

The Anxious Generation - Summary Notes

1. The Surge of Suffering

- Between 2010 and 2015, the social lives of American teens moved largely onto smartphones with continuous access to social media, online video games, and other internet-based activities. This Great Rewiring of Childhood, I argue, is the single largest reason for the tidal wave of adolescent mental illness that began in the early 2010s.
- The first generation of Americans who went through puberty with smartphones (and the entire internet) in their hands became more anxious, depressed, self-harming, and suicidal. We now call that generation Gen Z, in contrast to the millennial generation, which had largely finished puberty when the Great Rewiring began in 2010.
- The tidal wave of anxiety, depression, and self-harm hit girls harder than boys, and it hit preteen girls hardest of all.
- The mental health crisis has also hit boys. Their rates of depression and anxiety have also increased a lot, although not usually by as much as for girls. Boys' technology use and mental health difficulties are somewhat different from those of girls, as I'll show in chapter 7.
- Suicide rates in the United States began rising around 2008 for adolescent boys and girls; they rose much higher in the 2010s.
- The increase in suffering was not limited to the United States. The same pattern is seen at roughly the same time among teens in the U.K., Canada, and other major Anglosphere countries, and also in the five Nordic nations. Feelings of alienation in school rose after 2012 across the Western world. Data is less abundant in non-Western nations, and the patterns there are less clear.
- No other theory has been able to explain why rates of anxiety and depression surged among adolescents in so many countries at the same time and in the same way. Other factors, of course, contribute to poor mental health, but the unprecedented rise between 2010 and 2015 cannot be explained by the global financial crisis, nor by any set of events that happened in the United States or in any other particular country.

2. What Children Need to Do in Childhood

- Human childhood is very different from that of any other animal. Children's brains grow to 90% of full size by age 5, but then take a long time to configure themselves. This slow-growth childhood is an adaptation for cultural learning. Childhood is an apprenticeship for learning the skills needed for success in one's culture.
- Free play is essential for developing social skills, like conflict resolution, as it is for developing physical skills. But play-based childhoods were replaced by phone-based childhoods as children and adolescents moved their social lives and free time onto internet-connected devices.

- Children learn through play to connect, synchronize, and take turns. They enjoy attunement and need enormous quantities of it. Attunement and synchrony bond pairs, groups, and whole communities. Social media, in contrast, is mostly asynchronous and performative. It inhibits attachment and leaves heavy users starving for social connection.
- Children are born with two innate learning programs that help them to acquire their local culture. Conformist bias motivates them to copy whatever seems to be most common. Prestige bias motivates them to copy whoever seems to be the most accomplished and prestigious. Social media platforms, which are engineered for engagement, hijack social learning and drown out the culture of one's family and local community while locking children's eyes onto influencers of questionable value.
- Social learning occurs throughout childhood, but there may be a sensitive period for cultural learning that spans roughly ages 9 to 15. Lessons learned and identities formed in these years are likely to imprint, or stick, more than at other ages. These are the crucial sensitive years of puberty. Unfortunately, they are also the years in which most adolescents in developed countries get their own phones and move their social lives online.

3. Discover Mode and the Need for Risky Play

- The human brain contains two subsystems that put it into two common modes: *discover mode* (for approaching opportunities) and *defend mode* (for defending against threats). Young people born after 1995 are more likely to be stuck in *defend mode*, compared to those born earlier. They are on permanent alert for threats, rather than being hungry for new experiences. They are anxious.
- All children are by nature antifragile. Just as the immune system must be exposed to germs, and trees must be exposed to wind, children require exposure to setbacks, failures, shocks, and stumbles in order to develop strength and self-reliance. Overprotection interferes with this development and renders young people more likely to be fragile and fearful adults.
- Kids must have a great deal of free play to develop, and they benefit from risky physical play, which has anti-phobic effects. Kids seek out the level of risk and thrill that they are ready for, in order to master their fears and develop competencies. Risk-taking online may not have comparable anti-phobic effects.
- In the 1980s and especially the 1990s, parents in Anglo countries became more fearful for many reasons, including changes in the media ecosystem and news cycle. They lost trust in each other, they started spending far more time supervising their own children, and they did more parenting in *defend mode*, seeing risks and threats everywhere.
- The worship of "safety" above all else is called safetyism. It is dangerous because it makes it harder for children to learn to care for themselves and to deal with risk, conflict, and frustration.
- The attachment system evolved to help young mammals learn the skills they'll need to reach adulthood while retreating to their "secure base" when they feel threatened. Fearful parenting keeps children on home base too much, preventing them from having the experiences they need to grow strong and to develop a secure attachment style.

- Children are most likely to thrive when they have a play-based childhood in the real world. They are less likely to thrive when fearful parenting and a phone-based childhood deprive them of opportunities for growth.

4. Puberty and the Blocked Transition to Adulthood

- Early puberty is the period of rapid brain rewiring, second only to the first few years of life. Neural pruning and myelination are occurring at a very rapid rate, guided by the adolescent's experiences. We should be concerned about those experiences and not let strangers and algorithms choose them.
- Safetyism is an experience blocker. When we make children's safety a quasi-sacred value and don't allow them to take any risks, we block them from overcoming anxiety, learning to manage risk, and learning to be self-governing, all of which are essential for becoming healthy and competent adults.
- Smartphones are a second kind of experience blocker. Once they enter a child's life, they push out or reduce all other forms of non-phone-based experience, which is the kind that their experience-expectant brains most need.
- Rites of passage are a curated set of experiences that human societies arrange to help adolescents make the transition to adulthood. Van Gennep noted that these rites usually have a separation phase, a transformation phase, and a reincorporation phase.
- Western societies have eliminated many rites of passage, and the digital world that opened up in the 1990s eventually buried most milestones and obscured the path to adulthood. Once children began spending much or most of their time online, the inputs to their developing brains became undifferentiated torrents of stimuli with no age grading or age restrictions.
- A society that is large, diverse, and secular (such as the United States or U.K.) might still agree to a set of milestones that mark stepwise increases in freedoms and responsibilities.

5. The Four Foundational Harms: Social Deprivation, Sleep Deprivation, Attention Fragmentation, and Addiction

- The sheer amount of time that adolescents spend with their phones is staggering, even compared with the high levels of screen time they had before the invention of the iPhone. Studies of time use routinely find that the average teen reports spending more than seven hours a day on screen-based leisure activities (not including school and homework).
- The opportunity cost of a phone-based childhood refers to everything that children do less of once they get unlimited round-the-clock access to the internet.
- The first foundational harm is social deprivation. When American adolescents moved onto smartphones, time with friends in face-to-face settings plummeted immediately, from 122 minutes per day in 2012 down to 67 minutes per day in 2019. Time with friends dropped further because of COVID restrictions, but Gen Z was already socially distanced before COVID restrictions were put into place.

- The second fundamental harm is sleep deprivation. As soon as adolescents moved from basic phones to smartphones, their sleep declined in both quantity and quality, around the developed world. Longitudinal studies show that smartphone use came first and was followed by sleep deprivation.
- Sleep deprivation is extremely well studied, and its effects are far reaching. They include depression, anxiety, irritability, cognitive deficits, poor learning, lower grades, more accidents, and more deaths from accidents.
- The third fundamental harm is attention fragmentation. Attention is the ability to stay on one mental road while many off-ramps beckon. Staying on a road, staying on a task, is a feature of maturity and a sign of good executive function. But smartphones are kryptonite for attention. Many adolescents get hundreds of notifications per day, meaning that they rarely have five or 10 minutes to think without an interruption.
- There is evidence that the fragmentation of attention in early adolescence caused by problematic use of social media and video games may interfere with the development of executive function.
- The fourth fundamental harm is addiction. The behaviorists discovered that learning, for animals, is the “wearing smooth of a path in the brain”. The developers of the most successful social media apps used advanced behaviorist techniques to “hook” children into becoming heavy users of their products.
- Dopamine release is pleasurable, but it does not trigger a feeling of satisfaction. Rather, it makes you want more of whatever you did to trigger the release. The addiction researcher Anna Lembke says that the universal symptoms or withdrawal are “anxiety, irritability, insomnia, and dysphoria.” She and other researchers find that many adolescents have developed behavioral addictions that are very much like the way that people develop addictions to slot machine gambling, with profound consequences for their well-being, their social development, and their families.
- When we put these four foundational harms together, they explain why mental health got so much worse so suddenly as soon as childhood became phone-based.

6. Why Social Media Harms Girls More Than Boys

- Social media harms girls more than boys. Correlational studies show that heavy users of social media have higher rates of depression and other disorders than light users or nonusers. The correlation is larger and clearer for girls. Heavy users are three times as likely to be depressed as nonusers.
- Experimental studies show that social media use is a cause, not just a correlate, of anxiety and depression. When people are assigned to reduce or eliminate social media for three weeks or more, their mental health usually improves. Several “quasi-experiments” show that when Facebook came to campuses, or when high-speed internet came to regions and provinces, mental health declined, especially for girls and young women.
- Girls use social media a lot more than boys, and they prefer visually oriented platforms such as Instagram and TikTok, which are worse for social comparison than primarily text-based platforms such as Reddit.

- Two major categories of motivation are agency (the desire to stand out and have an effect on the world) and communion (the desire to connect and develop a sense of belonging). Boys and girls both want each of these, but there is a gender difference that emerges early in children's play: Boys choose more agency activities; girls choose more communion activities. Social media appeals to the desire for communion, but it often ends up frustrating it.
- There are at least four reasons why social media harms girls more than boys. The first is that girls are more sensitive to visual comparisons, especially when other people praise or criticize one's face and body. Visually oriented social media platforms that focus on images of oneself are ideally suited to pushing down a girl's "sociometer" (the internal gauge of where one stands in relation to others). Girls are also more likely to develop "socially prescribed perfectionism," in which a person tries to live up to impossibly high standards held by others or by society.
- The second reason is that girls' aggression is often expressed in attempts to harm the relationships and reputations of other girls, whereas boys' aggression is more likely to be expressed in physical ways. Social media has offered girls endless ways to damage other girls' relationships and reputations.
- The third reason is that girls and women more readily share emotions. When everything moved online and girls became hyper-connected, girls with anxiety and depression might have influenced many other girls to develop anxiety and depression. Girls are also more vulnerable to "sociogenic" illnesses, which means illnesses caused by social influence rather than from a biological cause.
- The fourth reason is that the internet has made it easier for men to approach and stalk girls and women and to behave badly toward them when avoiding accountability. When preteen girls open social media accounts, they are often followed and contacted by older men, and they are pressured by boys in their school to share nude photographs of themselves.
- Social media is a trap that ensnares more girls than boys. It lures people in with the promise of connection and communion, but then it multiplies the number of relationships while reducing their quality, therefore making it harder to spend time with a few close friends in real life. This may be why loneliness spiked so sharply among girls in the early 2010s, while for boys the rise was more gradual.

7. What Is Happening to Boys?

- Like girls, boys got more depressed and anxious in the early 2010s, in many countries. Unlike girls, boys experienced a slow decline since the 1970s in achievement and engagement in school, work, and family life.
- Boys and young men withdrew much of their time and effort from the physical world (which was increasingly opposed to unsupervised play, exploration, and risk-taking) and invested it in the rapidly expanding virtual world.
- Boys are at a greater risk than girls of "failure to launch." They are more likely to become young adults who are "Not in Education, Employment, or Training." Some Japanese men developed an extreme form of lifelong withdrawal to their bedrooms; they are called *hikikomori*.

- In the early 2010s, American teen boys' thinking patterns shifted from what they had traditionally been (higher rates of externalizing cognitions and behaviors than internalizing) to a pattern more commonly shown in girls (higher rates of internalizing). At the same time, boys also began to shun risk (more so than happened for girls).
- As boys engaged in fewer risky activities outdoors or away from home, and began spending more time at home on screens, their mental health did not decline in the 1990s and 2000s. But something changed in the early 2010s, and their mental health began to decline.
- Once boys got smartphones, they - like girls - moved even more of their social lives online, and their mental health declined.
- One way that smartphones - amplified by high-speed internet - have affected boys' lives is by providing unlimited, free, hardcore pornography accessible anytime, anywhere. Porn is an example of how tech companies have made it easy for boys to satisfy powerful evolved desires without having to develop any skills that would help them make the transition to adulthood.
- Video games offer boys and girls a number of benefits, but there are also harms, especially for the subset of boys (in the ballpark of 7%) who end up as problematic or addicted users. For them, video games do seem to cause declining mental and physical health, family strife, and difficulties in other areas of life.
- As with social media for girls, spending hours "connecting" with others online produces an increase in the quantity of social interactions and a decrease in the quality of social relationships. Boys, like girls, became lonelier during the Great Rewiring. Some boys use video games to strengthen their real-world packs, but for many others, video games made it easier for them to retreat to their bedrooms rather than doing the hard work of maturing in the real world.
- The Great Rewiring of Childhood pulled young people out of real-world communities, including their own families, and created a new kind of childhood lived in multiple rapidly shifting networks. One inevitable result was anomie, or normlessness, because stable and binding moralities cannot form when everything is in flux, including the members of the network.
- As the sociologist Emile Durkheim showed, anomie breeds despair and suicide. This may be why boys and girls, who followed different paths through the Great Rewiring, ended up in the same place, with a sudden and rapid increase in the feeling that their lives were meaningless.

8. Spiritual Elevation and Degradation

- When people see morally beautiful actions, they feel as though they have been lifted up - elevated on a vertical dimension that can be labeled divinity. When people see morally repulsive actions, they feel as though they have been pulled downward, or degraded.
- A phone-based life generally pulls people downward. It changes the way we think, feel, judge, and relate to others. It is incompatible with many of the behaviors that religious and spiritual communities practice, some of which have been shown to improve happiness, wellbeing, trust, and group cohesion, according to researchers such as David DeSteno. I described six such practices.

- First, Emile Durkheim showed that human beings move up and down between two levels: the profane and the sacred. The profane is our ordinary self-focused consciousness. The sacred is the realm of the collective. Groups of individuals become a cohesive community when they engage in rituals that move them in and out of the realm of the sacred together. The virtual world, in contrast, gives no structure to time or space and is entirely profane. This is one reason why virtual communities are not usually as satisfying or meaning-giving as real-world communities.
- Second, religious rituals always involve bodily movement with symbolic significance, often carried out synchronously with others. Eating together has a special power to bond people together. The virtual world is, by definition, disembodied, and most of its activities are conducted asynchronously.
- Third, many religions and spiritual practices use stillness, silence, and meditation to calm the “jumping monkey” of ordinary consciousness and open the heart to others, God, or enlightenment. Meditation has been shown to promote well-being, even brief regular meditation in fully secular contexts. The phone-based life, in contrast, is a never-ending series of notifications, alerts, and distractions, fragmenting consciousness and training us to fill every moment of consciousness with something from our phones.
- Fourth, a defining feature of spirituality is self-transcendence. There is a network of brain structures (the default mode network) that become less active during moments of self-transcendence, as if it were the neural basis of profane consciousness. Social media keeps the focus on the self, self-presentation, branding, and social standing. It is almost perfectly designed to prevent self-transcendence.
- Fifth, most religions urge us to be less judgmental, but social media encourages us to offer evaluations of others at a rate never before possible in human history. Religions advise us to be slower to anger and quicker to forgive, but social media encourages the opposite.
- Sixth, the grandeur of nature is among the most universal and easily accessible routes to experiencing awe, an emotion that is closely linked to spiritual practices and progress. A simple walk in a natural setting can cause self-transcendence, especially if one pays close attention and is not attending to a phone. Awe in nature may be especially valuable for Gen Z because it counteracts the anxiety and self-consciousness caused by a phone-based childhood.
- There is a “God-shaped hole” in every human heart. Or, at least, many people feel a yearning for meaning, connection, and spiritual elevation. A phone-based life often fills that hole with trivial and degrading content. The ancients advised us to be more deliberate in choosing what we expose ourselves to.

9. Preparing for Collective Action

- No summary

10. What Governments and Tech Companies Can Do Now

- Governments at all levels need to change policies that are harming adolescent mental health and support policies that would improve it. In the United States, governments at the state and local levels are partly responsible for the overprotection of children in the real world (via vast overreach

of vague neglect laws), and the federal government is partly responsible for the underprotection of children in the virtual world (by passing an ineffective law in 1998 and failing to update it as the dangers of life online became more apparent).

- To correct underprotection online, national and federal governments should enact laws of the sort first passed in the U.K., which require companies to treat minors differently than adults, with an extra duty of care. National governments should also raise the age of internet adulthood to 16.
- Tech companies can be a major part of the solution by developing better age verification features, and by adding features that allow parents to better designate their children's phones and computers as ones that should not be served by sites with minimum ages until they are old enough. Such a feature would help dissolve multiple collective action problems for parents, kids, and platforms.
- To correct overprotection in the real world, state and local governments should narrow neglect laws and give parents confidence that they can give their children some unsupervised time without risking arrest or state intervention in their family life.
- State and local governments should also encourage more free play and recess in schools. They should consider the needs of children in zoning and permitting, and they should invest in more vocational education and other programs that have been shown to help adolescents, especially boys, make the transition to adulthood.

11. What Schools Can Do Now

- U.S. middle and high schools have seen an increase in mental illness and psychological suffering among their students since the early 2010s. Many are implementing a variety of policies in response.
- There is a Polynesian expression: "Standing on a whale, fishing for minnows." Sometimes what you are looking for is right there, underfoot, and it is better than anything you could find by looking farther away. I suggested two potential whales that schools can implement right away, with little or no additional money: going phone-free, and becoming more play-full.
- Most schools say they ban phones, but that typically means only that students must not use their phones during class. This is an ineffective policy because it incentivizes students to hide their phone use during class and increase their phone use after class, which makes it harder for them to form friendships with the kids around them.
- A better policy is to go phone-free for the entire school day. When students arrive, they should put their phones into a dedicated phone locker or into a lockable phone pouch.
- The second whale is becoming a play-full school. The simple addition of a Let Grow Play Club - an afternoon option in K-8 schools of playing on the school playground, with no phones, plenty of loose parts, and minimal adult supervision - may teach social skills and reduce anxiety better than any educational program, because free play is nature's way of accomplishing those goals.

- Schools can become more play-full by improving recess in three ways: Give more of it, on better playgrounds (such as those incorporating loose parts and “junk,” and/or more natural elements), with fewer rules.
- The Let Grow Project is another activity that seems to reduce anxiety. It is a homework assignment that asks children to “do something they have never done before, *on their own*,” after reaching agreement with their parents as to what that is. Doing projects increases children’s sense of competence while also increasing parents’ willingness to trust their children and grant them more autonomy.
- When all the families in a neighborhood or town give their children more free play and independence, it solves the collective action problem: Parents are no longer afraid to give their children more unsupervised free play and independence, which children need to overcome normal childhood anxieties and develop into healthy young adults.
- Schools can do more to reverse the growing disengagement of boys and their declining academic progress relative to girls. Offering more shop classes and more vocational and technical training and hiring more male teachers would each serve to re-engage boys. (As would offering better recess in the earlier years.)
- An ounce of prevention is worth a pound of cure. If K-8 schools become phone-free and play-full, and if they add in the Let Grow Project, they will be applying many pounds of prevention, which will reduce the flow of depressed and anxious students entering high schools.

12. What Parents Can Do Now

- Being a parent is always a challenge, and it has become far more challenging in our era of rapid social and technological change. However, there is a lot that parents can do to become better “gardeners” - those who create a space in which their children can learn and grow - in contrast to “carpenters” who try to mold and shape their children directly.
- If you do one thing to be a better gardener in the real world, it should be to give your children far more unsupervised free play, of the sort you probably enjoyed at that age. That means giving them a longer and better play-based childhood, with ever-growing independence and responsibility.
- If you do one thing to be a better gardener in the virtual world, it should be to delay your children’s full entry into the phone-based childhood by delaying when you give them their first smartphone (or any “smart” device). Give only basic phones before the start of high school, and try to coordinate with other parents so that your children do not feel that they are the only ones without smartphones in middle school.
- There are many other ways to increase your children’s engagement with the real world and embeddedness in communities, including sending them to a technology-free sleepaway camp, going camping, and helping them find additional settings in which they can hang out with other children who are not carrying smartphones.

- As your children get older, increase their mobility and encourage them to find part-time jobs and ways to learn from other adults. Consider an exchange program, a summer wilderness program, and a gap year.
- A free-range childhood is more likely to produce confident, competent young adults, with lower levels of anxiety, than is a childhood ruled by safetyism, fear, and constant adult supervision. The biggest obstacle is the parents' own anxiety about letting a child out of sight, unchaperoned by an adult. This takes practice, but the ultimate pleasure of being able to trust your child outweighs the temporary anxieties of letting go.
- Most authorities recommend little or no screen time in the first 18-24 months (other than video calls with family members) and limited screen time through the age of 5 or 6.
- For children in elementary and middle school, use parental controls, provide clear limits, and designate some times and places as no-device zones. Look out for signs of problematic or addictive use.
- Your actions as a parent can contribute to solving the collective action problem. If you delay giving your child a smartphone, it makes it easier for other parents to do so. If you give your child more independence, it makes it easier for other parents to do so too. If you do it together, with other families, it will make it easier still, and more fun.

Conclusion: Bring Childhood Back to Earth

- Four foundational reforms: No smartphones before high school, no social media before 16, phone-free schools, and far more unsupervised play and childhood independence.
- Speak up about reform, and link up with others to support the change.
- Recommended resources:
 - anxiousgeneration.com
 - The Online Supplement (anxiousgeneration.com/supplement)
 - The *After Babel* Substack (www.afterbabel.com)