

How is cell phone use before bed so addictive to teens ?

Phones are an essential need for teens in this generation as it has become so normalised and with all the social media apps out there like Facebook, Instagram, and snapchat, teens need their phones to use these every day. The reason why this is a big problem is that not only does it affect our physical social life out in the real world, but it also significantly affects our ability to focus on the more important things in our lives such as studies and sleep. These two aspects of our lives have a direct link to each other, according to (Knight, 2017), causing studies to have a significant amount of dependence on the previous night's sleep to have the student performing at his/her peak level. It is recommended that students have at least nine hours sleep in order to be fully refreshed and be fully active throughout the day and staying up late whether it be cramming study or browsing your phone for a few more hours can have a drastic effect on this sleep pattern. A study conducted by a select bunch of health scientists (Phillips et al., 2017) where 61 students from Harvard College participated where researchers found some of them would have more regulated sleep patterns causing them to have higher grade point averages closer to 100 (scores are rated from 0-100) whereas the unregulated sleep patterned group of those students would have grade point averages that are closer to 0.

- Teens need mobile phones as a form of security.
- 68% of teens keep their phone within reach before bed (29% sleep with is in their beds)
- 36% wake up in the middle of the night to check their phones as their notification light goes off
- 47% of teens thought they wouldn't have a social life without their phones (57% linked their improvement in life due to their phones).
- Phones being portrayed as portable electronic entertainment devices for teens these days instead of just 'mobile phones.
- Teens using social media for more than 5 hours a day are 70% more likely to go to sleep later than others.
- Teens need to stay off screens at least an hour or more before bed.
- Mental health and performance at school being affected from sleep deprivation.
- Teenagers don't want to miss out so it's hard to get off social media at night (it's recommended that teens stay off social media at least an hour before bed for the brain to relax).

When conducting my primary research (surveys in appendices), I made sure I chose almost half boys and half girls so I could eliminate the possibility of a gender bias perspective. I found out that most people's answers were the same with the interesting answer of the main addiction of using the phone before bed being a social norm and habit linking very much with my internet research in this same trait causing me to infer that its the habit/normalisation rather than any other reason why teens use their phones for social media before bed. What was also interesting is that all my interviewees hadn't had a full nine hours sleep (averaged about 6-7 hours) which resulted in mostly everyone telling me that they don't even feel like getting up in the morning but have to because its routine which is a significant cause to why grades tend to be lower the next day (as said in my secondary research). It was also clear that most people are keen on actually having a good night's sleep but are just too used to the habit of using the phone that it ends up being an accidental burden that they tend to carry in the morning when they don't feel fully refreshed. What this basically means is that because using phones specifically for use of social media before bed has become so normalised teens are giving up the opportunity to perform at their peak the next day all because it has been embedded into their brains that phone use is essential part of the routine before bed which i think needs to be seriously considered in terms of improving the overall performance of teens at school and university.

A topic that could lead from this investigation to dig deeper into this important issue that's affecting the world is how infact did this phone use for social media before bed come about and how does this become an addictive trend embedded into most teens world wide. Is this due to the parents passing down the bad habits: "About 61 percent of parents check their phone within half an hour of falling asleep" (Johnson,2019), or is it purely us teens' faults for not taking control of our mental and physical health.

Project Brief:

Purpose: How can we solve the problem of teens spending too much time on their phones after going to bed.

Outline of problem: The normalisation of phone use for social media before bed for teens which needs to be controlled. I expect my design to significantly reduce the addiction for teens to use their phone before going to bed - benefiting them in ways of improving their peak performances the next day (studies, sports, etc).

Outcomes:

- Could be some kind of screen pop up message at a specific time of night which warns teens about going off their phones 30 mins - 1 hour before bed rule.
- Potentially an app blocker that blocks every app part from emergency ones at a time as emergency calls and texts always need to be accessible but this decreases teens' intentions to stay on the phone as they can't access the apps that they are addicted to using before going to bed.
- Screen completely turns off or something happens to the phone at a specific time so it can't be turned on/ apps that use broadband are all shutdown and only the basic apps can still be run like alarms so teens can still wake up which could be a more efficient method as to just putting a parental control on wifi as teens can still use their mobile data which they won't be afraid to use considering the normalisation of the routine.
- Thinking outside the box - possibly some kind of lamp light or device that blinks constantly when the sensor picks up that the person is using the phone in bed and can only turn off when it can sense the phone is put down on the table (which the lamp will be on too).

Target audience:

My target audience will be teens from 13 - 19 years of age as this is a problem that is affecting this generation of teens. (it also affects some adults however this is more of a problem for teens as they are the ones who are living arguably the most important part of their life in college/uni). In terms of this issue, i think that teens are the appropriate age group to target because of the higher percentages overall of teens using their phones for social media before bed as the constant habit as caused them to have no control whereas younger kids (12 and under) mostly tend to have set bedtimes and rules given to them and adults tend to carry more responsibility with their work as they need to provide for their families so they can control how long they are on their phones using social media before bed. I also think that these are the years where it's important for someone to get rid of bad habits specifically in terms of this investigation as stated in the article "Habits are so robust because they are routine, usually recurring under the radar of conscious regulatory thought" (Pickhardt, 2012), which is the basis of why this generation of teens are using their phones for social media so much. However, this is the reason that my design will target teens as its the perfect time to break specifically this bad 'habit' so this won't be a reoccurring issue with them further into their adulthood when they have more responsibilities and things to do during their days (work, families, etc) that being sleep deprived everyday could bring them more troubles - linking to another piece of information from the article "they are in charge of creating habits of living that will determine much of how they will probably behave when they step off into independence" (Pickhardt, 2012).

Requirements:

- Must eliminate any temptation to touch the phone (as for example the notification light of the phone will tempt the teen touch the phone).
 - Through the above requirement, must also be able to be something that can be kept within reach from them/ accessible to them from their bed (as the efficiency of the phone being small allows for it to be kept in bed with them/ close to them).
- Should still enable the teen to wake up in the morning (as teens aren't motivated to get up in the mornings otherwise).

- Should be an easy and efficient design so teens will be interested in using it. (as teens can get bored easily and if it's not efficient, they won't find the point in it - scrolling through instagram, facebook, etc always has a point for teens, keeping them up-to-date with the latest content such as friends posts/ memes).
- Linking to the above requirement, teens need to feel a sense of achievement in most things that they do otherwise their intentions to implement it into their daily routine will drop so it's important that it progressively works (keeping up with the latest posts/ sending that last message gives a sense of achievement to teens).
- As the feeling of security is a reason why teens are using phones..it is important that through a design, that teens can still feel that security (emergency calling/texting) whilst in bed as this could cause them paranoia and restrain them from falling asleep which demans the whole purpose of the new design.

Constraints:

- You can't really force teens to use/implement my design (at this age, teens' need to send that last message/ keep up with the latest social media posts can override their willingness to go to sleep earlier and get more sleep).
 - Along with this, teens tend to have a lack of concentration (more that of when they were younger/ compared to adults) due to the many things going on in and around their life as per the article by Benjamin 2012, in which it may be hard for them to keep up the routine of using my design on a daily basis (due to their lack of awareness).

Appendices:

- Chris. (2010, September 12). Why Mobile Phones Are Essential For Teenagers? Retrieved from <https://understandingteenagers.com.au/why-mobile-phones-are-essential-for-teenagers/>
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- Knight, V. (2017, June 12). Study links college students' grades to sleep schedules. Retrieved from <https://edition.cnn.com/2017/06/12/health/student-sleep-grades-study/index.html>
- Phillips, A. J., Clerx, W. M., O'Brien, C. S., Sano, A., Barger, L. K., Picard, R. W., . . . Czeisler, C. A. (2017, June 12). Irregular sleep/wake patterns are associated with poorer academic performance and delayed circadian and sleep/wake timing. Retrieved from <https://www.nature.com/articles/s41598-017-03171-4>
- Ph.D., C. P. (2012, January 16). Adolescence and the Development of Habits. Retrieved from <https://www.psychologytoday.com/us/blog/surviving-your-childs-adolescence/201201/adolescence-and-the-development-habits>
- 5 Reasons Teenagers Act the Way They Do. (2012, February 02). Retrieved from <https://www.mentalfloss.com/article/29895/5-reasons-teenagers-act-way-they-do>

How much sleep do you get on average most nights?

Is this due to you using your phone in bed?

If so, how long do you use your phone in bed?

What do you do on your phone?

What makes the addiction to not go to bed?

Is it important to do what your doing/finish before bed?
Why?

What causes the trigger movement to use your phone?

Why don't you want to read a book/write before bed?

Will you feel something for not sending that message or browsing that night? Why?

How do you feel when you finally go to bed and see you only have 5 or 6 hours till you have to wake up?

Do you feel like getting up? Refreshed or sleep deprived?
What are your thoughts?

Answers:

- less than most people

- 7.5 hours, not really

- youtube, instagram, study

- relaxing, need to do it.

- habit, social norm, don't actually need to

- hate reading, more entertaining

- not really guilty.

- depressed.

- no but its routine

- Little bit, mostly on Playstation
- So 6 hours
- In bed barely on phone (30 min)
- browse social media, messaging
- because bored, nothing to answer
- no, sometimes when checking alarms and later in the night when falling asleep.
- habit, out of convenience, it's in hand
- hate reading, more entertaining to use phone.
- not guilty, fine
- weirdly normal, but never at an thought, sad reminder, no rougher, lets notice difference but has to get up.
- no, ~~but~~

2.

- Try not to but most days (night mode)
- 7.5 hours due to going on phone often.
- just below an hour usually not over an hour as of last year and present (up to 2 hours before).
- youtube message people
- don't want to go to sleep straight away (just want to relax, brain wind down)
- not important, but messaging important at bed.
- just do it, check the time, charging phone causes trigger.
- do it at school, technology means don't need to quick entertainment.
- forget, waiting, don't mind messaging in margins.
- goodna feel like crap in the morning, exhausted.
- just wanna sleep, but force to go somewhere.

4.

yes, everyday

10-15 mins, follow that time limit fairly strictly

~9 hours despite using phone

- use meditation app, say bye to friends
- meditation app specifically for helping sleep (as i value sleep over anything) so important, but important to say bye but not everyone ~~only~~ to be phone on don't disturb.
- not addiction rather an importance, and have trouble sleeping so need the app to relax. long dist rel so cant talk to him cos of time difference so has to let him know shes sleeping.
- just the thought of having to text bf, routine to use the sleep meditation app goes to turn light off and sees phone so checks phone.
- cause I hate reading, don't feel like writing
- wake up a lot at night if app not used, if bf not texted, thoughts pop in head distracting from sleep
- pretty annoyed as sleep is valued so much, ~~anxious~~
- don't feel like getting up but have to cos of work, very sleep deprived.

6.

everyday, daily

6.5 to 7 due to phone related activities.

1.5 to 2 hours

- watch videos (youtube), lots of social media apps.
- routine, habit, its a social norm, nothing else to do, alone time
- can leave it when really tired, not too addicted.
- when setting alarms and having to charge phone triggers to check phone.
- use to read as a kid but the notifications pop up on the phone so much better to go on phone.
- no not ever, ~~no~~ does it often so not an issue.
- stupid and regret for wasting time.
- not energised, but used to the same routine everyday so not too much of a problem.

3.

- If alone, consciously browse if with gf no.
- 8 hours on average no matter what
- fluctuates, 15-20 mins max (depend on if busy all day then lots but if not busy then no).
- watching videos, Instagram reddit, messaging
- hard wired into brain, ~~so~~ social norm, not wanting to be alone with thoughts, sub-consciously go on phone.
- don't actually need to, subconsciously, if not stopped.
- notifications, if game missed has to catch up
- started reading books to make sure of better sleep.
- not really, no sense of loss just when bored.
- pretty crap, anxious about being up late, procrastinate sleep.
- no but has to go even if sleep deprived.

5.

yes, everyday

about 8 hours on average

about 30 mins (when fall asleep)

- just watching videos till fall asleep (makes sure social media done before bed so not distracted by thoughts of having to text someone back).
- habit, does it everyday (have had tv sounds in background ever since young so used to it. Also ~~doesn't make her feel~~ has a sense of security so more comfortable when sleeping.
- not important (it'll take longer to fall asleep if not watched but not end of world, just fall asleep whenever even if half).
- Its impulsive now, out of habit, no real trigger.
- writing journal you have to sit up and its inconvenient. more convenient to go on phone as everything is there, very rarely reads books.
- Its more the sound rather than the vid thats important, but maybe bit tired in morning because it would take longer to fall asleep as sound important.
- annoyed and frustrated that I'm tired for the next day need to have sufficient sleep.
- sleep deprived, exhausted, don't want to get up but forced to cause of uni/be practical

7.