



# How do phones affect your life?

t was early Halloween morning, and 15-year-old Christina Morris-Ward was walking to school in her hometown in Maryland. It was a trip she made every day. And there was nothing unusual about this particular morning.

Then the unthinkable happened.

Christina stepped into the crosswalk and was struck by a car. She later died at the hospital.

Then there was the 16-year-old boy in New York who walked into a telephone pole with such force that he suffered a concussion. In Ohio, a 14-year-old boy was walking across a bridge when he fell off, plummeting 8 feet into a rocky ditch. He sustained serious chest and shoulder injuries.

What do these accidents have in common? They were all caused by the same thing. It wasn't a disease. Or a criminal. Or even simple clumsiness.

It was a smartphone.

At the times of the accidents, all three kids were using their phones. They were too distracted to notice the oncoming car, the pole just ahead, or the edge of the bridge.

Alarmingly, the number of these types of phone-related accidents is on the rise. Even more alarming, they are only one part of a major public-health problem experts are calling "digital distraction."

It affects all of us, but experts are especially worried about young people like you.

You are at high risk for distraction-related accidents, like what happened to Christina, and the constant presence of technology in your life is causing other problems too. Technology makes it harder for you to focus and get your work done. It's crippling your creativity. Some say that the future will be shaped—is being shaped right now, in fact—by the way your

generation uses technology. And they don't mean it in a good way.

#### A New World

The world today is very different from the one your parents grew up in. Twenty-five years ago, cell phones were as big as a size-10

> shoe and used mainly by spies and millionaires. If you needed to call your mom because band practice was canceled, you had to find a payphone (and hope you

had a quarter to put in the slot). If there was no payphone, you sat and waited for your mom, even if it was pouring rain. To get the photographs from your birthday party, you took the film from your camera to the drugstore and waited a week for prints to be developed. To watch your favorite show, you sat down at the one time during the week when it was broadcast on TV. If you missed it, too bad. Finding out when your favorite singer was born meant going to the

library to look it up in a book

or magazine.

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Who could have imagined that one day there would be a palmsized device that you

could use to call home, take pictures, watch TV shows, and access information?

Few people would deny that life today is more convenient, information-rich, and connected than it's been at any point in human history. If you're stranded in the rain, all you have to do is

# OF PEDESTRIAN

**DEATHS** are kids under age 19. Experts believe these tragedies are mainly due to digital distraction.

SAFE KIDS WORLDWIDE, OCTOBER 2014



PEOPLE CROSS BUSY STREETS while using their phones.

text your mom to come rescue you. So what's the problem?

# **History of Panic**

Every era of **technological** change has triggered panic—and criticism. In ancient Greece, the philosopher Socrates hated the act of writing things down. He was certain people would lose the ability to remember facts and carry on informed conversations. There were similar fears after the invention of the printing press in the 15th century made it possible to **mass-produce** books. Surely, some said, the human mind wouldn't be able to handle the overwhelming

amount of information suddenly available to anyone who could read. In the 1930s, kids were listening to music on their radios while doing homework, **inciting** panic that they wouldn't learn a thing.

In recent years, it's been more of the same. Just look at the headlines: "Is Google Making Us Stupid?" (*The Atlantic*); "Is Facebook Making Us Lonely?" (*The Atlantic*); "Are Smartphones Making Us Dumber?" (*Forbes BrandVoice*).

Are these fears just **jitters** about a changing world? Many experts are saying no, that today's tech is significantly different than the technology of the past.

Why?

## **Homework Takes Too Long**

The answer lies in how much time most of us (not just young people) are spending staring at screens. The average teenager spends more than seven hours a day looking at a phone, tablet, laptop, or TV. But the problem is more complex than just the *amount* of time spent with technology. If you gave your screens

your full attention for seven hours straight and then turned them all off, that would be one thing. But that's not what's happening.

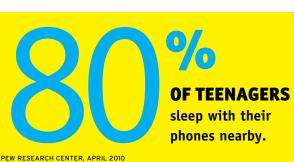
What's happening is that your phone is constantly calling for your attention while you are supposed to be doing other things. You're walking down the street, but you're also watching a Vine video. You're doing homework, but hey, why not quickly check the latest NBA rankings? You're studying your Spanish verbs, but awwww! Look at how your cat is just sitting there staring at you! You take a quick picture and post it to Instagram. Sometimes you forget all about what you were supposed to be doing because that YouTube video is so hilarious, you want to watch it again and again. (By the way, you were supposed to be taking out the trash.)

So why don't you just ignore all these digital interruptions?

Your brain won't let you.

The pleasure you get from interacting with your devices floods your brain with a feel-good chemical called dopamine.

It's the same chemical







# **AMOUNT OF TIME**

the average teenager spends in front of a screen per week

that gets released when you eat a piece of delicious chocolate cake. Dopamine makes it difficult to resist all those buzzes, vibes, and rings, because your brain is saying, "Come on-think how good it will feel to take a peek!"

But in fact, these interruptions are hard on your overtaxed brain. They are especially troublesome if you're supposed to be doing schoolwork or something else that requires deep thought. For example, studies show that it can take your brain 30 minutes to achieve the state of concentration you need to write an essay or read a chapter of To Kill a Mockingbird. Every time you stop writing or reading to check your phoneeven for a moment—you yank your brain out of its state of concentration.

Think what a pain it is when you have to reboot a computer. You wait for it to shut down, then turn it on and wait for it to fire up again. This is what you are doing to your brain every time you take a technology break and then try to get back to work.

No wonder simple projects take longer when you have your phone next to you. David Strayer, a leading **neuroscientist** from the University of Utah and an expert in attention and distraction, says that when faced with digital distractions, it can take people up to 50 percent longer to complete a task-and that they make more mistakes.

So homework that took an hour and a half could have been finished in an hour!

#### **Boredom Is the Best**

However, what worries experts most is not that your essay on Abraham Lincoln is taking you so long or that you got a 63 on your Spanish test.

What worries experts is that you are never bored.

It used to be that boredom was part of life. Just ask your parents what a family road trip was like in the days before smartphones and in-car DVD players. It was torture!

Turns out, something happens to our brains when we are bored. Our minds wander. We come up with new ideas, or new solutions to problems. Isaac Newton figured out gravity while relaxing in his mom's garden and watching

an apple fall from a tree. Albert Einstein's most famous theories are said to have come from a daydream he had about riding a sunbeam to the edge of the universe.

But who sits and stares out the window anymore when there's Instagram to click through or ESPN to check? When was the last time you were bored for more than a few minutes? When, in the course of your day, do you let your mind wander aimlessly? There is a reason you have your best ideas in the shower: There are no screens to distract you (unless you have a waterproof phone).

Some experts worry that your generation will be so busy consuming media that you won't be able to create anything of your own. If everyone is busy playing Candy Crush, who will write the next Hunger Games? Or develop a lifesaving treatment for cancer? Or invent a faster way to travel through outer space?



# AVERAGE NUMBER

of texts a teenager sends or receives per month

NIELSEN, OCTOBER 2010

## **Many Questions**

There is still much that we don't know about the human brain. And smartphones are still new enough that it's difficult to predict exactly how they will affect our minds over the long term, or whether the benefits of today's technology will outweigh the harm it causes.

What we do know is that digital distraction can lead to very serious situations. According to a study by Ohio State University, the number of emergency-room visits for injuries related to walking while using a mobile device has tripled over the past decade. Indeed, you are four times more likely to get hit by a car if you walk and use your phone at the same time.

It's a statistic that haunts Gwen Ward, Christina's mother. Since Christina's tragic death, Ward has dedicated her life to trying to prevent accidents like Christina's from happening again. She created a team of "safety champions" at Christina's high school. They stand at intersections, passing out reflectors and pointing out unsafe behaviors like texting or using headphones to listen to music while crossing the street.

Ward also works with a group called Safe Kids to spread the message: Putting away your phone might just save your life.

# **How To Be Smart** With Your Smartphone

**By Mackenzie Carro** 

Do take control.

Set aside time each day to turn off all your notifications for social media, messaging, and games. Enjoy the freedom of being undisturbed.



Don't sleep with your phone. Your phone screen gives off a kind of light that tells your brain to stay awake. You're also more likely to check your phone if it's close. Keep it in a different room while you sleep.



为 Don't carry your phone in a pocket. Using a phone while you walk is dangerous. It also gets in the way of enjoying your surroundings and fizzles the fabulous ideas brewing in your brain. Put your phone in your bag, where it's harder to get to. If you need to check it, stop walking.



Do be active every day. Being in front of a screen all day means too

much sitting. Choose a fun activity to do every day, whether it's playing soccer, riding your bike, or dancing to your favorite playlist.



Do practice concentration. The convenience of get-an-answer-to-anythinginstantly technology can make us impatient. To combat this, take up a hobby that requires practice and patience, like playing guitar or knitting.



#### **WRITING CONTEST**

There is a famous proverb that says "all things in moderation." What does this proverb mean? Why might it be wise to apply it to our digital lives? Answer both questions in a short essay. Use details from the main article and the sidebar to support your ideas. Send your essay to ATTENTION CONTEST. Five winners will each get Feed by M. T. Anderson. See page 2 for details.