

## **Sources and show notes:**

1. <https://www.vox.com/podcasts/2020/7/1/21308153/the-ezra-klein-show-the-shallows-twitter-facebook-attention-deep-reading-thinking>
2. <https://www.vox.com/science-and-health/2018/3/28/17054848/smartphones-photos-memory-research-psychology-attention>
3. <https://www.theguardian.com/science/2022/jan/02/attention-span-focus-screens-apps-smartphones-social-media>
4. <https://www.instagram.com/p/CrDrqoTqI5y/?igshid=YmMyMTA2M2Y=>
5. <https://www.youtube.com/watch?v=MakEIlvlyfE>
6. <https://www.youtube.com/watch?v=VQKMoT-6XSg>
7. [https://www.youtube.com/watch?v=4mbCakHdLKs&ab\\_channel=SeanChandler](https://www.youtube.com/watch?v=4mbCakHdLKs&ab_channel=SeanChandler)
8. <https://www.youtube.com/watch?v=MnrJzXM7a6o>
9. <https://www.abc.net.au/news/2009-08-10/sms-not-radiation-affects-kids-brains/1385560>
10. <https://www.cbsnews.com/news/is-your-blackberry-frying-your-brain/>
11. <https://www.sandiegouniontribune.com/sdut-sci-digital-brain-120308-2008dec03-story.html>
12. <https://lighthouse.mq.edu.au/article/august-2019/smartphones-are-making-us-stupid-and-may-be-a-gateway-drug>
13. <https://www.cnet.com/science/smartphone-makes-you-stupid-university-of-texas/>
14. <https://www.forbes.com/sites/robashghar/2014/11/10/4-ways-your-smartphone-is-making-you-dumber/?sh=5273ff477f2c>
15. <https://www.lifehack.org/484043/7-reasons-smartphones-make-you-lazy>
16. <https://www.latimes.com/science/la-xpm-2013-jul-11-la-sci-sn-is-your-smartphone-making-you-fat-and-lazy-20130710-story.html>
17. <https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/>
18. <https://www.nytimes.com/interactive/2019/12/21/opinion/location-data-democracy-protests.html>
19. <https://www.scientificamerican.com/article/london-taxi-memory/#:~:text=In%20other%20words%2C%20taxi%20drivers,demands%20of%20navigating%20London's%20streets>
20. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8204720/>
21. <https://academic.oup.com/psyrad/article/doi/10.1093/psyrad/kkad001/7022348>
22. <https://www.theguardian.com/global/2022/jul/03/is-your-smartphone-ruining-your-memory-the-rise-of-digital-amnesia>
23. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4094356/>
24. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3041121/>
25. <https://pubmed.ncbi.nlm.nih.gov/36512503/>
26. <https://time.com/4737286/multitasking-mental-health-stress-texting-depression/>
27. <https://kappanonline.org/rosen-distracted-student-mind-attention/>
28. <https://www.sciencedirect.com/science/article/abs/pii/S0925492723000033?via%3Dihub>
29. <https://www.fastcompany.com/90132364/nest-founder-i-wake-up-in-cold-sweats-thinking-what-did-we-bring-to-the-world>

### **Research materials and footage used:**

30. [https://www.youtube.com/watch?v=4mbCakHdLKs&ab\\_channel=SeanChandler](https://www.youtube.com/watch?v=4mbCakHdLKs&ab_channel=SeanChandler)
31. [https://www.youtube.com/watch?v=MakEIlvlyfE&ab\\_channel=CNBC](https://www.youtube.com/watch?v=MakEIlvlyfE&ab_channel=CNBC)
32. [https://www.youtube.com/watch?v=VQKMoT-6XSg&ab\\_channel=ProtectstarInc.](https://www.youtube.com/watch?v=VQKMoT-6XSg&ab_channel=ProtectstarInc.)
33. [https://www.youtube.com/watch?v=u-nuEX9b3Y4&ab\\_channel=ABCActionNews](https://www.youtube.com/watch?v=u-nuEX9b3Y4&ab_channel=ABCActionNews)
34. [https://www.youtube.com/watch?v=2ldLwkj4dRc&ab\\_channel=TEDxTalks](https://www.youtube.com/watch?v=2ldLwkj4dRc&ab_channel=TEDxTalks)
35. [https://www.youtube.com/watch?v=P2SraxoofFQ&ab\\_channel=CBSNews](https://www.youtube.com/watch?v=P2SraxoofFQ&ab_channel=CBSNews)
36. [https://www.youtube.com/watch?v=-BwUyTrU9fo&ab\\_channel=MarquesBrownlee](https://www.youtube.com/watch?v=-BwUyTrU9fo&ab_channel=MarquesBrownlee)
37. [https://www.youtube.com/watch?v=31oLcnwxM18&ab\\_channel=TheWallStreetJournal](https://www.youtube.com/watch?v=31oLcnwxM18&ab_channel=TheWallStreetJournal)
38. [https://www.youtube.com/watch?v=MnrJzXM7a6o&ab\\_channel=JohnSchroter](https://www.youtube.com/watch?v=MnrJzXM7a6o&ab_channel=JohnSchroter)
39. [https://www.youtube.com/watch?v=6Bvfs4ai5XU&ab\\_channel=danackermangreenberg](https://www.youtube.com/watch?v=6Bvfs4ai5XU&ab_channel=danackermangreenberg)
40. [https://www.youtube.com/watch?v=XHTrLYShBRQ&ab\\_channel=Apple](https://www.youtube.com/watch?v=XHTrLYShBRQ&ab_channel=Apple)
41. [https://www.youtube.com/watch?v=YE4HxDsni2A&ab\\_channel=Kirbpoyo3](https://www.youtube.com/watch?v=YE4HxDsni2A&ab_channel=Kirbpoyo3)
42. [https://www.youtube.com/watch?v=HGvxyw5WLzq&ab\\_channel=TechExplained](https://www.youtube.com/watch?v=HGvxyw5WLzq&ab_channel=TechExplained)
43. [https://www.youtube.com/watch?v=1qjnB2uZMqw&ab\\_channel=MadebyGoogle](https://www.youtube.com/watch?v=1qjnB2uZMqw&ab_channel=MadebyGoogle)
44. [https://www.youtube.com/watch?v=TX2lupkO9WI&ab\\_channel=GoogleUK](https://www.youtube.com/watch?v=TX2lupkO9WI&ab_channel=GoogleUK)
45. [https://www.youtube.com/watch?v=COLzHa3oml0&ab\\_channel=GoogleIndia](https://www.youtube.com/watch?v=COLzHa3oml0&ab_channel=GoogleIndia)
46. [https://www.youtube.com/watch?v=s-Bq\\_gt8fl0&ab\\_channel=GoogleUK](https://www.youtube.com/watch?v=s-Bq_gt8fl0&ab_channel=GoogleUK)
47. [https://www.youtube.com/watch?v=uaaC57tcci0&ab\\_channel=Netflix](https://www.youtube.com/watch?v=uaaC57tcci0&ab_channel=Netflix)
48. <https://www.abc.net.au/news/2009-08-10/sms-not-radiation-affects-kids-brains/1385560>
49. <https://www.cbsnews.com/news/is-your-blackberry-frying-your-brain/>
50. <https://www.sandiegouniontribune.com/sdut-sci-digital-brain-120308-2008dec03-story.html>
51. <https://lighthouse.mq.edu.au/article/august-2019/smartphones-are-making-us-stupid-and-may-be-a-gateway-drug>
52. <https://www.cnet.com/science/smartphone-makes-you-stupid-university-of-texas/>
53. <https://www.forbes.com/sites/robashghar/2014/11/10/4-ways-your-smartphone-is-making-you-dumber/?sh=300873ca7f2c>
54. <https://www.lifehack.org/484043/7-reasons-smartphones-make-you-lazy>
55. <https://www.latimes.com/science/la-xpm-2013-jul-11-la-sci-sn-is-your-smartphone-making-you-fat-and-lazy-20130710-story.html>
56. <https://www.theatlantic.com/magazine/archive/2017/09/has-the-smartphone-destroyed-a-generation/534198/>
57. <https://www.nytimes.com/interactive/2019/12/21/opinion/location-data-democracy-protests.html>
58. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8204720/>
59. <https://academic.oup.com/psyrad/article/doi/10.1093/psyrad/kkad001/7022348#403872580>
60. <https://www.theguardian.com/global/2022/jul/03/is-your-smartphone-ruining-your-memory-the-rise-of-digital-amnesia>
61. [https://www.youtube.com/watch?v=f-e-edli09k&ab\\_channel=HippoCamera](https://www.youtube.com/watch?v=f-e-edli09k&ab_channel=HippoCamera)
62. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4094356/>
63. <https://time.com/4737286/multitasking-mental-health-stress-texting-depression/>
64. <https://kappanonline.org/rosen-distracted-student-mind-attention/>

65. <https://www.medicalnewstoday.com/articles/nomophobia#:~:text=Nomophobia%2C%20or%20%E2%80%9CNO%20MOBILE%20PHONE,not%20having%20mobile%20phone%20connectivity>.
66. <https://www.sciencedirect.com/science/article/abs/pii/S0925492723000033?via%3Dihub>
67. <https://www.fastcompany.com/90132364/nest-founder-i-wake-up-in-cold-sweats-thinking-what-did-we-bring-to-the-world>
68. <https://nypost.com/2017/12/11/tremendous-guilt-ex-facebook-execs-regrets-on-ripping-apart-the-social-fabric/>
69. <https://thejump.com/2019/09/27/why-social-media-is-so-addictive/>
70. [https://www.youtube.com/watch?v=-4Fg-3M0CY&ab\\_channel=6MonthsLater](https://www.youtube.com/watch?v=-4Fg-3M0CY&ab_channel=6MonthsLater)
71. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8803971/#:~:text=The%20decline%20in%20comprehension%20when,brain%20and%20physiological%20activity%20levels>
72. <https://www.nature.com/articles/s41598-023-36256-4>
73. <https://www.simplypsychology.org/pavlov.html#:~:text=The%20main%20point%20of%20Ivan,pairing%20the%20two%20stimuli%20together>.
74. [https://www.youtube.com/watch?v=HMyurkqaddc&ab\\_channel=TheStudio](https://www.youtube.com/watch?v=HMyurkqaddc&ab_channel=TheStudio)
75. [https://www.youtube.com/watch?v=8QaYNHS\\_Gno&ab\\_channel=TechnoEclipse](https://www.youtube.com/watch?v=8QaYNHS_Gno&ab_channel=TechnoEclipse)
76. [https://www.youtube.com/watch?v=C7G1pWYVtBg&ab\\_channel=MattD%27Avella](https://www.youtube.com/watch?v=C7G1pWYVtBg&ab_channel=MattD%27Avella)
77. [https://www.youtube.com/watch?v=EBRS7y2mY2A&ab\\_channel=SpencerScottPugh](https://www.youtube.com/watch?v=EBRS7y2mY2A&ab_channel=SpencerScottPugh)
78. <https://www.scientificamerican.com/article/london-taxi-memory/#:~:text=In%20other%20words%2C%20taxi%20drivers,demands%20of%20navigating%20London's%20streets>
79. [https://www.youtube.com/watch?v=Wrf4LiXPt6E&ab\\_channel=NationalScienceFoundationNews](https://www.youtube.com/watch?v=Wrf4LiXPt6E&ab_channel=NationalScienceFoundationNews)
80. [https://www.youtube.com/watch?v=6\\_SUFvY80G4&ab\\_channel=BBCLondon](https://www.youtube.com/watch?v=6_SUFvY80G4&ab_channel=BBCLondon)
81. [https://www.youtube.com/watch?v=iTJn2ZWb3LM&ab\\_channel=DanielYu](https://www.youtube.com/watch?v=iTJn2ZWb3LM&ab_channel=DanielYu)
82. [https://www.youtube.com/watch?v=y0P1NOtRBdQ&ab\\_channel=christofu](https://www.youtube.com/watch?v=y0P1NOtRBdQ&ab_channel=christofu)
83. [https://www.youtube.com/watch?v=LOTuduCSm3g&ab\\_channel=JackScollay](https://www.youtube.com/watch?v=LOTuduCSm3g&ab_channel=JackScollay)
84. [https://www.youtube.com/watch?v=C7G1pWYVtBg&t=47s&ab\\_channel=MattD%27Avella](https://www.youtube.com/watch?v=C7G1pWYVtBg&t=47s&ab_channel=MattD%27Avella)
85. [https://www.youtube.com/watch?v=ow7CX0v5-DI&t=95s&ab\\_channel=Spencer%E2%80%99sAdventures](https://www.youtube.com/watch?v=ow7CX0v5-DI&t=95s&ab_channel=Spencer%E2%80%99sAdventures)
86. [https://www.youtube.com/watch?v=EsrySR1-HKk&ab\\_channel=RejectConvenience](https://www.youtube.com/watch?v=EsrySR1-HKk&ab_channel=RejectConvenience)
87. [https://www.youtube.com/watch?v=4nX5jwa2QTs&ab\\_channel=MattD%27Avella](https://www.youtube.com/watch?v=4nX5jwa2QTs&ab_channel=MattD%27Avella)
88. [https://www.youtube.com/watch?v=wnBDz1BVE2E&ab\\_channel=DarbyWilcock](https://www.youtube.com/watch?v=wnBDz1BVE2E&ab_channel=DarbyWilcock)
89. [https://www.youtube.com/watch?v=eRTXQ1ti-5w&ab\\_channel=AndrewFolts](https://www.youtube.com/watch?v=eRTXQ1ti-5w&ab_channel=AndrewFolts)
90. [https://www.youtube.com/watch?v=256TpMnvzp8&ab\\_channel=AshtonWomack](https://www.youtube.com/watch?v=256TpMnvzp8&ab_channel=AshtonWomack)
91. [https://www.youtube.com/watch?v=q5MCw8446gs&ab\\_channel=TheNewYorkTimes](https://www.youtube.com/watch?v=q5MCw8446gs&ab_channel=TheNewYorkTimes)
92. [https://www.youtube.com/watch?v=h81bLY3wQIs&ab\\_channel=thelightphone](https://www.youtube.com/watch?v=h81bLY3wQIs&ab_channel=thelightphone)
93. [https://www.youtube.com/watch?v=KID\\_haW\\_mig&ab\\_channel=Sunrise](https://www.youtube.com/watch?v=KID_haW_mig&ab_channel=Sunrise)
94. [https://www.youtube.com/watch?v=vgYi3Wr7v\\_g&ab\\_channel=OpenAI](https://www.youtube.com/watch?v=vgYi3Wr7v_g&ab_channel=OpenAI)
95. <https://www.wired.com/story/our-minds-have-been-hijacked-by-our-phones-tristan-harris-wants-to-rescue-them/>
96. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8803971/#:~:text=The%20decline%20in%20comprehension%20when,brain%20and%20physiological%20activity%20levels>
97. <https://www.journals.uchicago.edu/doi/epdf/10.1086/691462>
98. <https://www.youtube.com/watch?v=q5MCw8446gs>

99. <https://www.utm.utoronto.ca/main-news/researchers-track-global-smartphone-addiction-patterns-largest-ever-study>
100. [https://www.researchgate.net/figure/Mean-happiness-by-hours-a-day-texting-social-media-gaming-and-online-8th-10th-and-fig3\\_331666718](https://www.researchgate.net/figure/Mean-happiness-by-hours-a-day-texting-social-media-gaming-and-online-8th-10th-and-fig3_331666718)

**YouTubers mentioned:**

Ashton Womack <https://www.youtube.com/@ashtonwomack>

Darby Wilcock <https://www.youtube.com/@DarbyWilcock>

Spencer Scott Pugh <https://www.youtube.com/@SpencerScottPugh>

Matt d'Avella <https://www.youtube.com/@mattdavella>