Chapter 5

The Sad State of Happiness in the United States and the Role of Digital Media

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The years since 2010 have not been good ones for happiness and well-being among Americans. Even as the United States economy improved after the end of the Great Recession in 2009, happiness among adults did not rebound to the higher levels of the 1990s, continuing a slow decline ongoing since at least 2000 in the General Social Survey (Twenge et al., 2016; also see Figure 5.1). Happiness was measured with the question, “Taken all together, how would you say things are these days—would you say that you are very happy, pretty happy, or not too happy?” with the response choices coded 1, 2, or 3.

Happiness and life satisfaction among United States adolescents, which increased between 1991 and 2011, suddenly declined after 2012 (Twenge et al., 2018a; see Figure 5.2). Thus, by 2016-17, both adults and adolescents were reporting significantly less happiness than they had in the 2000s.

In addition, numerous indicators of low psychological well-being such as depression, suicidal ideation, and self-harm increased sharply among adolescents since 2010, particularly among girls and young women (Mercado et al., 2017; Mojtabai et al., 2016; Plemmons et al., 2018; Twenge et al., 2018b, 2019a). Depression and self-harm also increased over this time period among children and adolescents in the UK (Morgan et al., 2017; NHS, 2018; Patalay & Gage, 2019). Thus, those in iGen (born after 1995) are markedly lower in psychological well-being than Millennials (born 1980-1994) were at the same age (Twenge, 2017).

This decline in happiness and mental health seems paradoxical. By most accounts, Americans should be happier now than ever. The violent crime rate is low, as is the unemployment rate. Income per capita has steadily grown over the last few decades. This is the Easterlin paradox: As the standard of living improves, so should happiness – but it has not.

Several credible explanations have been posited to explain the decline in happiness among adult Americans, including declines in social capital and social support (Sachs, 2017) and increases in obesity and substance abuse (Sachs, 2018). In this article, I suggest another, complementary explanation: that Americans are less happy due to fundamental shifts in how they spend their leisure time. I focus primarily on adolescents, since more thorough analyses on trends in time use have been performed for this age group. However, future analyses may find that similar trends also appear among adults.

**Figure 5.1: General happiness, U.S. adults, General Social Survey, 1973-2016**
The data on time use among United States adolescents comes primarily from the Monitoring the Future survey of 13- to 18-year-olds (conducted since 1976 for 12th graders and since 1991 for 8th and 10th graders), and the American Freshman Survey of entering university students (conducted since 1966, with time use data since 1987). Both collect large, nationally representative samples every year (for more details, see iGen, Twenge, 2017).

The rise of digital media and the fall of everything else

Over the last decade, the amount of time adolescents spend on screen activities (especially digital media such as gaming, social media, texting, and time online) has steadily increased, accelerating after 2012 after the majority of Americans owned smartphones (Twenge et al., 2019b). By 2017, the average 12th grader (17-18 years old) spent more than 6 hours a day of leisure time on just three digital media activities (internet, social media, and texting; see Figure 5.3). By 2018, 95% of United States adolescents had access to a smartphone, and 45% said they were online “almost constantly” (Anderson & Jiang, 2018).

During the same time period that digital media use increased, adolescents began to spend less time interacting with each other in person, including getting together with friends, socializing, and going to parties. In 2016, iGen college-bound high school seniors spent an hour less a day on face-to-face interaction than GenX adolescents did in the late 1980s (Twenge et al., 2019). Thus, the way adolescents socialize has fundamentally shifted, moving toward online activities and away from face-to-face social interaction.

Other activities that typically do not involve screens have also declined: Adolescents spent less time attending religious services (Twenge et al., 2015), less time reading books and magazines (Twenge et al., 2019b), and (perhaps most crucially) less time sleeping (Twenge et al., 2017). These declines are not due to time spent on homework, which has declined or stayed the same, or time spent on extracurricular activities, which has stayed about the same (Twenge & Park, 2019). The only activity adolescents have spent significantly more time on during the last decade is digital media. As Figure 5.4 demonstrates, the amount of time adolescents spend online increased at the same time that sleep and in-person social interaction declined, in tandem with a decline in general happiness.
Several studies have found that adolescents and young adults who spend more time on digital media are lower in well-being (e.g., Booker et al., 2015; Lin et al., 2016; Twenge & Campbell, 2018). For example, girls spending 5 or more hours a day on social media are three times more likely to be depressed than non-users (Kelly et al., 2019), and heavy internet users (vs. light users) are twice as likely to be unhappy (Twenge et al., 2018). Sleeping, face-to-face social interaction, and attending religious services – less frequent activities among iGen teens compared to previous generations – are instead linked to more happiness. Overall, activities related to smartphones and digital media are linked to less happiness, and those not involving technology are linked to...
Figure 5.5: Correlation between activities and general happiness, 8th and 10th graders, Monitoring the Future, 2013-2016 (controlled for race, gender, SES, and grade level)
more happiness. (See Figure 5.5; note that when iGen adolescents listen to music, they usually do so using their phones with earbuds).

In short, adolescents who spend more time on electronic devices are less happy, and adolescents who spend more time on most other activities are happier. This creates the possibility that iGen adolescents are less happy because their increased time on digital media has displaced time that previous generations spent on non-screen activities linked to happiness. In other words, digital media may have an indirect effect on happiness as it displaces time that could be otherwise spent on more beneficial activities.

Digital media activities may also have a direct impact on well-being. This may occur via upward social comparison, in which people feel that their lives are inferior compared to the glamorous “highlight reels” of others’ social media pages; these feelings are linked to depression (Steers et al., 2014). Cyberbullying, another direct effect of digital media, is also a significant risk factor for depression (Daine et al., 2013; John et al., 2018). When used during face-to-face social interaction, smartphone use appears to interfere with the enjoyment usually derived from such activities; for example, friends randomly assigned to have their phones available while having dinner at a restaurant enjoyed the activity less than those who did not have their phones available (Dwyer et al., 2018), and strangers in a waiting room who had their phones available were significantly less likely to talk to or smile at other people (Kushlev et al., 2019). Thus, higher use of digital media may be linked to lower well-being via direct means or by displacing time that might have been spent on activities more beneficial for well-being.

**Correlation and causation**

Most of the analyses presented thus far are correlational, so they cannot prove that digital media time causes unhappiness. Third variables may be operating, though most studies control for factors such as gender, race, age, and socio-economic status. Reverse causation is also possible: Perhaps unhappy people spend more time on digital media rather than digital media causing unhappiness. However, several longitudinal studies following the same individuals over time have found that digital media use predicts lower well-being later (e.g., Allen & Vella, 2018; Booker et al., 2018; Kim, 2017; Kross et al., 2013; Schmiedeberg & Schroder, 2017; Shakya & Christakis, 2017). In addition, two random-assignment experiments found that people who limit or cease social media use improve their well-being. Tromholt (2017) randomly assigned more than 1,000 adults to either continue their normal use of Facebook or give it up for a week; those who gave it up reported more happiness and less depression at the end of the week. Similarly, Hunt et al. (2018) asked college students to limit their social media use to 10 minutes a day per platform and no more than 30 minutes a day total, compared to a control group that continued their normal use. Those who limited their use were less lonely and less depressed over the course of several weeks.

Both the longitudinal and experimental studies suggest that at least some of the causation runs from digital media use to well-being. In addition, the increases in teen depression after smartphones became common after 2011 cannot be explained by low well-being causing digital media use (if so, one would be forced to argue that a rise in teen depression caused greater ownership of smartphones, an argument that defies logic). Thus, although reverse causation may explain some of the association between digital media use and low well-being, it seems clear it does not explain all of it.

In addition, the indirect effects of digital media in displacing time spent on face-to-face social interaction and sleep are not as subject to reverse causation arguments. Deprivation of social interaction (Baumeister & Leary, 1995; Hartgerink et al., 2015; Lieberman, 2014) and lack of sleep (Zhai et al., 2015) are clear risk factors for unhappiness and low well-being. Even if digital media had little direct effect on well-being, it may indirectly lead to low well-being if it displaces time once spent on face-to-face social interaction or sleep.
Conclusion

Thus, the large amount of time adolescents spend interacting with electronic devices may have direct links to unhappiness and/or may have displaced time once spent on more beneficial activities, leading to declines in happiness. It is not as certain if adults have also begun to spend less time interacting face-to-face and less time sleeping. However, given that adults in recent years spent just as much time with digital media as adolescents do (Common Sense Media, 2016), it seems likely that their time use has shifted as well. Future research should explore this possibility.

Thus, the fundamental shift in how adolescents spend their leisure time may explain the marked decline in adolescent well-being after 2011. It may also explain some of the decline in happiness among adults since 2000, though this conclusion is less certain. Going forward, individuals and organizations focused on improving happiness may turn their attention to how people spend their leisure time.
References


