In the summer of 2012, fifty-one children visited a summer camp just outside Los Angeles. The children were typical Southern Californian public school kids: an equal mix of boys and girls aged 11 or 12 years from a variety of ethnic and socioeconomic backgrounds. All of them had access to a computer at home, and roughly half owned a phone. They spent an hour texting friends each day, about two and a half hours watching TV, and just over an hour playing computer games.

For this one week, the children would leave their phones and TVs and gaming consoles at home. Instead, they hiked and learned to use compasses and to shoot bows and arrows. They learned how to cook over a campfire and how to tell an edible plant from a poisonous plant. They weren’t explicitly taught to look each other in the eyes, face-to-face, but in the absence of new media, that’s exactly what happened. Instead of reading “LOL” and staring at smiley-face emojis, they actually laughed and smiled. Or didn’t laugh and smile if they were sad or angry.

Learning to Read Emotional Cues

On Monday morning, when the kids arrived at the camp, they took a short test called the DANVA2, which stands for the Diagnostic Analysis of Nonverbal Behavior. It’s a fun test—one of those tests that goes viral on Facebook—because all you have to do is interpret the emotional states of a bunch of strangers. For half the test you look at their faces in photos, and for the other half you listen to them read a sentence aloud. Then you decide whether they’re happy or sad or angry or fearful. That may sound trivial, but it isn’t. Some of the faces and voices are easy to read—these are labeled “high-intensity”—but many of them are subtle. Like deciding whether the Mona Lisa is smiling inside, or whether she’s just bored or unhappy. I tried the test and got some of the answers wrong. One guy sounded mildly depressed, but the test told me he was actually mildly afraid. The summer camp kids had the same experience. They made an average of 14 errors across the 48-item test. Four days of camping and hiking later, the kids were ready to file onto buses to return home. Before they did, the researchers administered the DANVA2 again. They reasoned that a week of face-to-face interaction without distraction from gadgets...
might make the kids more sensitive to emotional cues. There’s good reason to believe practice makes perfect when it comes to reading emotional cues. Children who are raised in isolation—like the famed Wild Boy of Aveyron who was raised by wolves in a forest in France till he was 9 years old—never learn to read emotional cues. And people who are forced into isolation struggle to interact with others when they emerge, sometimes for the rest of their lives. Children who spend time together also learn to read emotional cues through repeated feedback: you may think your playmate is holding out a toy because he wants to share it with you, but if you look at his face you’ll see he’s about to use the toy as a weapon.

**Spending Time With Peers**

Reading emotions is a finely tuned skill that atrophies with disuse and improves with practice, and that’s what the researchers found at the summer camp. The kids did much better the second time they took the DANVA2. They were never told the answers to the test after taking it the first time, but their error rate dropped by 33 percent. The researchers also asked a control group of kids from the same school to take the test twice. These kids didn’t attend the camp, so they took the test on a Monday morning and a Friday afternoon just as the camp kids did. Their error rate dropped a bit, too—by 20 percent—presumably because there’s some benefit to taking the same test twice, but this rate of improvement was much less impressive than the rate shown by the wilderness campers.

Now, there’s a lot that separates a week in the city from a week at camp. Apart from access to gadgets and time spent face-to-face with friends, there are plenty of other differences that may have explained the kids’ different rates of improvement on the DANVA2. Is it that spending time in nature improves mental functioning? Or that spending time with your peers makes you smarter? Or that staying away from gadgets makes all the difference? It’s impossible to be sure, but that doesn’t change the prescription: kids do better at a task that drives the quality of their social interactions when they spend more time with other kids in a natural environment than they do when spending a third of their lives glued to glowing screens.

**How Teens Communicate**

Today, schoolchildren aged between 8 and 18 years spend roughly a third of their lives sleeping, a third at school, and a third engrossed in new media, from smartphones and tablets to TVs and laptops. They spend more time communicating through screens than they do with other people directly,
face-to-face. Since the turn of the new millennium, the rate of non-screen playtime fell 20 percent, while the rate of screen playtime increased by a similar amount.

This matters because it drives how teens communicate. Take the case of texting, which many children (and adults) prefer to phone calls. Texting allows you to modulate your message more precisely than does speech. If you usually reply “haha” to a joke, you can write “hahaha” to signal that this one is particularly funny—or “HAHAHAHA” if the joke is uproarious. If you’re angry, you can reply with the dismissive “k,” and if you’re furious you can choose not to respond at all. To shout, you use a single “!,” and to exclaim loudly, you use “!!!” or even “!!!!!!” These signals are mathematically precise—you can count each “ha” or “!”—so texting is ideal for risk-averse communicators who worry about miscommunicating. The significant downside is that nothing is spontaneous and very little is ambiguous when you follow the rules of text-speak. There are no non-verbal cues; no pauses and lilts and unplanned giggles or scoffs to punctuate your partner’s message. Without these cues, children can’t learn to communicate face-to-face.

What It Means to Sit Face-to-Face

Few experts know this better than Hilarie Cash, a clinical psychologist and cofounder of an internet addiction facility near Seattle called reSTART. Cash explained that “there’s nothing wrong with making friends online, as long as you also make friends in the real world. If we’re good friends, and we’re sitting together, that interaction releases a bouquet of neurochemicals that keeps us each regulated emotionally and physiologically.” Online interactions are dangerous, not for what they provide, but for what they can’t provide: a chance to learn what it means to sit, face-to-face, as you maintain a conversation with another person. The staccato taps of a keyboard—and even remote webcam interactions—obey a very different rhythm, and convey information along a much narrower bandwidth. “Even the smell of another person, the consistent eye contact that comes from being in the same room, is important,” Cash said. People who communicate by webcam never seem to look one another in the eyes, because the other person’s eyes aren’t perfectly aligned with the webcam that conveys your gaze. “It’s a lot like feeding sugar to a hungry person,” Cash said. “It’s pleasurable in the short-term, but eventually, they’ll starve.”

Echoing Cash’s perspective, M.I.T. Professor Sherry Turkle illustrated the limitations of cell phone communication in her 2015 book, Reclaiming
Conversation. Turkle recounted an observation that comedian Louis C.K. shared with Conan O’Brien in 2013. C.K. explained that he was not raising children; he was raising the grown-ups they’re going to be. Phones, he said, are “toxic, especially for kids.” They don’t look at people when they talk to them. And they don’t build the empathy. You know, kids are mean. And it’s because they’re trying it out. They look at a kid and they go, “You’re fat.” And they see the kid’s face scrunch up and they go, “Ooh, that doesn’t feel good to make a person do that” . . . but when they write, “You’re fat,” then they just go, “Mmm, that was fun. I like that.” For Louis C.K., face-to-face communication is essential, because it’s the only way for kids to appreciate how their words affect other people.

Can We Resist the Irresistible?
Even when teens are communicating face-to-face, the mere presence of smartphones threatens to diminish their connection. In 2013, psychologists Andrew Przybylski and Netta Weinstein at the University of Essex invited pairs of strangers into a small room and asked them to engage in conversation. To smooth the process, the psychologists suggested a topic: why not discuss an interesting event that happened to you over the past month? Some of the pairs talked while a smartphone sat idle nearby, while for others the phone was replaced by a paper notebook. Every pair bonded to some extent, but those who grew acquainted in the presence of the smartphone struggled to connect. They described the relationships that formed as lower in quality, and their partners as less empathetic and trustworthy. Phones are disruptive by their mere existence, even when they aren’t in active use. They’re distracting because they remind us of the world beyond the immediate conversation, and the only solution, the researchers wrote, is to remove them completely. In their place, we’ll communicate with one another directly, and the glow of these social bonds will leave us richer and happier than the glow of screens ever could.