

Transcript: Sleep Junkies Podcast Episode 009

Solving sleep problems in school-age children - Prof. Michael Gradisar

<https://sleepjunkies.com/school-age-children-sleep-problems/>

Jeff Mann: 00:01:25 So I'm joined on the other end of the line all the way from Australia with Professor Michael Gradisar. Well it's good morning for you, so I'll say good morning, but it's evening here,

Prof. Michael Gradisar: 00:01:37 So I'll say good evening. You're welcome. And thanks for making this time.

Jeff Mann: 00:01:41 I just wondered if you could give people a bit of a background, how you got into sleep and where you've built up this practice and I believe you started out as a single clinical psychologist and now you've got a full team of researchers. Can, can you just give us a brief synopsis of how that journey started and how it got to where you are now?

Prof. Michael Gradisar: 00:02:04 Yeah, I guess I started at Flinders University and it ends at Flinders university. That's where actually I'm talking from. But you can't do a degree at Flinders University in Psychology without having some lectures or even some topics on sleep. So I think back when I was a third year undergraduate, I had a topic about sleep that was taken by Leon lack and that was my first experience of this area and I was completely fascinated by it.

Prof. Michael Gradisar: 00:02:33 It sort of just really stuck with me. And I found the content very interesting. I found that it was something that really did apply to a lot of people out there in the world. And so from there I managed to eventually get a job with Leon and that was in 1998 working on a big project in the sleep laboratory that he ran here.

Prof. Michael Gradisar: 00:02:53 And I think by a mixture of hard work and a bit of luck, I just kept going, did my masters degree, which led me to become a clinical psychologist and then went to do a phd. Again, I did that under Leon. And then towards the end of that, there was a job going where they were looking for someone who had some sort of experience in clinical child psychology.

And I was struggling at that point. And that was around 2005 and I'd done some research with kids and so I went for it. And like I said, I started out as a single person. I was told now that you're a lecturer in clinical child psychology, you've got to do research in kids, not with adults. So I had a look at sleep in kids and there wasn't much out there, so I started to have a crack at it and just kept going.

Jeff Mann: 00:03:44 It's quite interesting. You say you were actually taught about sleep. My perception, is that it's something that's not widely taught. So is that something special about Flinders?

Prof. Michael Gradisar: 00:03:55 Certainly. I guess, you know, if you look at it almost like a tree, you know. It sort of started to branch out a little bit back there in the 1990s with a few people here and there. And I think we were just fortunate that Leon lack who did his studies over at Stanford and had connections with people over there specifically, Bill Dement who's actually still working in the area and has been working in the sleep research field for a long time.

Prof. Michael Gradisar: 00:04:22 So we were fortunate enough to just study under someone who was a basically influenced by one of the greats. And from there he taught a number of people and they're teaching other people. And I'd still say that the perception that I get, because like I said, do a few workshops around Australia and sometimes overseas, I will ask the attendees how much sleep content that they got during their undergraduate degrees and also postgraduate training and more often than not they hadn't.

They're sort of like learning on the job. But I think like you said, we're seeing a change. I think we'll see more of it. People are able to do this themselves more than they have been in the past. We've got stuff like Google scholar. I certainly encourage families and health professionals to use Google scholar because it's a free resource where you can actually learn about sleep directly rather than hearing it second hand through people. So it's great to see that there's more education getting out there to the community.

Jeff Mann: 00:05:19 I wanted to talk about your book today it's co-written by yourself and a colleague of yours, Rachel Hiller. You describe it as a self help book and it's based around helping your child with sleep problems and it's for school age children isn't it, rather than the baby sleep age group, which you do deal with as well. But this book is very much about school age children.

Prof. Michael Gradisar: 00:05:41 Yeah, definitely. Like you mentioned I started out without sleep and then I noticed that in an adult clinic sometimes we were getting teenagers coming in. I was like, what's this about? You're supposed to be sleeping well. And then when I got my job in child psychology, I started to work with school age children and also toddlers and infants.

Prof. Michael Gradisar: 00:06:01 And so this is our first book and we could have written a sort of book for teenagers or for infants, but it was really this population that was really curious to us and still is curious to me because if you look at the number of self help books that you could probably find online or in a shop, and they are about sleep, they're more oriented towards adult sleep and potentially adult insomnia or infant sleep.

Prof. Michael Gradisar: 00:06:28 But if you look at the population of school age kids, so this is around what we call primary school aged kids. They've really been a forgotten lot, almost an assumption that they sleep fine. But we noticed when we opened up our clinic here at Flinders University, just up to seven to 18 year olds, we did get a number of parents approaching us saying, you know, my child's not sleeping well.

They can't sleep by themselves, they're really anxious at night. So we started to almost like develop techniques and a sort of combination of techniques to try to help them. And then we started to evaluate them and now we've sort of got to a point where we're starting to analyze what sort of works within those techniques. So I think it's a really neglected population that we're trying to get out there and try to help these families.

Jeff Mann: 00:07:17 But this is about, you know, these are evidence based sleep treatments that you've develop through clinical practice and through research. And so these are things that are tried and tested, you know, that have worked?

Prof. Michael Gradisar: 00:07:29 Yeah, for sure. And that's where my training in an adult insomnia clinic really came to the fore. I was like, if we think about the cognitive behavior therapy for insomnia techniques that we use for adults, which one of those might sort of apply it to these kids?

Prof. Michael Gradisar: 00:07:43 And when we looked at these cognitive behavior therapy techniques for anxiety for kids, we were like, okay, so we can imagine these techniques might work. So we essentially lumped those together as a package. And like you say, we tested it. Now we're on to a point where we're actually looking at how brief can we make these techniques so it's more cost effective for families because they're so time poor and it's hard to sort of come to a clinic.

Jeff Mann: 00:08:08 I just want to make a distinction here because you know, you've got anxiety related problems and also you deal with parasomnias as well, but there are some more serious issues that schoolchildren might have - things like sleep disordered breathing, problems like

that. But your book is to deal with, is it fair to say more anxiety related problems and the things that are treatable with let's say cognitive and behavioral type therapies?

Prof. Michael Gradisar: 00:08:36 Yeah, certainly. When we opened up our clinic we said, we're a bit like the Statue of Liberty, you know, just bring everyone, let's see what happens. And the most common presentation that we saw were these children that really had difficulty trying to fall asleep by themselves, they really needed to have some sort of parental presence.

Prof. Michael Gradisar: 00:08:56 So there was certainly a huge overlap between insomnia and the anxiety. And this is part of the journey and the interest that we have is that technically we haven't done a proper diagnostic assessment over the, these children that we've been seeing, would be diagnosed with an anxiety disorder.

Prof. Michael Gradisar: 00:09:14 Certainly experts within that area who have looked at the diagnostic criteria for insomnia say that they see a lot of insomnia occurring for the children that present with anxiety disorders.

And for us, and probably to a few listeners, the sort of situations that we saw were that you'd have a child that would go to bed in their own bedroom, but they needed a parent to be in the room or in some situations on top of the covers or underneath the covers or that child needed the parent to be in the adjacent room, like in the kitchen so that they could hear they were still awake.

Prof. Michael Gradisar: 00:09:51 And then we had children that had really got to a situation where they were on a mattress on the floor next to the parent's bed. And that's pretty much a permanent situation that the parents wanted to change. And then even other situations where there was a parent, who basically shared their bed with their child and dad was kicked out into a different room. And that was a commonplace thing.

Prof. Michael Gradisar: 00:10:14 We even had the most extreme, one family. It was a single mom and the child was 13 years of age. And the childhood had basically always slept in the mum's bed. And so getting to the age of 13 years, it was time to sort of see if he could try to go to his own bedroom. But he never learned that you never had those skills. And so you can imagine times 365 nights by 13 years, that's a lot of practice to sleep with someone present. So very difficult to unlearn that and relearn new skills. But still we found these techniques were successful.

Jeff Mann: 00:10:49 I want it dissect the book a little bit. So you've got three chapters here or three sections of the book. The first part of the book deals with this idea of what does healthy sleep - that's my term - you know, what does sleep look like? What should sleep look like for a child who just started school at school age.

Where can you identify where there are problems, what are the main problems in there? And I know this is a huge, a huge subject for you and you've spent decades in this field, but I just wondered if you could sum up for our listeners some of the signs where things are looking okay and things where maybe there is an actual issue here.

Prof. Michael Gradisar: 00:11:30 I have to take my head off to the editors here who not only helped us do many rewrites but also help to structure the book. But also at this point of the book, just sort of say, let's see if we can make a bit more of a clear distinction between what good sleep looks like and what problematic sleep looks like.

Prof. Michael Gradisar: 00:11:47 And I think that's really important. That's what we try to do in the clinic is to sort of say, almost, validate for the parents that are coming in - yes, this is a problem.

Prof. Michael Gradisar: 00:11:57 Because you can have one parent that thinks this is a problem. And then the other parents is no, no, this is fine. Just needs a bit of tough love, some sort of a advice

like that. So in the book we do outline what good sleep should be like. We also give symptoms of what might occur if sleep is not going so well.

Prof. Michael Gradisar: 00:12:20 So they can be things that you see at the start of the night when you got that bedtime process of trying to settle them down or if something happens during the nights or indeed if you find that they're really struggling to get out of bed in the mornings.

Prof. Michael Gradisar: 00:12:33 And like I mentioned before, it's those sort of issues particularly the parents would be aware of, is that they can't wind down for the night. They've still got a final job, which is the child has to get to sleep and they have to help them get to sleep.

Prof. Michael Gradisar: 00:12:46 So I think many parents that are putting in that extra effort at night when they're really tired and fatigued and want to just have their own time, they're quite well aware that, this is a problem. And in the book we want to say, yes, this is an issue for you. And usually what parents might do, which is totally understandable, is that they're so sleep deprived and they'll try to use a short term solution, which is to say, okay, just hop into bed tonight. Or look, just bring your mattress into our bedroom.

Prof. Michael Gradisar: 00:13:14 And unfortunately that problem still sticks around. So it's really important for us to not only distinguish good sleep from poor sleep, but why poor sleep might occur. Talking about the fact that all kids are born differently. Most families that have at least two kids will see that a couple of them are chalk and cheese. So trying to sort of say this is how they start out. But also there can be certain triggers sometimes. Some are quite obvious and some are not that might sort of trigger poor sleep.

Prof. Michael Gradisar: 00:13:45 And some of the things we do as parents that we inadvertently reinforce bad asleep. And it's important to sort of see that and it's not to shame or guilt parents because there's no manual that comes out with these babies about what to do.

Prof. Michael Gradisar: 00:14:02 We try to do what's best and sometimes it just doesn't work. It's really something that we didn't know about. And so from there I think it's really important for parents to know why poor sleep happens and what contributes to it so they've got this broad theory.

Prof. Michael Gradisar: 00:14:17 So when we're in the clinic, we really try to teach a lot of families about the basic theories of sleep. So if they understand the theories, they can understand the technique that you can use that is aligned to one of those series.

Jeff Mann: 00:14:29 So maybe you could just run through the sleep hygiene basics tailored towards the demographic for this book. The primary school age children.

Prof. Michael Gradisar: 00:14:40 Certainly, by the time a lot of families see us, they've tried some of these sleep hygiene techniques and it hasn't necessarily worked for them. People can look at it in terms of what you ingest that might affect sleep. Caffeine is one of the biggest ones and probably people don't realize, well what products contain caffeine. They don't realize that the darker chocolate that you have, the more caffeine is in that dark chocolate.

Prof. Michael Gradisar: 00:15:02 Sometimes people don't realize how much caffeine is in black tea. Sometimes people don't realize that caffeine is in green tea. So that's something that people could be made aware of in terms of how much chocolate or tea that their child might be having.

Jeff Mann: 00:15:18 Soft drinks I guess for kids as well

Prof. Michael Gradisar: 00:15:20 Yeah, certainly the colas can have caffeine in them. And certainly when you think about the approach to bedtime, you really have to sort of think about it like a volume knob, like you're really trying to dial down stimulation.

Prof. Michael Gradisar: 00:15:31 So whether that's stimulation internally about what you ingest, but also physical activity; lighting, noise, all of those things, everything should start to really de-stimulate and be quieter. So you don't want to have too much stimulation towards bedtime, whether it's the child's environment or whether it's going to also be something that they ingest.

Jeff Mann: 00:15:52 What are some other sleep hygiene tips? I'm thinking of things that routine for instance, lighting you mentioned.

Prof. Michael Gradisar: 00:15:59 Yep. So if we go through some of them. So for instance, one is to suggest avoid napping because if you nap you'll then, basically get a bit of sleep and that means it's going to be harder to sleep at night. We actually find a lot of college kids don't really nap. So usually that's not sort of an issue for this actual demographic.

Prof. Michael Gradisar: 00:16:19 Regular bedtimes is also something that is suggested. You do see a bit of that like, so what we mentioned in the book and what we do with parents, so when they come to see us in the clinic is to complete a sleep diary over one week where the parents with the child will indicate what times they go to bed and what times they get up out of bed, both on school weeks and weekends. So we do look at the variability of that. That's quite an important thing.

Prof. Michael Gradisar: 00:16:45 And some of the new sleep hygiene that's coming through is really about technology use. So trying to remove any sort of technological devices from the bedroom and trying not to have a stimulating technological activities before bed.

Prof. Michael Gradisar: 00:17:03 Although that's coming through. We've also done a lot of research with teenagers. I think we might've mentioned this a little bit in the book and we've been trying to test some of these theories of arousal using technology use and the bright light from screens. We're actually finding it's not as strong as what people are suggesting.

But that's probably another talk for another time. But we do sometimes mention to some specific families that they can probably swap out some of their more interactive technological activities, especially on mobile phones. And something is simple as watching TV could be less harmful if they struggled to sort of remove all technological devices from their child.

Jeff Mann: 00:17:41 We see quite a lot of sometimes quite hard line coverage about this, this stuff to do the screens and blue light but you're not quite as hard line as that you're saying? Well we need to see more evidence about this.

Prof. Michael Gradisar: 00:17:53 Absolutely. I mean we've conducted our own study in a sleep lab here at Flinders with teenagers. We gave them an iPad on full brightness and another time we gave it to complete low dim and this is in the hour before bed. It's on a very bright white screen. And we also had a filter so that it actually gave a warm orangey sort of color to the screen.

Prof. Michael Gradisar: 00:18:13 And, you know, in this sort of situation we have a very controlled environment so we can really look at cause and effect and seeing the effect of that screen on the sleep of these teenagers. And we measured their sleep, uh, with the best measures which is to use EEG. And we could not find any differences really between having a bright screen in the hour before bed versus having a dim screen. So we were a bit puzzled by that, but then when we saw other studies that were coming out from around the world, they were really confirming something similar to us.

Prof. Michael Gradisar: 00:18:44 There's, there's been a real failure to say that there is a direct link between bright screens and the effect directly on sleep. So I might sort of provide a bit of a caution here. What there seems to be consistent evidence of is that if you use a bright screen for at least one and a half hours continuously before bedtime, then that will mean that people that are

more alert and if you're more alert at home, you're more likely to then continue using that device and delay your bedtime.

Prof. Michael Gradisar: 00:19:14 So there's a sort of indirect path how bright screens could potentially affect sleep, but it's more so through the alertness that it provides and people just not being able to stop themselves.

Jeff Mann: 00:19:27 There's definitely guidelines in the book to avoid stimulating activities like that. But you're, you're basically saying that we still, we still need more of evidence to be clearer about the effects of these things.

Prof. Michael Gradisar: 00:19:40 Exactly what we attribute the poor sleep too, it might not necessarily be the blue lights. In fact, if I just dabble into it a little bit. Our research and research of other groups, is now starting to look at really individual differences I guess is what we would call it.

Prof. Michael Gradisar: 00:19:57 There are some people that are more likely to continue using a particular device or a particular video game more than others depending upon certain personality characteristics.

Prof. Michael Gradisar: 00:20:09 But they also interact with the activity that they're doing. So there are on the other side of the fence, there are game developers that are purposely putting AI algorithms, which mean that people are more likely to continue playing. And if you look at something, I guess if you compare, say Facebook to Instagram, I mean at least my Instagram at this point, we'll say you're up today, you know, there's a sort of definitive end.

Prof. Michael Gradisar: 00:20:35 Whereas Facebook can jumble up all the stories chronologically all the time. So there's never seeming to be an end. So there seems to us to be more of an interaction between the particular activity on a technological device and that person's personality characteristics. That actually seems to be the way that the field should be looking at where the research is telling us the damaging effects of technology is occurring for sleep.

Jeff Mann: 00:21:04 You're absolutely right. Facebook, all of these companies they want to hook people in. That's a really interesting point you raised about rather than the technology itself, how these different platforms are designed to, you know, to keep people hooked, and if it's at nighttime, obviously that's going to affect their sleep.

Prof. Michael Gradisar: 00:21:22 Exactly. Yeah. I think that's where people, hopefully kids will be more educated. Even people in the scientific world are missing some of these studies on personality characteristics of this point. So, I'm struggling to convince them it's going to be hard to get that message out to people in the community.

Jeff Mann: 00:21:41 Okay. What about, - it's quite a contentious issue and again, it's a very personal thing to do with the child and the parents and the, culture of the families. But what about, bedtime? You know, what do you advise? I know speaking to some people, some parents and I'm thinking really, that's like really, really early and then they get up at five 30 or six in the morning, which might be suitable for the family, but you know, is it suitable for the kids? What, what are your guidelines generally with regards to bed times.

Prof. Michael Gradisar: 00:22:14 Yeah, it goes back to that whole point that, so these babies don't pop out with a manual, so it's hard to know what their bed time is going to be at different ages.

Prof. Michael Gradisar: 00:22:24 When parents do come to us, we really work a lot with them on trying to find the best bedtime for that child. So that might be the second child has presented that has a sleep problem. So the first child slept quite fine. So they do have some experience in this matter, but they try to apply those techniques to this second child, it doesn't seem to work. And like you

mentioned, you go to the school when you start to talk to other parents. There might start to be a conversation around about bedtimes. And like you said, we had the same sort of thing.

Prof. Michael Gradisar: 00:22:58 One parents said that their child was put to bed at seven o'clock every night. And we thought that's really early. But it really has to be tailored to the individual child because they are born quite differently. And as parents we sort of take whatever experiences and information that we've got from talking to other parents or maybe family members or what happened with our previous children.

Prof. Michael Gradisar: 00:23:21 And so in the book we really try to give step by step techniques about how you can really try to find or in some ways experiment with the bedtime for your particular child.

Prof. Michael Gradisar: 00:23:33 And it has to be done in certain ways so that you can eventually find out a bed time. that means that they're going to be able to fall asleep a lot quicker and hopefully sleep more consistently through the night.

Prof. Michael Gradisar: 00:23:46 So it's a really important issue and fortunately it's a fairly simple technique to do in some sort of ways compared to some of the more cognitive techniques that you can do with your child.

Jeff Mann: 00:23:57 There's been a lot of stuff in the last couple of years about chronotype and this idea that, you know, we're all individuals and we all have our sleep timing and there's been books out about are you a dolphin or a bear or whatever as opposed to just, you know, the binary lark or owl thing.

Jeff Mann: 00:24:13 But we always apply that to adults. But there's going to be chronotypes within kids, even though their sleep is completely different to adults. But then if you've got two, three, four kids, you can't tailor all of their sleep individually to their chronotypes. But I guess as you say, it's got to be tailored in some way to the child's needs.

Prof. Michael Gradisar: 00:24:32 Yeah, exactly. I think we're talking about a couple of important issues. One is chronotype and it has a genetic influence there. And what we are talking about is how late the body wants to tell that individual or that child to fall asleep or when when to wake up.

Prof. Michael Gradisar: 00:24:49 So you can have a child and basically has a chronotype that means they're more likely to fall asleep later and another child that can mean that their body is dictating that they fall asleep earlier.

Prof. Michael Gradisar: 00:25:01 And aside from that though, you can also have this genetic influence on the amount of sleep that a child needs so this is where some parents get quite frustrated when they find out from us that. Look, you know, you just happen to have a child that needs less than the amount of average sleep than a child of their age. So that's also something to be aware of. So those two can sometimes confuse the matter a bit. Sometimes what we try to do is really look at chronotype first to make sure that that's in the correct sort of place. So it's not too late, it's not too early.

Prof. Michael Gradisar: 00:25:31 And then from there we'll have an idea about with this is a child that just needs far less sleep than the usual child, like you don't see so many consequences that occur because this child is getting seven hours sleep. They seem to get by on that.

Prof. Michael Gradisar: 00:25:47 And that was really an experience I've seen across the age range. At worst I've seen a couple of clients, they were only getting two hours of sleep per night but they were functioning on two hours of sleep. That's a real extreme of how variable the amount of sleep, including school age kids, it can vary quite a lot.

Prof. Michael Gradisar: 00:26:07 And we don't necessarily measure it. Like our first session is really asking a lot of questions, doing a big Q and A to really understand what are the, what we call contributing factors to the child's sleep problem. You know what are the things that are affecting kids sleep.

Prof. Michael Gradisar: 00:26:22 And then in the second session we really educate parents about what we think is happening to their sleep. Sometimes there's a bit of discussion about they sort of feel responsible and guilty and we have to really jump on that straight away and say, look, this is so common from what we see. And we often will do it as parents.

Prof. Michael Gradisar: 00:26:39 We do it inadvertently. We can influence their behaviors, but you have to understand the child is also built differently. So it just means that you just got to use different techniques for that particular child.

Jeff Mann: 00:26:49 And then there's a big sigh of relief, you see.

Prof. Michael Gradisar: 00:26:53 Exactly, yeah, they leave much more calmer, which is really great to see. And that potentially has also some sort of effect down the line about how they interact with their child at night.

Jeff Mann: 00:27:02 Okay. Well let's talk about some of these practical step by step techniques.

Prof. Michael Gradisar: 00:27:06 Yeah. We uh, we're looking at techniques from two different sort of areas. One was adult's insomnia and one was for anxiety for kids. So just looking at the adult insomnia techniques, there's one technique which is called a behavioral technique and it's got a bit of a scary name is called sleep restriction therapy.

Prof. Michael Gradisar: 00:27:23 So immediately when we say this to parents, we've got to explain it and try to put them at ease. But this is a technique that's been around since 1997 for adults with insomnia. And it's really based upon the physiological process that a lot of people don't really know about but unfortunately they experience it all the time, which is called sleep pressure.

Prof. Michael Gradisar: 00:27:46 So the idea is when you wake up in the morning, you start to build up sleep pressure and that therefore the longer you're awake, the more sleepy you get and the more sleepy you get, the quicker you will fall asleep.

Prof. Michael Gradisar: 00:27:56 So when you look at the actual technique for sleep restriction therapy in adults with insomnia. It's really completing a sleep diary first. So this can be quite a valuable learning experience for the parent. And you can download a lot of these sleep diaries from the Internet if you just go into Google images and do a search for sleep diary or sleep log. Even if you search for Child and Adolescent Sleep Clinic, Flinders university, we've got one you can download from our home page and we have one also available in the book.

Prof. Michael Gradisar: 00:28:28 And what you then do is you look at the average amount of sleep that your child is getting over a week. And then the idea is that you say, okay, well if my child is getting eight hours of sleep, then I'm going to provide them with eight hours of opportunity in bed.

Prof. Michael Gradisar: 00:28:43 So in other words, they might go to bed at a certain time or not ten o'clock at night and then get eight hours of sleep opportunity, meaning they wake up at six AM.

Prof. Michael Gradisar: 00:28:54 And the idea is you do that for a few nights or for a week, and then you see what their sleep is like. Has it improved? And if that's the case, fantastic, but you also gotta look out for any consequences. Are there certain things they look a bit sleepy? When they're sort of,

there at the daytime, when they come home from school, are they struggling to get out of bed, has a teacher reported that the behavior or inattention is occurring?

Prof. Michael Gradisar: 00:29:17 And if so, that's when you start to play around with their bedtimes. So you'll sort of get them to go a bit, maybe nine thirty for another week and try to extend that sleep opportunity.

Prof. Michael Gradisar: 00:29:26 And therefore, that goes back to what I was saying before, we start to experiment with moving around the bed times until you can find the ideal bedtimes for that child at that particular point of their development.

Prof. Michael Gradisar: 00:29:38 So when we look at that technique, technically it's not restricting sleep, so we labeled that technique, bedtime restriction therapy. So we're actually playing around with bedtimes for their child. So that's one of the techniques that we first started to really evaluate and test the Flinders University with a number of different families.

Prof. Michael Gradisar: 00:29:59 But we've also gone a bit further and thought, well, what if we actually do restrict the sleep of these kids? And so we've actually done a technique that is called sleep restriction therapy whereby if a child has an average of eight hours of sleep over a given week, we'll actually provide them with seven and a half hours of time in bed.

Prof. Michael Gradisar: 00:30:20 We actually are restricting their sleep a bit. Which everyone say you shouldn't do. So we actually went ahead and did it and the idea was that, I guess I had this, sort of experience went off when I haven't got as much sleep on a given time, the next day I don't really give a toss. I'm not worried about things so much.

Prof. Michael Gradisar: 00:30:41 And I wondered about these kids. They're lying there at night and worried about what's going to happen to school the next day. Sometimes they're worried about some sort of intruder breaking into their house. And we did actually look through the scientific literature and find that there was some suggestions that if you are able to do it with sleeping it's really the counter opposite to arousal that occurs with anxiety.

Prof. Michael Gradisar: 00:31:06 So we've started to test that over a number of years and found that parents that do go ahead with it, so they actually report very quick benefits. In some cases. We had a parent come back the following week and said, it's all fixed.

Prof. Michael Gradisar: 00:31:20 So bedtime restriction therapy and sleep restriction therapy. They're very similar and we outline in the book maybe which one you want to try first depending upon your child's sleep problems.

Prof. Michael Gradisar: 00:31:29 So we've got a road map, we call it in the book, but those are two of the techniques that are fairly powerful and can provide some quick results. So we have step by step instructions for the ball.

Jeff Mann: 00:31:40 Just to anyone who's not aware. A lot of people are calling it the gold standard now for treating insomnia, which is CBTi, cognitive behavioral therapy for insomnia. I could imagine some parents hearing that, you know, 10 o'clock, and recoiling in horror. But these are actually techniques that we know they work in adults.

Prof. Michael Gradisar: 00:31:58 Exactly. And we were hardly aware being parents ourselves that we had to also measure, while we were testing sleep restriction therapy, any sort of consequences that would occur for these kids. So we did some measures of their abilities within the intelligence, cognitive performance we call them. Also teacher reports also trying to find out about how sleepy they might feel.

Prof. Michael Gradisar: 00:32:25 And this is a technique where, keep in mind that we do a two week period and we didn't see any significant consequences from doing sleep restriction therapy overall for these kids, compared to a control group where we didn't restrict their sleep or play around too much with their bed times.

Prof. Michael Gradisar: 00:32:42 So it's very important that we try to do some evidence and the evidence at this point is showing us that we're not, we're getting some techniques that sound scary and I know you can imagine that occurring with parents.

Prof. Michael Gradisar: 00:32:52 I saw a face to face the first time I mentioned to their child that they had to go to bed at 11 o'clock at night. I think the reaction was what! And I was thinking yeah, I partly agree with you, but the good news is at least that we are struggling to find any harm and it's a short term solution for a problem that for a lot of the families that come see us that's been going on for sometimes an average of five years.

Jeff Mann: 00:33:19 Can I just ask you this distinction between the sleep restriction and and bedtime restriction?

Prof. Michael Gradisar: 00:33:26 Obviously, we're sort of saying, stay up until 10 o'clock, ten thirty in that first week parents are like, oh my God, how am I going to stay up that late? So we do recommend that it's really a case of them attempting sleep at that time. So if we're saying 10 o'clock is their new bedtime in finger quotes, it's really sort of saying that 10 o'clock lie down dim the lights or shut the light off if the child can do that. But they still can be in their bed and we recommend quiet activities like reading a book, listening to music. And really we'll go through with families about what sort of activities that they can do.

Prof. Michael Gradisar: 00:34:05 So they could actually be in their bedroom for an hour leading up to that new bedtime, just doing quiet activities. And it can be just in dim light conditions. It can be just playing with something on the floor, moving into doing something on top of the bed covers doing something underneath the covers and then when it's time to fall asleep at 10 o'clock, then they can turn the light off and attempt sleep then. So there can be some modifications around it to make it easy for parents.

Jeff Mann: 00:34:28 Right. So it's not as strict as the guidelines do you give to adults, get out of your bed, go somewhere else, somewhere dimly lit and read a book or whatever you, they are allowed to be in the bedroom, you know?

Prof. Michael Gradisar: 00:34:37 Yeah. And on that point, this, this sort of harks back to that issue that we were fortunate enough to study under Leon Lack who was quite good friends with Richard Bootson who developed stimulus control therapy, which is that technique you speak of, if you can't fall asleep within 15 to 20 minutes in bed, get up, go to another room, do something quiet under dim light when you feel sleepy, go back to bedroom and try again.

Prof. Michael Gradisar: 00:35:03 Then we were able to have Dick Bootson come here to Flinders and spend some time with him. And I've had a conversation with him many years ago he did actually say, you don't have to go into another bedroom, sorry, another room. You can actually just get up out of bed, sit in a chair next to the bed. As long as it's a different sort of stimulus, not necessarily a bedroom. That has to be something that you need to avoid. So there can be, by the sounds of it, these different modifications, different techniques.

Jeff Mann: 00:35:37 Fantastic. This is not related to the book, but it's related to the subject. There's been some coverage recently about attention deficit disorders in kids and misdiagnosis. Discussions about big pharma and all that. But there's been some discussion and some studies to say that potentially, some of these kids who are showing symptoms of hyperactivity and ADD symptoms

in the daytime, might just be sleep deprived. It's not directly related to what you're talking about in the book, but I'm guessing you must have come across some of this in your work.

Prof. Michael Gradisar: 00:36:13 Yeah. And it's more so with the younger children, like toddlers. They're in that developmental phase where they can get up and move around and so forth and certainly related to sleep disordered breathing. The idea of having that sort of poor quality sleep and fragmented sleep. So in other words, when they're trying to sleep and, and trying to breathe and not getting enough oxygen because the airways are becoming restricted, the brain essentially wakes them up and they're not getting into that sort of nice continuous good sleep.

Prof. Michael Gradisar: 00:36:44 It's fascinating that in that particular age for compared to adults, they don't necessarily feel sleepy or show those signs of sleepiness. If anything they show signs of hyperactivity and it has that sort of presentation of ADHD and could actually be misdiagnosed.

Prof. Michael Gradisar: 00:37:05 Where you in fact find that with a number of children if the situation is that they have sleep disordered breathing because they have these large adenoids and tonsils and actually have those removed, a lot of families have said they've seen a complete change in their child and this hyper activity is gone.

Prof. Michael Gradisar: 00:37:24 So that's certainly an issue. And that's aside from the issue, the controversial issue about whether a child truly has ADHD or not because if they do have ADHD and we have seen those, school age attending children, then yes, it's very difficult for the parents.

Prof. Michael Gradisar: 00:37:42 They do have a child that is up very late at night and they also have a child that can sometimes wake up quite early in the morning. It could be a case that they fall asleep at 10 30 at night. They're very disruptive to the other kids in the family. And then they're awake at five o'clock and they're ready to go again.

Prof. Michael Gradisar: 00:38:01 So in those particular instances, it's very hard for families. I think usually what happens from our clinical experiences is that they are prescribed some sort of stimulant, which helps to ease those symptoms for the child, especially if their school attending they might have some sort of pills that they give them in the morning before they go to school that will last over that school period. Sometimes I'll give them, maybe another pill when they come home, but then they finally have the sleep problems, they go back to their GP or pediatrician and essentially have some sort of pill to try to bring them down again.

Prof. Michael Gradisar: 00:38:35 And for parents that can be heartbreaking because they're thinking, what am I doing to my child with all these chemical medications by big pharma. What we've done in these sort of situations when we've been referred these clients, and we don't mention this in the book, but what we do is really work with the pediatrician or with the GP to really reduce to a point where they stop taking the nighttime medication, replace that with melatonin and usually for kids they would like liquid melatonin. And I know I'm now entering another controversial area.

Jeff Mann: 00:39:11 Yeah, I was going to bring it out because it's another hot topic. But it's perceived as a natural product and not a sleeping pill. And if it's working, and it's sending kids to sleep and they're thinking, well I'm going to carry on doing this, but there's issues, could you talk about that a bit more?

Prof. Michael Gradisar: 00:39:29 Yeah. I mean the idea is that you still try to go for these cognitive and behavioral techniques when you do see a child that's experiencing sleep problems and if they fail, then the second line of treatment is to look at melatonin. There'll be cases where I would reverse that and go for melatonin straight away.

Prof. Michael Gradisar: 00:39:49 I clearly remember a case I had over a year ago where it was a child around three, four years of age. And the parents were very strict, deprived and if you looked at this child's sleep diary, yes, they were falling asleep much later than a child should I guess on average for three to four year old and was also awake quite early.

Prof. Michael Gradisar: 00:40:13 So, the parents were themselves feeling quite sleep restricted and when the family mentioned the husband, I forgot what sort of trade he did, but, he works on rooves and he fell off a roof and he attributed that to sleep deprivation.

Prof. Michael Gradisar: 00:40:30 And so in a situation like that, something like melatonin can provide some pretty quick results for kids. And so when a family is at risk, like that, that's a case where I would sort of say, look, let's get onto this straightaway.

Prof. Michael Gradisar: 00:40:45 Unfortunately, I cannot prescribe it. I'm a psychologist by trade. So we have to try to sort of do this through a pediatrician or a GP and then they have to go from there to see a pharmacist.

Prof. Michael Gradisar: 00:41:04 And I think like what we discussed previously in this podcast is that sometimes their education is not up to date with the research and there are certainly articles out there that do say that melatonin is useful for kids and also for adolescents. So, you know, under 18. But we'll often get booked, family will get blocked.

Prof. Michael Gradisar: 00:41:28 They'll phone the GP or the pediatrician says, no I'm not going to do this. Or sometimes we even had the GP, say, yep, here you go, here's the script, and then the pharmacist has been really giving the Q & A about it and finding blocks there.

Prof. Michael Gradisar: 00:41:41 But certainly in children that present with autism, some children that present with true ADHD and especially where there's a risk to the family, whatever that might be, then certainly I will go for something like liquid melatonin, especially if the child is under, say, 10 years of age.

Jeff Mann: 00:41:58 I'm thinking I'm going to do it a whole, podcast on melatonin because it's a huge subject. And I know we've, we've veered off track a little bit, but are there any other sort of practical techniques in there we want to talk about?

Prof. Michael Gradisar: 00:42:11 I guess there's a couple of other important techniques that we do because you know, we have described your time restriction therapy and speech therapy, but there can be cases where the family will do that, but the child is still sleeping in their parent's bedroom.

Prof. Michael Gradisar: 00:42:24 So in such situations it's important to teach the child certain skills so that they can then sleep more independently. So we cover a technique called cognitive therapy. It's really looking at trying to get kids to sort of voice what sort of thoughts are worrying them at night or scaring them at night and getting them to really try to test out those thoughts and evaluate them for how probable they will occur. But also looking for alternative reasons.

Prof. Michael Gradisar: 00:42:53 So commonly we'll find that kids will say that they're very afraid that there's going to be some sort of intruder that breaks in and causes harm to themselves or their parents.

Prof. Michael Gradisar: 00:43:03 And so we say, okay, well that makes sense. If you're thinking something like that, you're going to feel quite anxious and you're going to have trouble falling asleep. But what will trigger a thought like this?

Prof. Michael Gradisar: 00:43:15 And they'll say that they hear some sort of sound outside. Okay, so, but what else could make that sound? And then they start to really generate a lot of different ideas. It could be an animal, it could be a cat, could be the wind, the tree knocking.

Prof. Michael Gradisar: 00:43:27 And that's when they start to realize that they can practice these skills and it's certainly needs practicing so that they can have some sort of cognitive mastery over their emotions. So that's one of the techniques that we go through.

Prof. Michael Gradisar: 00:43:39 And the next one is really getting them to be more brave about exposing themselves to this scary situation about trying to fall asleep by not being so close to their parents.

Prof. Michael Gradisar: 00:43:51 So that's usually a technique called exposure therapy. So they're basically learning a new skill, and that allows them to therefore, not necessarily sleep in the bedroom of the parents, but eventually sleep in their own bed. So those are two other important techniques for families that have a child that has that strong dependence of having their parents nearby to help him sleep.

Jeff Mann: 00:44:13 I'm wondering if it's an adult, they might be able to give a slightly more rational response. But with a kid, you know, with a wild imagination, does it differ in how you would apply that to an adult? If you're asking, you know, what are your irrational fears or anxieties at nights? Have you come across any challenges with dealing with kids' answers to those types of questions?

Prof. Michael Gradisar: 00:44:35 Yeah, it's certainly an interesting developmental stage because on the one hand got some younger kids, a fear could be monsters under their bed. So you've got to have some discussions and like you say, ask questions about these questions about these monsters, how big are they, what color are they? And so forth. And then you say, okay, well, if they're that big, how do they fit under the bed?

Jeff Mann: 00:44:55 Right

Prof. Michael Gradisar: 00:44:57 So you sort of get more skilled about trying to look at the logic of their thoughts. But at the other end of the spectrum, you can have the older children who are attending school.

Prof. Michael Gradisar: 00:45:12 And we'll say, okay, so what worries you about not being able to fall asleep? And they'll say, oh, it's going to take me long time to fall asleep. So you say, well what's so bad about that? And they say I won't get enough sleep. And we say, so what's the problem with that? Uh, I'll be really sleepy the next day. What's the problem with that? Uh, I won't do really well on my grades and then I won't be able to get a good job and I won't be able to support my kids later on.

Prof. Michael Gradisar: 00:45:33 I actually had a child, a nine year old said that and it was exactly what I hear from adults. So it was incredible how much, you know, we had these sort of young adults coming through voicing very similar thoughts.

Prof. Michael Gradisar: 00:45:46 So it's certainly an interesting age range where you can get these really wide and varied worries and thoughts. And having worked myself with kids and with adults, you know, you can rationally talk about these things during the light of day in a clinic, in an

office, but you know, come night time, it can be much more irrational voices. So it's interesting that trying to translate those skills when people go home.

Jeff Mann: 00:46:11 Yeah, just, just on that subject, I mean it's such a common thing, isn't it? It's when the anxieties come out pre bedtime, you know, you've had the best day ever and then it will come to bedtime and then suddenly these anxieties will just flood out and like where did that come from?

Prof. Michael Gradisar: 00:46:29 Yeah, exactly. And again, I'm extrapolating from the adult literature here and it's certainly something I've heard a lot of, even with adults was insomnia. They say they had a great day and put their head down at night and suddenly there's this flood of thoughts and worries and kids can also be the same.

Prof. Michael Gradisar: 00:46:46 And when you look at the literature, it's interesting when people are doing daily surveys multiple times during the day. And if you look at when they worry, they seem to worry first thing in the morning and last thing at night.

Prof. Michael Gradisar: 00:47:01 And I guess the theory that we have is that when you are basically going to bed, you're turning the lights off, suddenly you have no visual stimulation to distract you, you have no auditory stimulation to distract you. And potentially those background thoughts that are often present, they're just more loud and you're more aware of them. And so this is probably what's happening.

Prof. Michael Gradisar: 00:47:24 Kids are all distracted with schoolwork, having fun, playing, all the chores they got to do. You put them down to bed at night, suddenly they are so in tune to their thoughts. And again, for adults., so in these cases we are starting to develop I guess techniques that we would call cognitive distractions, sort of techniques you can do in the lead up to bedtime to really minimize paying attention to those thoughts, as a sort of a quick way, or it might be a simpler way to deal with cognitive contributions to sleep problems as opposed to the hard work and practice of doing cognitive therapy.

Jeff Mann: 00:48:00 Do you recommend for children having sounds and music at night? Can those kind of things help?

Prof. Michael Gradisar: 00:48:06 Yeah that's something we'll suggest. Sometimes listening to music and having to go through what sort of music that would be. And I'm a little bit biased as a teenager, I actually used to fall asleep listening to Metallica. It was a way to try to drown out all those thoughts when you're trying to study.

Prof. Michael Gradisar: 00:48:21 I'm bringing a bit of a bias there, but it can be music in some ways. Reading a book, if it's a good book that can distract you. These are quiet activities. But I've also noticed when we've looked at the literature in relationship to TV and sleep, there's actually a correlation that's much more closer to zero if anything.

Prof. Michael Gradisar: 00:48:43 Which is really interesting to us because we hear of some people that say that when they watch TV at night, you know, they fall asleep in front of the TV. And that's a distraction, you're not interacting with this TV. You have no influence over it really.

Prof. Michael Gradisar: 00:48:58 And so we've also suggested that for particular cases as well. So this is something that people can sometimes try for kids. May be when they're doing this bedtime restriction therapy they've got to go to bed a bit later, the idea might be to watch a bit more TV and then go to reading a book and then go listen to some music, sort of destimulate and hopefully distract from worrying thoughts if they're going to go to bed later.

Jeff Mann: 00:49:20 I need silence. But I guess it's a very individual kind of thing as you say, isn't it? I mean, you listened to Metallica, that would probably get all my stress hormones going straight away. But I guess it's a very personal thing, isn't it?

Prof. Michael Gradisar: 00:49:32 Exactly. Yes. So I won't recommend that to other people..

Jeff Mann: 00:49:36 No, I'm not without the evidence. Let's move on to talking about parasomnias. This is the last section of the book. And you talk very specifically about the types of parasomnias are common in school age children. First of all, can you explain what a parasomnia is? Because it's a specific subset of sleep disorders and parasomnias is one of those brackets. It's one of those sort of exotic branches of sleep disorders, isn't it? But there are certain ones that are very specific to school aged children. I just wondered if you could explain it broadly. What a parasomnia is?

Prof. Michael Gradisar: 00:50:14 Yes. A parasomnia is when a child or person will wake up during sleep and it's usually in the first half of their sleep at night. And they'll, some sort of unusual activity. So commonly what you'll see in younger children, um, and it's sometimes can still present in school aged children is something called night terrors.

Prof. Michael Gradisar: 00:50:37 So they will wake up and they will be highly distressed. They won't be completely opening their eyes or sometimes be responsive to people around them when people try to reassure them, they actually can get more agitated.

Prof. Michael Gradisar: 00:50:53 However, in the mornings they have no memory of it. And so the basis of some of these parasomnias is that the child is actually in quite a deep sleep and there's been almost this burst of arousal, this working them up out of sleep. And then you get these unusual behaviors.

Prof. Michael Gradisar: 00:51:11 So, not only can you get the night terrors, which can be quite distressing for the family members, but you can also get sleep walking and that can be sometimes quite harmful if especially with situations where the child has tried to unlock the front door and walk out.

Prof. Michael Gradisar: 00:51:28 And in adults, you know, if it does last that long, you get certain behaviors like sleep eating, where they will just go to the fridge and they'll eat something and the next morning have no memory of it, but I can see that there's this half eaten doughnuts or fish fingers that are lying around the kitchen.

Jeff Mann: 00:51:46 I read about someone eating the contents of an ashtray, the bizarre, very bizarre end of the spectrum.

Prof. Michael Gradisar: 00:51:52 Yes. And, you can also have these cases where people claim that they have sleep sex as well and, and bad cases of sometimes, sleep driving or there's sometimes they're sort of linked with certain medications.

Prof. Michael Gradisar: 00:52:06 So yeah, these are quite rare. But, it's something, nevertheless, we had to really address in the book because at least in younger children, toddlers and so forth, these parasomnias can sometimes occur when the child is not getting enough sleep.

Prof. Michael Gradisar: 00:52:21 So if we're recommending to families to try to restrict the sleep of children, then we've got to also be aware that if they have these sorts of problems of having a parasomnia what to also do about that.

Prof. Michael Gradisar: 00:52:33 And likewise, it was really important for us to measure this in our research when we were doing sleep restriction therapy with these families. And to our surprise,

we weren't getting a lot of this occurring at all. And this was including children that had a previous history of parasomnias or currently history of parasomnias.

Prof. Michael Gradisar: 00:52:55 It was a real surprise cause everyone says not to do it because you will get these parasomnias. But I think what we've learned, and this is something that's certainly the case for young children, toddlers, but it might not be the case for school age kids.

Prof. Michael Gradisar: 00:53:09 So it was a nice sort of scientific finding for us. But anyway, in the book we do outline a couple of techniques of parents can use if they have a child that has this sort of problem.

Jeff Mann: 00:53:20 Before you took about the specific techniques. Can you just break down, I think there's a lot of misunderstanding between night terrors and people just think nightmares, but it's a very specific thing, isn't it? Night terrors.

Prof. Michael Gradisar: 00:53:33 So night terrors do occur out of deep sleep. And because they do occur out of deep sleep, children are unlikely to remember them in the morning and it's also more likely to occur in the first few hours of sleep.

Prof. Michael Gradisar: 00:53:48 Whereas nightmares, they usually occur out of the dreaming sleep and children are more likely to be able to recall if they had this nightmare or dream. They won't do it 100% when it comes to the recall, but they're more likely to do it.

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Prof. Michael Gradisar: 00:54:00 And that's usually going to occur, the nightmares, in the second half of the night. So this is going to be early hours of the morning. Three, four, five, six AM. But they can have a presentation that looks like that.

Prof. Michael Gradisar: 00:54:12 When some child has a night terror, it can actually look like they're having some sort of nightmare, they're quite stressed by it. But we do specify in the book that essentially if the child cannot remember it and it's also towards the beginning of the night it's far more likely to be a night terror as opposed to a nightmare.

Jeff Mann: 00:54:29 It can be really, really distressing for the parents as well because they can literally be inconsolable but at the same time seemingly terrified out of their wits.

Prof. Michael Gradisar: 00:54:40 Yeah. And you can go onto Youtube and type in night terror and people can see it for themselves and manipulate the volume so they will, cause it is very hard to hear.

Jeff Mann: 00:54:50 Okay. Very briefly bedwetting that's classed in this bracket of parasomnias as well but we wouldn't necessarily bracket that as a sleep disorder. But that's something you talk about as well.

Prof. Michael Gradisar: 00:55:01 Yeah. And that can be something, again, we have to sort of address with the families because if they are doing something like sleep restriction and when you do something like this, it's going to really build up the intensity of their deep sleep. And if it is doing that, then we want to basically arm parents with some sort of techniques that might be able to help them if they find that their child starts to do some bed wetting.

Prof. Michael Gradisar: 00:55:25 And for cases where it's like pure bed wedding, you will have the literature suggesting that bed alarms probably do help, something like seven out of 10 children. But some children find that quite alarming for lack of a better word so they don't like to have them. So there are other techniques that parents can use. And we also, once again, suggest a couple of that they can try.

Jeff Mann: 00:55:50 You do recommend, again, some evidence based treatments and techniques. Can you run through those?

Prof. Michael Gradisar: 00:55:57 So there are a couple of suggestions. So one is because you are really intensifying the deep sleep that the child is having if you are doing something like sleep restriction therapy, then the immediate thing is to try to keep them some more sleep.

Prof. Michael Gradisar: 00:56:12 So there can be different ways of doing that. And it can be something as simple as just getting them to go to bed 15 minutes earlier so they can get a little bit of sleep. Seeing how that goes and trying to do a bit of what we would call cause and effect change one thing, see what the result is.

Prof. Michael Gradisar: 00:56:27 Sometimes it can be letting the child sleep in 15 minutes later. Sometimes it can be just only allowing them to sort of have a bit more of a sleep in on the weekend. Whether they can have a nap for even like one nap a week.

Prof. Michael Gradisar: 00:56:39 In some ways they're trying to catch up on a bit of sleep and seeing how, if that has an effect of deintensifying their deep sleep overall and therefore less likely to have these parasomnias.

Prof. Michael Gradisar: 00:56:49 And another technique that we still don't know the mechanism that governs it is that, is called scheduled awakenings. So the idea is you do a sleep diary for a week and you try to locate when the child is on average falling asleep and then at what time the child during the night he's having these parasomnias.

Prof. Michael Gradisar: 00:57:09 And then the following week you're trying to anticipate the occurrence of these parasomnias. So say they seem to be occurring on average at 10 30 at night. Then the idea is 15 to 30 minutes before they would occur, you actually try to wake your child up. But not completely, just enough so that they look like they're not sleeping.

Prof. Michael Gradisar: 00:57:27 And somehow that seems to break that progression of having a parasomnia that night. But again, we don't know the reason, I don't know how it came about, but this is a technique that seems to also provide some relief even as quickly as sometimes as a week for some families.

Jeff Mann: 00:57:44 Appreciate you saying, you know, we're not sure how that mechanism works, but essentially you're disrupting the sleep cycle and potentially there's something going on with the, the natural occurrence of these parasomnias. So it's been really, really interesting. We've raced through the book. Is there anything else you'd like to, you'd like to add?

Prof. Michael Gradisar: 00:58:05 I think the last chapter in the book that we wanted to touch upon, and actually the book editors wanted us to write a lot more about, was, eventually these school age kids turn into adolescents at some point and things start to change in their bodies that do disrupt sleep.

Prof. Michael Gradisar: 00:58:24 So we want it to forewarn parents so that if they got to the point where they were trying a lot of these techniques and they had a child that had much better sleep health, our research has also tried to track the kids that we've done this with over years and we find that so once they cross that sort of wall of puberty, the good sleep practices can still be there and they can still have healthy sleep but not for all of them.

Prof. Michael Gradisar: 00:58:48 Sometimes they develop completely new sleep problems that the techniques in our book don't teach the parents about because essentially teenagers start to have this natural drift in their body clock where they start to naturally fall asleep later and wake up later.

Prof. Michael Gradisar: 00:59:06 That requires a different set of techniques for parents and teenagers to try to circumvent that problem. But we do provide some suggestions in the book, some simple suggestions.

Prof. Michael Gradisar: 00:59:19 For instance, our researchers find time and time again that if you can set a bedtime for your child throughout their early teenage years, at least on school nights, and that's a protective factor for their sleep and how they function the next day.

Prof. Michael Gradisar: 00:59:36 So it's a very simple thing to do and very hard to do though once you stopped doing that. So we really urge parents to try to maintain that practice for as long as they can in their child's teen years.

Jeff Mann: 00:59:49 Yes. So potentially you followed your book and you've conquered it and then the teenage years come and then it all starts again. Yes, exactly. Can you tell us where people can get hold of the book?

Prof. Michael Gradisar: 01:00:04 Yep. So the book is called "Helping Your Child With Sleep Problems". So they can purchase the book by going onto Little Brown Book Group. They sell it in the UK still, it's a, in the UK, it should be in bookstores there as well, Hachet and Amazon as well.