



How Self Directed Play and Exploration Promote Children's Social, Emotional, and Intellectual Development

Dr. Peter Gray

Interviewed by Dr. Laura Markham

Laura Markham ([00:00:04](#)):

This summit is brought to you with love by Peaceful Parent, Happy Kids. Welcome. Hello, I'm Dr. Laura Markham, Founder of Peaceful Parent, Happy Kids and organizer of this summit, Nurturing Hearts, Nurturing Minds, the Neuroscience of Peaceful Parenting.

([00:00:22](#)):

My guest today is Dr. Peter Gray, whose book *Free to Learn*, forever changed my ideas about education and about play. Dr. Peter Gray is a research professor of psychology and neuroscience at Boston College, who has conducted and published research in behavioral biology, developmental psychology, anthropology, and education. He's the author of an internationally acclaimed introductory psychology textbook, which views all of psychology from an evolutionary perspective.

([00:00:51](#)):

Much of his research focuses on the role of play in human evolution. He's expanded these ideas into the book, *Free to Learn*, which has been translated into 18 languages. He's one of the founders of the nonprofit, Let Grow, the mission of which is to renew children's freedom to play and explore independently of adult control.

([00:01:12](#)):

Dr. Gray, I'm delighted to be able to speak with you about self-directed play and how it promotes children's social, emotional, intellectual development. Thank you for joining us today.

Dr. Peter Gray ([00:01:22](#)):

Well, thank you for inviting me. I'm very happy to be here.

Laura Markham ([00:01:27](#)):

Most parents would say that of course their children do play and some parents think their children play too much or wish they would play more independently, obviously, entertain themselves. So, maybe we need to start with your definition of what is self-directed play, because that's different than most of what kids do when they play today.

Dr. Peter Gray ([00:01:50](#)):

Yeah, so I usually just call it play because by my definition, by my way of thinking, it's not really play if it isn't self-directed. And in fact, if you look at some of the classic writings on play, they would agree with me. And also, there are studies with kindergarten children that also indicate that if it's not self-directed, they don't call it play. So, play is by definition, by my definition and really this is a definition I didn't make up out of completely out of my own head. It's a definition that came partly from looking at the way other writers who have studied play in the past and written about play in the past.

([00:02:40](#)):

And also, as I mentioned, how kids define play as well as my own observations of play. So, this is my definition of play that it's an activity that has the following four characteristics. The first characteristic is that it is self-chosen and self-directed. So, that's part of the definition is it's self-chosen and self-directed. If a teacher stands up in front of a room and says, "Now children, we're all going to play this," immediately, no, it's not play.

([00:03:13](#)):

One of the primary purposes of play, if not the primary purpose from an evolutionary perspective is for children to learn how to take initiative to create their own activities and how to take charge of their own activities. And most of the rest of children's lives, especially today, they're pretty much governed all the time by adults. So, they're pretty much told what to do. Their problems are solved and so forth by adults.

([00:03:44](#)):

But in play, children in some sense, are the adults. Children are the ones who create the activity, direct the activity, solve the problem. So, play is how children in some sense grow up. It's how they prepare to be adults. It's how they take charge of their own lives.

(00:04:03):

So, the second characteristic of play is that it is intrinsically motivated. What that means is that you do it for its own sake. You're not doing it for a reward that's given to you. You're not doing it for a trophy or gold star or a grade and a report card or praise from your parent or a teacher or a coach or to improve your resume. You're doing it just because you want to do it. Now, that's the aspect of play that in our materialistic and competitive society makes adults think it's a waste of time or makes some adults think that. Why would you do something that you're not getting something for? That's a cultural way of thinking.

(00:04:58):

Well, how many times you've probably been to a commencement speech and heard the speaker tell the graduates, "Follow your passions." Well, how do you know what a passion is? What is a passion? It's what you love to do. How do you ever discover what you love to do if you haven't played? Play is doing what you love to do. And so, play is among other things. It's how that children develop passions. It's how they develop real interests.

(00:05:30):

And I've been lucky enough to study young people who had ample opportunity to play as children, and many of them do follow their passions in careers. They develop and play real passionate interests. They become good at those things and they figure out how to make a living doing it. So, that's one almost materialistic way of thinking of it, but there's a better way to think of it really. What is the purpose of life, if not to have fun? Play is fun and children deserve to be happy and to have fun. There's nothing that makes children happier than play. So, that's the second characteristic of play.

(00:06:17):

The third characteristic of play by my definition is that play is always structured. People talk about unstructured play, but there's no such thing as unstructured play. Play is always structured and in line with the first part of the definition is always structured by the children themselves. So, play is how children learn to structure things. Play is not random activity.

(00:06:44):

When you're playing at something, you're playing at something. That means that there is structure to what you're doing. You're building a sandcastle. You're not just piling up sand randomly. You're having a play fight which is guarded by certain kinds of rules that prevent it from becoming a real fight. You are imagining that you are a Wonder Woman. You have to behave like Wonder Woman. You can't just behave like a little girl.

(00:07:14):

These are the things that children are doing in play. They're structuring their activity, meaning that they're creating certain guidelines. The great developmental psychologist, Lev Vygotsky in the 1930s said that in his view of the primary thing, the most important thing children learn how to do is to follow rules in play. Because all play has rules. So, what he really meant by rules are these guidelines within which you have to behave. You can't behave impulsively in play. You have to do what you and your playmates have decided you're doing. You have to control your behavior.

(00:07:55):

I think maybe one of the reasons, it's not the only reason, but one of the reasons for the high diagnoses of ADHD, which is really if you call it a disorder, is a disorder of impulsiveness, overimpulsive. Not being able to control your behavior in accordance with the rules of what you're supposed to do, the norms of society. And so, Vygotsky would say probably that's because kids aren't playing enough. They're not learning how, they're not practicing that kind of control to follow the guidelines of what you're doing when you're playing.

(00:08:33):

And then finally, the fourth characteristic is although play has rules or guidelines, those always set boundaries within which there's lots of room for creativity. Play is never so rigidly structured as to prevent creativity and play and I would argue is the most creative thing that we ever do. Every move in play involves a choice and every move, and no matter what you're playing, you are within the guidelines, you're free to make a lot of different choices. And every one of those choices is creative.

(00:09:13):

So, children, when they decide to play and they're creating play, they are doing something creative every time they do it. So, play is how children exercise their creativity. And for young children especially, that creativity involves a high level of imagination. So, for example, that little girl is pretending that she's Wonder Woman, she's exercising her imagination. I'm imagining that I'm Wonder Woman. Or pictures little children playing.

(00:09:47):

An example I like to give is children playing around the kitchen table and somebody points to the kitchen table and says, "That's a bridge," and somebody else says, "There's a troll under the bridge." Now this is hypothetical. And then somebody else says, and these could be four-year-olds, somebody else says, "Well, we better give the troll a cookie so the troll doesn't eat us."

(00:10:12):

Now, what are these little children engaging in when they do that, they're engaging in what logicians would call hypothetical deductive reasoning. They are positing a hypothesis. They don't say it's a hypothesis, but it obviously is that the kitchen table is a bridge, that there's a troll under the bridge and one of the children is making a logical deduction. If there's a troll under the bridge, we should give it a cookie so it doesn't eat us.

(00:10:42):

Now Piaget, the supposedly great developmental psychologist, said that children below 11 or 12 years old aren't capable of hypothetical deductive reasoning, but if you watch children play any kind of fantasy game, they're engaged in hypothetical deductive reasoning all the time. So, by defining play, what I've just done is shown some of the enormously important things that children are learning and practicing in play.

Laura Markham (00:11:14):

So many great nuggets in what you've just said. I love the idea of impulsivity is tempered by play. You're motivated to temper your impulsivity because you need to get along with the other kids. Parents ask me all the time, "Well, my kid's really impulsive. What should I do with him?" And to retrain the brain, well, the brain is any repeated experience will train the brain. If that child were playing constantly with other children, they would be incentivized to manage their impulsivity and to develop that neural wiring to manage their impulsivity. Such a great point.

Dr. Peter Gray (00:11:52):

Yes, that's true. And even when you're playing by yourself, you are exercising, you're concentrating. Kids who do have ADHD or who've been diagnosed with that generally are capable of concentrating on something that they're interested in. And so, when they're playing, they're concentrating much better than when something is foisted upon them. In fact, there's some evidence that the best treatment for ADHD is

computer games because computer games, you have to concentrate and focus. And there's some evidence that this is quite helpful for kids who are impulsive.

(00:12:31):

So, it doesn't necessarily have to be social play, but I agree with you. The thing about social play is that your playmates enforce the rules. And either because of impulsiveness or rudeness or the bullying tendency don't behave in accordance with the way that your playmates expect to behave, they'll leave you. The primary freedom in play is freedom to quit. If you can't quit, it's not play.

(00:13:12):

That's another mistake parents, not parents, so much as teachers often make at recess, "Oh, you have to let everybody play with you." Well, that's ridiculous. I mean, it's not play. If you're forcing somebody to play with me that I don't want to play with, that's not play. And part of what children learn how to play is how to be decent playmates. And that means partly learning how to be willing to negotiate and follow the rules that your playmates and you agree upon.

Laura Markham (00:13:53):

I love this little tangent and we'll go back to the main theme of playing, but imagine you're the teacher, you're on the playground. The kid comes running and says, "They won't let me play." And the usual thing is everybody gets to play. So, I'm in agreement with you that we don't just say you have to include him, and yet we want to support this kid to be able to join the group. What do you do as the teacher at that point?

Dr. Peter Gray (00:14:18):

Well, first of all, let me say that recess, as we usually structured in school, is one of the very worst places for play for lots of reasons. First of all, there's generally limited things you can do there. There's all kinds of rules about what you can do. There's lack of opportunities. There's lack of equipment for various kinds of things. There's limited time and you're locked in there with these kids. You can't leave. You're just locked in there. I mean, this is a perfect recipe for bullying. Whenever we chain people, whenever we lock people together, we get bullying. This is a phenomenon. It's not just related to kids, it's related to human nature in general. When people are locked together, you get bullying.

(00:15:06):

When you have a marriage and you can't leave the marriage, before we had divorce laws, we had terrible domestic violence. Domestic violence in every nation goes down when divorce becomes possible. Freedom to quit is essential, is the most

important freedom. It underlies all the other freedoms. If you can't quit, you can be bullied. And so, there's a certain sense in recess that you can't leave the recess, you can't truly leave it, so there's no place else to go. That's part of the problem.

(00:15:42):

And then it of course becomes worse if you've got a teacher saying that you have to include these people. If a teacher comes over and says, "Peter, in your group, you're going to have to include Laura in your play thing." Is that going to make me like Laura? I'm going to probably like her less than before. The teacher is making me play with Laura.

(00:16:05):

Now, isn't it a lot better if Laura sees us playing and she thinks, "Okay, now how could I join that group? What would I have to do to get these kids to want me to play with her?" And that's how you learn. That's how you learn, not by a teacher saying, "Everybody has to play with Laura." Nobody likes Laura. I'm sorry to tease you that way, but that's-

Laura Markham (00:16:36):

No, no. I think this is great. And I think I'm imagining the teacher saying to little Laura, "You would really like to play with them and they don't want you to play. Let's see what we can figure out here. What are they playing? They're playing pirates. Well, did you want to play pirates?" "Yes, I want to be captain." "Well, that's one reason I haven't been allowed to play. I want to be the captain. They've got a captain. I have to find a way to blend into the play. Maybe I volunteer to walk the plank or whatever they need in the game."

(00:17:04):

My point is that if the teacher can coach me to learn how to enter the game, it's so much more effective than to ... Because the reason kids don't let someone in the game is that that person often derails the game and they know that and that's why they won't let them in.

Dr. Peter Gray (00:17:19):

Yeah, I think that that can help. But let me describe an alternative to recess. So, one of the things that we have done through the Let Grow organization that I helped to found along with Lenore Skenazy and a couple of other people as we have developed in schools, in elementary schools, primarily something that the schools call play club, which I think should occur during the school day, but so far, no schools are willing to allot an hour for free play.

(00:18:00):

So, this generally occurs either before school or after school. And it's an hour of free play and I call it free play, just to be sure, even though normally I would just call it play, but just to be sure what we're talking about, where all the kids in the school are free to play together. It's age mix. There are kids from kindergarten through fifth grade, so basically five to 11 all playing together.

(00:18:26):

There's lots of different ways of playing. The outdoor playground is available. The gymnasium is available. The hallways between the outdoor, playground and gym, there's an art room available to play with, art supplies. There's other rooms that have puzzles and games and so on. So, you can play actively, you can play more mentally, you can run around and there's maybe 100 or 150 kids all playing at once. So, there's lots of potential playmates. It's not like there's just one play group that you're either excluded from or not excluded from.

(00:19:04):

And it's mixed age, which is, I argue that mixed age play is natural play. Age-segregated play is not natural. Throughout human history, we never segregated children by age until we had age-graded schools. So now, we tend to segregate children by age in every way. In many ways, age-mixed play is more creative. Generally, it's more nurturing, it's less competitive, and it is more welcoming to diverse people because as soon as you have differences in age, then other kinds of differences become smaller in your perception.

(00:19:48):

So, the fact that it's age mix, the fact that there's so many different ways of playing and the fact that you have a full hour to play makes it real play that is almost not possible in the typical 20-minute recess where everything is so confined and so regulated. Now, there's only one rule in play club, and that is don't deliberately hurt anyone. There's an implied rule. You have to stay on campus, you can't run off campus. But the only actually stated rule is don't deliberately hurt anyone. That's a pretty obvious rule.

(00:20:27):

And the teachers who monitor play club, because it usually is teachers monitoring it, are instructed that they are like lifeguards on an ocean beach. They're not there to tell the kids how to play. They're not there to solve little quarrels. They're not there to be tattled to. They're not there for any other purpose than to "save a life" if they really see something in danger. And then when I talk to them, I tell them even that, unless

it's just absolutely imminent, count to 10 first to see if the kids don't solve the problem themselves.

(00:21:03):

Because the real purpose of play is for kids to learn how to solve their own problems. When a teacher steps in, even in the pleasant way that you just described, then in some sense what the kids are learning is I need an adult to solve my problem for me. I need an adult even to tell me how to solve my problem. Where really when you're playing just yourself, you're learning. You're figuring out how to solve a problem. You're taking more control for yourself.

(00:21:35):

Now, one of the things we've learned is that at first, I thought that the teachers were going to have difficulty following this because they're so used to teaching. They're so used to intervening. They'll almost feel like they're not doing their job if they don't intervene, if they see something that appears to be a problem. So, the task for them, the rule for them is that they have to follow in this kind of play is hold back. As much as they want to step in, you have to hold back.

(00:22:09):

And what I've been delighted to learn, because there are some various somewhat informal studies, but a couple of formal studies that the teachers are really do this. They really do hold back. And they have learned that the kids are much better at solving their problems if they hold back than they ever believed they would be.

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And the other thing about the age mix is they often see that if there's a problem among a couple of little kids, that often an older kid will step in and say, "Hey, what's the problem here?" And will help them solve the problem. And that is so much better than if an adult authority steps in because it's a learning experience for the older kid who's learning, "I can help these little kids. I could solve this little problem they're having." And it's a different kind of experience from the younger kids.

(00:23:02):

So, you've got these two, five-year-olds at some kind of a squabble making a fuss. And this amazing eight-year-old comes over who's somebody that they're really looking up to and say, "Hey, what's the problem? What's all this squabbling about?" And that's like almost somebody who's a peer, but just a little bit beyond being a peer that you emulate, that you're trying to be like as opposed to somebody that you've perceive as an authority figure coming down on you here. That's a very different sort of experience and more of a learning experience.

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So, I think first of all, if we really want recesses to be played, they have to be much longer than they are. There has to be many more ways of playing because not everybody wants to play that kickball game or whatever it is that's going on there. And not everybody wants everybody into their game. And so, you need more ways of playing. You need more time to play. And ideally, it should be next stage.

(00:24:10):

Among other things, we know that this comes partly from my own research, but there's other research supporting it, that mixed age play is more nurturing and less competitive and there's far less bullying going on in mixed age play than in same age play. Same-age play brings out the competitiveness and tends to promote bullying, especially in schools, playgrounds. Schools are a competitive environment to begin with.

(00:24:42):

And the kids who for whatever reason are not successfully competing in the classroom may take it out. I can beat other kids up. That's one of the consequences of the way we do schooling as that we're engendering a competitive attitude that can have what we think of as positive effects in academic competition, although I don't think that's positive effects, but at the same time can generate negative effects on the playground and in other aspects of life.

Laura Markham (00:25:17):

So, I want to build on your point about who's responsible. That my idea of how to coach that child, which might work with siblings in the home where there's no threat of exit for one of the kids isn't necessarily the best approach on the playground, where they might be incentivized to work it out. I love that. And the question of, well, who solves the problems? Who's responsible?

(00:25:42):

Because the repeated experience that children have today when most of their play is adult-directed or most of their activity is adult-directed, is that someone else is always responsible for solving the problem, for withholding or giving approval for even just how they're spending their time. How does that affect, I mean, I know you were trained originally as a biologist. How does that affect the developing brain and the skillset of any given child?

Dr. Peter Gray (00:26:10):

So, the idea that adults should be around when kids are playing is a new idea historically. I mean, in the past, even when I was a kid, there were no adults around when we played. We went out to play from four years, five certainly by five years old, kids were out playing with other kids with no adults around. Throughout history, that's true. I've interviewed anthropologists and studied, read about what anthropologists have written and also surveyed anthropologists about playing hunter-gatherer cultures.

(00:26:47):

The kids from age four on through the early teenage years are out playing with one another in age-mixed groups away from adults all day long. And that's how they learn. And nobody worries about that. As I said, the older kids tend to solve problems among the younger kids, but younger kids can also play with one another and figure out how to solve problems. Kids are a lot more responsible than we think they are.

(00:27:17):

And kids, one of my observations is kids are a lot more safety conscious and responsible when there's no adult around than when there is an adult around. And the reason for that I think is that when there's an adult around, they assume that the adult is going to take responsibility for safety. And if they go too far and so on, they're almost like pressing the edges. How far can I go before an adult will intervene? But when there's no adult around, you have to be responsible. You have to take charge. And so, kids learn to be responsible because they have to be responsible when there's no adult around.

(00:27:58):

And kids are far more capable of responsibility than we admit. It becomes a self-fulfilling prophecy if we assume children are not responsible, that they can't solve problems, that they can't govern their own activity, that they can't follow safety rules, that in some sense they don't. They assume that they can't or they don't. But when kids have to be responsible, they take responsible.

(00:28:25):

We would not have survived as a species if kids were as irresponsible and incapable as in our culture we believe they are. Because throughout human history, they all would've died off. I mean, they would've been eaten by tigers. They would've picked up poisonous snakes and they would've pushed one another off of cliffs because they were always out playing by themselves.

(00:28:51):

So, it's just a belief that has gradually developed over time, that over time, really over my lifetime, which I was a kid in the 1950s and over my lifetime with every decade, the assumptions about children have changed and the assumptions about how much adults have to monitor and control and supervise children have changed. You had tried, if we suddenly were back in the 1950s and somebody proposed a law like what we have for child protective services here in the United States, that children have to be watched until they're age 12. People would've thought, "This is crazy. This is absolutely idiot. I mean, my 10-year-old babysits."

(00:29:52):

I had a paper route when I was 11. I had a job making deliveries in the city of Duluth when I was 13. I mean, I ran errands in the city of Minneapolis for my grandmother who was crippled, partly crippled when I was four, two blocks away, crossing two busy streets. You might have your child taken away from you by child protective services if you allowed that today. So, we have changed so dramatically our understanding of children and that understanding of children in the 1950s was not unique to the 1950s. That was the understanding people always had of children up everywhere up until around that time.

(00:30:43):

And it's the understanding people in many other cultures still have of children. It's still the case that in Finland, seven-year-olds at least can watch a school by themselves. They can take public transportation. They can do many of the same things that I did at age seven in this country. So, we have just ludicrously really underestimated the abilities of children. And in a way that's really harmful because when we prevent children from exerting this independence and this responsibility, we prevent them from developing the understanding that they can do this. And that's why we have such high levels of anxiety, depression, and even suicide among young people today.

Laura Markham (00:31:34):

So, I know that there's been skyrocketing mental health problems, specifically anxiety and depression among children and teens, that it just continues to climb. And I know you make the link to what they're not getting from play. Are you saying it's partly that they feel powerless and not capable? Tell us more about why that you make this connection.

Dr. Peter Gray (00:32:00):

So, a term for powerless and not capable that psychologists use is that they lack an internal locus of control. So, there's actually questionnaires that assess locus of

control. So, an internal locus of control, I mean we're all kind of, this is a dimension. You can be more internal or more external in your sense of control.

(00:32:27):

Internal locus of control means I can solve problems. I can take control of my own life. I can choose what to do and I can do it. That's a a strong sense of agency. External locus control, that's the sense of I'm just a victim of circumstances around me. I'm a victim of powerful other people. I'm a victim of fate. And there's very little I can do about what happens to me.

(00:32:58):

Now, one of the things we know is that people of any age who have that external locus of control, feeling like they're a victim, something could happen at any time, and there's really nothing I can do about it. I just don't have the ability to do things to solve my problems. People who score strongly towards that external end are far more likely to suffer from anxiety and depression of any age. Whether you're an older person, a middle-aged person, a young adult or a child are far more likely to suffer at some point from anxiety and depression than people who have an internal locus of control.

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This should not be surprising because if you have that external locus of control, something could happen to you any time. The world is scary. Something could happen and there's nothing I could do about it. That's a frightening situation. I go outdoors and take a walk and oh my god, what are all the things that might happen to me on this walk and I get all anxious about it. Or I get a low grade in school, "Oh, this is the end of the world. There's nothing that I can do about this low grade in school."

(00:34:11):

And so, every event, that somewhat negative event or a somewhat unknown event elicits anxiety. And if that sense of "there's nothing I can do" gets high enough, then you begin to feel a sense of hopelessness. Well, depression is basically hopelessness. If you reach the point of such hopelessness that you just give up that you just in some sense give up psychologically and go into this state that we call depression. So, it's no surprise that not having an internal locus of control or the other way of saying it is having an external locus control would be predisposing you for anxiety and depression.

(00:35:04):

Well, how do you develop an internal locus of control? You have to develop by having practice with control. And that's what children are doing all the time in play. Because play is where, as I said at the very beginning, is where they do have control. Take play away, and you're taking away the place where they learn how to solve problems, how to initiate activities, how to do their own thing. You're taking away that possibility.

(00:35:31):

Now, it's interesting that over the same decades that we have seen a decline in play and a rise in anxiety and depression among young people, we have also seen, because this has been done at least for decades between about 1960 and about the year 2000, we have seen a decline in internal locus of control among kids and teenagers.

(00:36:02):

There's a test designed for school-age children and teenagers. I think generally when they're tested, use the same one for adults. And there is data showing that when you look at where these tests have been given to semi-normative groups, internal locus of control has gone down, external locus of control has gone up over these same decades that play has declined and anxiety and depression have increased among especially teens, but also even younger children. So, all of this is perfectly logical. You almost don't need the empirical evidence for it. It just makes sense.

(00:36:45):

And the other thing why kids are unhappy is I said before, why makes kids happy? I mean, this is not brain science. I mean this is in some sense, it is brain science, but it's not. In another sense, you don't have to be smart to understand this. And yet our whole culture doesn't understand it. You take play away from kids, they're going to be unhappy. So obvious.

Laura Markham (00:37:14):

Yeah. We're talking about how repeated experience shapes the brain if they don't have the opportunity to experience what you're talking about, an internal locus of control while they're playing, they're not getting the opportunity to develop. And another thing you talk about in your work is that play makes kids more courageous and more confident, i.e. less anxious because they do things that are hard for them that they're motivated to do, whether it's working something out with that bigger kid or riding their skateboard down, something that's feels a little scary to them or climbing the tree that they can modulate the risk, but they take the risk. Is that right? So, that's also developing courage if they have that opportunity.

Dr. Peter Gray ([00:37:57](#)):

Right. So, I think in any kind of play, children are taking responsibility, they're learning they can solve problems, they're learning they can do things. And that in a general sense develops courage, develops the feeling "I can do things, I can solve problems." But in addition to that, as you just alluded to, children and the young of other mammals do the same thing, but in deliberately risky ways, where one might say what they're doing is they're playing with fear. They're deliberately putting themselves into situations where they're feeling a little bit of fear, not terror, because they don't want to feel terror.

([00:38:43](#)):

So, question. The first people who really developed a theory of this were studying animals and they were different animal species and all kinds of young animals play in deliberately risky ways. They do the equivalent of our kids climbing trees and sliding down banisters. For example, there's observations of young chimpanzees climbing to the top of a tree dropping and catching themselves on a lower branch just before they hit the ground.

([00:39:15](#)):

Goat kids skip along edges of cliffs where they could fall over that cliff. Why are they practicing skipping there as opposed to some safer place. Monkeys chasing one another around way up high in trees, why if they want to chase one another around. Why don't they do it on the ground or at least on lower branches where if they fell, they wouldn't hurt themselves so much.

([00:39:39](#)):

So, you would think that just on the basis of that, sometimes animals get seriously hurt once in a long time. One even dies from that. That's very rare, but it can happen. So, why didn't natural selection weed out that kind of play? And the answer that they came up with is because this is how they develop courage and courage is essential for all mammals to develop.

([00:40:11](#)):

All of us mammals at some points in our lives are going to experience real emergencies. And if we haven't had experience with how to deal with fear, this kind of controlled experience in play, then we might just fall apart. We might panic when we meet real emergency. We'll be ineffective. We won't be able to save our life or our child's life because we panic. We're not able to use our brain and our body to solve the problem.

([00:40:44](#)):

So, when children or other young mammals are engaging in risky play, what they're learning is I can feel this fear. I can feel my heart rate increasing. I can feel these signs of fear, and yet I can keep control. I can control my mind, I can control my body and I can live to tell the tale. I can come down from this tree and I'm still alive. And I did that. And you do that in many different contexts. And the result is that now you are a person who when something in the real serious world happens, it's a true emergency and you feel all these signs of fear, you don't fall apart because of it.

Laura Markham (00:41:31):

I love that. And I'm thinking about kids who we might talk to the parents and in their day-to-day life, this child is terrified of something. The separation from the parent or putting their hat underwater as they're learning to swim or heaven forbid, getting on the elevator, whatever it is that they can tolerate those feelings without feeling like it's an emergency if they've had the opportunity you've just described to experience those feelings through play. So, it seems like a brilliant intervention from Mother Nature that we children would have this experience and without it we're handicapping our kids.

Dr. Peter Gray (00:42:14):

And I'm glad you used the term "Mother Nature." Mother Nature has been shaping our children's brains for millions of years if we go back all the way. The time that we've been Homo sapiens is so much shorter, but we have our whole evolutionary history, so we have to assume that Mother Nature is smarter than we are, that if children are designed to behave in a certain kind of way, we should allow them to behave in that way. We shouldn't try to second guess what children's instincts are. And so, because if those instincts when they're there and they're so powerful, they've got to be there for some reason. That doesn't mean that there aren't some cases where we have to.

(00:43:08):

When I was a kid, almost everybody broke their arm at least once, but I had one friend who broke his arm every summer and one time he broke his neck and somehow he survived it. Now that kid needed some restraint, but he was a different kid. He was something other than Mother Nature had messed up his brain a little bit, but he was a great kid in other ways, but he was crazy about risks and foolish about risks.

(00:43:40):

So, every once in a while there's a kid that maybe needs a little bit more restraint. But 99.9% of kids are a lot safer than we think they are. The kid who climbs a tree higher

than her mom wants her to climb it knows better the mom, how high she can climb that tree safely.

Laura Markham (00:44:06):

Yes, yes. And in fact, I think you argue that the process of climbing that tree is helping that child to develop executive function skills like decision-making and planning and impulse control. Think before you make that move, how are you going to get down. All of those things that we want our children to learn, the executive skills that parents say, "Well, how can I help my child develop it?" It sounds like you're saying partly it's play.

Dr. Peter Gray (00:44:33):

Yeah. The other thing about risky play is if you just sit back and watch children, whether it's little children or older children, when they're doing something that's risky and new, watch how cautious they are about it. The child goes very carefully up to the first limb and climbing the tree and then comes down and then maybe the next time, a little bit higher and the next time. There are some, especially in the Scandinavian countries, there is a deliberate attempt to create opportunities for risky play and daycare centers and preschools, they put up boulders they can climb and jump off of and so on and so forth.

(00:45:23):

And I've had the opportunity in this country to watch little children when they're exploring those kinds of areas and they are so careful. They're really amazingly careful how they're climbing. They're testing, climbing up a rock, and they're testing. They're testing everything along the way. Even four-year-olds are doing this. And so, just as Mother Nature designed children to play in risky ways, she also designed children to be very careful in how they're doing it to test things out.

(00:46:00):

If you're watching a child who's done a lot of tree climbing, it might look like that child isn't being careful because that child knows I can climb this tree and then just shoots right up at. But watch that child when the child is first learning to climb the tree with nobody telling the child what to do, the child is being very cautious.

(00:46:23):

The other thing I want to quickly add, because sometimes adults get the wrong message from this. Sometimes adults conclude, "Well, I should push my child into risky activities." That's the absolute wrong message to get. Children are endangered

when they're pushed into risky activities that they're not ready to take. And that pushing into risky activities may make the child feel traumatized, shamed.

(00:46:54):

I still have a memory from when I was a young child. I always had a bit of a fear of heights and one relative of mine, adult relative of mine, was trying to get me to dive off the high board. I was a good swimmer and I was happy diving off the low board, but I remember feeling shame because I was afraid to dive out and going out to the end of that high board and just trembling. And in the end, I didn't dive and I just felt wasn't ready to do it, and I felt shamed. And it was a long time after that before I ever got onto a high board.

(00:47:37):

When you do something like that, you don't want to be doing it in front of some adult judge. You don't want to be doing it because somebody is requiring you to do it or making you feel bad for being afraid of doing it. When you're doing something new like that, you want to be completely unjudged unless it's just by your close friends who might tease you and so on and so forth. But these are just your friends. These aren't authority figures. You just tease them back. But that's different.

(00:48:11):

I think, for example, that one of the worst things, I don't know if it still happens, but one of the worst things that used to happen in gym classes is making kids climb that rope to the ceiling. That's a terrible thing to insist.

(00:48:25):

I know people who've left school to go to an alternative school, not because they hated the academic classes, but because gym was shaming to them, making you do that and this is not your forte in front of your peers and feeling like even if they're not laughing at you, you feel like they're laughing at you, making fun of you and the gym teacher, you feel even if the gym teacher is not deliberately shaming you, is in effect shaming you because you can't really do this or you're terrified of doing this.

(00:49:01):

Risky activities are great when they are self-chosen by the child who knows I can do this and knows I want to do this. They're terrible when forced upon a child.

Laura Markham (00:49:18):

I think what you're describing, this sort of culture at the school of competition and shame is so different than the culture of play, which as you've described, it develops empathy in young people. And in fact, that's a question I wanted to ask you. There's

researchers agree that routine testing of young people shows their less empathic and more narcissistic now than they used to be. So, is that related to lack of play?

Dr. Peter Gray ([00:49:47](#)):

Well, there is some research. The research is somewhat mixed on narcissism empathy, but let's assume you're correct. Some of the research indicates that. Schools is all about individual achievement and about competition, beating other people, you being the best. And that's basically a definition of narcissism. It's definition of egocentrism. You're trying to prove yourself better than other people. And in play, children have to cooperate. Even in a pseudo competitive game, you have to cooperate. You have to play in such a way that the other players are having fun. And if you don't succeed at that, just as we talked about at the beginning of this period, they'll leave you.

([00:50:50](#)):

So, the lesson for not paying attention to your playmates, for not being empathic, for being egocentric or narcissistic is that your playmates will leave you. And that's a natural punishment because kids want playmates. Kids don't want to be left alone. So, sometimes the way I put this is that in my mind, probably the most important skill humans beings have to learn for a happy life is how to tell if their playmates are having fun or not. If you can't do that, you can't have a good marriage. You can't have real friends. You can't have good work partners. No person is an island. We all depend upon other people.

([00:51:48](#)):

And to be able to get along with other people and have them like us and get along with us, we have to be able to be sensitive to their feelings, to how they're reacting at any given moment. We have to be able to pay attention even to subtle nonverbal cues as to whether they're having fun or not. And children are learning that all the time in play because if your playmate is not having fun, the play is going to end as soon as they quit.

([00:52:19](#)):

So, this is something that children are always learning when they're playing is how to ... And that in some sense there are different ways of defining empathy, but that in some sense is the core of empathy, being able to get into the head of feelings of another person so you can predict how they're going to react. Is this person going to leave me or is this person going to stay with me here?

Laura Markham ([00:52:49](#)):

So, I know we have to wrap up and I could ask you questions about schooling, which we haven't even talked about, but I'm going to wrap up with a question on what parents can do today around play, where most kids aren't used to self-directed play. They can't just walk out of their house and find a playmate. That's not a hunter-gatherer situation where the kids will run around tracking animals and practicing skills for adult life.

(00:53:19):

And most parents work so they can send their kids to an alternative school like the Sudbury school you described, to get at least some of that. I guess I'm wondering what kind of childhood play would prepare kids for modern life? That's part of the question. And the other is what practical steps can parents take today to allow their child more self-directed play?

Dr. Peter Gray (00:53:45):

So, I've been writing a series of Substack posts. And one of my relatively recent posts, which anybody can Google, is 13 ways to bring more play into your child's life in today's world. And so, I list 13 things that parents can do. Not all of those things would be available to every parent, but some of those things would, every parent should be able to find some of those things.

(00:54:18):

So, just to be very brief, I won't go through all of them, but obviously one of the things that I would encourage parents to do is if your school doesn't have play club, push your school to do it. Whatever influence you might have on the school, lobby with the school to add this in. This brings play in a safe setting, real play.

(00:54:40):

Some libraries have play at the school or growing play at the library. Check out whether your library has that. Some libraries have teen hangout rooms where kids are hanging out after school, teenagers are hanging out after school and playing in a room in the library. Some libraries go further and they actually have hours, somewhat like play club. There's a few number of libraries that have indoor and outdoor play at the library at certain hours. So, check out those possibilities.

(00:55:08):

But another thing you can do to take some initiative, but there are people who have done it, is get to know your neighbors who have kids. And this takes initiative. We don't in this day and age automatically know our neighbors. That's one of the problems of our society and one of the reasons why play has declined. If you don't

know your neighbors, then you don't know if the block is safe or not. I mean, that man down the street might be a child molester for all you know because you don't know that man down the street. So, get to know the neighbors and especially get to know the neighbors who have kids.

(00:55:44):

And I heard recently from one family that did it this way, there are other families do it this way, but they create a little neighborhood Facebook group so that the moms in the neighborhood could all communicate with one another. And so, they got to know one another. And through their Facebook group, they decided, so there's going to be certain hours every week where we all send our kids outdoors.

(00:56:12):

We're going to be like old-fashioned parents and kick our kids outdoors. Whether they want to go out or not, you're going to go out. It's like my parents in the '50s said, "It doesn't matter if it's 20 below zero here in Northern Minnesota, just dress up. You're getting out of the house. I don't want you in the house."

(00:56:29):

So, they're all going to behave like old-fashioned parents and kick our kids out, leave the cell phones indoors. If you've got cell phones, keep them indoors. And some of the kids might complain at first, but after they've had the experience, the neighbor has done this, they don't complain after that. Because the trick is if you just send your own child outdoors, even if you believe you can do that without child protective services getting after you, if you just send your own child outdoors, your child is going to get bored.

(00:57:04):

As much as we might wish that our children just naturally love the great outdoors, most children don't. What children naturally love is playing with other children. And so, if they don't find other children out there, they're going to quickly get bored and want to come in, or they're going to sneak their cell phone out and use the only way they can to connect with other kids.

(00:57:25):

But if the whole block sends them out and there's enough kids out there, they're going to meet one another. They're going to get up again. And if there's a parent who says, "Well, it's too dangerous to send our kids out," then have at least one adult out there just for safety, same as we do for play club, have somebody there for safety who's going to act like that lifeguard on a beach and not intervene, but just be there for safety.

(00:57:53):

And I just got connection to somebody who's talking about how wonderful this has worked. But there's actually a book written a few years ago by Mike Lanza called Playborhood, in which he describes in each of seven chapters a different neighborhood, often a very different neighborhood who did essentially this how they created play in their neighborhood by something like that.

(00:58:23):

So, one of the examples was a housing project for people below a certain economic level in the Bronx, where the parents thought, "Our kids need to get out and play, but it is dangerous around here, and what are we going to do to make it safe?" And so, they got together and they got the city to close off the streets outside of the project on certain hours. And they just all sent their kids out during those hours, and they had two or three grandmothers sitting out there to drive the drug pushers away. So, that's a solution that worked for them. And I don't know if they're still doing it, this was a number of years ago, but this is something that can be done.

(00:59:17):

It takes initiative, but that's initiative well spent. Parents are spending way too much time doing stuff that isn't helpful to the child, helping them with their homework as if they can't do homework themselves, which also deprives the kids of responsibility, driving them from one adult-directed thing to another.

(00:59:41):

So, the excuse that I don't have time to do this doesn't weigh high with me because parents are spending more time on their kids than they ever have in the past, but they're spending the time doing the wrong things. What they should be spending time on if it takes time to do it, is figuring out how I'm going to get my kid away from me and in relationship with other kids. And there are ways to do it, but it takes initiative.

Laura Markham (01:00:14):

I'm so glad that you brought up how parents are spending their time because this whole conversation, I've been thinking all the parents who say to me, "So important to me that my child takes piano lessons now." My daughter took piano lessons. I have nothing against piano lessons if the child wants it, but parents regard something like that, or chess lessons are very important for their child's development. And yet it's taking away time from something that you're arguing is much more important to the child's development. Is that correct?

Dr. Peter Gray ([01:00:45](#)):

Exactly. Yeah. And moreover, there are studies of why parents are putting their kids in the chess lessons and so on and so forth. And what the research shows is parents are doing it because they believe that we live in a highly competitive society. And to root to success for your child is to learn how to be competitive, to learn how to work hard, to be the best at something at whatever you're doing, and to beat other people at it.

([01:01:20](#)):

And this is a mistaken belief that yes, in some sense, we are a competitive society, but the people who do best in the broad sense of doing best and the broad sense of including being able to support themselves well, but having friends living a happy life, having a good family, these are not people for whom competitiveness is the driving drive. These are people who genuinely like other people and want to cooperate with and help other people. And because they're that way, other people like them and help them.

([01:02:12](#)):

Mother Nature knows us. And so, children are motivated in their own brains, in their own natural ways to want to play in cooperative ways, not in competitive ways. And when children are playing even a pseudo-competitive game, they are usually cooperating. They're helping one another rather than hurting one another. And we adults want to turn it into competition. We want our child to win the violin contest. We want our child to increase ranking and chess.

([01:02:49](#)):

Whereas there's actually a research study by a woman named Hilary Friedman published it as a book. It was done initially as a doctoral dissertation, but she interviewed parents in close to 100 families who had their young children in competitive. She took three different kinds of competitive activities. So, they were either in competitive chess, competitive dance, or competitive soccer. So, three very different kinds of activities.

([01:03:24](#)):

And her interviews of the parents showed that the primary reason the parents were investing so much money and time and effort into getting their kids into these activities and promoting these activities was because they believe we live in a highly competitive culture. It didn't even matter to them what the activity was because they didn't expect their children to become professional chess players or dancers or soccer players.

(01:03:53):

But they believe that because we live in a competitive culture, it's important for the children to develop the skills of competition, which they saw as the ability to work hard, to do well, the desire to win, the drive to win, the ability to set aside things that might be more fun for you in order to work hard at winning. And they would reward the children even beyond the trophies they might get, they would reward the children for winning, for improving their chess score and their chess ranking and so on and so forth with maybe a trip to Disneyland.

(01:04:36):

So, what they were doing was teaching their children the skills that the adults thought were really important skills to learn in our competitive capitalist culture. And the children themselves, when she interviewed the children themselves, she found, first of all, when she would ask, "What do you like about this activity?" Some of them would say, "Well, I like the prizes I get. I like going to Disneyland if I win." But almost none of them said, "I really enjoy the activity myself." They weren't loving chess. And almost none of them said that they enjoyed beating somebody else. In fact, some of them said the opposite.

(01:05:34):

I think it even outranked the prizes, the rewards I get was I get a chance to make friends with people that I otherwise wouldn't meet. But none of the parents said making friends was the purpose for doing it. But many of the children said this. And some of them went on to say, "And I really sometimes feel bad if I win because that means my friend lost." So, my view is the children had a much healthier attitude about this than the parents did.

Laura Markham (01:06:09):

Wow. That is when I asked you earlier about, well, what skills would prepare kids for modern life, we've just been talking about those skills are about all the connection, what you said makes a good life. The connection to other human beings, the empathy for other human beings, the cooperation, the internal locus of control that you can take responsibility and go after what you want and create it. All of this stuff comes from play.

(01:06:37):

And it isn't that you have to practice the specific things, like I'm thinking to the hunter-gatherers, the kids tracking the animals. It doesn't have to be the specific skills, but those same skills from play apply to any life, including modern life, it sounds like.

Dr. Peter Gray ([01:06:55](#)):

Exactly. I mean, they're learning the whole set of skills that are important. They're learning social skills. They're learning physical skills in play. But as I also said at the beginning, when children are allowed to play at what they want to play. In our culture, unlike a hunter-gatherer culture, there are almost an infinite number of different ways to make a living. And if you develop a passionate interest in something in play and you become really good at it, there's a pretty good chance you can make a living doing it.

([01:07:29](#)):

That's what I found in my studies of children in self-directed education situations because they have lots of opportunity to play and they develop passionate interests. Many of them, more than 50% of them, by my count, develop passionate interests that then become careers when they are adults. So, that's another way of thinking about the value of play.

Laura Markham ([01:07:55](#)):

So, you're working on a new book, is that right?

Dr. Peter Gray ([01:07:58](#)):

Yes.

Laura Markham ([01:07:59](#)):

Tell us about it.

Dr. Peter Gray ([01:08:01](#)):

Well, the tentative, the working title is Restoring Childhood. And the thesis is that over the last 70 years or so, we've been gradually taking childhood away from children. Childhood is a period of exploration motivated by curiosity of play, of observation, of daydreaming, of the philosophizing in the way that children philosophize, of being bored and figuring out how to overcome boredom.

([01:08:35](#)):

All of the things that have been part of childhood throughout history, we have taken away and substituted for all of these things that require the child's freedom-substituted adult-directed activities. So, we have deprived children of a normal childhood. And as I said in all that we've been talking about, we are seeing the consequences of that.

([01:09:02](#)):

And so, the book just begins by describing the ways we've taken, how society has changed in so many different ways that has resulted in our taking childhood away why these childhood things that these childish, if we want to put it that way, things that children do are so valuable for their development and how in our modern world we can bring them back. How can we restore jobs? Some of it requires changes in laws. Some of it just requires changes in individual behavior. Some of it requires lobbying to change institutions.

(01:09:38):

One of the first things we have to do is repeal common core, which is had a devastating effect on children in recent times.

Laura Markham (01:09:49):

The curriculum. Yeah. Okay. So, we can watch for Restoring Childhood, your book when it comes out. And in the meantime, I know you have a Substack. People can sign up to follow you, is that right? We'll put that below your name. We'll put the actual link, but people can find your work online?

Dr. Peter Gray (01:10:11):

Yeah. So, people can find my Substack. You could easily find it. Just Google Dr. Peter Gray Substack. The title of the Substack is Play Makes Us Human. And it deals with a lot of the things that I've talked about here plus much more. And I also have a personal website just petergray.org, where if you're interested, you can download any of many of my academic articles, which are written in a way that I think anybody can read. So, articles that I've written for academic publication are available there.

Laura Markham (01:10:52):

Great. Dr. Gray, this has been a really interesting conversation.

Dr. Peter Gray (01:10:57):

Okay.

Laura Markham (01:10:58):

And I really appreciate sharing your wisdom with us. I know that a lot of parents are going to be that these are new ideas that you're bringing into our culture and questioning things that we've just taken for granted. And so, it's such an important role that you're playing. Thank you.

Dr. Peter Gray (01:11:16):

Thank you.