Johann Hari: If you’d asked me, when I started doing this research, what causes heroin addiction? I would’ve said, "Well dummy, the clue’s in the name, right? Obviously heroin causes heroin addiction."

Tristan Harris: That’s Johann Hari, a British journalist who traveled some 30,000 miles to answer this deceptively simple question.

Johann Hari: I would have thought, if we had randomly snatched 20 non-addicted people off the streets of San Francisco, and like a villain in a Saw movie, we injected them all with heroin every day for a month. At the end of that month, they all be heroin addicts and indeed I thought that’s what addiction is, it’s the desperate physical craving for the drug.

Tristan Harris: If you give 20 injections, you’ll get 20 addicts, case closed.

Aza Raskin: That is until Johan encountered a group of people who had in fact been pulled off the street, and injected with a drug as potent as heroin and their story blew everything he thought he knew about addiction wide open.

Johann Hari: In Britain, where I’m from as you can tell from my weird Downton Abbey accent, if you step out into the street and you get hit by a truck, you’ll be taken to hospital and you’ll be given a lot of drug called Diamorphine. Diamorphine is heroin, right? It’s much better than the contaminated shit you buy here on the street because it’s medically pure heroin. So if anyone listening to this has a British grandmother who’s had a hip replacement operation, your grandmother has taken a lot heroin quite likely.

Johann Hari: If what we think about addiction is right, that it’s caused primarily or entirely by exposure to the chemical hooks, what should be happening to all these people in hospitals in Britain? They should be leaving hospital when they’re cut off, trying to score. But that isn’t happening. And when I learned that, I just thought that can’t be right.

Aza Raskin: What enables some people or some communities or even a whole nation to become essentially drug resistant even after they’ve been exposed to those chemical hooks?

Johann Hari: This is something I saw all over the world from Sydney to San Francisco to São Paulo. The most effective strategies for dealing with depression, anxiety, addiction, disconnection are the ones that deal with the reasons why we feel so bad in the first place.

Tristan Harris: Today on the show, Johann Hari, author of Chasing the Scream will explain how isolation, depression, anxiety, and addiction are not isolated problems, they’re all symptoms of a deeper problem, a society-wide fraying and severing of the connections that really matter.
Aza Raskin: And in around about way, his research led him to a problem that technology makers are uniquely positioned to solve.

Johann Hari: The opposite of addiction is not sobriety, the opposite of addiction is connection.

Aza Raskin: Connection, isn’t that why we all started going online in the first place. But first, we need to figure out what it really means to connect.

Tristan Harris: I'm Tristan Harris.

Aza Raskin: I'm Aza Raskin, and this is Your Undivided Attention.

Johann Hari: I understand well why you resist the application of the language of addiction to this debate about tech, because that can sound like individualizing the problem, transferring the responsibility to the individual. I think that’s true in the way that addiction is currently framed in the American debate. What I would urge to do is actually reframe how we talk about addiction. Then I only really began to understand it when I went to Vancouver and met an incredible man named professor Bruce Alexander, who's done an experiment that really transforms our understanding of addiction, has led to some really important changes in various parts of the world.

Johann Hari: Professor Alexander explained to me that this story we have, that addiction is primarily or entirely caused by the chemical hooks, comes from a series of experiments that were done earlier in the 20th century. They're really simple experiments. Your listeners can try them at home if they're feeling a bit sadistic. You take a rat, you put it in a cage and you give it two water bottles. One is just water and the other is water laced with either heroin or cocaine. If you do that, the rat will almost always prefer the drug water and almost always kill itself quite quickly. So there you go, that’s our story, right?

Tristan Harris: Right. This is a very, very famous sort of storied anecdote people refer to.

Johann Hari: Exactly. Which you remember the famous advertisement in the 1980s of partnership for a Drug Free America. This experiment showed the rat dying and said something like “it will happen to you”.

Johann Hari: But in the 70s professor Alexander had come along, he was working with people on the downtown East side of Vancouver, which is has a high concentration of homeless people with addiction problems. And he was thinking about this, and he went back and looked at these experiments and he said, "Well hang on a minute, you put the rat alone in an empty cage, it's got nothing that makes life meaningful for rats, all it's got is the drug. What would happen if we did this differently?"

Johann Hari: So he built a cage that he called rat park, which is basically heaven for rats. They've got loads of friends, they can have loads of sex, they've got wheels they can run in, they've got cheese and grains. They've got-
Johann Hari: Exactly. Rat heaven, right? And they've got both the water bottles, the normal water and the drug water. This is the fascinating thing, in rat park, they don’t particularly like the drug water. None of them use it compulsively. None of them ever overdose. So they go from almost 100% compulsive use and overdose when they do not have the things that make life worth living, to no compulsive use and overdose when they do have the things that make life worth living.

Johann Hari: There's lots of human examples, and in fact a whole country that built these drug policies around these insights. But to me what I took from this is the opposite of addiction is not sobriety, the opposite of addiction is connection. But then after I've written that book, I have a lot of people asking me, "Well, connection can't simply mean social connection, there are lots of people who are socially connected who nonetheless become addicted or depressed." And I never thought the lesson of rat park was that simple, but I started thinking more deeply about that, and I was thinking a lot about the epidemic of depression and anxiety that's happening all over the Western world. Extraordinary rise. I'm 40 years old and every year that I've been alive, depression and anxiety have increased. I wanted to understand those crisis as well. So I ended up doing a lot of research on that and having a much deeper, more nuanced understanding of what connection is.

Tristan Harris: So in terms of your personal interest in this and sort of feeling like this story that you were told isn't what matched up with it. You said, not to pry, but I mean in your family or in personal situations, was there some moment where you kind of said, "This isn't the right explanation?"

Johann Hari: I had more epiphanies around depression actually. When I was a teenager I'd gone to my doctor and explained, I remember saying that I had this feeling like pain was leaking out on me and I couldn't control it or regulate it. And my doctor told me this story, that I now realize it was well intentioned but hugely oversimplified, a story that still everyday people had been told by their doctors in contravention of the advice by the leading medical body in the world, The World Health Organization.

Johann Hari: I had more epiphanies around depression actually. When I was a teenager I'd gone to my doctor and explained, I remember saying that I had this feeling like pain was leaking out on me and I couldn't control it or regulate it. And my doctor told me this story, that I now realize it was well intentioned but hugely oversimplified, a story that still everyday people had been told by their doctors in contravention of the advice by the leading medical body in the world, The World Health Organization.

Johann Hari: So my doctor said, "Well, we know what people feel like this. There's a chemical called serotonin in people's brains. Some people are just naturally lacking it. You're clearly one of them. All we need to do is give you this drug and you're going to be fine." So I started taking chemical antidepressant named Paxil, and I got some relief but I remained depressed.

Johann Hari: This is a society that is constantly transferring responsibility for all problems down onto the individual rather than thinking about them structurally. And I think what we've seen is a massive attempt to do that with both depression and addiction.

Johann Hari: So we see it with addiction, with stigmatization of people with addiction problems, and the mass punishment of them. So to give you a very extreme
example, in Arizona, I went out with a group of women who were made to go out on chain gangs wearing tee shirts saying, “I was a drug addict” where members of the public mock them and jeer at them. It was led by that psychopath, the sheriff Joe Arpaio.

Tristan Harris: The one that was just pardoned or something?

Johann Hari: Pardoned by President Trump. Yeah. So that’s obviously a very extreme example, so think about addiction, we actually have a society that doesn’t meet people’s basic human needs, and we have a society that’s a lot more like this isolated cages than like rat park. All sorts of forms of disconnection that I’m sure we’ll get to. And what do we do? We say, "Well, it’s your job to deal with it."

Johann Hari: Think about obesity, obesity crisis. I was recently in Lexington, Kentucky and in Copenhagen, there are almost no obese people in Copenhagen and most people are obese in Lexington, Kentucky. It is not that the people in Lexington, Kentucky are somehow lazier or dumber or more morally flawed than people in Copenhagen. In Lexington, you can’t walk anywhere and it’s really hard to buy decent food. And in Copenhagen is hard to buy shitty food and you can walk and bike everywhere. It’s not rocket science. But what do we do? We transfer the responsibility for dealing with weight. We don’t deal with it at the systemic level of what has happened that means that obesity has massively risen? We transfer responsibility down to individually, we say, "Well, you’re greedy, you’re lazy." We shame them and so on.

Tristan Harris: Yeah. I think that the core question that interest both of us is, is this... essentially when we’re holding this film camera up to society in a set of problems, and does the film camera focus on the individual or does it focus on the system? And it breaks down to a question of responsibilities. And I think there’s a bunch of scaffolding structures that lead us to put the blame on the individual. This reminds me of another study that is around organ donations. The US and Britain are not organ donors by default. And then you have this small group of Nordic countries that are organ donors. And so you say, "Okay, well what’s going on here? These Nordic countries must just be more generous." But it turns out that the big thing that determined this result is on the driver’s license registration form, whether the default option that’s already checked is yes, I agree to be an organ donor versus you have to check it yourself. And that one choice that’s pre-made for you makes all the difference that makes the difference.

Tristan Harris: I think that what you’re talking about when we talk about systems is what are all of the little check boxes? Like whether or not you live in a small community where you can walk to your friend’s house, and they’re there, versus you live in a food desert in the case of food versus the fact that if you drive to get good food or food is way more expensive or triple the price. And I think what you’re pointing to is, is it like holding up a microscope to what is the social choice architecture when it comes to this thing we're calling connection.
Johann Hari: The social choice architecture I think can sometimes get a bit Skinnerian in the way that it’s talked about. It can look at, well, how do you motivate external stimuli? Which is valuable. I'm in favor of it, of course. And I think that organ donation is a classic and great example. I'm interested more in thinking about the wound. So let me give you an example. Portugal in the year 2000 had one of the worst drug problems in the world. 1% of the population was addicted to heroin, which is staggering. And every year they tried the American way more. They imprisoned more people, shamed more people. They focused on that negative stimuli approach, right? And every year the problem got worse. And one day the prime minister and the leader of the opposition got together and they decided to do something really radical, something nobody had done in more than 70 years since the global drug war effectively began.

Johann Hari: They said, "Should we like ask some scientists what we should do?" So they set up a panel of scientists and doctors led by an incredible man I got to know later named Dr. Weil. And they said to this panel, "You guys go away, figure out what would genuinely solve this problem, take all the science tech, take as much time as you need. And come back and we've agreed in advance we'll do whatever you recommend." And all the main political parties agreed to implement it apart from the far right party.

Johann Hari: So the panel went away, looked at all the evidence. Rat park was part of what they looked at. And they came back and they said, "The solution has to be radical environmental change." They said, "What we want to do is decriminalize all drugs from cannabis to crack, but," and this is the crucial next step, "take all the money we currently spend on screwing people's lives up, shaming them, arresting them in prison and all of which is super expensive, and spend that instead on radically changing their environments."

Johann Hari: So it’s interesting. What they did was not really what we think of as drug treatment in the United States. They did a little bit of residential rehab, little bit psychological support. Those are both valuable. Biggest thing they did was a huge program of reconnection. So say you used to be a mechanic, and you developed an addiction problem, they go to a garage, and they say, "If you employ this guy for a year, we'll pay half his wages." And they set up a big promo of micro loans where people with addiction problems they could set up and run small businesses and be supported in it about things that they cared about.

Johann Hari: The goal was to say to everyone with an addiction problem in Portugal, "We love you, we value you, we’re on your side, we want you back." And by the time I went to Portugal it was 13 years since this had begun. It’s now 17 years, nearly 18 actually. And the results were really clear. According to the best study of this by the British Journal of Criminology, it was the largest fallen addiction problems in the world. There was a 50% fall in injecting drug use, 80% fall in overdoses, 90% fall in HIV transmission among people with addiction problems, huge fall in street crime.

Johann Hari: One of the ways you know it works so well is that virtually nobody in Portugal wants to go back. I went and interviewed a man called Guaro Figueires, who was
the top drug cop in Portugal at the time of the decriminalization. And at the time he said, "Well lots of people totally understandably say, which is, well, surely if we decriminalize all drugs, we’re going to have a massive explosion in drug use addiction, children using drugs." He said to me, "Everything I said would happen, did not happen. And everything the other side said would happen, did." He talked about how he felt really ashamed of how he’d spent so many years making people's lives worse, and their addictions worse when he could've been helping them turn their lives around.

Johann Hari: I think this points us to a wider principle, which is, with these problems, whether it's addiction, depression, obesity, the best evidence shows the most effective and sustainable solutions are radical environmental improvement. One of the things I find so chilling about, and so massively important about your work, is that you're demonstrating massive environmental degradation, which is increasing these problems. So what we're doing is effectively the opposite of Portugal, right?

Tristan Harris: Exactly. Well, it's like technology as an environment. We think of this as sort of the new mental mimetic environment that is the way in which we structure our relationships, who we are talking to, who we're not talking to is more based on who happens to appear in our recent messages in our texts, right? Because left to our own devices, are we... no pun intended, are we going to think of the other relationships that aren’t in our most recent messages? But it doesn’t have to do that. And I think the whole point is, okay, if Portugal did this, what does that Portugal reversal look like in tech? Instead of just passive choices on screens, it's all about joining other people's events, responding to those texts, it's reactive mode. It's more about creation.

Johann Hari: There's a really interesting psychologist called Jan Tønnesvang, who I interviewed in Aarhus, in Denmark, who had this great concept. He was talking about how human beings have a whole range of innate needs. You need to have autonomy, you need to have intimacy, you need to have belonging, and you need to have what we call mastery; the feeling you're good at something. Those are the kind of four clusters he put basic psychological needs, which is pretty much in line with the broader literature.

Johann Hari: He said to me, "And different environments have different ways to meet your psychological needs to different degrees." So you might have a very high degree of belonging but very low autonomy and low mastery. You can imagine all sorts of different combinations. And he said, "Your ability to get your needs met is the amount of psychological oxygen in your environment." I thought it was such a useful way of thinking about it. That in some ways we are deprived of psychological oxygen in many of the environments we've constructed. Part of the problem with this tech is it's depriving us of psychological oxygen.

Aza Raskin: This is Aza. Tristan and I found this to be a powerful way of thinking about how to visualize what our needs are as humans. We brainstormed about how design can help us recognize and honor those needs.
Tristan Harris: What we want to do is support the natural flows of psychological oxygen in our real lives. That naturally means doing things we love with the people that we love.

Aza Raskin: If we detect that we're running low on psychological oxygen, the answer is not that from the ceiling of the airplane comes a phone dropping down and just plugging it into your face and trying to breathe through like I need that psychological oxygen, rather it's an acknowledgment of how human beings find that oxygen in their daily lives anyway, and then creating the conditions in which they can do that.

Tristan Harris: So what does that for you? What is your psychological oxygen?

Aza Raskin: Oh man, for me, honestly, it's going for long late night walks. It's realizing that I can call someone like calling you that when I'm walking to Bart, like I can just pick up the phone and have a real conversation with another human being that I haven't seen in a while. I wish my phone just made it a little easier for me to remember to do that.

Tristan Harris: This is the example. The point is I don't think if I asked you, "And what is your psychological oxygen?" That you would say, "Facebook."

Aza Raskin: No. Yeah. Sorry, that was the answer, Facebook.

Tristan Harris: I forgot.

Aza Raskin: Twitter hate threads. That's my psychological oxygen.

Tristan Harris: Exactly. Toxicity is mine usually.

Aza Raskin: Yeah.

Tristan Harris: No, I mean it's similar to you. I think each of us have our own answers, but it's usually offscreen, it's usually with other people. It's usually a phone call. It's usually walk-based. It's usually nature. Whatever it is for people, is there a way to create the hooks so that the reminders, the activation points to go there instead of back in.

Tristan Harris: Instead of reinforcing the loneliness, the whole point is how do you create the on-ramps? Just like you have on-ramps onto a freeway, how do you have on-ramps onto who do I feel closest to? Who do I know cares about me? We have wallpaper for our phones, what if for every contact you have... we joked it was called love paper. And the idea is when your friends send you a message something like, "Hey man, you can count on me any time." That you could save that message from that friend. It's actually quite a reasonable solution. Do you want to save this as your love paper? And then when you're lonely and you open up Facebook five times in a row, instead of putting on the time limit screen on screen time that says, "Hey, do you want to stop using this? Do you want to stop using it? Do you want to stop using this?" It could show you your
five friends and the little love papers from them, and then be like, "Hey, do you
want to give one of them a call?" That's a totally different prompt than yes or
no, or put your hands behind, or put on the seatbelt and don't use this thing.

Aza Raskin: It should be noted, this is not an easy design problem. And there have been
many apps that have tried to capture this moment of loneliness and then let you
raise your hand as a user and say, "Hey, I'm lonely, who else is lonely?" And the
design challenges are you're in a low state, you're feeling lonely, you don't really
want to broadcast to everyone that you're feeling.

Tristan Harris: You don't want to just say, whenever you're lonely, let's make sure every
human being is like not lonely. Loneliness is important.

Aza Raskin: No, loneliness is a good-

Tristan Harris: ... is an important experience, yeah. But what's hard is like getting out of that
anxious, addictive state. The thing that causes you to check five times in a row
Twitter, even though you know you want to stop. And the point being, how can
we think really carefully about reading into and looking for those signals when
someone looks like they're looking for a connection, and not just saying, "Hold
your hand behind your back."

Johann Hari: The people who taught me the most about this, I think, are actually a group of
people who are not scientists and doctors. It's a place in Berlin, and I'm sure you
have lots of listeners in Berlin for there's such big tech community there, so
people will know this story. In the summer of 2011, on a big anonymous housing
project in Berlin, a Turkish-German woman named Nuriye Cengiz climbed out
of her wheelchair and she put a sign in her window, and the sign said, "I got a
notice saying I'm going to be evicted from my apartment next Thursday night, so
on Wednesday night I'm going to kill myself."

Johann Hari: This housing project is called Kotti. For people who know Berlin, it's in
Kreuzberg. It was a very poor part of Berlin. Three kinds of people live there.
They were recent Muslim immigrants, like this woman Nuriye, there were gay
men, and there were punk squatters. And as you can imagine, these groups did
did not get along very well, but no one really knew anyone anyway.

Johann Hari: People started walking past Nuriye's window in this housing project and they
were like, "Oh, we need to try to help this person." So people knocked on
Nuriye's doors, said, "Do you need any help?" Nuriye said, "I don't want any
help." Shut the door in their faces. And they started talking, they're like, "Well
what can we do? We've got to help this woman, we can't just leave her to kill
herself."

Johann Hari: And one of the people who lived in Kotti had an idea. So there's a big
thoroughfare that goes through Kotti into the center of Berlin. And they said, "If
we just blocked the road for a day and we had a protest, they'll probably let
Nuriye stay in her apartment, there'll be a news story, they might even be a bit
of pressure to keep her rents down." So Saturday came and they did it, they
blocked the road. And Nuriye was like, "I'm going to kill myself, I might as well
let them push me into the middle of the street." So she went and sat there and
the media came as a bit of a news story in Berlin that day. Nuriye does these
slightly bemused looking interviews with the media. And then it got to the end
of the day and the police said, "Okay, you've had your fun, take it down."

Johann Hari: And the people who lived in Kotti said, "Well hang on a minute, you haven't
told Nuriye she gets to stay. Actually we want a rent freeze for our entire
housing project, and when we've got both those things, then we'll take this
barricade down." But of course they knew the minute they left the barricade,
the police would just tear it down.

Johann Hari: So one of my favorite people in Kotti, she's called Taina Gartner, she's one of
the punk squatters, she wears tiny little miniskirts even in Berlin winters. Taina
is hardcore. Taina had this idea, in her apartment, she had a klaxon, you know
those things that make really loud noises at soccer matches. So she went and
got it. She came down, she said, "Okay, this is what we're going to do. We're
going to drop a timetable to man this barricade 24 hours a day until they get
into our demands. If the police come to take it down before then, let off the
klaxon, we'll all come down and stop them."

Johann Hari: So people started signing up to man this barricade, people who would never
have met, didn't know each other. And you started getting these very unlikely
pairings. So Taina, punk squatter, tiny miniskirt, got paired with Nuriye, the
woman who started this, who's a very religious Muslim in a full hijab. And the
first few times they sit there, Taina and Nuriye are like, "This is so awkward.
We've got nothing to talk about." Taina sat there on our laptop. They just didn't
want to talk.

Johann Hari: As the night went on, Taina and Nuriye started talking, just out of sheer
necessity. And they discovered there's something incredibly powerful and
common, Nuriye had come to Berlin when she was 16 years old, from a village
in Turkey, she had two very small babies. And she was meant to earn enough
money to send back home for her husband in Turkey to come and join her. But
after she'd been in Berlin for 18 months, she got word from home that husband
had died. She'd always told people in Germany that her husband had died of a
heart attack. Sitting there in the cold in Kotti with Taina, she told her something
she never told anyone in Germany before, her husband had actually died of
tuberculosis, which was seen as like a shameful disease that immigrants brought
into the country.

Johann Hari: That's when Taina started to talk about something she never talked about. Taina
had come to Kotti when she was 15. She'd been thrown out by her middle class
family who hated that she loved punk. She made her way to Kotti. She'd started
living in a punk squat, and very soon afterwards she got pregnant. Nuriye and
Taina both realized that they had been children, were children or their own in
this place they didn’t understand. They realized they were incredibly similar.
They became very close friends. These pairings were happening everywhere.

Johann Hari: Directly opposite this housing project, there's a gay club called Sudblock, run by
a man I love called Richard Stein. It's a pretty hardcore gay club. To give you a
sense of it, the previous place he ran was called Cafe Anal. So when they opened this club... this is an area with a lot of Muslim immigrants, quite religious people. As you can imagine, there had been some backlash. In fact, their windows had been smashed. They'd been real anger about it.

Johann Hari: When the protests began, the people at Sudblock, this gay club, gave all their furniture to the protest. And as the months went by, the people who were living in Kotti had built a kind of permanent structure in the middle of the street because a lot of them are construction workers. The built a really nice thing in the mid of the street. Sudblock gave all their furniture. And after a while they started saying, "You guys should have your meetings in our club. You should come here." But even the lefties at Kotti were like, "Look, we're not going to get these very religious Muslims to come and have meetings-

Tristan Harris: This is the most unlikely of pairings, I guess.

Johann Hari: Well literally underneath posters for fisting night, right? It's not going to happen. It did start to happen. As one of the Turkish German women there Neriman said to me, Neriman said to me, "We all realized we had to take these small steps to understand each other." They then launched a referendum initiative to keep rents down across the city. They got the largest number of written signatures in the history of the city of Berlin.

Johann Hari: The last time I saw Nuriye, she said to me, "I'm really glad I got to stay in my neighborhood, that's great. I gained so much more than that. I was surrounded by these incredible people all along and I would never have known." Remember, one of the other Turkish German women there, Neriman saying to me, "When I grew up in Turkey, I grew up in a village, and I call my whole village home." And I learned when I came to live in the West, the what we're meant to call home is just our four walls, and if you're lucky, your family."

Johann Hari: And then she said, "This whole protest began and I started to think of all these people in this whole place as my home." As she said that in some ways, she realized that in some deep sense, in this culture, we are homeless. Human beings have a need to belong. What we've built is not deep enough to give us a sense of belonging. And the reason I mentioned it to you is I remember when we first met thinking what happened at Kotti is the opposite of what Facebook and Instagram and Twitter are doing to us. These were people who united despite being really different, actually. In all sorts of ways, they're really different. I thought so much about how unhappy they had been. They didn't need to be drugged, they didn't need to be retweeted, they needed to be together. They need to have a sense of meaning and purpose. They need to see each other.

Johann Hari: I remember the almost physical sense of relief I got in Kotti of seeing people who were seeing each other in this deep sense, and I realized, I think part of what we need to do is rebuild a healthy sense of home. Taina said to me one time, I was sitting with her outside Sudblock, said to me, "When you're all alone, and you feel like s***, you think there's something wrong with you. But what we did is we came out of our corner crying and we started to fight, and we realized how strong we were." I can talk to you about lots of science and I'm really in
favor of all the insights we get from the science, but to me, those people taught me more than anything.

Tristan Harris: The whole thing about technology right now is it's 100% individual, right? So Lyft and Uber make it so it's never been easier to take a Lyft or Uber or get somewhere by yourself for the most part. It's never been easier to get directions somewhere by yourself without talking to anyone. It's never been easier to watch a movie without asking anyone else for recommendations. In general, technology is trending us towards moment to moment enabling of mute, silent without talking to each other choices. We can make more and more choices by ourselves. In other words, we're less and less interdependent.

Tristan Harris: It struck me recently... I go to a fitness class. I think what happened to me is my phone had died, and I didn't have a way to turn it back on and I realized I needed a ride. And remember it's been a long time since this has happened to me, where you just ask people, "Hey, is anybody going this direction?" People who you would never talk to. People you just would not be part of your filter bubble.

Tristan Harris: So the filter bubble phenomenon is just getting... it's seeping out through technology. It's not the social media Facebook thing, it's that increasingly I'm able to only spend time with the people that I would already without any kind of noise thrown into my social milieu agree with, admire, like, feel affinity for, versus if you're sitting there in some interdependent mode where, hey I need to get a ride over there, I don't know how I'm going to get there, I have to ask random people who look very different from me. And it's through those moments that we learn so much.

Johann Hari: So one of the heroes of my book Lost Connections is one of the great pioneers, this guy called Dr. Sam Everington. So Sam I think illustrates that principle beautifully. So Sam is a general practitioner in East London, poor part of East London where I lived for many years. Sam was really uncomfortable because he had loads of patients coming to him who were depressed and anxious. Like me, he's not opposed to chemical antidepressants, he thinks they have some positive role to play for some people. The default mode is drug them and send them on their way. And he could see that most of the people who were coming to him who were depressed, were depressed and anxious for understandable reasons, like they were really lonely. And secondly, although the drugs gave them some relief, most of them did remain depressed after a while.

Johann Hari: So Sam decided one day to pioneer a different approach. A woman came to see him called Lisa Cunningham, who I got to know later. Lisa had been shut away in her in crippling depression and anxiety for seven years. Awful situation. And Sam said to Lisa, "Don't worry, we'll carry on giving you these drugs, but we're also going to prescribe something else. And what we'd like you to do is come to the center two times a week and meet with a group of other depressed and anxious people not to talk about how depressed and anxious you are, please don't do that. What we'd like you to do is find something meaningful to do together."
Johann Hari: So the first time the group met, Lisa actually literally started vomiting with anxiety, but they started talking and they're like, "What can we do?" This inner city, East London people like me that didn't know anything about gardening, they were like, "Should we build a garden?" There was an area behind the doctors' offices, they decided to build a garden.

Johann Hari: So they started to watch YouTube clips. They started to get books at the library. Started to meet around this collective project. They started to get their fingers in the soil. They started to learn the rhythms of the seasons. A lot of evidence that exposure to the natural world. So really powerful antidepressant. But something even more important started to happen, they started to form a tribe. They started to form a group. They start to care about each other. The way Lisa put it to me, "As the garden began to bloom, we began to bloom."

They had a sense of pride in what they were achieving. They were building something that was beautiful, people would congratulate them on it. If one of them didn't show up, the others would go looking for them, say, "Hey, are you okay? Do you need any help?"

Tristan Harris: One of the things I found in your work so compelling was you talk about just how many people feel like there's no one they could call on if-

Johann Hari: It's shocking.

Tristan Harris: ... something were to happen to them.

Johann Hari: Well, the Bosnian writer Aleksandar Hemon said, "Home is where people notice when you're not there." So this approach is called social prescribing, you prescribe people to take part in social groups. It's not just for depression, anxiety and the pain relief, it's really powerful. Grief, all sorts of things. There's a small but growing body of evidence showing this is really effective. So a study in Norway showed it was more than twice as effective as chemical antidepressants in terms of reducing depression and anxiety.

Johann Hari: I spent a lot of time interviewing a really remarkable man who's at the university of Chicago, Professor John Cacioppo, who sadly died recently.

Tristan Harris: I actually knew him and I actually knew his daughter as well.

Johann Hari: What an incredible man.

Tristan Harris: An amazing psychology researcher. He was the sort of the king of loneliness research and social neuroscience at a university of Chicago, I think.

Johann Hari: Yeah, it's a devastating loss. He taught me about so many things in relation to this. I remember him saying to me, "Why do we exist? Why are we here? You, me, everyone we've met. One key reason is that our ancestors on the savannas of Africa were really good at one thing, a lot of the time they weren't bigger than the animals they took down, they weren't faster than the animals they took down, but they were much better banding together into groups and
cooperating. This was our super power as a species, we worked together." Just like bees evolved to live in a hive, humans evolved to live in a tribe.

Johann Hari: If you have a separated a bee from its hive, it goes crazy. It doesn’t make sense on its own right. In fact, a human being separated from the tribe in the circumstances where we evolved, was depressed and anxious for a really good reason, you were in terrible danger. These are the impulses we still have. This is in a very deep sense who we are. But we are the first humans ever to disband our tribes, to tell ourselves a story, actually you should go it alone, actually you don’t need other people. You see how deep this is in the culture when you realize that even our kind of cheerful self-help dictums are wrong.

Johann Hari: There’s an interesting person called Dr. Brett Ford, who with their colleagues did this really simple but interesting study. Let’s say you decided you consciously and deliberately wanted to take steps to be a happier person. They wanted to understand, does doing that actually make you happier? What can you do to make yourself happier? And what they discovered was at first it looks really weird. In the United States, if you try to make yourself consciously happier, you don’t become happier. In the other countries if you try to make yourself happier, you do. And these were averages, there were exceptions.

Tristan Harris: Which countries were these?

Johann Hari: The United States, Japan, Russia, and Taiwan. And why would that be? What’s going on there? They went and studied it more. What they discovered is in the United States, in general, if you try to make yourself happier, you do something for yourself. You buy something, you work harder to get promotion, you treat yourself, whatever it is. In the other countries in general, if you try to make yourself happier, you do something for someone else, your friends, your family, your community.

Johann Hari: So we have an implicitly individualistic story about happiness. They have an implicitly collectivist story about happiness. And it turns out our vision of happiness just doesn’t work. A species Ayn Randian and individualist would have died out on the savannas of Africa. They wouldn’t have been able to cooperate to get the things they needed to get.

Johann Hari: I think this might be apocryphal because I’ve been trying to find the source, but Winston Churchill is reputed to have said, "Communism is a great idea, it’s just they got the wrong species, it works really well for ants." And in the same way, I think individualism might be a great idea, but we ain’t that species. That’s not who we are. That’s not our impulses. That’s not our history. That’s not our nature to be... Now it’s not to say there’s not a natural human desire for autonomy and free determination, of course there’s some individual determination that’s really important-

Tristan Harris: Right. But we lean too heavily into that. I mean…

Johann Hari: Insanely too far towards it.
Tristan Harris: Yeah.

Johann Hari: Yeah.

Tristan Harris: So I mean, what you're really getting at is who are we then as humans if we're not this individual species? I mean, just quickly for you, I mean, I'm just curious, since you're so expert in these topics, how have you constructed your life and social relationships? I mean, I imagine you're on the road quite often as well. Just speaking from personal experience-

Johann Hari: Yeah.

Tristan Harris: I take it to heart everything that you're saying, and communities become more and more important to me as the last few years have gone on. Actually recognizing the same insights. And I'm just curious, like knowing these things, how do you end up sort of navigating your daily and weekly choice-making to bring that in or not?

Johann Hari: Yeah. I think that's interesting. I remember Professor Kasser saying that I found really, really deep. They did all this research in Cook County. And one of the key things they learned about loneliness, is loneliness is not about how many people you interact with. The feeling of loneliness does not track at all with how many people you interact with every day. It's really interesting. So what does loneliness track with? It's about the meaning you share with other people.

Johann Hari: So loneliness is the sensation that you don't share anything meaningful with other people. And to me, and I love the work of your colleague and friend James Williams, so I'm hopefully going to go and see him in Moscow soon to interview. It's hard for me to know if this is actually the deepest layer or it's just this is the thing that is speaking to me most loudly.

Tristan Harris: It's great. I mean I appreciate the humility.

Johann Hari: To me the deepest layer, I think, in terms of the tech crisis is what it's doing to our ability to construct meaning and goals that thousands of years, philosophers have said, "If you think life is about money and status and showing off, you're going to feel like shit." It's not an exact quote from Confucius, but that is the gist of what he said. But weirdly, nobody had scientifically investigated this until professor Kasser, who just retired at Knox college in Illinois.

Johann Hari: Professor Kasser just did this such important research. So he showed everyone you've ever met, all humans are a mixture of two kinds of motivation. Let's imagine if you play the piano, I'm totally un-musical, but let's say you play the piano.

Tristan Harris: I do actually play it.

Johann Hari: All right? Okay, well, there, you're a great example. If you play the piano in the morning because you love it and it gives you joy, that's what's called an intrinsic
motivation to play the piano. You’re not doing it to get anything out of it, it’s just that is a thing that’s... That’s an experience that is meaningful to you in that moment. Now, let’s imagine you play the piano not because you love it, but in a dive bar that you can’t stand, to pay the rent, or because your parents are massively pressuring you because it’s their dream that you’ll be piano player, or to post the clips on Instagram to impress a woman that maybe there are some piano fetishist out there. That would be an extrinsic reason to play the piano. You’re not doing it because that experience has meaning, you’re doing it to get something out of it further down the line.

Johann Hari: Now all human beings are a mixture of intrinsic and extrinsic motivations, and should be. But professor Kasser showed a few really important things. Firstly, the more you are driven by external motivation, the more likely you are to become depressed and anxious. And secondly, as a society, as a culture, we have become much more driven by these external motives. Over time, I began to think of this as analogy with junk food, right? Everyone needs nutrition obviously or you’ll die. And what junk food does is it appeals to the part of us that needs nutrition but actually poisons us, screws us up. In a similar way, I think of these extrinsic values, if they become too dominant, it’s like junk values. It’s like we’re being fed or kind of KFC for the soul.

Johann Hari: I think one of the tragedies about social media and its colonization of our consciousness in the current model, and I think what you say is so important about it’s the current model not social media.

Tristan Harris: Not inevitably.

Johann Hari: Exactly. Is that it is constantly jolting us towards extrinsic values. I've always had a strong sense of intrinsic meaning in my work, but I also realized how vulnerable I was to these junk values. So to give you an example, last week I had this new Ted talk that came out, and I kept thinking about depression, some of the things we’re talking about. And it was a really interesting illustration that really helped me to navigate through to thinking about professor Kasser’s work. There’s two ways I can think about that, right?

Tristan Harris: This is the moment when your new Ted talk came out and you sit there addictively checking to see how many views you have.

Johann Hari: So I have thankfully not done that.

Tristan Harris: Not that I’ve gone through that experience.

Johann Hari: So what happened is I was sitting there and I thought, okay, I gave this talk, do I think it’s really important that people know this? Yes. Do I wish someone had told me when I went into my doctor when I was 17, and I was told, "Oh, this is just a problem in your brain." Do I wish someone had explained this to me? Absolutely. Would it have made my life better? Yes.
Johann Hari: When I think about those things, I think about how much I admire professor Kasser and his research and Sam Everington, who pioneered social prescribing, which we also talked about. I think about the people who were helped by these things. I feel a sense satisfaction and calm. I feel okay, that's good. That's good work. Or I can get into and I... This is a very strong temptation, who tweeted about my Ted Talk? How many followers have they got? How many views has it had? How my book sales have gone up? Should I look at the Amazon ranking. I feel that temptation very powerfully. This is a natural human division.

Tristan Harris: Absolutely.

Johann Hari: If I get into that mode, interestingly even if I'm winning, I feel like s***.

Tristan Harris: Exactly.

Johann Hari: Right? Because it's not... well how would you describe why? I'm interested why. What do you think about that, Tristan, why do you think that is that we feel worse in that mode?

Tristan Harris: You're bringing up so many interesting things that I have so many views on. So first of all, which one is more profitable, right? I mean, can applications whose business model is dependent on your attention, get your attention better with your intrinsic motivations that are unconnected to how often do you get more likes or is it better and more profitable to have you extrinsically motivated? The thing that keeps you coming back like a drug user checking to see how many likes or feedback you get.

Tristan Harris: I don't know if you know this, there's a famous phenomenon now, you post a photo and you look at the initial set of likes you get back in the first few 30 seconds, a minute, you can basically tell in the first 30 seconds or a minute whether or not it's going to be a hit or not. And if it's not a hit, people actually delete it. They actually take it down.

Johann Hari: Yeah. My niece is 15 and the day she joined Instagram, I actually felt a lurch in my stomach. And I thought this lovely… she's so kind, she's so thoughtful, and I thought exactly that, that she's about to be... what's that brilliant phrase you use, a D?

Tristan Harris: Oh, downgraded.

Johann Hari: Yeah. I felt like I was about to see how literally being downgraded. And I think about my godsons who are eight and 10, who I just don't want this for them. I don't want this corruption of their values. I don't want this corruption of their ability, their sense of self.

Tristan Harris: The thing that people don't get about why this is so alarming for the next generation, it's not just like, "Oh look what's happening to them." It's that this is native to them. They won't know anything different. You and I know what the internet used to look like in 1990, as it was being developed, and people on
newsgroups and being kind to each other and being good to each other. And what it looked like when people weren't addicted to how much attention they got in their Instagram account selling their makeup thing for $10,000 a month and becoming a commercial avatar. Like this is not normal.

Tristan Harris: What’s most alarming for the next generation, beyond the immediate harms that we know it’s causing more depression and increasing correlates with suicide and things like this, is that this is the new normal, and it’s not normal. And that's why I feel like the Nina Simone song, I can't remember the original author, but I've Put a Spell on You. Technology has put a spell on us, and it’s not real, and it's time we snapped out of it and said this normal doesn’t have to be normal. In fact, it's not normal, and it shouldn't be normal.

Tristan Harris: It makes me think like when we see people flirting in public and being really human with each other, they’d be like, "Oh my God, look at that human connection. That's insane. That's incredible. I've never seen that." And I honestly, I do feel that way sometimes, not the human connection one maybe, but just other ways in which by just being really human and really self-expressed and really just ourselves, this is rarer and rarer.

Aza Raskin: So I was at a yoga class, and there were... there was a man and a woman and they didn’t have their phones, or they were off or they were out of batteries or something, and they were trying to figure out how to contact each other because they sort of flirting and they couldn't really figure it out. And the yoga teacher had to slide over a pen and paper and it's like, "Try this out." And I was just like, "I'm witnessing a cultural moment right now. This is like the 90s come back." But literally, they could not figure it out. It would be so strange being an alien looking at human beings from space, “what are they doing?”

Johan Hari: I went to the first ever internet rehab center in the United States. It's not that far away, it's in Spokane in Washington. Had an interesting conversation there with Dr. Hillary Cash, who runs it. I remember getting out of the car and absolutely instinctively looking at my phone and feeling really pissed off that I couldn't check my email because there was no reception but thinking, oh wait-

Johan Hari: Exactly, you’re in the right place. So they get all sorts of people there, but they disproportionately get young men who are obsessed with these multiplayer role player games like World of Warcraft, this didn’t exist then, but I'm sure now it would be Fortnight. So it’s disproportionately there. And I was speaking to the young men there who were very thoughtful and impressive young man actually. And after talking to Dr. Cash and her saying, "You’ve got to ask yourself, what are these young man getting out of these games? They're getting the things they used to get from the culture but they no longer get. They get a sense of tribe. They get a sense they're being seen. They get a sense they're physically moving around." The figures on kids physically leaving their house is shockingly small, right? They're getting a sense they're good at something. We have a school system that does not give young men a sense they're good at something, particularly young men.
Johann Hari: I began to think, I think what they're getting is like a kind of parody of those things. I think the relationships with social media and social life is like the relationship between porn and sex. I'm not anti-porn, right? But if your entire sex life consisted of looking at porn, you'd go around pissed off and irritated all the time because we didn't evolve to masturbate over screens, we evolved to have sex. And in a similar way, these kind of parodies of connection we're being offered... There was a great line, I thought about you and I read this recently, Ed Hallowell, who's a kind of expert on attention problems, said, "We've replaced connection with stimulation as a society."

Johann Hari: So the moment the internet arrived, a lot of the factors that are driving disconnection, junk values, loneliness, so I go through a lot more in the book, were already accelerating, right? But I think what's interesting is the tech arrives and it looks a lot like the things we've lost. We've lost friends, but here's Facebook friends. We've lost status in the economy, there's inequality growth, well here's status updates, right? But it's not the thing we've lost. So you end in this terrible ratchet, which again, you know infinitely better than I do, where... There's a phrase that people always use in 12 steps programs, "You can never get enough of something that's not quite enough." So we have this clearing of the way that made us vulnerable to some form of addicted behavior understood in this broadest sense, not in an individualized sense.

Johann Hari: And then the thing comes along that addicts us, that then degrades us even further, makes us even more vulnerable. It's like someone who has a low functioning life, they're in an apartment or whatever, and then they become addicted to crack and then they lose their apartment.

Tristan Harris: It's like a snowball that just keeps building. You're in the wrong feedback loop.

Johann Hari: Exactly. But that's happened to a whole society and culture. And to see that playing in places... If I think about three places I've spent a lot of time, the United States, Britain and Brazil, to see the same factors happening in such a... I mean, Britain and Brazil are really different, and to see the same dynamics playing out in both, with obviously many differences in all sorts of things that are different. But to see those processes, it's really frightening.

Johann Hari: I think we need to do a kind of two things. We need to... I'm cautious of saying this casually. We just do two things if it's easy, but we need to exactly have the humane technology that you're fighting for rather than the life destroying technology that we currently have. And we need to restore the social health of the society in every other way. But those things need to happen simultaneously because if we don't deal with the tech, then it's like trying to heal a body that's under constant biological attack. Yeah.

Tristan Harris: As a technologist, thinking about the things that we've been talking about for the last hour, hour and a half, is how do you respect the fact that at a human paleolithic level, human beings are wired to be connected to nature and there's something soothing, calming about, as he mentioned, the example of the doctor who prescribed the gardening project, the community gardening project. How can we be automatically built into that?
Tristan Harris: I mean, think about a calendar that instead of just saying, "Hey, there's a little plus button and you can type." Instead of getting a menu of which key do you want to type to title your event, it actually gives you a menu of like, "Do you want to add some nature to your week? Do you want to add some community time to your week? Do you want to add some exercise to your week?" Have these sort of templates almost for thinking about our lives and how we want our lives to be structured in terms of our values. I mean this doesn't have to be top down.

Johann Hari: Values and needs.

Tristan Harris: Values and needs, yeah. And we could actually have whole menus and technology guided by imagine sort of a value and chooser, and then that is baked into the iPhone. I'm not trying to make this a tech utopian thing, I'm just trying to give people some hints of ideas. That imagine you pick the kinds of values that are important to you, you're in control of them, and then technology wraps around your daily choice-making, your calendaring can be in terms of your values. So that instead of being based on this sort of race to the bottom of the brain same dynamics we've been talking about, it's actually based on that.

Johann Hari: Listen to the wisdom of your needs. You have these needs for reasons. A species that loves nature will survive. A species that does not pay attention to that will end up with the Amazon rainforest on fire, which is where we are now, right? So to give just one example of many. We evolved these needs for reasons. We need to listen to them, we need to respect them, we need to honor them. The pain that comes when we don't respect them is something that we should really listen to because at the moment what we do is we pathologize that pain.

Johann Hari: We either say it was just a problem in your brain, now, of course there's some biological components, but we say it's just a problem in your brain. Or we say with addiction, it's a moral flaw. Or there's a whole range of ways in which we disregard those signals. We need to start listening to those signals. The fact this is a society where a third of middle aged women at any given time are taking a chemical antidepressant where you know now the opioid... more people have died in the opioid crisis than in all the Wars in American history after the civil war, that's a signal we should be listening to and not insulting.

Johann Hari: And if you follow it to the root of its pain, you find the unmet needs, and those unmet needs can educate us about how to change. Depression and addiction have been presented as malfunctions, they are in fact signals. We need to listen to those signals, respect those signals, and hear what they're telling us because they are telling us something really profoundly important about who we are as human beings, about where we've gone wrong, and how to put it right.

Tristan Harris: Johann, thank you so much.

Johann Hari: Oh, thank you for the incredible what you're doing. It's massively important.
Tristan Harris: On our next episode, we'll talk to Maria Ressa, a journalist fighting the impacts of pervasive social media influence in the Philippines.

Maria Ressa: Digital products were first tested in the Philippines. We're English speaking nation, we're 100 million people. We're a little test case for you. If you don't do anything drastic, we really are your dystopian future.

Tristan Harris: Maria explains why and tells us what she's been doing to help restore the country's media literacy and democracy.

Tristan Harris: We're trying to solve this problem. It's going to take all of us to figure it out. And we're starting to hold these conferences, these virtual conversations online through Zoom with members of our community, to read and share solutions. You can find a link in information about the next one at humanetech.com/podcast.

Aza Raskin: Your Undivided Attention is produced by the Center for Humane Technology. Our executive producer is Dan Kedmey. Our associate producer is Natalie Jones. Original music and the sound design by Ryan and Hays Holladay. Special thanks to Abby Hall, Bill Clinton, Randy Fernando, Colleen Haikes, Rebecca Lendl, David Jay, and the whole Center for Humane Technology team for making this podcast possible.

Tristan Harris: And a very special thanks goes to our generous lead supporters at The Center for Humane technology who make all of our work possible, including the Gerald Schwartz and Heather Reisman Foundation, the Omidyar Network, the Patrick J McGovern Foundation, Craig Newmark Philanthropies, The Knight Foundation, Evolve Foundation, and the Ford Foundation, among many others.