

1. **Mark your confusion.**
2. **Show evidence of a close reading.**
3. **Write a 1+ page reflection.**

5 New Brain Disorders that Were Born Out of the Digital Age

Source: Tammy Kennon, TheWeek.com, February 27, 2017

It's hard to remember what life was like before we had the internet at our fingertips, smartphones in our pockets, and a laptop on every desk. Today, our brains are racing to adapt to the digital age. Cognitive neuroscientists say all that time we now spend in front of screens has changed the way we read and comprehend. Internet browsing has shortened both our attention spans and our patience. And it's doing a number on our memories.

In one recent study, researchers asked people a series of trivia questions. Half the group was allowed to use Google, the other half was not. Then, in the second half of the study, all participants were given a new round of easier questions and told they could choose whether or not to use Google to answer them. Sounds pretty standard, right? But those who used the internet in the first round really struggled to answer any questions in the second round while relying solely on their own knowledge and memories. One-third of them didn't even try, reaching for Google immediately.

"Whereas before we might have tried to recall something on our own, now we don't bother," says lead author Dr. Benjamin Storm. "As more information becomes available via smartphones and other devices, we become progressively more reliant on it in our daily lives."

Of course, the internet has done a lot of good for the world. But considering these revelations, it's worth highlighting a few of the more recent disorders that experts blame on our digital obsession:

1. **Nomophobia**

Some people are afraid of spiders. Others, heights. Or maybe you're unreasonably fearful of clowns. The list of phobias is long, and researchers recently added one more: In 2012, the world learned of "No-Mobile Phobia" or "nomophobia" — the feeling of panic one has upon being separated from one's phone or tablet. In one U.K. survey, 73 percent of respondents felt panic when they misplaced their phone. And for another 14 percent, that panic spiraled into pure desperation.

But the research into this new fear is so new, it's hard to say conclusively whether nomophobia is good or bad for our long-term health. "Maybe the nomophobic have higher quality relationships," Piercarlo Valdesolo speculates at *Scientific American*. "Maybe the nomophobic have greater life satisfaction. Maybe they have more successful professional lives. Or maybe I should admit this is wishful thinking and try to detach from my device for a while."

2. **Technoference**

Our digital obsession might be doing more than just making us feel a bit panicky. It could also be dragging down our relationships. In one 2014 study, more than half of the 143 participants said that tech devices interrupt their leisure time, conversations, and meals with their significant other. The researchers gave these interruptions a name: "technoference." Not surprisingly, higher technoference correlated directly with lower relationship and life satisfaction. "We would still hypothesize that when partners experience what they perceive to be an interruption due to technology, their views of the relationship are likely to suffer, especially if these interruptions are frequent," says Brandon T. McDaniel, one of the study's authors.

3. **The phantom ring**

Fauxcellarm, phantom ringing, and ringxiety are new to our lexicon, thanks to the universal presence of our buzzing, pinging smartphones. These terms refer to the perception that one's mobile device is ringing (or, more precisely, vibrating) when, in fact, it is not. David Laramie, a clinical

psychologist in Los Angeles, studied this phenomenon for his dissertation. Among the 320 adult mobile phone users he polled, two-thirds of them reported experiencing phantom ringing. That is, they "heard" their phone ringing when it actually wasn't. "Phantom vibrations are this unusual curiosity that speaks to our connection with our phones," Laramie told *Wired*.

What causes this weird phenomenon? "What happens, I think, is that because your clothes are rubbing against your skin, you cause activity in the same receptors, and that activity is just similar enough to the activity caused by a vibrating phone that it triggers the learned association and the perception of a vibrating phone," Sliman Bensmaia, a neuroscientist at the University of Chicago, explains.

4. Cyberchondria

Hypochondria is not a new disorder, but the internet has taken it to the next level. In the broadest definition, cyberchondria refers to people who research and diagnose their own illnesses online. Sure, we've probably all done that — in fact, one in three American adults say they have used the internet to self-diagnose. But for some people who might already be prone to hypochondria, this can be detrimental. They get neurotic, and go down a Google wormhole, frantically reading about every dreaded disease that matches their symptoms. A search for abdominal pain brings up diagnoses that include everything from food poisoning to stomach cancer, and soon, the Googler is convinced they're dying.

This is a huge problem considering that online symptom checkers are wrought with inconsistencies and inaccuracies. More than half the time, the top diagnoses matching a symptom search will be wrong, one study found.

"For a number of reasons, most medical professionals aren't too happy about the self-diagnosis trend," writes psychologist Mary Aiken at *Quartz*. "It isn't simply a matter of loss of control or an undermining of their authority through online medical searches — it can mess with the diagnostic process, because the results can suggest rare or morbid conditions to patients, which in turn can prompt the appearance of new 'symptoms.'"

5. Truman Show Delusion

Do you ever have that spooky feeling that someone's watching you? In the 1998 film *The Truman Show*, Truman Burbank had that feeling too, only his turned out to be true. Although the film was intended as a sort of dark comedy, it is not funny to those suffering from the Truman Show Delusion, the false perception that their lives are being broadcast. Joel Gold, a professor of psychiatry at New York University School of Medicine, first identified the syndrome in 2003. Gold is co-author of *Suspicious Minds: How Culture Shapes Madness*, along with his brother Ian Gold, professor of philosophy and psychiatry at McGill University. They claim the disorder is not a new diagnosis but a fresh twist on persecutory and grandiose illusions. And while it isn't directly caused by our digital devices, Truman Show Delusion is a product of our overly connected, reality-TV obsessed, social media-driven lifestyles that nurture our most narcissistic qualities.

"Shifts in technology have caused the content of delusions to change over the years," writes Colin Lecher at *Popular Science*. "In the 1940s, the Japanese controlled American minds with radio waves; in the '50s, the Soviets accomplished this with satellites; in the '70s, the CIA implanted computer chips into people's brains. And today's delusion fuel? Take your pick of the Kardashian sisters, then compound it with a dose of the latest NSA revelations. The resulting delusions aren't real, but they certainly aren't random: They're a half-skip past reality, a snippet of the world taken and blown out of proportion."

Possible Response Questions:

- Discuss your thoughts about one or more of these disorders.
- Pick a passage from the article and respond to it.