter, *Irresistible: The Rise of Addictive Technology and the Business of Keeping Us Hooked* (London: Penguin, 2017), p. 1.
- 98 Roger McNamee, *Zucked: Waking up to the Facebook Catastrophe* (HarperCollins, 2019), pp. 146–7; R. Seymour, *The Twittering Machine* (London: Indigo Press, 2019), pp. 26–7.
- 99 James Williams, *Stand Out of Our Light* (Cambridge: Cambridge University Press, 2018), p. 102.
- 100 Nir Eyal, *Hooked: How to Build Habit-Forming Products* (London: Penguin, 2014), p. 11; P. Graham, 'The Acceleration of Addictiveness,' *Paul Graham* (blog), July 2010. <http://www.paulgraham.com/addiction.html?viewfullsite=1>.

Розділ 7

- 101 S. Zuboff, *The Age of Surveillance Capitalism* (New York: Public Affairs, 2019). Щоб дізнатись більше про боротьбу професорки Зубофф за майбутнє людства, відвідайте сайт: www.shoshanazuboff.com.
- 102 P. M. Litvak, J. S. Lerner, L. Z. Tiedens and K. Shonk, 'Fuel in the Fire: How anger affects decision-making,' *International Handbook of Anger*, 2010, pp. 287–310, citing C. Hansen

- and R. D. Hansen, 'Finding the face in the crowd: An anger superiority effect,' *Journal of Personality and Social Psychology*, 54 (6), 1988, pp. 917–24.
- Див. також: R. C. Solomon, *A Passion for Justice* (Reading, MA: Addison-Wesley Publishing Company, 1990); C. Tavis, *Anger: The misunderstood emotion* (New York: Touchstone Books/Simon&Schuster, 1989).
- 103 Litvak et al., 'Fuel in the Fire,' citing J. M. Haviland and M. Lelwica, 'The induced affect response: 10-week-old infants' responses to three emotion expressions,' *Developmental Psychology*, 23 (1), 1987, pp. 97–104.
- 104 Узагальнення з цієї теми див.: M. Jaworski, 'The Negativity Bias: why the bad stuff sticks,' *PsyCom*, 19 February 2020. <https://www.psycom.net/negativity-bias>.
- 105 Див.: algotransparency.org — цей сайт відстежує слова в тренді на ютубі.
- 106 William J. Brady et al., 'Emotion shapes the diffusion of moralised content in social networks,' *Proceedings of the National Academy of Sciences*, 114, 28, 2017, pp. 7,313–18.
- 107 'Partisan Conflict and Congressional Outreach,' *Pew Research Center*, 23 February 2017. https://www.pewresearch.org/politics/2017/02/23/partisan-conflict-and-congressional-outreach/pdl-02-23-17_antipathy-new-00-02/.
- 108 Коментар Джона Мейджора з інтерв'ю 1993 року для *Mail on Sunday*, що набуло розголосу.
- 109 Nolen Gertz, *Nihilism and Technology*, (Rowman&Littlefield, 2018), p. 97; A. Madrigal, 'Many many Facebook users still don't know that their feed is filtered by an algorithm,' *Splinter*, 27 March 2015. <https://splinternews.com/many-many-facebook-users-still-dont-know-that-their-ne-1793846682>; Motahhare Eslami et al., "'I always assumed that I wasn't really that close to [her]": Reasoning about Invisible Algorithms in News Feeds,' *Proceedings of the 33rd Annual ACM Conference on Human Factors in Computing Systems* (CHI '15) (New York: Association for Computing Machinery, 2015), pp. 153–162. Повна версія статті: http://www-personal.umich.edu/~csandvig/research/Eslami_Algorithms_CHI15.pdf.
- 110 Трістан сказав це Децці Ейткенгед — головній інтерв'юерці Sunday Times. Вона надала мені неопублікований транскрипт їхньої розмови, що допомогло в написанні цієї частини книжки.
- 111 Litvak et al., 'Fuel in the Fire,' citing G. V. Bodenhausen et al., 'Happiness and stereotypic thinking in social judgement,' *Journal of Personality and Social Psychology*, 66 (4), 1994, pp. 621–36; D. DeSteno et al., 'Beyond valence in the perception of likelihood: the role of emotion specificity,' *Journal of Personality and Social Psychology*, 78 (3), 2000, pp. 397–416.
- 112 Litvak et al., 'Fuel in the Fire,' p. 299.
- 113 S. Vosoughi, D. Roy, D. and S. Aral, 'The spread of true and false news online,' *Science*, 359, 2018, pp. 1,146–51.
- 114 C. Silverman, 'This Analysis Shows How Viral Fake Election News Stories Outperformed Real News On Facebook,' *BuzzFeed*, 16 November 2016. <https://www.buzzfeednews.com/article/craigsilverman/viral-fake-election-news-outperformed-real-news-on-facebook>.
- 115 Трістан сказав це Децці Ейткенгед. Згідно із SimilarWeb.com, відвідуваність Guardian становила приблизно 286 мільйонів за шість місяців (до вересня 2020 року); Відвідуваність New York Times — майже 354 мільйони; Washington Post — трохи більше ніж 185 мільйонів. Показник 15 мільярдів узято звідси: <https://www.latimes.com/business/hiltzik/la-fi-hiltzik-tristan-tech-20190510-story.html>.

- 116 A. Jones, 'From Memes to Infowars: how 75 Fascist activists were "Red-Pilled,"' *Bellingcat*, 11 October 2018. <https://www.bellingcat.com/news/americas/2018/10/11/memes-infowars-75-fascist-activists-red-pilled/>.
- 117 J. M. Berger, 'The Alt-Right Twitter Census: defining and describing the audience for Alt-Right content on Twitter,' *VOX-Pol Network of Excellence*, 2018. https://www.voxpol.eu/download/vox-pol_publication/AltRightTwitterCensus.pdf.
- 118 Трістан сказав це Децці Ейткенгед.
- 119 C. Alter, 'Brazilian Politician tells Congresswoman she's "not worthy" of sexual assault,' *Time*, 11 December 2014. <https://time.com/3630922/brazil-politics-congresswoman-rape-comments/>.
- 120 <https://www.independent.co.uk/news/world/americas/jair-bolsonaro-who-is-quotes-brazil-president-election-run-off-latest-a8573901.html>.
- 121 C. Doctorow, 'Fans of Brazil's new Fascist President chant "Facebook! Facebook! Whatsapp! Whatsapp!" At inauguration,' *BoingBoing*, 3 January 2019. <https://boingboing.net/2019/01/03/world-more-connected.html>.
- 122 Трістан сказав це Децці Ейткенгед.
- 123 T. Harris, Senate Commerce Committee testimony, 25 June 2019. <https://www.commerce.senate.gov/services/files/96E3A739-DC8D-45F1-87D7-EC70A368371D>.

Розділ 8

- 124 Nir Eyal, *Indistractable: How to Control Your Attention and Choose Your Life* (London: Bloomsbury Publishing, 2020), p. 213.
- 125 Там само, сс. 41–2.
- 126 Там само, с. 62.
- 127 Там само, с. 113.
- 128 Книжка Ніра Еяля і Раяна Гувера «На гачку. Як створити продукт, що чіпляє» вийшла друком у видавництві «Наш Формат» 2017 року. — Прим. пер.
- 129 Там само, стор. 1.
- 130 Тут і далі цитати за виданням Нір Еяль і Раян Гувер. На гачку. Як створити продукт, що чіпляє. К.: Наш Формат, 2017. — Прим. пер.
- 131 N. Eyal, *Hooked: How to Build Habit-Forming Products* (London: Penguin, 2014), p. 164. Коли я згодом зачитав цю цитату Нірові, він сказав: «Ну, треба ж читати всю книжку, чи не так? Якщо виривати фрази з контексту, звісно, можна мені приписати що заманеться». Однак я таки читав її в контексті й закликаю інших прочитати книжку й дійти власних висновків. Ніщо ані в частині, де наведено ці речення, ані в контексті всієї книжки, не пом'якшує значення цих фраз.
- 132 Там само, с. 2.
- 133 N. Eyal, 'Want to Hook Your Users? Drive Them Crazy,' *TechCrunch* (blog), 26 March 2012. <https://techcrunch.com/2012/03/25/want-to-hook-your-users-drive-them-crazy/>.
- 134 Він також наводить корисні варіанти застосування цих прийомів: наприклад, фітнес-застосунок, який заохочує користувачів ходити в спортзалу, або застосунки, які допомагають вивчати іноземні мови.
- 135 Ronald Purser, *McMindfulness* (Repeater Books, 2019), p. 138.
- 136 Там само, с. 139, з посиланням на: Dana Becker, *One Nation Under Stress: The Trouble With Stress As An Idea* (Oxford: Oxford University Press, 2013).

137 <https://www.nytimes.com/2021/01/09/opinion/diet-resolution-new-years.html> (останній перегляд: 12 січня 2020 року).

138 Оригінальне дослідження, за висновками якого 95 відсотків дієт закінчуються провалом, охоплювало сто пацієнтів з ожирінням: A. J. Stunkard and M. McLaren-Hume, 'The results of treatment for obesity,' *AMA Archives of Internal Medicine*, 103, 1959, pp. 79–85. В інших, свіжіших, дослідженнях висновки були дуже схожими. У дослідженні, про яке йдеться тут, лише 2 відсоткам учасників вдалося скинути більш як 20 кілограмів у подальші два роки: J. Kassirer and M. Angell, 'Losing weight — an ill-fated New Year's resolution,' *New England Journal of Medicine*, 338, 1998, pp. 52–4.

Деякі науковці стверджують, що це занадто песимістичні висновки або занадто високі вимоги до визначення успішності. Див., наприклад: R. R. Wing and S. Phelan, 'Long-term weight loss maintenance,' *The American Journal of Clinical Nutrition*, vol. 82, issue 1, 2005, pp. 222S–225S. На їхню думку, успішною варто вважати дієту людини, яка худне на 10 відсотків ваги протягом року після дієти. Однак навіть на таке спромагаються лише близько 20 відсотків людей, що сідають на дієту, а 80 відсотків здаються.

У цій статті описується дослідження 1959 року і висловлюється думка про надмірний негативізм: <https://www.nytimes.com/1999/05/25/health/95-regain-lost-weight-or-do-they.html>.

Див. також: T. Mann, *Secrets from the Eating Lab* (New York: Harper Wave, 2017). Автор переглянув дієтичну літературу за 60 років і виявив, що в середньому люди, які сідають на дієту, спочатку скидають 10 відсотків початкової ваги, а за два роки знову набирають щонайменше один кілограм.

139 Станом на 2018 рік, понад 42 відсотки дорослого населення США і 18,5 відсотка американських дітей мали ожиріння. Спостерігається стабільне поширення цієї недуги протягом 20 років: 'Overweight&Obesity Data & Statistics,' Centre for Disease Control and Prevention. <https://www.cdc.gov/obesity/data/index.html>.

Станом на 2018 рік ожиріння мали тільки 15 відсотків дорослого населення Нідерландів — це значно нижчий показник, але в країні досі (небезпідставно) вважають таку ситуацію кризою громадської охорони здоров'я. Див.: C. Stewart, 'Share of the population with overweight in the Netherlands,' *Statista*, 16 November 2020. <https://www.statista.com/statistics/544060/share-of-the-population-with-overweight-in-the-netherlands/>.

140 D. Marshall, 'BBC most trusted news source 2020,' *Ipsos Mori*, 22 May 2020. <https://www.ipsos.com/ipsos-mori/en-uk/bbc-most-trusted-news-source-2020>; W. Turvill, 'Survey: Americans trust the BBC more than the New York Times, Wall Street Journal, ABC or CBS,' *Press Gazette*, 16 June 2020. <https://www.pressgazette.co.uk/survey-americans-trust-the-bbc-more-than-new-york-times-wall-street-journal-abc-or-cbs/>.

141 Трістан сказав це Децці Ейткенгед.

142 G. Linden, 'Marissa Mayer at Web.20,' *Glinden* (blog), 9 November 2006. <http://glinden.blogspot.com/2006/11/marissa-mayer-at-web-20.html>.

Див. також: <http://loadstorm.com/2014/04/infographic-web-performance-impacts-conversion-rates/>.

Див. також: R. Colville, *The Great Acceleration: How the World is Getting Faster, Faster* (London: Bloomsbury, 2016), p. 27.

143 M. Ledwich and A. Zaitsev, 'Algorithmic Extremism: Examining YouTube's Rabbit Hole of Radicalisation,' arXiv:1912.11211 [cs.SI], Cornell University, 2019. <https://arxiv.org/abs/1912.11211>.

- Див. також: A. Kantrowitz, 'Does YouTube Radicalize?,' *OneZero*, 7 January 2020. <https://onezero.medium.com/does-youtube-radicalize-a-debate-between-kevin-roose-and-mark-ledwich-1b99651c7bb>; W. Feuer, 'Critics slam study claiming YouTube's algorithm doesn't lead to radicalisation,' *CNBC*, 30 December 2019, updated 31 December 2019. <https://www.cnn.com/2019/12/30/critics-slam-youtube-study-showing-no-ties-to-radicalisation.html>.
- 144 A. Narayanan, Twitter post 29 December 2019, 12.34pm. https://twitter.com/random_walker/status/12n264254io9765634?lang=en.
- 145 J. Horwitz and D. Seetharaman, 'Facebook Executives Shut Down Efforts to Make the Site Less Divisive,' *Wall Street Journal*, 26 May 2020. <https://www.wsj.com/articles/facebook-knows-it-encourages-division-top-executives-nixed-solutions-11590507499>.
- 146 A. Dworkin, *Life and Death: Unapologetic Writings on the Continuing War Against Women* (London: Simon&Schuster, 1997), p. 210.

Розділ 10

- 147 N. Burke Harris, *The Deepest Well: Healing the Long-Term Effects of Childhood Adversity* (London: Bluebird, 2018), p. 215.
- 148 V. J. Felitti et al., 'Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study,' *American Journal of Preventive Medicine*, 14 (4), 1998, pp. 245–58.

З цього приводу я також поспілкувався у своїх інтерв'ю з доктором Вінсентом Фелітті, доктором Робертом Андою і доктором Габором Мате. Див. також: Gabor Mate, *In the Realm of Hungry Ghosts: Close Encounters With Addiction* (London: Vermilion, 2018).

- 149 Harris, *The Deepest Well*, p. 59.
- 150 R. Ruiz, 'How Childhood Trauma Could Be Mistaken For ADHD,' *The Atlantic*, 7 July 2014.

Див. також: N. M. Brown et al., 'Associations Between Adverse Childhood Experiences and ADHD Diagnosis and Severity,' *Academic paediatrics*, 17 (4), 2017, pp. 349–55; Newsroom, 'Researchers Link ADHD With Childhood Trauma,' *Children's Hospitals Today*, Children's Hospital Association, 9 August 2017. <https://www.childrenshospitals.org/Newsroom/Childrens-Hospitals-Today/Articles/2017/08/Researchers-Link-ADHD-with-Childhood-Trauma>; K. Szymanski, L. Sapanski and F. Conway, 'Trauma and ADHD — Association or Diagnostic Confusion? A Clinical Perspective,' *Journal of Infant, Child, and Adolescent Psychotherapy*, 10 (1), 2011, pp. 51–59; R. C. Kessler et al., 'The prevalence and correlates of adult ADHD in the United States: results from the National Comorbidity Survey Replication,' *The American Journal of Psychiatry*, 163, 4, 2006, pp. 716–23.

Виявилось, що вихованці румунських сиротинців (надзвичайно занедбані), були в чотири рази більше схильними до істотних проблем з увагою. Див.: M. Kennedy et al., 'Early severe institutional deprivation is associated with a persistent variant of adult-deficit hyperactivity disorder,' *Journal of Child Psychology and Psychiatry*, 57 (10), 2016, pp. 1,113–25.

Див. також: Joel Nigg, *Getting Ahead of ADHD: What Next-Generation Science Says About Treatments That Work* (New York: Guilford Press, 2017), pp. 161–2.

Див. також: W. Gallagher, *Rapt: Attention and the Focused Life* (London: Penguin, 2009), p. 167; R. C. Herrenkohl, B. P. Egolf and E. C. Herrenkohl, 'Pre-school Antecedents

- of Adolescent Assaultive Behaviour: A Longitudinal Study,' *American Journal of Orthopsychiatry*, 67, 1997, pp. 422–32.
- 151 H. Green et al., *Mental Health of Children and Young People in Great Britain*, 2004, Office of National Statistics, Department of Health and the Scottish Executive (Basingstoke: Palgrave Macmillan, 2005). Статистичні дані наводяться на стор. 161 і підсумовуються в таблицях 7.20 і 7.21.
- Я звернув увагу на цю статистику завдяки: N. Hart and L. Benassaya, 'Social Deprivation or Brain Dysfunction? Data and the Discourse of ADHD in Britain and North America,' in S. Timimi and J. Leo (eds), *Rethinking ADHD: From Brain to Culture* (London: Palgrave Macmillan, 2009), pp. 218–51.
- 152 S. N. Merry and L. K. Andrews, 'Psychiatric status of sexually abused children 12 months after disclosure of abuse,' *Journal of the American Academy of Child and Adolescent Psychiatry*, 33 (7), 1994, pp. 939–44.
- Див. також: T. Endo, T. Sugiyama and T. Someya, 'Attention-deficit/hyperactivity disorder and dissociative disorder among abused children,' *Psychiatry and Clinical Neurosciences*, 60 (4), 2006, pp. 434–8. <https://doi.org/10.1111/j.1440-1819.2006.01528.x>.
- 153 Помічний огляд найкращого дослідження з цієї теми (на який я спирався, описуючи дослідження в наступних абзацах): Charissa Andreotti, 'Effects of Acute and Chronic Stress on Attention and Psychobiological Stress Reactivity in Women,' PhD dissertation (Vanderbilt University, 2013).
- Див. також: E. Chajut and D. Algom, 'Selective attention improves under stress: Implications for theories of social cognition,' *Journal of Personality and Social Psychology*, 85, 2003, pp. 231–48; and P. D. Skosnik et al., 'Modulation of attentional inhibition by norepinephrine and cortisol after psychological stress,' *International Journal of Psychophysiology*, 36, 2000, pp. 59–68.
- 154 Skosnik et al., 'Modulation of attentional inhibition by norepinephrine and cortisol after psychological stress'; see also C. Liston, B. S. McEwen and B. J. Casey, 'Psychosocial stress reversibly disrupts prefrontal processing and attentional control,' *Proceedings of the National Academy of Sciences of the United States of America*, 106 (3), 2009, pp. 912–17.
- 155 H. Yaribeygi et al., 'The impact of stress on body function: A review,' *EXCLI Journal*, 16, 2017, pp. 1,057–72.
- 156 C. Nunn et al., 'Shining evolutionary light on human sleep and sleep disorders,' *Evolution, Medicine and Public Health*, 2016 (1), 2016, pp. 234, 238.
- 157 Z. Heller, 'Why We Sleep — and Why We Often Can't,' *New Yorker*, 3 December 2018.
- 158 S. Mullainathan et al., 'Poverty impedes cognitive function,' *Science*, 30, 2013, pp. 976–80.
- Див. також: R. Putnam, *Our Kids: The American Dream in Crisis* (New York: Simon & Schuster, 2015), p. 130.
- 159 Mullainathan et al., 'Poverty impedes cognitive function.'
- Чудове інтерв'ю з професором Муллайнатаном: C. Feinberg, 'The science of scarcity: a behavioural economist's fresh perspectives on poverty,' *Harvard Magazine*, May-June 2015. <https://www.harvardmagazine.com/2015/05/the-science-of-scarcity>; Наукове підґрунтя дуже детально розглянуто в книжці: Sendhil Mullainathan and Eldar Shafir, *Scarcity: Why Having Too Little Means So Much* (London: Penguin, 2014).
- 160 J. Howego, 'Universal income study finds money for nothing won't make us work less,' *New Scientist*, 8 February 2019. <https://www.newscientist.com/article/2193136-universal-income-study-finds-money-for-nothing-wont-make-us-work-less/>.

- 161 G. Maté, *Scattered Minds: The Origins and Healing of Attention Deficit Disorder* (London: Vermilion, 2019), p. 175; E. Deci, *Why We Do What We Do: Understanding Self-Motivation* (London: Penguin, 1996), p. 28; W. C. Dement, *The Promise of Sleep: A Pioneer in Sleep Medicine Explores the Vital Connection Between Health, Happiness, and a Good Night's Sleep* (New York: Bantam Doubleday Dell, 1999), p. 218.
- 162 R. Colville, *The Great Acceleration: How the World is Getting Faster, Faster* (London: Bloomsbury, 2016), p. 59.
- 163 B. Schulte, *Overwhelmed: Work, Love and Play When No One Has the Time* (London: Bloomsbury, 2014), p. 22, citing L. Duxbury and C. Higgins, *Work-Life Conflict in Canada in the New Millennium: Key Findings and Recommendations from the 2001 National Work-Life Conflict Study*, Report 6 (Health Canada, January 2009); L. Duxbury and C. Higgins, *Work-Life Conflict in Canada in the New Millennium: A Status Report, Final Report* (Health Canada, October 2003). <http://publications.gc.ca/collections/Collection/H72-21-186-2003E.pdf>. Див. статистику перевантаження: Table F1.

Розділ 11

- 164 B. Cotton, 'British employees work for just three hours a day,' *Business Leader*, 6 February 2019. <https://www.businessleader.co.uk/british-employees-work-for-just-three-hours-a-day/59742/>.
- 165 Професорка Гелен Делані з Оклендського університету також люб'язно надала мені цю публікацію дослідників із теми, що була тоді на стадії експертної оцінки, і я спирався на наведені там дані.
- 166 A. Harper, A. Stirling and A. Coote, *The Case For a Four Day Week* (London: Polity, 2020), p. 6.
- 167 K. Paul, 'Microsoft Japan tested a four day work week and productivity jumped by 40%,' *Guardian*, 4 November 2019. <https://www.theguardian.com/technology/2019/nov/04/microsoft-japan-four-day-work-week-productivity>; Harper et al., *The Case For a Four Day Week*, p. 89.
- 168 Harper et al., *The Case For a Four Day Week*, pp. 68–71.
- 169 Там само, сс. 17–18.
- 170 K. Onstad, *The Weekend Effect* (New York: HarperOne, 2017), p. 49.
- 171 M. F. Davis and J. Green, 'Three hours longer, the pandemic workday has obliterated work-life balance,' *Bloomberg*, 23 April 2020. <https://www.bloomberg.com/news/articles/2020-04-23/working-from-home-in-covid-era-means-three-more-hours-on-the-job>.
- 172 A. Webber, 'Working at home has led to longer hours,' *Personnel Today*, 13 August 2020 <https://www.personneltoday.com/hr/longer-hours-and-loss-of-creative-discussions-among-home-working-side-effects/>; 'People are working longer hours during the pandemic,' *The Economist*, 24 November 2020. <https://www.economist.com/graphic-detail/2020/11/24/people-are-working-longer-hours-during-the-pandemic>; A. Friedman, 'Proof our work-life balance is in danger (but there's hope),' *Atlassian*, 5 November 2020. <https://www.atlassian.com/blog/teamwork/data-analysis-length-of-workday-covid>.
- 173 F. Jaureñguibery, 'Denconnexion volontaire aux technologies de l'information et de la communication,' Rapport de recherche, Agence Nationale de la Recherche, 2014, hal-00925309. <https://hal.archives-ouvertes.fr/hal-00925309/document>.

- 174 R. Haridy, 'The right to disconnect: the new laws banning after-hours work emails,' *New Atlas*, 14 August 2018. <https://newatlas.com/right-to-disconnect-after-hours-work-emails/55879/>, citing W. J. Becker, L. Belkin and S. Tuskey, 'Killing me softly: Electronic communications monitoring and employee and spouse well-being,' *Academy of Management Annual Meeting Proceedings*, 2018 (1), 2018.

Розділ 12

- 175 'Sleep and tiredness,' NHS web-page. <https://www.nhs.uk/live-well/sleep-and-tiredness/eight-energy-stealers/>.
- 176 M. Pollan, *In Defence of Food* (London: Penguin, 2008), pp. 85–9.
- 177 L. Pelsser et al., 'Effect of a restricted elimination diet on the behaviour of children with attention-deficit hyperactivity disorder (INCA study): a randomised controlled trial,' *Lancet*, 377, 2011, pp. 494–503; J. K. Ghuman, 'Restricted elimination diet for ADHD: the INCA study,' *Lancet*, 377, 2011, pp. 446–8.
- Див. також: Joel Nigg, *Getting Ahead of ADHD: What Next-Generation Science Says About Treatments That Work* (New York: Guilford Press, 2017), pp. 79–82.
- 178 Donna McCann et al., 'Food additives and hyperactive behaviour in 3-year-old and 8/9-year-old children in the community: a randomised, double-blinded, placebo-controlled trial,' *Lancet*, 370, 2007, pp. 1,560–67; B. Bateman et al., 'The effects of a double blind, placebo controlled, artificial food colourings and benzoate preservative challenge on hyperactivity in a general population sample of preschool children,' *Archives of Disease in Childhood*, 89, 2004, pp. 506–11.
- Див. також: M. Wedge, *A Disease Called Childhood: Why ADHD Became an American Epidemic* (New York: Avery, 2016), pp. 148–59.
- 179 Joel Nigg, *Getting Ahead of ADHD*, p. 59.
- 180 B. A. Maher, 'Airborne Magnetite-and Iron-Rich Pollution Nanoparticles: Potential Neurotoxicants and Environmental Risk Factors for Neurodegenerative Disease, Including Alzheimer's Disease,' *Journal of Alzheimer's Disease*, 71, 2, 2019, pp. 361–75; B. A. Maher et al., 'Magnetite pollution nanoparticles in the human brain,' *Proceedings of the National Academy of Sciences of the United States of America*, 113, 39, 2016, pp. 10,797–801.
- 181 F. Perera et al., 'Benefits of Reducing Prenatal Exposure to Coal-Burning Pollutants to Children's Neurodevelopment in China,' *Environmental Health Perspectives*, 116 (10), 2008, pp. 1,396–400; M. Cuxens et al., 'Air Pollution During Pregnancy and Childhood Cognitive and Psychomotor Development: Six European Birth Cohorts,' *Epidemiology*, 25, 2014, pp. 636–47; P. Wang et al., 'Socioeconomic disparities and sexual dimorphism in neurotoxic effects of ambient fine particles on youth IQ: A longitudinal analysis,' *PLoS One*, 12, 12, 2017, e0188731; Xin Zhanga et al., 'The impact of exposure to air pollution on cognitive performance,' *Proceedures of the National Academy of Science, USA*, 115 (37), 2018, pp. 9,193–7; F. Perera et al., 'Polycyclic aromatic hydrocarbons-aromatic DNA adducts in cord blood and behavior scores in New York city children,' *Environmental Health Perspectives*, 119, 8, 2011, pp. 1,176–81; N. Newman et al., 'Traffic-Related Air Pollution Exposure in the First Year of Life and Behavioral Scores at 7 Years of Age,' *Environmental Health Perspectives*, 121 (6), 2013, pp. 731–6.
- 182 Weiran Yuchi et al., 'Road proximity, air pollution, noise, green space and neurologic disease incidence: a population- based cohort study,' *Environmental Health*, 19, article no. 8, 2020.

- 183 N. Rees, 'Danger in the Air: How air pollution can affect brain development in young children,' UNICEF Division of Data, Research and Policy Working Paper (New York: United Nations Children's Fund (UNICEF), 2017); Y-H. M. Chiu et al., 'Associations between traffic-related black carbon exposure and attention in a prospective birth cohort of urban children,' *Environmental Health Perspectives*, 121 (7), 2013, pp. 859–64.
- 184 L. Calderón-Garcidueñas et al., 'Exposure to severe urban air pollution influences cognitive outcomes, brain volume and systemic inflammation in clinically healthy children,' *Brain and Cognition*, 77, 3, 2011, pp. 345–55.
- 185 J. Sunyer et al., 'Traffic-related air pollution and attention in primary school children: short-term association,' *Epidemiology*, 28 (2), 2017, pp. 181–9.
- 186 T. Harford, 'Why did we use leaded petrol for so long?,' *BBC News*, 28 August 2017. <https://www.bbc.co.uk/news/business-40593353>.
- 187 M. V. Maffini et al., 'No Brainer: the impact of chemicals on children's brain development: a cause for concern and a need for action,' CHEMtrust report, March 2017. <https://www.chemtrust.org/wp-content/uploads/chemtrust-nobrainier-mar17.pdf>; House of Commons Environmental Audit Committee, 'Toxic Chemicals in Everyday Life, Twentieth Report of Session 2017–2019. (London: House of Commons, 2019). <https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1805/1805.pdf>.
- 188 T. E. Froehlich et al., 'Association of Tobacco and Lead Exposures With Attention-Deficit/Hyperactivity Disorder,' *Pediatrics*, 124, 2009, e1054.
 За метааналізом 18 досліджень виявлено, що 16 із них довели роль свинцю у СДУГ серед дітей, залучених до дослідження: M. Daneshparvar et al., 'The Role of Lead Exposure on Attention-Deficit/Hyperactivity Disorder in Children: A Systematic Review,' *Iranian Journal of Psychiatry*, 11 (1), 2016, pp. 1–14. Брюс розповідає про це тут: <https://vimeo.com/154266125>.
- 189 D. Rosner and F. Markowitz, 'Why It Took Decades of Blaming Parents Before We Banned Lead Paint,' *The Atlantic*, 22 April 2013. <https://www.theatlantic.com/health/archive/2013/04/why-it-took-decades-of-blaming-parents-before-we-banned-lead-paint/275169/>.
 Більше про расизм цієї політики дивіться чудову публікацію: L. Bliss, 'The long, ugly history of the politics of lead poisoning,' *Bloomberg City Lab*, 9 February 2016. <https://www.bloomberg.com/news/articles/2016-02-09/the-politics-of-lead-poisoning-a-long-ugly-history>.
 Див. також: M. Segarra, 'Lead Poisoning: A Doctor's Lifelong Crusade to Save Children From It,' *NRP*, 5 June 2016. <https://www.npr.org/2016/06/05/480595028/lead-poisoning-a-doctors-lifelong-crusade-to-save-children-from-it?t=1615379691329>.
- 190 B. Yeoh et al., 'Household interventions for preventing domestic lead exposure in children,' *Cochrane Database of Systematic Reviews*, 4, 2012, <https://core.ac.uk/download/pdf/143864237.pdf>.
- 191 S. D. Grosse, T. D. Matte, J. Schwartz and R. J. Jackson, 'Economic gains resulting from the reduction in children's exposure to lead in the United States,' *Environmental Health Perspectives*, 110 (6), 2002, pp. 563–9.
- 192 Joel Nigg, *Getting Ahead of ADHD: What Next-Generation Science Says About Treatments That Work* (London: Guilford Press, 2017), pp. 152–3.
 Моторошний огляд експериментів над тваринами див. тут: H. J. K. Sable and S. L. Schantz, 'Executive Function following Developmental Exposure to Polychlorinated

- Biphenyls (PCBs): What Animal Models Have Told Us,' in E. D. Levin and J. J. Buccafusco (eds), *Animal Models of Cognitive Impairment* (Boca Raton, Florida: CRC Press/Taylor&Francis, 2006), Chapter 8; доступно за посиланням: <https://www.ncbi.nlm.nih.gov/books/NBK2531/>.
- Барбара Демене розповідає про поліхлоровані біфеніли й доказову базу щодо них у книжці: Barbara Demeneix, *Toxic Cocktail* (OUP, 2017), pp. 55–6.
- 193 Joel Nigg, *Getting Ahead of ADHD*, pp. 146, 155; News Desk, 'BPA rules in European Union now in force: limit strengthened 12 fold,' *Food Safety News*, 16 September 2018. <https://www.foodsafetynews.com/2018/09/bpa-rules-in-european-union-now-in-force-limit-strengthened-12-fold/>.
- 194 B. Demeneix, 'Endocrine Disruptors: From Scientific Evidence to Human Health Protection,' Policy Department for Citizens' Rights and Constitutional Affairs Directorate General for Internal Policies of the Union, PE 608.866, 2019. https://www.europarl.europa.eu/thinktank/en/document.html?reference=IPOL_STU%282019%29608866.
- 195 B. Demeneix, 'Letter: Chemical pollution is another "asteroid threat,"' *Financial Times*, 11 January 2020; B. Demeneix, 'Environmental factors contribute to loss of IQ,' *Financial Times*, 18 July 2017.
- Див. також: Demeneix, *Toxic Cocktail*, p. 5.
- 196 A. Kroll and J. Schulman, 'Leaked Documents Reveal The Secret Finances of a Pro-Industry Science Group,' *Mother Jones*, 28 October 2013. <https://www.motherjones.com/politics/2013/10/american-council-science-health-leaked-documents-fundraising/>.
- ### Розділ 13
- 197 Коли я попросив його послатись на джерело статистики, він надав таке авторитетне, за його словами, джерело: S. Faraone and H. Larsson, 'Genetics of attention deficit hyperactivity disorder,' *Molecular Psychiatry*, 2018. І зазначив: «За оцінкою авторів, сдуг залежить від спадкового чинника на 74 відсотки, тобто йдеться про дещо обережнішу оцінку, ніж 75–80 відсотків». S. V. Faraone and H. Larsson, 'Genetics of attention deficit hyperactivity disorder,' *Molecular Psychiatry*, 24, 2018, pp. 562–75.
- 198 L. Braitman, *Animal Madness: Inside Their Minds* (New York: Simon&Schuster, 2015), p. 211.
- 199 Там само, с. 196.
- 200 На основі цього дослідження згодом провели величезну кількість інших. Найбільш значущі серед них: D. Jacobvitz and L. A. Sroufe, 'The early caregiver-child relationship and attention deficit disorder with hyperactivity in kindergarten: A prospective study,' *Child Development*, 58, 1987, pp. 1,496–504; E. Carlson, D. Jacobvitz and L. A. Sroufe, 'A developmental investigation of inattentiveness and hyperactivity,' *Child Development*, 66, 1995, pp. 37–54.
- Див. також: A. Sroufe, 'Ritalin Gone Wrong,' *New York Times*, 28 January 2012.
- 201 Див. також чудову книжку: Alan Sroufe, *A Compelling Idea: How We Become the Persons We Are* (Brandon, Vermont: Safer Society Press, 2020), pp. 60–5. Див. також: Alan Sroufe, *The Development of the Person: The Minnesota Study of Risk and Adaptation From Birth to Adulthood* (New York: Guilford Press, 2009).
- 202 Там само, с. 63.
- 203 Там само, с. 64.
- 204 L. Furman, 'ADHD: What Do We Really Know?' in S. Timimi and J. Leo (eds), *Rethinking ADHD: From Brain to Culture* (London: Palgrave Macmillan, 2009), p. 57.

- 205 N. Ezard et al., 'LIMA: a study protocol for a randomised, double-blind, placebo controlled trial of lisdexamfetamine for the treatment of methamphetamine dependence,' *BMJ Open*, 2018, 8x020723.
- 206 M. C. Kirkpatrick et al., 'Comparison of intranasal methamphetamine and d-amphetamine self-administration by humans,' *Addiction*, 107, 4, 2012, pp. 783–91.
- 207 Класичні дослідження: J. L. Rapoport et al., 'Dextroamphetamine: Its cognitive and behavioural effects in normal prepubertal boys,' *Science*, 199, 1978, pp. 560–3; J. L. Rapoport et al., 'Dextroamphetamine: Its Cognitive and Behavioral Effects in Normal and Hyperactive Boys and Normal Men,' *Archives of General Psychiatry*, 37, 8, 1980, pp. 933–43; M. Donnelly and J. Rapoport, 'Attention Deficit Disorders,' in J. M. Wiener (ed.), *Diagnosis and Psychopharmacology of Childhood and Adolescent Disorders* (New York: Wiley, 1985).
- Див. також: S. W. Garber, *Beyond Ritalin: Facts About Medication and other Strategies for Helping Children* (New York: Harper Perennial, 1996).
- 208 D. Rabiner, 'Consistent use of ADHD medication may stunt growth by 2 inches, large study finds,' *Sharp Brains* (blog), 16 March 2013, <https://sharpbrains.com/blog/2018/03/16/consistent-use-of-adhd-medication-may-stun-growth-by-2-inches-large-study-finds/>; A. Poulton, 'Growth on stimulant medication; clarifying the confusion: a review,' *Archives of Disease in Childhood*, 90, 2005, pp. 801–6.
- Див. також: G. E. Jackson, 'The Case against Stimulants,' in Timimi and Leo, *Rethinking ADHD*, pp. 255–86.
- 209 J. Moncrieff, *The Myth of the Chemical Cure: A Critique of Psychiatric Drug Treatment* (London: Palgrave Macmillan, 2009), p. 217, citing J. M. Swanson et al., 'Effects of stimulant medication on growth rates across 3 years in the MTA follow-up,' *Journal of the American Academy of Child and Adolescent Psychiatry*, 46, 8, 2007, pp. 1,015–27.
- 210 A. Sinha et al., 'Adult ADHD Medications and Their Cardiovascular Implications,' *Case Reports in Cardiology*, 2016, 2343691; J.-Y. Shin et al., 'Cardiovascular safety of methylphenidate among children and young people with attention-deficit/hyperactivity disorder (ADHD): nationwide self-controlled case series study,' *British Medical Journal*, 2016, p. 353.
- 211 K. van der Marel et al., 'Long-Term Oral Methylphenidate Treatment in Adolescent and Adult Rats: Differential Effects on Brain Morphology and Function,' *Neuropsychopharmacology*, 39, 2014, pp. 263–73. Хай як дивно, та, за результатами цього дослідження, у дорослих шурів смугасте тіло виросло.
- 212 A. Schrantee et al., 'Age-Dependent Effects of Methylphenidate on the Human Dopaminergic System in Young vs Adult Patients With Attention-Deficit/Hyperactivity Disorder: A Randomised Clinical Trial,' *JAMA Psychiatry*, 73, 9, 2016, pp. 955–62.
- 213 Table 4 here: The MTA Cooperative Group, 'A 14-Month Randomised Clinical Trial of Treatment Strategies for Attention-Deficit/Hyperactivity Disorder,' *Archives of General Psychiatry*, 56, 12, 1999, pp. 1,073–86.
- 214 J. Joseph, *The Trouble With Twin Studies: A Reassessment of Twin Research in the Social and Behavioral Sciences* (Abingdon-on-Thames: Routledge, 2016), pp. 153–78.
- 215 Див., наприклад: P. Heiser et al., 'Twin study on heritability of activity, attention, and impulsivity and assessed by objective measures,' *Journal of Attention Disorders*, 9, 2006, pp. 575–81; R. E. Lopez, 'Hyperactivity in twins,' *Canadian Psychiatric Association Journal*, 10, 1965, pp. 42–16; D. K. Sherman et al., 'Attention-deficit hyperactivity disorder

- dimensions: A twin study of inattention and impulsivity-hyperactivity,' *Journal of the American Academy of Child and Adolescent Psychiatry*, 36, 1997, pp. 745–53; A. Thapar et al., 'Genetic basis of attention-deficit and hyperactivity,' *British Journal of Psychiatry*, 174, 1999, pp. 105–11.
- 216 J. Joseph, *The Trouble With Twin Studies*, pp. 153–78. Джей узагальнив усі дослідження за цим методом: J. Joseph, 'Levels of Identity Confusion and Attachment Among Reared-Together MZ and DZ Twin Pairs,' *The Gene Illusion* (blog), 21 April 2020. https://thegeneillusion.blogspot.com/2020/04/levels-of-identity-confusion-and_21.html.
- Типовий приклад: A. Morris-Yates et al., 'Twins: a test of the equal environments assumption,' *Acta Psychiatrica Scandinavica*, 81, 1990, pp. 322–6.
- Див. також: J. Joseph, 'Not in Their Genes: A Critical View of the Genetics of Attention-Deficit Hyperactivity Disorder,' *Developmental Review*, 20, no. 4 (2000), pp. 539–67.
- 217 Щодо цього давно тривають дебати. Джейв відповідь на найпоширеніші аргументи за дослідження близнюків і його контраргументи (які видались мені переконливими) див. тут: 'It's Time To Abandon the "Classical Twin Method" in Behavioral Research,' *The Gene Illusion* (blog), 21 June 2020. https://thegeneillusion.blogspot.com/2020/06/its-time-to-abandon-classical-twin_21.html.
- 218 D. Demontis et al., 'Discovery of the first genome-wide significant risk loci for attention deficit/hyperactivity disorder,' *Nature Genetics*, 51, 2019, pp. 63–75.
- 219 Nigg, *Getting Ahead of ADHD*, pp. 6–7.
- 220 Там само, с. 45.
- 221 Там само, с. 41.
- 222 Там само, с. 39.
- 223 Там само, с. 2.

Розділ 14

- 224 S. L. Hofferth, 'Changes in American children's time — 1997 to 2003,' *Electronic International Journal of Time-use Research*, 6 (1), 2009, pp. 26–47.
- Див. також: B. Schulte, *Overwhelmed: Work, Love and Play When No One Has the Time* (London: Bloomsbury, 2014), pp. 207–8; P. Gray, 'The decline of play and the rise of psychopathology in children and adolescents,' *American Journal of Play*, 3 (4), 2011, pp. 443–3; R. Clements, 'An Investigation of the Status of Outdoor Play,' *Contemporary Issues in Early Childhood*, 5 (1), 2004, pp. 68–80.
- Див. інші приголомшливі дані з цієї теми: C. Steiner-Adair, *The Big Disconnect: Protecting Childhood and Family Relationships in the Digital Age* (New York: HarperCollins, 2013), p. 88: «У США 1969 року половина дітей ходила до школи пішки або їздила велосипедами, і лише 12 відсотків дітей привозили на машинах; до 2009 року все стало майже навпаки. У Великій Британії кількість семи- або восьмирічних дітей, які ходять до школи пішки, скоротилась із 80 відсотків, станом на 1971 рік, до 9 відсотків, станом на 1990 рік».
- Див. також: L. Skenazy, *Free Range Kids: How to Raise Safe, Self-Reliant Children (Without Going Nuts with Worry)* (Hoboken, New Jersey: Jossey-Bass, 2010), p. 126.
- 225 L. Verburgh et al., 'Physical exercise and executive functions in preadolescent children, adolescents and young adults: a meta-analysis,' *British Journal of Sports Medicine*, 48, 2014, pp. 97–39; Y. K. Chang et al., 'The effects of acute exercise on cognitive performance:

- a meta-analysis,' *Brain Research*, 1,453, 2012, pp. 87–101; S. Colcombe and A. F. Kramer, 'Fitness effects on the cognitive function of older adults: a meta-analytic study,' *Psychological Science*, 14, 2, 2003, pp. 125–30; P. D. Tomporowski et al., 'Exercise and Children's Intelligence, Cognition, and Academic Achievement,' *Educational Psychology Review*, 20, 2, 2008, pp. 111–31.
- 226 M. T. Tine and A. G. Butler, 'Acute aerobic exercise impacts selective attention: an exceptional boost in lower-income children,' *Educational Psychology*, 32, 7, 2012, pp. 821–34. У цьому випадку дослідники спостерігали за дітьми з малозабезпечених родин, які мали проблеми з увагою, але, як пояснює професор Hirr, ефект помітний і серед широкого загалу.
- 227 Nigg, *Getting Ahead of ADHD*, p. 90.
- 228 Там само, с. 92.
- 229 Детальніше про аргументи Ізабель: A. Pellegrini et al., 'A short-term longitudinal study of children's playground games across the first year of school: implications for social competence and adjustment to school,' *American Educational Research Journal*, 39, 4, 2002, pp. 991–1,015.
- Див. також: C. L. Ramstetter, R. Murray and A. S. Garner, 'The crucial role of recess in schools,' *Journal of School Health*, 80, 11, 2010, pp. 517–26, PMID:21039550; National Association of Early Childhood Specialists in State Departments of Education, *Recess and the Importance of Play: A Position Statement on Young Children and Recess*, Washington, DC, 2002, available at: www.naecs-sde.org/recessplay.pdf; O. Jarrett, 'Recess in elementary school: what does the research say?,' *ERIC Digest*, ERIC Clearinghouse on Elementary and Early Childhood Education, 1 July 2002, available at: www.eric.ed.gov/PDFS/ED466331.pdf.
- 230 L. Skenazy, 'To Help Kids Find Their Passion, Give Them Free Time,' *Reason*, December 2020. <https://reason.com/2020/11/26/to-help-kids-find-their-passion-give-them-free-time/>.
- 231 S. L. Hofferth and J. F. Sandberg, 'Changes in American Children's Time, 1981–1997,' in T. Owens and S. L. Hofferth (eds), *Children at the Millennium: Where Have We Come From? Where Are We Going? Advances in Life Course Research*, 6, 2001, pp. 193–229, cited in P. Gray, 'The Decline of Play and the Rise of Psychopathology in Children and Adolescents,' *American Journal of Play*, Spring 2011.
- 232 Skenazy, 'To Help Kids Find Their Passion, Give Them Free Time'; F. T. Juster, H. Ono and F. P. Stafford, 'Changing Times of American Youth, 1981–2003,' *Child Development Supplement* (University of Michigan, November 2004). http://ns.umich.edu/Releases/2004/Nov04/teen_time_report.pdf.
- 233 R. J. Vallerand et al., 'The Academic Motivation Scale: A Measure of Intrinsic, Extrinsic, and Amotivation in Education, Educational and Psychological Measurement,' 52, 4, 1992, pp. 1,003–17.
- 234 M. Wedge, *A Disease Called Childhood: Why ADHD Became an American Epidemic* (New York: Avery, 2016), p. 144.
- Див. також: J. Henley et al., 'Robbing elementary students of their childhood: the perils of No Child Left Behind,' *Education*, 128, 1, 2007, pp. 56–63.
- 235 P. Gray, *Free to Learn: Why Unleashing the Instinct to Play Will Make Our Children Happier, More Self-Reliant and Better Students For Life* (New York: Basic Books, 2013), p. 93; P. Gray and D. Chanoff, 'Democratic Schooling: What Happens to Young People Who Have Charge of Their Own Education?,' *American Journal of Education*, 94, 2, 1986, pp. 182–213.

- 236 G. Riley and P. Gray, 'Grown unschoolers' experiences with higher education and employment: Report II on a survey of 75 unschooled adults,' *Other Education*, 4, 2, 2015, pp. 33–53; M. F. Cogan, 'Exploring academic outcomes of homeschooled students,' *Journal of College Admission*, 2010; G. W. Gloeckner and P. Jones, 'Reflections on a decade of changes in homeschooling,' *Peabody Journal of Education*, 88 (3), 2013.
- 237 P. Gray, 'Play as a Foundation for Hunter-Gatherer Social Existence,' *American Journal of Play*, 1, 4, 2009, pp. 476–522.
- Див. також: P. Gray, 'The value of a play-filled childhood in development of the hunter-gatherer individual,' in D. Narvaez, J. Panksepp, A. Schore and T. Gleason (eds), *Evolution, early experience and human development: From research to practice and policy* (New York: Oxford University Press, 2012), pp. 352–70.
- 238 P. Gray, 'Evolutionary Functions of Play: Practice, Resilience, Innovation, and Cooperation,' in P. K. Smith and J. Roopnarine (eds), *The Cambridge Handbook of Play: Developmental and Disciplinary Perspectives* (Cambridge, UK: Cambridge University Press, 2019), pp. 84–102.
- 239 D. Einon, M. J. Morgan and C. C. Kibbler, 'Brief periods of socialisation and later behavior in the rat,' *Developmental Psychobiology*, 11, 1978, pp. 213–25.

Підсумок

- 240 L. Albeck-Ripka, 'Koala Mittens and Baby Bottles: Saving Australia's Animals After Fires,' *New York Times*, 7 January 2020. Обережніші відгуки про ситуацію див., наприклад, тут: 'Australia's fires killed or harmed three billion animals,' *bbc News*, 28 July 2020. <https://www.bbc.co.uk/news/world-australia-53549936>.
- 241 James Williams, *Stand Out Of Our Light* (Cambridge, UK: Cambridge University Press, 2018), p. xii.