Screen Time, Examined

What the Research Says About Phones, Sleep, Mood, Attention and Cutting Back

by Cara Sinclair

2026 Edition | Free chapters 1 to 3

Chapter 1: Does Screen Time Cost You Sleep?

Many people feel that evenings on a screen make for worse nights. A large pooled analysis put numbers on it.

WHAT THEY DID

The authors say earlier reviews of screen time and sleep were limited by incomplete coverage of the population and by too little attention to factors that could change the result. They ran a pre-registered systematic review and meta-analysis of 21 cohort studies, which follow people over time, with 548,338 participants in all (He and colleagues, 2025).

WHAT THEY FOUND

Each extra hour of daily screen time went with about 3 to 5 minutes less total sleep (beta = -0.05, 95 percent interval -0.08 to -0.03) in the 11 studies that measured sleep as a number. In nine studies that counted short sleepers, each extra hour went with a higher risk of short sleep (odds ratio 1.25, interval 1.08 to 1.40). Longer screen time also went with more insomnia symptoms (beta = 0.41), a later bedtime (13.2 minutes later per hour of screen time) and more difficulty falling asleep (odds ratio 3.05, interval 1.51 to 6.24). Age, region, how short sleep was defined and length of follow-up did not significantly change the link, but for short sleep the link differed across countries. The authors say adolescents seemed especially vulnerable.

WHAT TO TAKE FROM THIS

The sleep cost of each hour was small in minutes but consistent, and it showed up most clearly as a later bedtime and trouble falling asleep. That is a reason to look at the last hour before bed.

LIMITS

These are associations. The authors themselves say future research should establish causal relationships. The abstract does not say how screen time was measured in the studies, and it does not separate what people did on the screen.

Averages across 21 studies can hide big differences between people. This is general education, not medical advice.

HABITS TO TRY

These are practical suggestions, not findings from the analysis.

Set a screen-off time at least 30 minutes before your target bedtime.

Charge your phone outside the bedroom.

Track your bedtime for two weeks and note screen use that evening.

If you cannot fall asleep, try a book or a podcast with the screen off.

If poor sleep persists, speak to a doctor.

A WORKED EXAMPLE (INVENTED FOR PRACTICE)

A reader notes his bedtime for 14 nights. On nights with more than two hours of screen use after dinner, he falls asleep about 25 minutes later. He moves his phone to the hall. It is his own record, not a study result.

PRACTICE EXERCISE

For 14 nights, write your screen hours after dinner and the time you fell asleep.

KEY POINTS

A meta-analysis of 21 cohort studies and 548,338 people found each extra hour of daily screen time went with 3 to 5 minutes less sleep, a bedtime 13.2 minutes later, and more insomnia symptoms. The link is an association.

Chapter 2: How Much Phone Use Is Too Much for Sleep?

Chapter 1 looked at screens in general. A second analysis focused on the phone and asked how sleep quality changes as use goes up.

WHAT THEY DID

The authors say no systematic review had looked at smartphone use time and self-reported sleep quality. They searched two databases for observational studies up to January 2022 and checked the risk of bias. They included 17 studies with 36,485 participants, and used a dose-response method, which asks how the outcome changes as the amount goes up (Chu, Oh, Gwon, Hwang, Jeong, Kim, Kim and Kim, 2023).

WHAT THEY FOUND

The pooled odds ratio for poor sleep in heavier smartphone users was 2.28 (interval 1.81 to 2.89), with high variation between studies (80 percent). In the dose-response analysis of five studies, the coefficient linking hours of daily use with poor sleep quality was 1.042 (interval 1.027 to 1.058), a significant positive link. The authors conclude that smartphone overuse was closely associated with poor self-reported sleep quality, sleep deprivation and a longer time to fall asleep, and that better-designed studies are needed.

WHAT TO TAKE FROM THIS

More hours on the phone went with worse sleep quality in a steady way. The odds of poor sleep were more than doubled for heavier users in the pooled result, but studies disagreed a lot.

LIMITS

Sleep quality was self-reported, and the studies were observational, so they cannot show that the phone caused poor sleep. People who sleep badly may also use their phones more at night. Only five studies could be used for the dose-response step. The abstract does not define "heavier users" the same way for all studies.

HABITS TO TRY

These are practical suggestions, not findings from the analysis.

Count your phone hours for one week using your phone's own report.

Note the hours after 9 pm.

Pick a daily cap and test it for two weeks.

Compare your sleep rating from 1 to 5 before and after.

Keep the change if your sleep rating improves.

A WORKED EXAMPLE (INVENTED FOR PRACTICE)

A student finds her phone report shows 5 hours a day, 2 of them after 9 pm. She caps evening use at 30 minutes. Her sleep rating moves from 2 to 3 in two weeks. It is her own record, not a study result.

PRACTICE EXERCISE

Write your phone hours for the last 7 days and your sleep rating from 1 to 5 for each night.

KEY POINTS

A meta-analysis of 17 studies and 36,485 people found heavier smartphone use went with poor self-reported sleep quality (odds ratio 2.28), and a dose-response analysis of five studies confirmed a positive link with hours of use. The studies varied a lot.

Chapter 3: When Phone Use Becomes a Problem

Some people say they cannot put their phone down. Researchers use scales to measure this, called problematic smartphone use. Two reviews looked at how it relates to sleep, mood and worry.

WHAT THE REVIEWS DID

One team searched four databases and included 14 observational studies. They compared risks of poor sleep quality, depression and anxiety in people with problematic use (Yang, Fu, Liao and Li, 2020). A second team screened 117 citations and reviewed 23 papers that compared standard measures of problematic smartphone use with the severity of psychological symptoms. They included only correlational studies (Elhai, Dvorak, Levine and Hall, 2017).

WHAT THEY FOUND

The first review found significantly higher risks of poor sleep quality, depression and anxiety in people with problematic phone use, but warned about high variation and method limits. The second found that depression was consistently related to problem use with at least medium effect sizes, that anxiety was consistently related with small effects, that stress was somewhat consistently related with small to medium effects, and that self-esteem was inconsistently related. Adjusting for other factors gave similar but somewhat smaller effects.

WHAT TO TAKE FROM THIS

People who scored high on problematic phone use also tended to report worse sleep and more low mood and worry. The strongest and most consistent link was with depression.

LIMITS

These are correlations from surveys, so they cannot show that the phone causes the symptoms. Low mood can also make people reach for the phone. A high score on a scale is not a diagnosis. The first abstract gives no effect sizes, and the authors urge confirmation. If your phone use or your mood is a worry, speak to a doctor or counsellor.

HABITS TO TRY

These are practical suggestions, not findings from the reviews.

Ask yourself what you reach for the phone to feel or avoid.

Notice if the urge comes with boredom, worry or loneliness.

Put one other activity ready for those moments.

Track your pick-ups for a week.

If low mood lasts, tell a doctor.

A WORKED EXAMPLE (INVENTED FOR PRACTICE)

A reader notices that he picks up the phone when he feels anxious. He keeps a notebook on the table and writes one line before unlocking it. After a week he picks it up less often. It is his own experiment, not a study result.

PRACTICE EXERCISE

For three days, write the feeling you had each time you reached for your phone without a task.

KEY POINTS

Two reviews (14 studies, and 23 papers) found problematic smartphone use went with poor sleep, depression and anxiety, with depression the most consistent link, at least medium in size. All the studies were correlational.

Get the full book

This free preview holds the first 3 of 16 chapters. The full book is at ebookdev.com/screen-time-examined.