

Directions: In this section, you are going to read a passage with ten statements attached to it. Each statement contains information given in one of the paragraphs. Identify the paragraph from which the information is derived. You may choose a paragraph more than once. Each paragraph is marked with a letter. Answer the questions by marking the corresponding letter on **Answer Sheet 2**.

Increased Screen Time and Wellbeing Decline in Youth

- A) Have young people never had it so good? Or do they face more challenges than any previous generation? Our current era in the West is one of high wealth. This means minors enjoy material benefits and legal protections that would have been the envy of those living in the past. But there is an increasing suspicion that all is not well for our youth. And one of the most popular explanations, among some experts and the popular media, is that excessive "screen time" is to blame. (This refers to all the attention young people devote to their phones, tablets and laptops.) However, this is a contentious theory and such claims have been treated skeptically by some scholars based on their reading of the relevant data.
- B) Now a new study has provided another contribution to the debate, uncovering strong evidence that adolescent wellbeing in the United States really is experiencing a decline and arguing that the most likely cause is the electronic riches we have given them. The background to this is that from the 1960s into the early 2000s, measures of average wellbeing went up in the US. This was especially true for younger people. It reflected the fact that these decades saw a climb in general standards of living and avoidance of mass societal traumas like full-scale war or economic deprivation. However, the "screen time" hypothesis, advanced by researchers such as Jean Twenge, is that electronic devices and excessive time spent online may have reversed these trends in recent years, causing problems for young people's psychological health.
- C) To investigate, Twenge and her colleagues dived into the "Monitoring the Future" dataset based on annual surveys of American school students from grades 8, 10, and 12 that started in 1991. In total, 1.1 million young people answered various questions related to their wellbeing. Twenge's team's analysis of the answers confirmed the earlier, well-established wellbeing climb, with scores rising across the 1990s, and into the later 2000s. This was found across measures like self-esteem, life satisfaction, happiness and satisfaction with individual domains like job, neighborhood, or friends. But around 2012 these measures started to decline. This continued through 2016, the most recent year for which data is available.
- D) Twenge and her colleagues wanted to understand why this change in average wellbeing occurred. However, it is very hard to demonstrate causes using non-experimental data such as this. In fact, when Twenge previously used this data to suggest a screen time effect, some commentators were quick to raise this problem. They argued that her causal-sounding claims rested on correlational data, and that she had not adequately accounted for other potential causal factors. This time around, Twenge and her team make a point of saying that they are not trying to establish causes as such, but that they are assessing the plausibility of potential causes.
- E) First, they explain that if a given variable is playing a role in affecting wellbeing, then we should expect any change in that variable to correlate with the observed changes in wellbeing. If not, it is not plausible that the variable is a causal factor. So the researchers looked at time spent in a number of activities that could plausibly be driving the wellbeing decline. Less sport, and fewer meetings with peers correlated with lower wellbeing, as did less time reading print media (newspapers) and, surprisingly, less time doing homework.

(This last finding would appear to contradict another popular hypothesis that it is our burdening of students with assignments that is causing all the problems.) In addition, more TV watching and more electronic communication both correlated with lower wellbeing. All these effects held true for measures of happiness, life satisfaction and self-esteem, with the effects stronger in the 8th and 10th-graders.

- F) Next, Twenge's team dug a little deeper into the data on screen time. They found that adolescents who spent a very small amount of time on digital devices—a couple of hours a week—had the highest wellbeing. Their wellbeing was even higher than those who never used such devices. However, higher doses of screen time were clearly associated with lower happiness. Those spending 10-19 hours per week on their devices were 41 percent more likely to be unhappy than lower-frequency users. Those who used such devices 40 hours a week or more (one in ten teenagers) were twice as likely to be unhappy. The data was slightly complicated by the fact that there was a tendency for kids who were social in the real world to also use more online communication, but by bracketing out different cases it became clear that the real-world sociality component correlated with greater wellbeing, whereas greater time on screens or online only correlated with poorer wellbeing.
- G) So far, so plausible. But the next question is, are the drops in average wellbeing happening at the same time trends toward increased electronic device usage? It looks like it—after all, 2012 was the tipping point when more than half of Americans began owning smartphones. Twenge and her colleagues also found that across the key years of 2013-16, wellbeing was indeed lowest in years where adolescents spent more time online, on social media, and reading news online, and when more youth in the United States had smartphones. And in a second analysis, they found that where technology went, dips in wellbeing followed. For instance, years with a larger increase in online usage were followed by years with lower wellbeing, rather than the other way around. This does not prove causality, but is consistent with it. Meanwhile, TV use did not show this tracking. TV might make you less happy, but this is not what seems to be driving the recent declines in young people's average happiness.
- H) A similar but reversed pattern was found for the activities associated with greater wellbeing. For example, years when people spent more time with friends were better years for wellbeing (and followed by better years). Sadly, the data also showed face-to-face socializing and sports activity had declined over the period covered by the survey.
- I) There is another explanation that Twenge and her colleagues wanted to address: the impact of the great recession of 2007-2009, which hit a great number of American families and might be affecting adolescents. The dataset they used did not include economic data, so instead the researchers looked at whether the 2013-16 wellbeing decline was tracking economic indicators. They found some evidence that some crude measures, like income inequality, correlated with changes in wellbeing, but economic measures with a more direct impact, like family income and unemployment rates (which put families into difficulties), had no relationship with wellbeing. The researchers also note that the recession hit some years before we see the beginning of the wellbeing drop, and before the steepest wellbeing decline, which occurred in 2013.
- J) The researchers conclude that electronic communication was the only adolescent activity that increased at the same time psychological wellbeing declined. I suspect that some experts in the field will be keen to address alternative explanations, such as unassessed variables playing a role in the wellbeing decline. But the new work does go further than previous research and suggests that screen time should still be considered a potential barrier to young people's flourishing.
36. The year when most Americans began using smartphones was identified as a turning point in young Americans' level of happiness.

37. Scores in various wellbeing measures began to go downward among young Americans in recent years.
38. Unfortunately, activities involving direct contact with people, which contributed to better wellbeing, were found to be on the decline.
39. In response to past critics, Twenge and her co-researchers stress they are not trying to prove that the use of digital devices reduces young people's wellbeing.
40. In the last few decades of the 20th century, living standards went up and economic depressions were largely averted in the US.
41. Contrary to popular belief, doing homework might add to students' wellbeing.
42. The author believes the researchers' new study has gone a step further regarding the impact of screen time on wellbeing.
43. The researchers found that extended screen time makes young people less happy.
44. Data reveals that economic inequality rather than family income might affect people's wellbeing.
45. Too much screen time is widely believed to be the cause of unhappiness among today's young people.