The Tim Ferriss Show Transcripts
Episode 93: Jane McGonigal
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Tim Ferriss: Hello, Ladies and germs. This is Tim Ferriss and I'd like to ask you, why so serious? We're going to get back to that. This is another episode of The Tim Ferriss Show, where my job is to try to deconstruct world-class performers, to try to identify the things that make them as good as they are at what they do. That is a mouthful a sentence. Whether that is their morning routines, their favorite books, etc. This episode is a fun one because we are going to focus on how to use games to get more done with less stress, among many other things.

My guest is none other than Jane McGonigal, Ph.D., one of my favorite peeps. Jane is a senior researcher at the Institute for the Future and the author of the New York Times bestseller, Reality is Broken. Subtitle: Why Games Make Us Better and How they Can Change the World. Her work has been featured in The Economist, Wired, The New York Times, on and on. She has been called one of the top 10 innovators to watch by BusinessWeek and one of the 100 most creative people in business by Fast Company.
Her TED Talks on games have been viewed more than 10 million times. She knows of what she speaks. In this conversation, we dig into everything from recovering from head trauma, to how you can use Candy Crush Saga to lose weight. If that's not enough, we talk about how to use Tetris to prevent PTSD or perhaps Call of Duty to increase empathy and there are many other options. It's a very cool discussion with a lot of science underlying all of it. Her latest book is SuperBetter.

I would like to ask you guys a favor. I got an advance copy. I've really been enjoying it and testing it and I want to ask you to go buy a copy of this book. SuperBetter – it's on Amazon, check it out. But what is the premise? SuperBetter offers a revolutionary and science-based approach for getting stronger, happier and more resilient. Like I said, I've been testing it myself and it works. Not only am I feeling better and that is typically sort of a morning issue or a late-at-night issue, but I'm having more fun in the process.

As adults, I think we often lose track of play. My hope is that this episode will help you to reclaim it. It's not frivolous. It can help you get a lot more done with less stress. Without further ado,

please enjoy my conversation with Jane McGonigal. Jane, welcome to the show.

Jane McGonigal: Thank you, Tim.

Tim Ferriss: I am so excited to finally reconnect. It has been many years. I have enthusiastically watched your growth and propagation of all these ideas that I hope we'll have a chance to explore in this conversation. I missed quite a lot. And we'll go to, for instance, just the head trauma. I didn't know anything about. But before we get to the serious stuff, tell me about your dogs and the names of your dogs.

Jane McGonigal: I have two Shetland sheepdogs and their names actually reflect a pretty good evolution of my sort of work and interest in game design.

My oldest dog, Meche, is named after my favorite video game character from Grim Fandango. And my new puppy, Tsonga, who is only two, is named after my favorite tennis player. People ask me about games I'm playing and I'm actually playing more tennis than video games these days.

Tim Ferriss: So when somebody asks you – for those people listening who are not familiar with your work – what do you do? How do you answer them?

Jane McGonigal: I usually lie because –

Tim Ferriss: Like George Costanza style?

Jane McGonigal: Oh, yeah. I've been on an airplane and somebody asks me what I do and I tell them I'm a cab driver. And they're like, "Why are you flying to China in business class?" I'll say, "Oh, I'm getting an award for being a really innovative cab driver."

Because it's hard to explain to people that I research games and I design games and I try to design games to help people be happier and healthier and save the world. Then you spend the whole eight-hour flight answering questions about it.

Tim Ferriss: Well, instead of an eight-hour flight, we're going to have a long podcast about all of this. I'm afraid you can't dodge me with the taxi driver gambit this time around. But am I correct in saying that you were the first person to earn a Ph.D. studying the psychological strengths of gamers?

Jane McGonigal: And how they can apply them to real life. I was the first person to really take seriously the idea that people who spend an hour a day or more playing, particularly video games, might have some unique strengths: cognitive strengths, social strengths, imaginative strengths that could be applied to real world problems.

Tim Ferriss: And what would some of those problems be? And, of course, I have some familiarity with this because I'm a fan of your writing and was also an early reader of your first book, but could you give some examples of what types of real world problems can be either addressed partially or potentially solved by gamers?

Jane McGonigal: Sure. Well, you know, I've been working with The Institute for the Future in Palo Alto for eight, nine years now. One of my favorite kinds of games to create is future forecasting games. So to invite ordinary people to try to predict their own futures and then when you get enough people predicting their own futures, you can learn some really interesting trends. It's sort of like a collective intelligence project, where you might not be able to predict what will happen in the rest of the world, but if I tell you a short scenario – Peak Oil scenario – you can very accurately predict what you would do, how you would get to work, how you would get your kids to school, what you would cook.

We take all that information and aggregate it to understand how the world might react to different future scenarios. That's my kind of game.

Tim Ferriss: Now this is very interesting. I know that, for instance, and you could probably elaborate on this, but whether you're looking at, say protein folding, right? You could use excess processing power from gaming units to collectively handle a lot of very gnarly computation, right? But in this particular case, are you getting pinged by hedge fund managers and people like that who want to try to develop investment thesis around those types of scenarios?

Jane McGonigal: Sure, yeah, I was the first game designer to be invited to give a keynote at Davos. There are definitely powerful people interested in these.

Although I'm happy to say that my work at the Institute for the Future, it's a non-profit organization and we're mostly trying to help the world survive environmental catastrophe and pandemics and things like that. I've been used more for global good than individual profit so far.

Tim Ferriss: Well, and I suppose though there could be an interesting conversation about how you can utilize both or make them, in some respect, a virtuous cycle. So if you have people who are incentivized to help develop games that drive their own benefit, but at the same time they're facilitating the development of toolkits or architectures that address these larger-scale problems facing humanity. I don't know. It is a very interesting conversation. But I don't want to take us too far off topic immediately.

Could you please describe to folks, and this is as much to satisfy my curiosity as anything else, but concussion. So I am ashamed to say I knew nothing about this. Could you describe for people what happened and what happened after that incident?

Jane McGonigal: Sure. Well, you know, while it was happening, not a lot of people knew. I actually tried to hide it for a long time because I was so impacted by the concussion that I was afraid I would never be able to work again. I was afraid I'd never be able to speak publicly because I couldn't remember things long enough to put together a talk. I was in the middle of writing my first book and I thought oh, my God, I'm never going to finish my book. I was not screaming from the rooftops that I was having so many problems. It was the summer of 2009.

It was just an ordinary day, I was rushing around my apartment and wound up hitting my head on an open cabinet door.

Tim Ferriss: Did you stand up quickly? Like hinge at the hip and whack your head? Or did you hit your head?

Jane McGonigal: I did. Sometimes people ask me if this was a sport injury and I say yes, kind of, because I am a runner, a marathon runner. So I have very strong quads. I was in such a hurry, I just used the full force of my quads to power up. It was crazy. Literally, it was out of a movie. My husband was joking around, "Oh, who's the President?" And the only thing I could remember was that it wasn't George Bush. I'm like, "I know it's not George Bush," but I couldn't even remember who the President was. And that's when I knew, okay, this is bad. It was really bad. So a lot of concussions heal within a week. But after the first month, I was still completely concussed. All day, every day, nauseous, vertigo, couldn't remember people's names.

I lost everything. I'd put something down and never find it again. I couldn't ever really get out of bed. I couldn't talk to people. It was

a disaster. My current work, my new book, my new game, the clinical trial I'm running, all of that comes out of my attempt to use game design to fix my brain.

Tim Ferriss: You did a great job of hiding it, for those people who were not interacting with you on a daily basis. Because we had quite a bit of interaction for Reality is Broken and while you were finishing that. So this was happening at the same time that we were interacting.

Jane McGonigal: That would be fun, to dig up the emails and see –

Tim Ferriss: See if they read like haikus?

Jane McGonigal: Right.

Tim Ferriss: Wow. I had a very similar experience last year with Lyme Disease, where I tried to keep it under wraps.

Jane McGonigal: I know.

Tim Ferriss: But with respect to the concussion, can you describe then what followed? Because you had some very dark periods and I'd just love to hear how this work that you're doing now, at least some of it, evolved out of that concussion.

Jane McGonigal: Sure. By the way, I'm the world's expert on concussions now because I have learned every bit of research that has ever been done. So one of the things I learned is that there is a 30-day window for recovering from concussion. Most people recover within 30 days. And if you miss that window, then they tell you that the next window is three months. Then if you miss that window, if you're still having all these symptoms, then it's likely to be a year. And if you are still totally symptomatic in a year, then you may have the symptoms forever.

That was something I learned on Day 34 of my concussion, when my doctor told me, "Oh, you sort of missed the first window of recovery of 30 days, so this could drag out for three months." At that point, you have to image, I couldn't do anything. You're basically on bed rest. I couldn't watch TV unless it was episodes I'd seen before because I would get really confused by the plot. I remember watching an episode of TV and it was like, who are these characters? I can't keep it straight. So you can't do anything. You can't go running. You can't drink coffee because it aggravates the symptoms.

So I was more depressed than I've ever been in my life. I was super anxious that I would never work again. My husband had just been laid off from his job. The only upside of that was that he was able to stay at home and care for me, but the downside being neither one of us was working. I was a total mess. Sometimes in that first 30 days, I also, to make things even more dramatic and awful, started to have suicidal ideation.

Which just meant that I was hearing these voices in my head. You should kill yourself. You're never going to get better. You're going to be a burden to your family. Every day is going to be this awful for the rest of your life, just get out now. I did not know at the time – I found out later – that this is really common with traumatic brain injuries. It happens to one in three people who even just from a mild concussion, one in three people will have suicidal thought.

Which, first of all, we should tell everybody. Because when it starts to happen to you, it's such a relief to know that it's not your brain actually wanting to die. It's just the neurochemistry of the brain. Your dopamine levels zero out. Literally your brain cannot imagine any positive outcomes in the future. You have no access to dopamine. So literally it is impossible to imagine anything good ever happening again while the brain is trying to heal.

So this is where I went. I was basically worried that I was going to kill myself. Then my doctor was like, you missed the window of recovery here, so good luck for another three months and maybe you'll be like this forever. So that was where things went. That was rock bottom.

Tim Ferriss: And how did you dig yourself out of that? What were the conversations or interactions that allowed you to get out of that hole? Because there are people who don't get out of it, right? And like you said, it's important to have these conversations so that people can view it as a collective symptom and not a personal, singular, individualized flaw.

Jane McGonigal: Exactly.

Tim Ferriss: But how did you start turning the corner? What was it?

Jane McGonigal: There were two key things going on that summer that really helped me. So the first was I had been writing my book, the first book, Reality is Broken. Which is all about how games make us happy, they're happiness engines. I thought well, shit, I should really, really test these theories out, and take this really seriously. Because

if anything could jump start my brain into being happy, even though dopamine was zeroed out and my brain was telling me it wanted to die. Well, games should be able to do it. The other thing that was going on that summer was I was re-watching the entire Buffy the Vampire Slayer series because –

Tim Ferriss: You just earned so much dork cred with my audience.

Jane McGonigal: Yeah. Because I knew all the episodes so well, so it wasn't taxing to my brain. So I was watching Buffy and I just decided I'm going to try to turn this recovery process into more of a game because I know games make us more optimistic and motivated and it's easier to ask people for help when we're playing a game. So I decided to invent this game called Jane the Concussion Slayer.

I was going to be like Buffy the Vampire Slayer who did not choose to be the slayer, right? Fate just thrust it upon her and she had to step up to the heroic occasion and I was going to step up to my own heroic occasion and treat all of these symptoms like demons and vampires and just be a bad ass. And that was the start of a game that I played for the rest of the year but now half a million have played and we just ran a big clinical trial on. So it's been almost six years that kind of crazy idea has been developing into something much bigger now.

Tim Ferriss: I feel like Rip Van Winkle. I'm so embarrassed that we haven't about this before I got an early copy of the new book which, by the way, I should just say (that's SuperBetter) that I sent a lot of books. My assistant sees all of these books and this is the first time that she said to me, "When you're finished with that book, I'd like you to give it to me."

Jane McGonigal: Awesome.

Tim Ferriss: So very fascinating. I'm already into the book, which is saying a lot – I get 20, 30 books a week and this is the one that I'm focusing right now. It's partially because I want to fix my own problems. In reading the introduction, you talk about being gameful. I'd love for you to talk about that and then also just talk about the first incarnation of the game as you played it for yourself.

Jane McGonigal: Sure. I am excited you want to talk about what it means to be gameful because I feel like this is a really good opportunity to set the record straight about something that makes me crazy, which is the topic of gamification.

The idea that you can just give people points for doing stuff and that's going to motivate them and give them achievement badges and that's going to make them feel proud. It's a very simplistic motivation and reward. I don't do it. Even if you look up "gamification" on Wikipedia, it's like, "Jane McGonigal, patron saint of gamification." No, I never! Did you see that word in my book? No. I don't do it.

Tim Ferriss: It's like when I get "motivational speaker" and I'm like, oh, my God, really? I've got to live with that one forever, okay.

Jane McGonigal: So this book is really about something totally different, which is the gameful mindset, which is a way of approaching obstacles and stress that most of us naturally adopt when we play games.

When we play sports or when we're doing puzzles or board games, card games, video games, almost every single person on this planet and throughout history has been able to adopt a very powerful mindset that makes us better able to learn from our mistakes, more determined in the face of obstacles, better to amass resources from other people, build allies, and all these really wonderful things that help us solve problems, but few of us use that same mindset in everyday life. We only use it in games. So that's what I've been researching since my brain healed. It took about a year.

That's been the new research topic that I've been obsessed with, which is how do we help people take all of the benefits of a gameful mindset which mean you're more creative, you're less likely to give up, you've got better social support, more curiosity, more optimism, all these wonderful things. How do we bring that into the real world? It doesn't necessarily mean gamifying anything. As it turns out, the most important thing you can do to really access your gameful mindset is to play games, any games that you like, and then remember to call on those same strengths in real life.

Tim Ferriss: So how did you do that initially when digging yourself out of this hole? I think it's also important – I think a lot of people listening are imaging sitting in front of a screen playing Zelda or a first-person shooter game or something like that. What did you do concretely for yourself in the beginning and then how has that evolved?

Jane McGonigal: Right. It really wasn't even a game, so much as it was a process for being gameful in everyday life. The first thing I adopt was adopt this secret identity – Jane the Concussion Slayer. The idea behind that is it was just like an avatar for real life. When we have avatars in video games, we're really focused on what they good at, what are their strengths, how can I level up those strengths, what are their special secret weapons, how do they use them?

We're very focused on strengths and the skillsets. So I wanted to start focusing on what are my strengths and skillsets, even though I feel completely hopeless and helpless and like I can't do a single thing right. To adopt that kind of avatar for everyday life. It was not a digital avatar on a screen. It was literally me just telling people, "I'm Jane the Concussion Slayer." As it turns out, now that I've done all this research, literally just talking about yourself in the third person with a focus on your strengths is this incredible brain hack that changes so much in terms of anxiety and depression. So that was the first thing that I did; this sort of avatar.

Tim Ferriss: So when you would go get a cup of tea at Starbucks, and they're like, "What's your name, Miss?" But is this something that – who would you use that name with?

Jane McGonigal: I first started just with my closest inner circle. I called my twin sister, Kelly, who is a psychology professor at Stamford University, by the way.

So I got a lot of good tips from here. I'm like, "I'm playing this game to heal my brain. I want you to play it with me. I'm going to be Jane the Concussion Slayer and I want you to be my watcher." So I actually adopted the mythology from the Buffy series to give everybody in my life a particular ally role to play. If you remember Buffy, her watcher, Giles, he would oversee her training. So my sister's job was to give me one thing to do every day, like a little quest or mission and then she would call me the next day to see how I did.

That was actually amazing because I had not really done anything successfully until she started giving me missions. Stupid things like can you see out the window from the bed that you're not able to get out of? Yes. Okay, I want you to look out the window and find one interesting thing. Try to see one interesting thing about it and tell me about it tomorrow when we talk. Spot something kind of crazy outside your window.

Then I had a sense of purpose for the day. I'm lying in bed with nothing to do, but I have a goal now. I have a mission. It turns out I learned from all my research later that having a clear goal and being able to anticipate succeeding in that goals, that's one of the fastest ways to get the dopamine back cycling through your brain, which is key to reversing depression. So even just being given a little, tiny quest, just like a role playing game, like World of Warcraft. Here's somebody who comes up to you and says, "I have a quest for you. Do you accept it?" And you agree to do it. That's also a brain hack, where you're just spiking the dopamine levels and learning to anticipate success again.

Tim Ferriss: I've been thinking a lot about resource allocation – that's the most boring way I could possibly put it. But I've been thinking about how people allocate different currencies: time, income, and so on.

Looking at the difference, for instance, between buying possessions or experiences. The data very strongly support the psychological superiority of buying experiences, generally speaking, because the value of a purchase decreases very quickly. It's like driving a new car off the lot and suddenly it's depreciated 30 percent.

But when you plan, and I experienced this last year for myself, when you plan a trip six months from now, you have those six months of anticipation. I recently took my family on our first real family outing in many years and we went to Iceland, but it was something that we planned for Christmas and New Years and we had a good five or six months to look toward to it. It just made all of the bumps along the way seem minor and very easily overcome.

I just gave us some North Star to look towards when the going got rough. So what other features did you build into your life? So you had your sister.

Jane McGonigal: So secret identity, you have allies that you recruit and then you have these quests that your allies give you. We also collected and activated power-ups. So in this system, power-ups are anything that give you a quick burst of a positive emotion. Any feeling at all. It could be pleasure, it could be laughter, it would be delight, whatever. So I started collecting cuddling with my dog for 10 minutes would be a power-up. Or listening to a powerful song that made me feel powerful. Or eating walnuts because that was supposed to be good for brain healing.

So just trying to identify things you could do in just a minute or two to create a positive experience, which having a traumatic brain injury is kind of an extreme example of needing power-ups because otherwise you just lie there in a state of abject boredom or frustration. But making sure that you have these tiny moment of positive emotions because, as I've learned now in all my research, happiness and success and good health can co-exist with all kinds of negative emotions and you don't actually have to get rid of your negative emotions to be really successful and thriving.

You just have to balance them out with positive emotions. So the most happy and successful people actually have more negative emotions than people who are depressed or anxious or struggling. They just manage to balance them out with even more positive emotions.

So these power-ups are just a way to game the math. Every time you feel something really bad, you try to do a couple quick things that will make you feel happy.

Tim Ferriss: Right. To offset it, to tilt the balance in your favor. And what does the current game look like when you have people, for instance, seeing measurable improvements within two weeks and even bigger improvements between four to six weeks and you have hundreds of thousands of people who have played, what is the current state of that game or the format?

Jane McGonigal: So there's a website and there is an app. Again, it's not a video game. It's like a life management tool where we walk you through the process of hey, do you think you might have a secret identity? Here are some ways that you can investigate it. We have you think about who your heroes are, your favorite fictional characters are, what your strengths are, until you are able to craft one.

We ask you to collect power-ups. We find out more about you. We say, oh, you're trying to lose weight? Okay, here are ten power-ups that we validated to be really helpful for other players. Or here are ten bad guys that we know that people who are struggling with anxiety also struggle with and strategies for wrestling with them. So we have bad guys also. So we just kind of walk you through the process of looking at your life as if it were a game.

So it's almost like you're the game designer. You craft your secret identity. You pick your power-ups and define your bad guys and you eventually create your own quest and get the help of your own allies who you invite. We just sort of teach you the process of

thinking and living like a game designer by offering you some sample power-ups and bad guys and quests to get started.

Tim Ferriss: Let's talk about – I'm going to come back to the power-ups because I think for those people who haven't played games, it might be easy to dismiss these things as childish.

But I did some personal experimentation today, which was pretty fun, with some of your exercises. But let's talk about some games that people might be familiar with. For instance, Candy Crush Saga. So I've noticed that Candy Crush Saga has talked about as being used to lose weight in some cases and I wanted to just hear you elaborate on that.

Jane McGonigal: So this is amazing. There are so many games now that people are playing every day and have no idea that they're powerful, life-changing tools. So Candy Crush Saga has something like half a billion people have played this game. And 0.000001 percent of them know that there have been these clinical studies showing that a game like Candy Crush Saga can reduce cravings for things like food or cigarettes by 25 percent, which sounds like not a lot, but it's actually been shown to be enough of a reduction of the craving that you can make a better choice.

So it sort of gives your willpower a fighting chance. The way it works is the game is so visually intensive. So a game like Candy Crush Saga or Bejeweled or Tetris – they're the kind of games where when you walk away, you see these sort of visual flashbacks. You see the blocks falling or you see the pieces swapping. They occupy the visual processing center of your brain so that you cannot imagine the thing that you're craving. It turns out the cravings are very visual. Anyone who has had a craving knows you imagine what you want.

And the more that you see it in your mind's eye, the more irresistible the craving is. So it turns out if you can just get your brain to stop picturing it and obsess it with some other visual process, you can block cravings, not just while you're playing, but afterwards because these games have been shown to create these visual flashbacks.

Your brain thinks it still needs to keep working on this problem because you were so focused on it. So your brain is going to keep working on this visual process and even hours after you've walked away from the game. It can last three, four hours. You've played

just for 10 minutes but your brain is no longer obsessing over the thing that you were craving.

Tim Ferriss: That's fascinating.

Jane McGonigal: There are so many studies like this. This is one of the reasons why I wanted to write the book. And Tim, you actually inspired me because when I read The 4-Hour Body and you're like, people, there's all this amazing science, and you should be experimenting with it in your own life. That's kind of where game research is now too. People still have a little bit of skepticism, and rightly so because we haven't tested the Candy Crush Saga diet over 10 years with 10,000 people, but it's so easy to test in your own life and with no downside.

Most of these games are completely free to play. People should be experimenting with this in their own lives because I think this book cites a thousand peer-reviewed scientific studies. So there is a lot of research. We just need to help people get their hands on it.

Tim Ferriss: Thank you for The 4-Hour Body. Kind words, I appreciate that. I sometimes push it so far that I hope it serves as a cautionary tale to others. Let me be the guy who's getting himself perfused in any number of ways so that you don't have to be that person. But the Candy Crush Saga diet, let's talk about that. Or let's say you know you smoke when you go out and drink. If the effects last three to four hours, does that mean that a potential prescription would be to play Candy Crush Saga for say 15 minutes before you head out for Friday night? Is that the way that it might be used as an intervention?

Jane McGonigal: Yeah, absolutely. And that is a recurring finding in a lot of these studies is that a very short dose of play can provide these preventative benefits for hours or even in one of the studies that I write about in the book, two hours of gameplay changed the player's behavior for three months afterward.

Tim Ferriss: What?

Jane McGonigal: Yes. I don't know if you've gotten to the chapter yet about the cancer patients who were better able to take all their chemotherapy medicine because they played a video game.

Tim Ferriss: I have not gotten to that part yet. Which video game is this?

Jane McGonigal: The game is called Remission.

Tim Ferriss: Sounds cancer-related.

Jane McGonigal: Yeah. And there's actually a sequel that's out now too, which is awesome. They're all free to play, the Remission games. So if you know anybody, anyone who is listening who has a friend or family member who is battling cancer, this game has been shown in clinical trials to improve the patient's – first of all – optimism and self-efficacy.

They don't feel so powerless in the face of cancer, but also to include the doses of chemotherapy that they're able to take. Certain kinds of cancer like leukemia, you have to take these pills for two years, three years, at home, on an ongoing basis. There's all these side effects. More than a third of patients miss a significant number of doses because of the side effects or because it's really hard to never miss a pill on schedule over two to three years. But they know that more than 80 percent of cases where the cancer comes back is related to missed doses. So if you can get people to not miss any doses, you have dramatically improved their recovery outcomes.

So this group called Hope Lab in Palo Alto created a game designed to basically –they didn't know what they were doing – but they basically hacked these patients' brains to change how they viewed themselves and how they viewed chemotherapy so that they started to view it as empowering, rather than something that made them sick or that they hated. It was able to hack into their hippocampus and the cottae and thalamus, which we know are related to motivation and not giving up.

They know this because they did brain scans of the players and had them in FMRI machines and looking at their brains while they played the game so they could see what was actually going on to change their behavior over a three-month period. But the upshot is when they measured their blood three months later, the cancer patients who had played Remission for as little as two hours had 41 percent more chemotherapy medicine in their bloodstream and they had missed 18 or 19 percent fewer doses of antibiotics as well, which they used electronic pill cap monitors to measure.

And that was over a three-month period, two hours of playing the video game. This is a big clinical trial they ran with dozens of hospitals around the United States. It's amazing that these games exist. I think something like a quarter of a million cancer patients

have been given access to these games now, but you kind of want every cancer patient to get access to them.

Tim Ferriss: Yeah, what's the downside?

Jane McGonigal: Right, exactly. That's the thing about games as treatment. There is extremely little risk of negative side effects or opportunity costs. Because you can do a game alongside traditional therapy, for depression or if you feel like you have some kind of pharmaceutical solution you're pursuing, games really add no downside and all upside.

Tim Ferriss: So let's talk about a couple of other games. Tetris and Call of Duty. Can those be used in any particular way?

Jane McGonigal: Tetris – by the way, it's so exciting because literally yesterday a new study came out about Tetris that validates the studies that I write about in the book. I was so excited because people have been a little bit skeptical about when I encourage people to play Tetris to help prevent post-traumatic stress disorder, which I will now explain how that works. People are like, oh, that could really dangerous to tell people to do that, because what if they never see a therapist because they think they've cured themselves with Tetris, right?

So of course you always have to preface this by saying, "If you're having problems, you should see a doctor or therapist." But it turns out that if you play Tetris within six hours of witnessing a traumatic event – so they've only tested it on witnessing trauma, rather than you yourself were traumatized directly.

But if you play Tetris for ten minutes after witnessing a trauma, it prevents flashbacks and lowers symptoms of post-traumatic stress disorder afterwards. It's really actually very similar to how the Candy Crush Saga diet works in that –

Tim Ferriss: It's overriding your visualization.

Jane McGonigal: Exactly. It prevents your brain from obsessing over what you saw. And what's amazing is this new study that just came out this week shows that if you miss that six-hour window – because one of the reasons why people were skeptical was, who's going to remember to play Tetris within six hours of a trauma? Even though I've been doing my best to create public service announcements so people

know. Kind of like "stop, drop and roll" if you catch on fire. Do you remember that? "Stop, drop and roll."

Tim Ferriss: Oh, sure.

Jane McGonigal: So I'm trying to drill into people's heads, "Play Tetris. Don't replay the trauma. Play, don't replay." But people are like, nobody's going to remember after a trauma to play. So now, they have found out that you can actually wait 24 hours.

And if you re-stimulate the memory – so you ask somebody to visualize the trauma for just a minute or two so it's fresh in their brain. Their brain is accessing those memories and dealing with them directly, and then you go play Tetris for ten minutes. You can – you're not erasing the memory.

Tim Ferriss: You're like overriding it.

Jane McGonigal: Well, this is interesting. This is super critical detail. You can still recall the experience if you're asked questions. You can remember details of the experience. So it's not like Eternal Sunshine of the Spotless Mind. You can still remember. But your brain is not forcing you to think about it when you don't want to. So it's voluntary recall only. So this new study shows you can wait 24 hours, prime yourself by thinking about it and then play Tetris for ten minutes right afterwards and then that reduces the flashbacks and PTSD symptoms as well. And they think if it can work after 24 hours that this might be able to work with people who have been suffering for months or years with flashbacks.

Which is amazing because it is literally the hardest to treat symptom of post-traumatic stress disorder. When people get flashbacks under control their quality of life improves immeasurably.

Tim Ferriss: Call of Duty?

Jane McGonigal: Call of Duty. Well, there are like a million things that Call of Duty does really well. You've already covered some of that on a previous podcast. I know you were talking about cognitive enhancement benefits.

Tim Ferriss: With Adam Gazzaley from UCSF.

Jane McGonigal: Yes, he's amazing. I love his work.

Tim Ferriss: Yeah, he's a great guy.

Jane McGonigal: So we won't talk about cognitive enhancement. But Call of Duty, the first thing it can do is really improve relationships with people if you play in the same room with them. If you can actually be physically in the same space with somebody playing with them, because it dramatically increases mind-body synchronization.

So what that means is if you're playing Call of Duty with someone in the same room, you start to sync up with them at every possible level. Your breathing rates – you'll start to breath in and out at the same pace. Your heart rates will synchronize, so your pulses are kind of equalized. Your facial expressions with start to mirror each other. Your body language will mirror each other. Your brains will actually start to show blood flow in the same region and the same tempo as each other. They call that mirror neuron effect.

It actually happens in basically all video games, but the more intense, sort of high-speed, fast action the game is, the more it happens. Because in order to do well in a game, whether you're competing against someone or collaborating with them on the same team, you have to be able to anticipate what they're going to do next, right? So that you can either cooperate or be effective, or so that you can outmaneuver them and beat them. That forces your brain to try to mirror what their brain is doing.

And as soon as your brains start to mirror each other, everything else starts to mirror each other. It turns out this is like the building block for compassion and love. So basically you love people more when you play Call of Duty with them, but only if you're in the same room.

Tim Ferriss: Physical space.

Jane McGonigal: Yes. Most gamers are playing with people remotely and a distance, but if you can get in the same room, that has a really magnificent benefit.

Tim Ferriss: So I'm going to take a digression into what might be an urban myth. It's not really an urban myth. Old wives' tale? Also not totally appropriate. But you have an identical twin, is that right?

Jane McGonigal: Yes.

Tim Ferriss: Have the two of you experienced anything that is like spooky accident action at a distance? You must be sick of answering this type of question, but I'm really curious.

Jane McGonigal: Well, you see, now you're going to like – I'm really into science. So now I will say something that will sound like mystical, spiritual.

Tim Ferriss: Can I add a caveat just to make it easier?

Jane McGonigal: Yeah.

Tim Ferriss: I believe a bunch of stuff that seems quackier than the quackiest of quack. But it's from empirical, first-hand experience and just because we can't explain it, doesn't mean we won't be able to explain it.

Jane McGonigal: I think there's actually probably some – in physics, they talk about you can have the twin effect, like protons will be separated but then will be able to communicate at a distance a billion light years away from each other in the galaxy. So maybe the fact that we were once the same egg. We are identical twins. Maybe we have some weird, spooky twin effect. So yeah, I call it "twinfection," because it only works if something really horrible is happening to my sister, it's almost like I'm having a heart attack.

I feel like I'm going to throw up. I can't breathe. I feel like I'm being attacked. It happened a couple years ago during a really emotionally traumatic time. But this is the most recent. It doesn't happen all the time. It really only happens when something truly horrible is going on. I was at a store in Los Angeles. I fell to the floor in the dressing room. I'm like what's going on? Then literally two minutes later, my sister called me sobbing, the worst pain I've ever heard her in. She was dealing with a death in the family. I was like, okay, that explains what just happened because I was having a "twinfection" moment.

Tim Ferriss: Yeah, wow. And you have a pretty twin-rich life at the moment.

Jane McGonigal: I do. I have little twin babies. I have my own little twin girls.

Tim Ferriss: And are they identical or fraternal?

Jane McGonigal: They're fraternal, so it'll be a totally different experience. Because I think having someone with the same DNA, it feels like your

whole life is an experience. Like whenever she does anything amazing, I'm like, why am I not doing that? We're like the same person, I should be able to do that too. I think fraternal it's less pressure.

Tim Ferriss: Less pressure, but there's still something there. I have relatives who are fraternal twins. There's still some unusual connection there.

Jane McGonigal: Oh, good.

Tim Ferriss: But I don't want to take us too far off the reservation here. But I am fascinated by this stuff. And partially, I was reading at the beginning of the new book, the SuperBetter book, and there were a couple things that jumped out at me. The first was, in effect – let me just find it here. There's a line that reads, "But even when I still had the symptoms, even while I was still in pain, I stopped suffering." And I think this is a really important concept because I'm not sure if this is from the military or elsewhere, but I've heard "Pain is mandatory, suffering is optional."

Jane McGonigal: Right. Or "Pain is inevitable, suffering is optional," which is a Buddhist saying, actually.

Tim Ferriss: Well, there we go.

Jane McGonigal: The Buddhist military.

Tim Ferriss: From the Buddhist Special Operations Forces. I think is really important because, like you said, it's not necessarily about eradicating all negative experiences, which is not possible, but about increasing, if you have two bank accounts – one of negative experiences and one of positive, you just want to make sure that the balance in the positive is higher than in the negative. Could you talk a little bit about post-traumatic growth?

Jane McGonigal: Sure, yeah. The idea of a gameful mindset is that it's exactly that. You look at pain as inevitable but suffering is optional. Because if you think about when you play games, you're always trying to suffer when you play games.

Games are voluntary suffering. You think about golf, you know? If in real life your goal were to get a small ball in a small hole, you would just walk up to the hole and you would put the ball in it and you would be happy with the outcome. But you volunteer to suffer by standing really far away from the hole, which is a stupid way to

achieve the goal, and then you use the stick to try to aim the ball, which is also pretty inconvenient. But every game we play – like Scrabble is the same way. You don't get unlimited letter. You only get the seven letters and you can't even pick them yourself. So it's voluntary suffering. Things are harder than they should be.

And that's what unleashes the creativity and the curiosity and the optimism and the recruitment of friends and resources. The gameful mindset is really about how do you look for voluntary obstacles in real life? How do you look at things that you are currently experiencing as suffering as instead a way to get stronger or happier?

And then that's the idea of post-traumatic growth comes in, which is not all that new a field of research now. There's probably a decade's worth of research now showing that many people who undergo a traumatic experience, in addition to suffering, and by the way, post-traumatic growth is not the opposite of post-traumatic stress disorder. That a misconception that many people sort of stumble onto. Most people with post-traumatic growth first experience post-traumatic stress disorder. So just because you have one, doesn't mean you can't ultimately wind up with growth.

It's a process whereby wrestling with these really difficult things, you get to know yourself better. So at the end of post-traumatic growth, you feel like you understand your strengths better, you feel like your friends and family understand you better, you feel like you know your priorities in life better and you have more courage to make decisions so that you're putting your time and energy on the things that matter most to you.

It's kind of similar in that way to a near-death experience. A lot of people who have a near-death experience, suddenly they relish every day, they're not afraid to speak their minds, they really do put more time on their personal dreams or spending time with friends and family. So post-traumatic growth is the same way. But you only get it by really wresting with this incredible, almost existential crisis in your own life. Which for me was the traumatic brain injury and not knowing whether I would ever work or really be myself again.

Tim Ferriss: But it can take the form of setting a goal like running a marathon or fill in the blank, right?

Jane McGonigal: There have been now a couple books about post-traumatic growth, but I am happy to say that I have the first book on post-ecstatic

growth, which is a concept that was originally discovered by this amazing researcher, Anne Marie Ripke at University of Pennsylvania. Not a lot of people are familiar with her research and I'm hoping this book will shine a spotlight on it.

She found that many people seem to be exhibiting characteristics of post-traumatic growth by doing things that they had chosen for themselves and that were not traumatic experiences, per se, although there might be trauma involved. So training for a marathon, being a parent for the first time, starting your own business, going on a kind of spiritual journey, like a physical mecca somewhere. Things that are really challenging that you will probably fail at sometimes, make mistakes, struggle and that really force you to cultivate that same understanding of your own strengths, reaching out to friends and family, taking stock of your priorities. It turns out you can have all the benefits of post-traumatic growth without the trauma.

Tim Ferriss: You can engineer it.

Jane McGonigal: Yes. And so that's why the SuperBetter method is basically a roadmap to post-traumatic growth if you have an illness or injury or if your life is pretty good and you still want to get all these benefits helping you define for yourself a challenge that will be meaningful and difficult enough, but also doable that you can get to these benefits.

Tim Ferriss: So I have one observation and then a question. The observation, when I was reading this, and then also listening your description and talking about, for instance, the post-traumatic growth following a near-death experience, which is of course, not something that you – it's dangerous to try to engineer near-death experiences in the literal sense.

Jane McGonigal: Although a lot of people do, right? As you know, people pursue extreme sports and things like that because of that ability to really see so clearly what you want out of life.

Tim Ferriss: It magnifies and really exaggerates a lot of the emotions and provides clarity in those moments in some cases.

I couldn't help but think about the wife of a friend who used to work in hospice care, palliative care. She would sit with people in the weeks and then moments before they passed on, before they died. It turned out she was basically a Michael Jordan in that capacity. She was really good at guiding people through that, but

she wanted to have the opportunity to help more people. She ended up then working with psychedelics to help people simulate that type of near-death experience.

We don't have to go far down this road, but I've had conversations, for instance, on the podcast with Jim Fadiman who talks quite a lot about micro-dosing, but also the use of higher doses for what some people would call spiritual or mystical experiences.

Jane McGonigal: Yes, well, this is actually very interesting because when I was at Berkeley doing my Ph.D., I actually wrote a research paper on the commonality of experience of people who were playing these certain types of games, these kind of very collaborative, collective intelligence games and these spiritual, drug-taking, the "psychonauts" they call themselves, right?

Tim Ferriss: Berkeley is a good place to do that.

Jane McGonigal: Yeah. So that's something I've actually been interested in for a very long time because I do think there is a spiritual element to a lot of gameplay in that sense of really wanting to open yourself up, particularly in games that require you to be part of a massive community and part of these kind of epic narratives, like Joseph Campbell's Hero's Journey.

There is definitely a spiritual element to that and a lot of spiritual benefits that come out of gameplay. For my third book, I keep saying I want to write a book called Super Mario was a Buddhist. So maybe we should come back to that in episode 800 of your podcast.

Tim Ferriss: Right, Super Mario was in the Buddhist Special Ops, as we mentioned earlier.

Jane McGonigal: Yeah, I actually got to go to a Buddhist conference and give a keynote with all of the most important Buddhists in the world were there and I actually gave a keynote called "Super Mario was a Buddhist," but it had a question mark after the title.

Tim Ferriss: That gives you an out if there's a mutiny in the crowd.

Jane McGonigal: Yeah, exactly.

Tim Ferriss: I'd like to ask a personal question and this is because I love playing games. I was a Dungeons and Dragons aficionado/obsessive growing up and that was my refuge.

I was a real kind of runt dork growing up and got beat up in elementary school and whatnot, so I used games as a way to escape, but also as a way to live this sort of virtual life that enabled me to, I think, in many ways, develop characteristics I wanted later in life. But when people ask me now, oh are you a gamer? I don't know how to answer that because when I look at how slick the games are that have been developed and how much money has gone into developing games that are as addictive as possible, I choose not to play those games out of fear.

And the fear is the same fear I would have if I tried heroin. If someone asked me, have you tried heroin? I'm like, no, I haven't, I'm sure I'd love it and that's the problem. I don't want to become a heroin addict. And I worry about becoming one of these people who sinks 40 to 60 hours a week into World of Warcraft because I know I have that capacity.

I know it's there. So what are ways that people can re-introduce gameful mindset or gameplay? Let's just say it's somebody who is working 80 hours a week and they recognize they want the joy and all the promises of a gameful mindset and/or gameplay, but I don't want to go off the deep end and end up becoming completely consumed.

Jane McGonigal: Yeah. I can really relate to this, by the way. People ask me what my favorite games of all time are and I always have World of Warcraft in the top three or four best games of all time. But I only played it for a very short time because I saw what my future was going to be like if I didn't get out quickly. My husband and I, our plan is when we're retired and old, unless they've invented life extension technology so that at 150, we're trying around like a 20-year-old.

Assuming old age is similar to how it is today, I'm going to be totally addicted to these games when I'm 90 because it'll have all these cognitive-enhancing benefits and I'll be socially connected to other people. So I'm waiting to get addicted until it really is better than trying to live my old life. But there's lot of things you can do. And I should just say also as a sort of public service announcement benefit – one of the things that I write about in the book – there is an entire chapter on what makes a difference between somebody who benefits from playing games and brings a gameful mindset to

real life and somebody who develops some kind of addictive or pathological or compulsive gaming behavior.

And there are two things that predict whether you will benefit and be gameful in real life or whether you will get addicted and the rest of your life starts to suffer. So the two things that are predictive – one is really simple; it's 21 hours a week. That is the tipping point.

I've looked at all kinds of studies from people in the military to elementary school students. 21 hours a week; when you go over that, we start to see suffering in other aspects of life, such as physical health, mood, and your ability to do well at school or at work or other aspects of your life.

Tim Ferriss: Three hours a day on average.

Jane McGonigal: But you could pile up on the weekend, it doesn't have to be. So I always say, if you feel like you're addicted or you have a family member who you fear is addicted, do not take the games away. Because as you learn about reading the book, games are very powerful. They help treat or prevent depression, anxiety and if you take games away from somebody who is gaming 30, 40, 50, 60 hours a week, you're basically taking them off an anti-depressant without tapering. We've seen a lot of people – there are many cases of people committing suicide, young people when their parents have taken away the games.

It's not just that they're upset or angry, it's that literally their brain has had this powerful anti-depressant ripped away from them. So just go down to 20 hours a week. That is one piece of practical advice for people who are really dealing with addiction or compulsion. Do not give it up. Just get it down to 20 hours a week. That's actually very manageable for most people, even people who feel like they love to play, they don't want to give up games. You can get it down to three hours a day. So that is a practical tip. But the other thing that predicts negative outcomes or you're just not getting the benefits of games in real life is looking at games as escapist.

So I was really interested to say that you thought about games as escaping, but you also maybe thought about them as a way to build these character strengths. So it turns out the No. 1 predictor of who will suffer from gameplay is people who think that games are an escape from real life or a way to avoid thinking about or dealing with real problems.

People who manage to bring the gameful mindset and all the benefits of games to their real lives are the people who identify benefits to gameplay and can talk about them and can identify them and say "I'm not just playing Candy Crush or Call of Duty because I just can't deal; I just need to shut everything off." They're the people who say, "This is quality time for me and my brother when we play this game together. This is a real benefit to my life." Or "I'm playing this game because I'm having really anxious thoughts and I want to shut them off and I know if I play this game for 10 minutes, I can shut down. I'm not going to have a panic attack."

So if you have a real purpose for how you play, that's when you start to build up the self-efficacy to use the gameful strengths in real life. So you're asking a very practical question like "What should I do? What should I play?" Literally 10 to 20 minutes a day.

If you do 10 minutes every day or 20 minutes three times a week, that's what's been tested in clinical trials and randomized control studies to have powerful impacts, first and foremost on depression and anxiety, improving your mood. For social interactions, 10 minutes a day improves the number of people you have in your life who will help you with a real life problem. So I think of it as I make time to do 10 pushups during every commercial of tennis that I watch on TV. So you should think about it that way. How do you squeeze in a little bit of gameplay into your downtime? That's what I would recommend.

I have to ask now, since you mentioned it, what's on your top 5 game list? Just a handful of your favorite games? But then also, for someone like me who doesn't want to get sucked into the vortex, it feels like I should probably stay away from world building games in that case and maybe go with the kind of more transactional kind of Tetris type of game or something that allows me a closed, short session? But what are some of your favorite games? What are on your hits list and then what might be games that I could use for those 10 to 20 minutes a day? And then what should my intention be going into them?

Jane McGonigal: Yeah, okay. We won't do like an all-time favorite games. Because otherwise I'd be like Dance Dance Revolution totally on my top 10 all-time, but nobody plays that anymore. Okay, so Tetris is definitely – everybody should have that on their phone because it treats so many different conditions from anxiety to post-traumatic stress disorder to building up your willpower. So everybody should have Tetris. Games that other people you know are playing is really good.

So this changes depending on the times. So a lot of people are playing Clash of Clans right now or Candy Crush Saga or Words with Friends. You should just check out what people you know are playing, because a lot of the benefits that have been documented for games comes just from having these sort of micro-conversations with friends and family about the same game that you're playing or actually playing a game with them. So any of those three games would be good. I think Minecraft is really great, even though it's the most popular game of all time for kids now, it's actually a really great resilience building game for grownups.

Because if you die, if you have your stuff blown up and you have to start over again, it has the qualities of a kind of game that we know builds resilience, builds determination and willpower that can benefit you in real life.

By the way, if somebody has not played Minecraft, they've missed out on one of the biggest cultural gifts of our generation.

Tim Ferriss: That's me looking down at my feet right now, so I'll get on it.

Jane McGonigal: So definitely do that. Because the next generation, that's going to be their No. 1 nostalgia point. All you're going to hear about 20 years from now are people in their 20s and 30s talking about Minecraft. So at least expose yourself. And then I think single-player puzzle games or single-player adventure games are really good for provoking positive emotions. So Portal is something I always recommend to people. There are Portal and Portal 2. It's incredibly challenging but hilarious puzzle game that even though the first one is single player, you can play the second one co-outpatient, which is really cool.

In fact, when I was playing Portal 2 with my husband and we were also training for a half marathon at that time, we actually used our Portal skills to better navigate all the people that we were trying to run around and pass in the race. We would use the same gestural system that you use in the video game to communicate with each other like how we were going to get around all these people and still then come back and run together. So add Portal to that. Yes, those are some good games to start with. But really, any game that you love, including – you could be playing Pandemic, the board game. You could be playing poker. You could be playing bridge, golf, whatever. Most games, even video games, also help you develop that gameful mindset.

Tim Ferriss: You have some babies, you have some dogs, you have a husband, and you have at least one or several jobs.

What is your sort of weekly – let's just say this past week or next week – what does the workout schedule look like with the gaming? Where do you squeeze it in? What time of day? How many days a week?

Jane McGonigal: Okay. So first of all, with two babies, I literally cannot play anything on a console now because I only, at best have one hand. Like one thumb, basically. So we're talking strictly games on my phone. So for me, Candy Crush Saga is the best one to be playing

now because both my parents-in-law play and they are helping us take care of our babies. So when they come over, I can give my father-in-law a baby to feed and I can take his phone and try to get him off a level that's – you know because I'm like 400 levels ahead of him. So I can take his phone and help him get off the level and now he's happy because he's ahead a level and I'm happy because he's feeding the baby.

So for me, that's actually really important. Using games as a cultural touchstone or piece of common experience with other people. My mom is also playing, so that's really helpful. Then I play tennis with my husband once a week, which is really good for me because if I lose 6-0-6-1, that is an amazing match for me. I won one game. He's 6'3", he's a dude. I get clobbered.

Tim Ferriss: So is he just 100-mile-an-houring – I don't know my numbers, that might be slow, I don't know.

Jane McGonigal: No, that's a good serve.

Tim Ferriss: I mean, is he just going to bean you? Is he going for the kill?

Jane McGonigal: I finally just convinced him three or four weeks ago to serve such that I could return.

Literally, it was ridiculous. But my only points were if he double-faulted. So that's a really good game for me that I play once a week because I'm kind of killing it in other areas of my life. I feel very successful in other areas of my life and I think getting clobbered once in a week in a game that I'm very bad at – I just don't think this, this is documented to be true – if you can take the clobbering and stay optimistic and still have positive emotions throughout that experience, it builds a lot of psychological resources that you will be able to draw on when it's not a game. When it's real life.

Tim Ferriss: Resilience.

Jane McGonigal: Yeah. So I'm getting clobbered once a week in tennis and playing Candy Crush.

Tim Ferriss: Which day of the week? What time of day? I love the specifics. How many times a week, how many days per week are you playing Candy Crush Saga and then what day of the week on tennis?

Jane McGonigal: So Candy Crush is every day and I would say I probably look at it twice a day, maybe in the morning I make sure to spin the world to get my free power-up. I might not play it, but I'm like, I don't want to forget. Because every day in Candy Crush you can get one free power-up, otherwise they charge you like $.99 for it. So I make sure even when I'm traveling and giving talks in other countries and have no time for anything, I always log in once a day and spin so I can have this stash of power-ups for when I'm on a really hard level. So I do that in the morning and then later in the evening I will do it. I find it's actually good for me before I go to sleep because I have one of those minds that will anxiously race about all the things that I have to do tomorrow. So there's a set of quests and power-ups and bad guys for insomnia in SuperBetter, so I know one of the tricks for that – one of the ways you battle the bad guy of the sort of ruminating on things you have to do tomorrow is to totally occupy your brain with something else for 10 minutes. So I find that to be a good kind of nightcap for me.

Tim Ferriss: That's a great idea. Maybe that's how I'll get my Tetris. Because I've used fiction for that but sometimes I just don't have the concentration perhaps for fiction.

Jane McGonigal: Exactly.

Tim Ferriss: And then the tennis is on?

Jane McGonigal: Tennis is on Sunday afternoons. That's when his parents babysit for us and we go and play.

Tim Ferriss: So get it on the calendar people listening. You can't just improvise your way through the entire week. It's very helpful to get it on the calendar. Let me ask a handful of last questions. I want to be respectful of your time and make sure that your kids aren't climbing out the windowsills or something. When you think of the word "successful," who's the first person who comes to mind and why?

Jane McGonigal: Oh, my goodness. I've heard you ask that question of someone else too and they were totally stumped too. I was going to say Bill Gates; which first of all is very boring and also it's a man and I really want to answer a woman. So I'm going to – because that's something I spend a lot of time doing, making sure that I don't accidentally talk only about successful men. Even in my book, I make sure I'm citing a lot of women scientists because it's oftentimes the first person we think of is a man because they're so often talked about more. I'd like to say Elizabeth Warren is

actually the next name that came to mind – Senator Elizabeth Warren, because I think she is doing an amazing job of pushing back against powerful interests in this country and getting us to talk about making big changes to our financial system and our political system.

It's really hard for anybody to get any traction in this country today. So that is who I thought of. Maybe it might be wishful thinking, because I would love to see her run for President. So maybe I'm using my futurist forecasting skills here to think that in 2024, she has just successfully been elected President. And that's why I thought of her as the most successful person I could think of. Cross your fingers, everybody.

Tim Ferriss: Nostradamus. Speaking of successful women, there are a number of exercises in the beginning of SuperBetter. I did actually go through these exercises, including the quests, I should say. I actually did both of these. So I was in a coffee shop and one of them was stand up and take three steps. Or make your hands into fists, hold them over your head as high as you can for five seconds. So I did both in this coffee shop.

Jane McGonigal: Yes, you're totally a gamer. You gamed it!

Tim Ferriss: I pretended to be stretching because as it turns out, five seconds is pretty long.

Jane McGonigal: Yes, it is.

Tim Ferriss: But I love these comfort challenges. And then there was the, for instance, the snapping of the fingers exactly 50 times. These very, very small things – looking out the window for certain periods of time and so on – that I found really fun to do, even as comfort challenges. I just enjoy anything that allows you to practice being uncomfortable. The line that struck me was "I've watched some amazing people complete the same four quests you're about to undertake, including Oprah Winfrey, legendary skateboarder and entrepreneur Tony Hawk." And then it goes on. So how did you get Oprah to do these exercises?

Jane McGonigal: Right. That was a long story. I was on tour with Oprah on her life class show.

Not actually doing anything on stage with her, but we created a game together called The Thank You Game, Oprah's Thank You Game. And it was a game designed to spread gratitude to as many

people as possible because gratitude is contagious and has all these amazing life and health benefits. So I made a game for her. Somewhere along the way, I had gotten a phone call from her people who'd stumbled across some scientific research and then they saw my name associated with it. I just got very lucky that her and her team were suddenly interested in games and gameful psychology. It was the first time I met her. I'd had meetings with her team like a dozen times. I was in a conference room and she comes in and gives me a big hug and says, "I love you." I basically look at her as having saved my life as a kid.

I watched her every day after school. I felt like it was going to therapy watching her show growing up.

Tim Ferriss: She's really amazing.

Jane McGonigal: Yeah. Literally her saying "I love you," I felt like I could've died on the spot and my life would've had a full karmic circle. I was totally okay with that. But we just started talking about the power of games and I said, "Let me show you the game that I'm working on now." I didn't know she was going to actually do it and play along and she did. It was freaking awesome. That led into making the Oprah's Thank You Game, where we spread gratitude. How many people did we get to? I think it was over 100 million people, which is pretty amazing.

Tim Ferriss: The Oprah effect.

Jane McGonigal: Yeah.

Tim Ferriss: 100 million people. Like, oh yeah, just another 100 million people. Incredible. What is the book that you've given most often as a gift? Or any books you've given a lot as gifts?

Jane McGonigal: There are two. One is called Finite and Infinite Games, which is by a professor of religious studies at New York University named James Carse. It's basically a book about games, but then it turns out it's about the meaning of life. You don't know until the last page. It's this big shock. It's like Sixth Sense. You thought you were reading a book about games and then suddenly it's like –

Tim Ferriss: The red door knob!

Jane McGonigal: Yeah, yeah. The last line of the book is "There is but one infinite game." And then you're like, oh, shit, it's life. Life is the infinite game. And it's a tiny book; it's practically a pocket book. So

anyone who is interested in philosophy and looking at games as a way of life, that's a really good one. And then a book well, it's called "Suffering is Optional," actually.

So it's by my favorite Buddhist teacher, Cheri Huber. I'm very inspired by Buddhist practices. I practice Zen Buddhism myself. I think that gameplay and Buddhist practice are both a way to arrive at a similar approach to life. That's another good book.

Tim Ferriss: What was her last name?

Jane McGonigal: Huber, H-U-B-E-R.

Tim Ferriss: Awesome.

Jane McGonigal: She has an amazing podcast too, by the way. So if people love your podcast, they can listen to her podcast too.

Tim Ferriss: Just interviewed – I'm not sure if you know the name – Tara Brach. But she's an amazing teacher and focuses on mindfulness and Buddhist teachings and so on. Just fantastic. I think that this has been a really interesting week for me, because it's tying together a bunch of seemingly disparate activities.

So you have the Buddhist philosophy and teaching, and then you have Stoic philosophy, which I've read a ton of, and just a huge fan of whether it's Seneca or Marcus Aurelius or others. And then you have the gameplay and they serve very similar – they can help you achieve very similar outcomes. It's very fascinating. Do you have a favorite documentary? Any favorite documentaries?

Jane McGonigal: I have to plug a documentary called Gamers, which was made in 2003, I think? It was the first full-length feature documentary about competitive video game players. At time it was the Cyber-Athlete Professional League, the CPL. Now, of course, you've got League of Legends finals. More people attended, bought a ticket and attended League of Legends finals than the Stanley Cup finals this year.

Tim Ferriss: Wow.

Jane McGonigal: But this is from 2003 and it's available in its entirety on YouTube.

So you can watch it for free. But that was a fascinating documentary that I think – as the years pass and competitive video

gaming becomes even more a part of our mainstream athletic lives, that early look at it is pretty damn cool.

Tim Ferriss: Have you seen King of Kong?

Jane McGonigal: Of course.

Tim Ferriss: Okay, all right.

Jane McGonigal: Yes, in the movie theater the day it came out.

Tim Ferriss: Oh, my God, King of Kong. You want to talk about old-school, mullet vengeance, retro video game competition – so amazing. I will definitely check out Gamers. And for people who haven't seen King of Kong, it seems like a Spinal Tap parody; like a mockumentary. It is such a hilarious – such a well-done documentary.

Jane McGonigal: Well, people take games seriously. That's one of the great paradoxes of play, right? It's only play if it's not serious, except then we take it incredibly seriously, which is good because that unlocks all of our gameful strengths.

Tim Ferriss: Just a few more questions. What purchase of less than $100.00 has most positively impacted your life in the last say 6 to 12 months?

Jane McGonigal: This is not going to be surprising at all. But I would say at Bjorn carrier for the babies. We live on a hill and every day we take the babies out for an hour-long walk. Half an hour trudging up this really steep hill and coming back down. Being able to leave the house and get some fresh air and also a great workout because the babies are getting fatter every day. Just when you're getting really fit walking up the hill, the baby weighs another pound. So I would say my Bjorn carrier.

Tim Ferriss: Is that like a strap that attaches said fat babies to you?

Jane McGonigal: Yeah, it's like a harness. It goes around your back and then the baby kind of hugs your chest.

Tim Ferriss: Cool. B-Y, B-J?

Jane McGonigal: B-J-O-R-N. Yeah, Bjorn.

Tim Ferriss: Yeah, this is progressive resistance for moms. It's kind of like the story of Milo of Croton, who every day had to pick up a baby bull

calf and lift it over a fence. And then, of course, the story goes as it became a larger and larger bull, he became the strongest man in the world.

Jane McGonigal: Yes! And this is such a great way to tie back to video games because one of the reasons why video games tend to be even better for your gameful mindset than other games is that they always get harder.

Tim Ferriss: Right, it's adaptive.

Jane McGonigal: There's progressive resistance. Adaptive, right. Not like chess where it's very hard to find somebody who is just slightly better than you every single time you play. Video games are designed to be that kind of progressive resistance. So you're always playing at the edge of your ability, therefore always getting better.

Tim Ferriss: That's such an important point. I'm really glad you brought that up. What morning rituals are important to you?

Jane McGonigal: I'm a terrible person. I will confess. There's a neuroscience hack in here. So when I wake up, I basically put on tennis – whatever the last 24 tennis matches are on TV, I'm constantly recording on the tennis channel or ESPN live tennis. And then I do email while I'm watching tennis. I spend an inordinate amount of time watching tennis. When I started my start-up company for SuperBetter, I would disappear for eight hours to go watch the French Open live. That's working with Jane is she will go disappear and watch tennis for eight hours a day for two to three week stretches.

But it's a good neuroscience hack because – this is true for all professional sports – every time you make a prediction about something, your brain increases the amount of dopamine that it has access to because it anticipates either success – you successfully predicted what would happen so that's great. Or you'll learn from your mistakes. So you'll learn information that will make you have a better prediction next time. Every time you get a little boost of dopamine, it's like taking amphetamines, right?

So I like to start my day with watching a tennis match because I will have a prediction about who I think will win and then I will either be right or wrong and I will either feel super awesome that I was right, or I will learn something about how somebody is playing right now and what their game is like right now and I'll make a better prediction next time. It's like a really strong cup of coffee or taking an amphetamine. Giving my brain that kind of a

boost every morning. But if you have a sports team that you like – that's why people who are really into professional sports are happier during the sports season than off season.

It's not just that they miss their favorite game; it's that their brain is constantly anticipating success for their favorite team, which is increasing dopamine. So I like tennis because they only have one month off all year. They play for 11 months. The season is incredibly long.

Tim Ferriss: You can get your fix more regularly.

Jane McGonigal: Yes, exactly.

Tim Ferriss: Now, I wasn't expecting to ask this question, but now that you mentioned watching tennis, I love watching tennis, mesmerized by it. And it's true for a handful of individual sports like gymnastics also, same story. Have any studies been conducted looking at the carryover benefits of observing gameplay as opposed to being involved in it yourself?

Jane McGonigal: Yes! Oh, my gosh, yes. But it only works if you know how to play the game yourself. And if you know how to play the game, you active mirror neurons. So I have found if it's during Wimbledon or the French Open or U.S. Open, I've been watching literally eight hours a day for two weeks.

I will go on the court that Sunday and play better because I know how to play tennis and my brain can physically embody – like if I see somebody going for a point, my brain understands what that feels like and so it creates a mirror neuron effect. So it's practicing. If you have never played the game or sport yourself, watching gymnastics is not going to do a lot for you unless you have physically been on the mat or on the rings or the bars and you know what it feels like. But if you know what it feels like, then your brain practices while you watch and it actually is beneficial and that has been documented. So if you want to get the benefits of watching a sport, you should make sure you've played it enough times that your brain can follow along in that mirror neuron way.

Tim Ferriss: So that brings up all sorts of interesting ideas, such as, for instance, if I knew I was going to have a surgery that was going to take me out of commission from a sport standpoint for three to six months – I'm just making that up – if I didn't know how to play tennis, I could do like a three-day or two-day intensive immersion course

for tennis and then use watching tennis therapeutically when I'm laid out for the subsequent period of time.

Jane McGonigal: You are so good at this. I love the way your brain works. That is such an awesome and extreme idea. I really think you and I should write a book together sometime. That would be something new and interesting. If you could take all of this research to that extreme, really life maximizing level in ways that I would never think about. You're a genius.

Tim Ferriss: Well, we need to hang out more.

Jane McGonigal: I agree.

Tim Ferriss: I keep on saying a few more questions. "Five more minutes, Turkish," like that guy in Snatch. But anyway, if you had a billboard you could put anywhere that could say anything, what would it say and where would you put it?

Jane McGonigal: Oh, my God. Well, I would get a billboard that says – I really want to do a public service announcement about Tetris. About how Tetris can prevent post-traumatic stress disorder. I would put it – I don't know where. You should put it in games. Because you can buy advertising in video games. I should have a billboard in video games so that people who are open to this idea of games and playing them and benefitting them. Because it really makes me agitated that there is so much good research that would have such profound – the difference between getting PTSD and not getting PTSD and what that would have on your life is so freaking profound that I really feel like I would like to get in people's faces about that.

So ten minutes of Tetris after a trauma – done. That's my billboard.

Tim Ferriss: I love it. I want to play with Tetris. I grew up playing Tetris on the Gameboy. It doesn't take a lot to twist my arm to get back into it. But I heard a phrase recently which was a take on PTSD, but it was related to worrying about things. So having anxiety about what might happen and it was called, "Pre-Traumatic Stress Disorder." I'll do some experimentation and report back to you. But I wonder if Tetris could have an inoculating effect against experiencing trauma or even foreseeing trauma. Because you would imagine since that worrying is often a visualization, it might have the same type of kind of decoupling or coupling effect that minimizes the negative. I don't know.

Jane McGonigal: Well, as you get further in the book, you'll see – actually, it's Super Mario that's been tested for basically exactly that thing. To sort of prevent the predictive anxiety better than anti-anxiety medications.

Tim Ferriss: I need to play more games that is clear. And it's such a nice day, I think I want to go whack a tennis ball around. So if you could make one ask of the people listening or a recommendation aside from, of course, the book. I will put everything in the show notes. But what ask or recommendation would you make of the people listening?

Jane McGonigal: I would encourage people to ask one person in their life what is their favorite game? It could be any kind of game, doesn't have to be a video game. What it is they think that game makes them good at? Because one of the things that I found in my research is the best way to ensure that somebody starts to use their gameful strengths in real life is to talk about what games they play and what those games make them good at.

So if we could have everybody ask one person that question, not only will you learn something really interesting about someone you care about, but they will also benefit from now starting to think about their gameful strengths and then maybe how they might apply them in real life?

Tim Ferriss: Well, Jane dear, you and I should get together and scheme like Pinky and the Brain to come up with some type of massive experiment that we can do with people.

Jane McGonigal: I love it.

Tim Ferriss: We should definitely make that happen. This is really fun. Jane, where can people find out everything about you and learn more about SuperBetter and also say hi to you on Twitter, Facebook or anywhere you might be active?

Jane McGonigal: Yeah, I'm super active on Twitter. I'm avantgame, but you can just search for my name. My website is Janemcgonigal.com, but I have another site that I think everybody who listens to you will like, which is showmethescience.com, where I collect all of the studies that back up all of the things that I'm encouraging people to do with games. You can actually get the full academic article if you're a geek like me and read it and so you don't have to take my word for it. Everything that I've said in the book – I have literally a

thousand studies online that you can click to and read yourself so that you can be a geek like me. So it's showmethescience – like show me the money.

Tim Ferriss: Show me the money. You just brought up all sorts of visuals for me. I'm seeing Cuba Gooding, Jr. dance around with his shirt off.

Jane McGonigal: Play Tetris to block the imagery.

Tim Ferriss: Well, Jane, it's always so much fun to hang out virtually or in person. We need to hang out more. Everybody listening, check out SuperBetter, a revolutionary approach to getting stronger, happier, braver, and more resilient. I am stoked to go play some more games. I am going to do that today and make it happen.

Everybody who is listening, show notes, links, everything will be at fourhourworkweek.com/podcast all spelled out; you will be able to find links to everything. Jane, thank you so much for taking the time.

Jane McGonigal: Thank you. You are awesome. You are one of my heroes so this is really amazing to get to do.

Tim Ferriss: Well, I feel the same about you. So we will go hatch some plans. Everybody, thank you so much for listening, and until next time, game on.