Common Sense is grateful for the generous support and underwriting of this report.

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<table>
<thead>
<tr>
<th>TABLE OF CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Letter from Our Founder .................................................. 1</td>
</tr>
<tr>
<td>Dealing with Devices: The Parent-Teen Dynamic ........................................ 2</td>
</tr>
<tr>
<td>Introduction ................................................................................. 4</td>
</tr>
<tr>
<td>Key Findings ................................................................................ 6</td>
</tr>
<tr>
<td>Conclusion .................................................................................. 10</td>
</tr>
<tr>
<td>Finding Balance: Create a Family Media &amp; Tech Plan ................................ 13</td>
</tr>
<tr>
<td>References .................................................................................. 14</td>
</tr>
<tr>
<td>Board of Directors ....................................................................... 15</td>
</tr>
</tbody>
</table>
May 3, 2016

Last fall, our Common Sense Census found that tweens and teens spend on average six to nine hours a day with media — not including schoolwork. We are experiencing a transformative change in the way children interact with others, with implications for their social and emotional development.

Parents, educators, policymakers, and advocates are eager to understand the implications of our always-on media environment for children and adults alike. Are we “addicted” to our devices? Are we becoming less empathic as we interact with others through screens rather than in person? Are we less able to focus as we constantly toggle among devices? Or are we just adapting to innovations that have a considerable upside, with opportunities for connection and access to information?

In Technology Addiction: Concern, Controversy, and Finding Balance, we examine existing research and tap into current family dynamics to find answers. An extensive literature review yields some surprising findings and raises many more questions. Research on Internet use and children is complicated and varied and, most importantly, woefully incomplete. As a nation, we owe it to our kids to find out how today’s always-on, digital society is affecting their social, emotional, and cognitive growth.

Common Sense polled over 1,200 parents and teens to find out how the saturation of cell phones and other mobile devices in family life is playing out in homes and child-parent relationships. We found that one out of every two teens feels addicted to her mobile device. We also found that parents and teens agree that mobile use is distracting, a regular source of conflict, and, in some cases, truly problematic. But overwhelmingly they also agree that their use of mobile devices has made no difference to, or even helped, their relationships.

The poll paints a changed portrait of family life in 2016. A significant minority of families seems to be truly struggling to integrate mobile technology in a healthy way. And many concerning behaviors and outcomes are associated with mobile use. But the generational gap revealed in the different behaviors of teens and their parents raises the question of whether we may be too quick to label as “addiction” something that is actually a normal adaptation to rapidly and constantly evolving social norms.

At Common Sense, our mission is to provide parents and educators with the tools and resources to be aware of dangers, set realistic boundaries, and role-model healthy behaviors around media and technology. Given the constantly changing media environment, and the very real negative outcomes for some families of problematic media use, that mission is more important than ever.
DEALING WITH DEVICES: The Parent-Teen Dynamic

Are We Addicted?

66% of parents feel their teens spend too much time on their mobile devices

52% of kids agree

Is It Causing Family Conflicts?

Teens and parents say they argue about device use:

At least a few times every week...

85% of parents feel their teens’ use of mobile devices has made no difference in or even has helped their relationship

89% of teens feel their parents’ use of mobile devices has made no difference in or even has helped their relationship

Methodology: Lake Research Partners designed and administered a nationwide telephone survey from February 16 to March 14, 2016, conducting 1,240 interviews of parents (n=620) and their children (n=620) (between the ages of 12 and 18), both of whom used a mobile device. The data for the parents and children sample were weighted slightly by gender, region, age, and race to reflect attributes of the actual population. The margin of error for this sample is +/-4.0%.

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Parents and other concerned adults increasingly wonder, what are the human costs of this “always connected” lifestyle, especially for our children?

Over the past decade, society has witnessed massive changes in the way media and technology intersect with the ways we work and live. Devices are more mobile, functional, and seemingly indispensable. Accordingly, we’ve integrated media and technology into more and more of our lives, bringing devices with us everywhere and depending on them for a range of work, school, play, and social functions.

Not only are media widely embraced by adults around the world, but they also are pervasive in the lives of young people. The Common Sense Census (Common Sense Media, 2015), a representative survey of American tweens (8- to 12-year-olds) and teens (13- to 18-year-olds), documented that outside of school and homework, tweens spend almost six hours per day (5:55 hrs.) and teens spend almost nine hours per day (8:56 hrs.) using media, including watching TV, playing video games, using social media, using the Internet, reading, and listening to music.

Interpreting time spent with media poses a challenge—some would point to the sheer number of hours as evidence of an addiction, although just counting time disregards the many different activities that can be done on the Internet. Even if children aren’t actually addicted, how should we understand unhealthy engagement with media? Parents and other concerned adults increasingly wonder, what are the human costs of this “always connected” lifestyle, especially for our children?

Common Sense reviewed the latest scientific research about problematic media use and, in this research literature brief, articulates its pervasiveness, forms, and possible impacts on youths’ well-being and development. The brief considers over 180 journal articles, press articles, interviews, industry papers, and books.

Data were collected from global populations; studies with people living in the United States were the most frequently cited, and studies with people living in China were the second most frequently cited. The literature search covered several primary areas:

- Behavioral and technologic addiction (e.g., theory and rhetoric, empirical observation, and experiments)
- Media use habits (e.g., time spent with and frequency of engaging with media)
- Family approaches to media management
- Prevalence of, attitudes toward, and impacts of media multitasking
- Developmental implications of media use, particularly with respect to empathy and social well-being
- Strategies for mitigating problematic media use

It is important to note that much of the research reviewed here was conducted with college students and adult populations, not specifically with children. There is some limited work on adolescents but very little on young children or preteens (or “tweens”). Given the many physical, cognitive, social, and emotional changes that occur from early childhood through adolescence and beyond, it is appropriate to treat findings with caution, as research on adults may not always generalize to younger populations and phenomena of interest may be more or less pronounced in those groups. The following key findings are from the research brief.
There remains substantial disagreement about whether Internet addiction is a new psychological disorder or the manifestation of another disorder, how it is measured, and how prevalent it is.

1. Internet addiction is potentially serious and needs clarification and additional study for people to understand the impact on children’s physical, cognitive, social, and emotional development.

One systematic review of studies on American adolescents and college students reported a range of prevalence estimates between 0 and 26 percent (Moreno, message, Cox, Young, & Christakis, 2011). “Internet addiction” refers to a swath of excessive and compulsive technology-related behaviors resulting in negative outcomes. There remains substantial disagreement about whether Internet addiction is a new psychological disorder or the manifestation of another disorder, how it is measured, and how prevalent it is. There is also some ambiguity about what Internet addiction is, given the many things that can be done on the Internet (such as watching videos, playing games, or using social media). Focusing on amount of time online is controversial, given that children and adults alike are connected all the time and given how many activities take place in online environments.

There is also ongoing controversy over whether Internet addiction can be considered an addiction in the same sense as substance abuse or a behavioral disorder, in which individuals pathologically seek out “rewarding stimuli” despite negative outcomes. Internet addiction is not currently included as a diagnosis in the Diagnostic and Statistical Manual of Mental Disorders (the DSM-V), the medical resource that classifies and provides diagnostic criteria for mental disorders and provides comprehensive diagnostic criteria for all psychiatric disorders.

However, Internet gaming disorder (IGD), which recognizes unhealthy patterns of engagement with games, is a condition identified by the American Psychiatric Association. Mostly diagnosed in male adolescents and young adults, IGD is currently being considered for inclusion within the next version of the DSM. Individuals with IGD experience extreme negative consequences as a result of their gameplay, such as exhaustion and loss of relationships. There is also evidence that the brains of IGD patients resemble the brains of substance users and pathological gamblers. Cultural differences may underlie differences in IGD prevalence across countries.

Even though it is unclear whether or how teens are addicted to the Internet, problematic media use is a concern. “Problematic media use” is a term that describes dysfunctional ways of engaging with media and encompasses many related terms, including Internet addiction, technology addiction, Internet gaming disorder, and others. Media users’ problematic relationships with media and devices, such as smartphones, could be characterized as compulsive, obsessive, or unhealthy.

However, there are substantial gaps in research on problematic media use, especially as it pertains to children.

2. Our digital lifestyles, which include frequent multitasking, may be harming our ability to remain focused.

Part of the concern around being constantly connected through technology and media revolves around how we multitask among different forms of media and between media and real life. Media multitasking is very common among children and adults, even though there is ongoing concern over how it affects our abilities to pay attention and avoid distraction. A 2010 study of 8- to 18-year-olds found that young people were engaging in media multitasking for 29 percent of their overall media use, fitting over 10 hours of media use into 7.5 hours of their days (Robek, Fisher, & Roberts, 2010). Another study of 263 middle school, high school, and university students found that students studied for fewer than six minutes before switching to another technological distraction, such as texting or social media (Rosen, Carrier, & Cheever, 2010).

Some young people don’t believe media multitasking is harming their ability to get things done. For example, the Common Sense Census (2015) found that high percentages of teens watched TV (51 percent), used social media (50 percent), and texted (60 percent) while doing homework, but most of the teens did not feel that their multitasking harmed the quality of their work. However, multitasking may decrease productivity because users take time to reorient after a transition to a different activity and become cognitively fatigued from the effort, which slows their rate of work. Additionally, multitasking makes it more difficult to create memories that can be accurately retrieved later (Hernandez & Moselewski, 2000). In terms of real-world performance, a study of laptop users in university classrooms found that students who multitasked on a laptop during a lecture performed worse on a test than students who were not multitasking (Gava, Weston, & Capina, 2015).

A seminal research study involving 262 college students found that heavy media multitaskers have a harder time filtering out irrelevant information (Ophir, Nass, & Wagner, 2009), but it is possible that they have other attention issues that result in poor performance. Additional research with younger populations is needed to illuminate the impacts of low, medium, and high levels of media multitasking on developing children.

3. Media and technology use is a source of tension for many families.

In an environment where people are frequently using and checking devices, research has pointed to conflicts that arise in families when people are distracted by media and technology use. For example, in a survey of 8- to 17-year-olds and their parents, 54 percent of children felt that their parents checked their devices too often, and 32 percent of children felt unimportant when their parents were distracted by their phones (Kaiser, 2010). Another study with 803 American parents of 8- to 17-year-olds found that about one-third of all participating parents struggled with limiting their children’s use of media and technology (Rich, Bickham, & Shrier, 2015). And, an observational study of 55 caregivers eating with young children in fast food restaurants found that parents who were highly absorbed in their devices tended to be more harsh when dealing with children’s misbehavior (Robek et al., 2014).

However, not all studies find that media and technology are causing family conflicts. A study of 2,326 parents of 0- to 8-year-olds found that almost 80 percent of parents disagreed that negotiating media use causes conflict in the home, and 59 percent said they were not worried about their children becoming addicted to new interactive technologies (Vartanian, Robek, Lachalys, & Crowell, 2011). It is unclear whether
the frequency of media and technology use for adults and children is becoming a new social norm or whether parents are underestimating the impact of media and technology on family life.

4. Problematic media use may be related to lower empathy and social well-being.

Many researchers have noted that narcissism seems to be increasing, while empathic traits have been on the decline, and have pointed to the frequency linking social media use to empathy, the results are limited and difficult to interpret. One study of adults between the ages of 18 and 50 found that commenting, viewing photos, and posting status updates on Facebook was related to narcissism but that higher levels of chatting on the site were positively related to perspective-taking, a key component of empathy (Kiesner, Bunzle, & Kemp, 2016). But, another study of 1,726 adults found that going online did not have any impact on face-to-face communication and did not reduce empathy (Carringer, Sprecher, & Reisner, 2015).

It should be noted that teens still place high value on face-to-face communication and don’t see social networking as harming their personal relationships. Common Sense Media (2012) found that children between the ages of 13 and 17 preferred face-to-face communication over all technological means of communication, because it was perceived to be more fun and because they could understand people better in person. In addition, 52 percent of teen social media users felt that social networking had mainly helped their relationships with friends, as opposed to 4 percent who felt it hurt their relationships. Because it is correlational, current research makes it difficult to know whether people who engage in problematic media use become less empathetic, whether people with less empathy or low levels of social well-being choose to engage more online, or both.

5. Technology may facilitate new ways of expressing typical adolescent developmental needs, such as the need for connection and validation from peer groups.

What is different about teens’ experiences in the digital age is the extent to which technology can narrow or expand the ways in which teens interact with their friends and the wider world. Engaging with peers on social networks such as Facebook, Instagram, or Snapchat, or playing immersive role-playing games with friends and people from around the world, are ways in which youth may feel socially connected. In this framing, the seemingly constant use of tech, evidenced by teens immediately responding to texts, social-networking posts, and other notifications, is actually a reflection of teens’ need to connect with others. What looks like excessive use and distraction may actually be a reflection of new ways of maintaining peer relations and engaging in communities that are relevant to them. Some research suggests that what appears to be teens’ addiction to technology is actually just an expression of their desire to interact with friends in a society that does not allow children as much freedom as earlier generations (Boyk, 2014).

Online activities also allow youth to dive deeply into a topic or talent and participate in communities that share their interests. In extensive qualitative fieldwork with young people, which included 5,194 hours of observation, 659 semistructured interviews, and 28 diary studies, Ito and colleagues (2012) observed that youth spent time with and around media in order to socialize with peers and pursue personal interests. While youth could spend many hours engaging with their passions, and potentially displace other hobbies, the researchers noted that this intensity was not perceived negatively or practiced pathologically.

6. Embracing a balanced approach to media and technology, and supporting adult role-modeling, is recommended to prevent problematic media use.

A balanced approach includes fostering awareness of media and self, embracing quality media usage, selective single-tasking, carving out times and places to disconnect, and nurturing relationships and face-to-face conversation. Gardner and Davis (2013) point out that media and technology can be especially beneficial when used to form deeper relationships, to allow for creativity and exploration, and to explore identity. There is a difference between spending hours using technology to create digital worlds, hone photography or music skills, or engage in meaningful discussions of important issues and being a passive consumer of content or using tech as a way to distance oneself from social relationships. A healthy digital lifestyle could and should include thoughtful and intentional uses of media and technology.

A balanced approach also prioritizes focusing on a single task when called for and not multitasking in educational, work, or social contexts. It also recognizes the importance of face-to-face communication, in addition to online communication, in supporting rich social relationships.

Additionally, parents and other caring adults can help youth to manage media. By modeling balanced media habits themselves as well as co-engaging with media, discussing media-related best practices, strategies, and ethical dilemmas, and setting limits around how, when, and where to use media, parents can act as “media mentors” (Samuel, 2015). Samuel’s research suggests that children of technology limiters, who focus mostly on minimizing their children’s use of technology, are most likely to engage in problematic behaviors such as posting hostile comments or impersonating others online, whereas children of media mentors are much less likely to engage in problematic online behaviors.

Understanding that adults are role models, parents should be conscious of how they engage with technology and media, given how they want their children to engage with technology and media. If children observe parents being frequently distracted by their phones, they may be more apt to internalize that behavior. Modeling sets an example and establishes a social norm.

Time spent with media could subtract from face-to-face time, so heavy media users would forfeit opportunities to deepen empathy by conversing and learning from human facial and vocal cues.
In this research literature brief, we reviewed the complicated and sometimes contradictory research on Internet addiction and problematic media use. We set out to understand what is known about whether the surge of new devices and increased media use are harming children’s development. The issue is far from black and white. It seems clear that, for some adolescents and adults, it is possible to engage with technologies in obsessive or compulsive ways that have severe negative life outcomes, such as poor school-work or social withdrawal. Yet, it is not clear whether underlying factors such as depression or social anxiety may be driving unhealthy use of technology. Addiction is a complex and charged subject, and though it may be tempting to point to children’s evolving technology- and media-related behaviors as evidence of new addictions, it is important to remember that true addictions reflect severe problems with very specific medical criteria. We should not be so quick to point at children’s use of technology as an addiction. Still, even if children are not addicted, we should be cautious of the ways that problematic media use could affect their ability to stay focused or negatively impact their social and emotional well-being.

Even as we wait for additional research to fill in the major knowledge gaps, we should not feel paralyzed. Media multitasking is distracting and fatiguing, so how can we instill good habits in children from an early age, so that they can grow up using technology and media in intentional and not reflexive ways? How can we help parents gain control over their own device usage and mentor their children about integrating technology into their lives in thoughtful and productive ways? What do media producers need to know to design products and media that are ethical and that don’t unfairly take advantage of children’s developing cognitive and self-regulation abilities? As Gardner and Davis (2014) argue, we should look for ways to use technology to promote creativity, collaboration, and creativity in ways that support well-being.

In the last decade we have seen wide and sweeping adoption of devices and technology as well as pervasive media use. As a society we should aim to better understand how these changes will impact our children and future generations. Understanding the cautions and concerns presented in this review is a necessary step toward creating opportunities for people in all areas of children’s lives to help children thrive in the digital age.

A note about the limitations of this literature review: There is a growing body of research on problematic media use, but much of it draws samples from college students and adults. In our literature review, we were surprised by how few experimental or quasi-experimental studies or large, national surveys have been done with adolescents around these issues. The research base on pre-teens (“tweens”) and young children is even smaller. Much of the research that has been done is cross-sectional, which is helpful in giving a snapshot on young people’s lives in the digital age but does not allow researchers to draw conclusions about cause. Children’s brains are still growing and maturing through adolescence and beyond, so research on how excessive or problematic use affects brain development is critical if we are to understand the impact of device and media use on children. Additionally, longitudinal and experimental research that can show changes over time, and that can support causal rather than correlational relationships, will help stakeholders better understand problematic media use. Research is needed to better understand how and why people engage with media in problematic ways and whether particular children (i.e., children who are already depressed, socially isolated, etc.) are especially vulnerable.

Even as we wait for additional research to fill in the major knowledge gaps, we should not feel paralyzed. Media multitasking is distracting and fatiguing, so how can we instill good habits in children from an early age, so that they can grow up using technology and media in intentional and not reflexive ways? What do media producers need to know to design products and media that are ethical and that don’t unfairly take advantage of children’s developing cognitive and self-regulation abilities? As Gardner and Davis (2014) argue, we should look for ways to use technology to promote creativity, collaboration, and creativity in ways that support well-being.

In the last decade we have seen wide and sweeping adoption of devices and technology as well as pervasive media use. As a society we should aim to better understand how these changes will impact our children and future generations. Understanding the cautions and concerns presented in this review is a necessary step toward creating opportunities for people in all areas of children’s lives to help children thrive in the digital age.
MISSION

Common Sense is the nation’s leading independent nonprofit organization dedicated to creating a powerful voice for kids and families in the 21st century. Millions of families, educators, and policymakers turn to Common Sense every day to access our independent rating systems, unbiased research, and trusted tools and advice to help them navigate a rapidly changing digital landscape at home and at school.

FINDING BALANCE:
Create a Family Media & Tech Plan

If you’re wondering how this all affects your kid and your family — well, there’s no one-size-fits-all answer. But what’s clear is that parents, teachers, and supportive adults can help kids use media and tech in healthy, productive, and responsible ways.

A healthy media diet balances three things: what kids do, how much time they spend doing it, and whether their content choices are age-appropriate. Mixing media and tech time with other activities will help families find that happy medium. Here are a few more helpful tips for getting started:

Declare Tech-Free Zones and Times. Devices are a huge part of screen time, and kids need support in establishing balance and setting limits. Depending on your family, these rules can be as simple as “no phones at the dinner table” or “no texting after 9 p.m.”

Check the Ratings. Choose age-appropriate, high-quality media and tech for your family. Media and technology can be especially beneficial when used to form deeper relationships, allow for creativity and exploration, and explore identity. Encourage your kids to be creative, responsible consumers, not just passive users.

Talk About It. Connect with your kids and support learning by talking about what they’re seeing, reading, and playing. Encourage kids to question and consider media messages to better understand the role media plays in their own lives.

Help Kids Understand the Effects of Multitasking. Our research shows that many tweens and teens think multitasking has no impact on the quality of their homework. As parents, we know that helping kids stay focused will only strengthen interpersonal skills and school performance. Encourage them to minimize distractions and manage one task at a time, shutting down social media while working online for homework or engaging in conversation.

Walk the Walk. Lead by example by putting your own devices away while driving, at meal times, and during family time. Parent role-modeling shows kids the behavior and values you want in your home. Kids will be more open and willing participants when the house rules apply to you, too.

Seek Expert Help If Needed. If you observe significant negative issues with your kids’ use of media and technology, (e.g., it’s harming their mental health, disrupting their relationships, or hurting their academic performance) and you don’t feel equipped to address it yourself, consult your pediatrician, a psychologist, a social worker, or another professional for advice.

Learn more at CommonSense.org.
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