

Presentation Transcript

Topic: Creating Autism Sport & Exercise Programmes that Make a Difference

Speaker: David Geslak, Exercise Connection

Hi, everyone. It's a pleasure to be here and talk with you today.

Today we will be discussing exercise and sport, building programmes that make a difference.

My background is, I'm an exercise physiologist, trained through the American College of Sports Medicine. I'm also a strength and conditioning specialist through the National Strength and Conditioning Association, and I have a degree in health promotion. I accidentally fell into autism in 2004 after training a father who had a son with autism, and he asked me, can you help him teach him sport. But he also he can't skip, and if you don't know, a neurotypical child, who can skip is shown better to read than a child who cannot. Knowing that I was more intrigued in helping to teach him to skip before we got to sport. And I was able to get him to skip and four one-hour sessions, when took it him, his family, the therapist and the team had tried for nearly years. That moment. That day changed only Joseph and his family's life, but it changed my life and my career path. I went on to go and teach and learn about autism through being a Para-Educator.

Again, I had no background in autism. So, I needed to understand how these kids learn best. So I went on to be a Para-Educator, which is a one-on-one support aid for a child in a school. Because the school knew my background about nine months after being a Para-Educator, I was then asked to start their full fitnesss, their first fitness programme, and I did so from kindergarten all the way through transition-aged students, which means 22 years old here in the United States. I built a programme that worked, but also found because of a Para-Educator found areas that that these children need to succeed not only in an exercise programme, but it is a sport-based programme. I've gone on and I humbly say this that I've gone on to now being an international keynote speaker, a published author, and as well as contributing writer to journal articles.

And I'm very excited to share with some of you that I and my teammate Amber Pantaleo, were actually in Singapore in 2019. It was an incredible experience. We enjoyed your country. We enjoyed working with all of the professionals and families there. And we ended up training nearly 100 Singapore professionals and they earned their autism exercise specialist certificate.

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We also worked with and trained and educated Singapore parents about the benefits of exercise and why it was important and how it differs or is different than therapies like OT and PT, but how it needs to have its place in their child's life and development.

One thing that I want to point out to you guys, is that this was a recent study done in 2017, that showed that exercise can reduce stereotypical behaviours like echolalia, which is the repetitive of words or phrases or hand flapping. Now why is this study so critical? Well, I think it does a couple things for us as professionals and professionals to share with parents or other professionals in special education. So, one, 10 minutes is an obtainable goal, attainable goal for an exercise or sport based professional to try to keep their kids or their clients or their students engaged. It's an attainable goal for the student, the client or your athlete to stay engaged and especially when starting a sport or an exercise-based programme.

And this also needs to be carried over and shared within the special education departments or maybe schools that they attend or directly with the families and the reason is because some of these stereotypical behaviours like echolalia and hand flapping are things that both the parents and the special education teachers or therapists are trying to reduce. But many don't know about the power and the benefits that exercise can provide. So, I highly encourage you to share research like this with the families, the children, the adults, the athletes that you may be working with, and the special education teams.

Parents rate exercise as the number one treatment. This is a United States based parent survey done on autism done with autism parents. It hasn't made its way to publication yet. But Dr. Adams, I know, and his team, are trying to do so. But again, what I also want to stress here is exercise does not replace physical therapy, occupational therapy, or any of those listed, but it has its own purpose. And that's what I want to briefly share with you today. And then I'll answer some questions at the end. But also share ways and how you can better teach that and create these programmes that make a difference by using strategies that we know this community learns from.

So, when I talk about evidence-based strategies, as you can see here on the screen, there's a number of them listed there for you on the right. Now, some of these you may have heard of, and some of you may not. But these some things that we go on, and many of your professionals who've gone through our trainings have learned about and how to use them. But there's a couple things I want to point out before we move on. Some of these evidence-based practices are going to be used in combination, right? Meaning you may use a visual support, like a picture, in combination with modelling. Modelling is just you demonstrating that sport or

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that activity, but sometimes you have to pair them together, and reinforcement there at the bottom. What is reinforcement? Well, that's typically what you as coaches, or teaching professionals typically do, right? Hey, good job, keep it up.

That works. But then you may use a visual reinforcement, to show that what they're working towards, or what they're earning something that they may enjoy, to get them to start maybe kicking a soccer ball, but then knowing something that they enjoy comes after it. So that's the reinforcement, but also used with a visual support or a picture. Now the last one, there is exercise.

And yes, exercise is an evidence-based practice. It's defined as the increase in physical exertion as a means of reducing problem behaviours or increasing appropriate behaviour. But here's the catch. You can't just throw a kid, an athlete or a student or an adult into an exercise setting and expect those results to happen. You need the other evidence-based practices that I discussed, right visual supports, modelling, videos, a social narrative. Critical, those visual supports are critical to getting your child not only to exercise, but to teach sport and to what is how they are learning in the classrooms. If you don't use those visual supports in a sport or exercise programme, it is going to be extremely more challenging for you to teach it, teach a sport or exercise to them. And for them, it's going to be very frustrating, and which could deter them from what they need most, exercise or sport to gain exercise.

So this is what I call an autism ready sport. When I was teaching at that school, I found that baseball is one of the most highly structured programmes to teach, and I was able to make it visual. So, what you see on the screen here is you see different coloured feet of where the athletes or the players could stand. You see stop signs and every base and a base with a number on it. So, the reason I show this is because these are things that we try to teach and give you empower you to understand so you can teach your sports. I just felt that this is one of the most structured sports to teach and I saw a lot of success with it versus basketball or maybe soccer, for example. There's a lot, there's no structure to it. The ball goes there, or it's thrown or it's passed there. Here, I think it's a great sport introduction that you can make for many of your clients or athletes. But again, you have to pair that with visuals. So, what you're seeing on the screen here is, I actually, when I was teaching at my school, we didn't have a baseball diamond, I just drew all this with chalk. Then I had bases, but I made stop signs, and I put coloured feet out there. So, the children knew where to stand, and that they were on separate teams. So that's kind of the things that I'm talking about is you guys go into design

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your sport based your programmes is that it's encompassing a bunch and multiple types of evidence based practices so they can have success and ultimately gain the benefits of exercise.

[Slide 10] Now, this is one of the certificates that many of the professionals in Singapore did go through in 2019. And how this works is, it is an American College of Medicine based certificate. It's a two-step process to earning the certificate. One, you have to complete online modules, which those online modules take about six hours to complete. They are done through ACSM's portal, and they cost 120 US dollars. And they're valued at six ACSM CECs. And the reason I say that is because one CEC is one working hour. In the United States, we have many professionals petitioning to their agencies, petitioning to their schools, and in earning extra credits per se, through the respective agency or schools for obtaining the certificate. So sometimes it's a two for one benefit. And then the second step, which is why we came to Singapore, was to do it that time an in-person workshop. But now what we've done is we've made that now a virtual workshop. And that virtual workshop is now spread out over three days to prevent the zoom fatigue and is also valued at six ACSM CECs. Because ultimately, we're going to spend another six hours via zoom with us. And you're not just going to be sitting, I promise you that we are going to be getting up and doing some exercise.

So right now, we are tentative to Sport Singapore, and we'll be hosting a virtual workshop in some time or May or June. And for more details and any more information on that, please contact Stefanie and as you can see on the screen there, but she is going to be your best point of reference and either surveying you, or just getting you the information, the more up to date information as we plan.

As I mentioned, we have gone through being a Para-Educator, I had gone through and seen all the different therapies and sat a special education classroom, sat in social skill groups. And then what I found is that the evidence base resources that these kids were learning from like visual supports, that were truly engulfing a special education classroom, which I know is happening in Singapore. What happens is, is still to this day, unfortunately, in the United States, when you go to a physical education class, or an adapted physical education class, or an exercise setting, typically it's a blank canvas. There's no visual support and that's how we know these kids learn. Sometimes that is the first step in designing a successful exercise programme, or sport-based programme. And that's why we started to create these visual systems just to make it easier on the professionals and the teachers doing it. Because you could spend hours and hours trying to gather all this stuff. We've created various packages, as

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well as DVD and a handbook just to educate both professionals and parents about the benefits of exercise, and how they can begin to introduce and teach that to their child students, clients or athletes.

We also created exercise buddy. It really stems from the visual exercise system since technology then, obviously iPads were introduced along the way throughout my career, and the last 16 years I'd spent on teaching this community. But exercise buddy truly challenges the students and the teachers, everything you have is at your fingertips. It's an instructional resource where you can create assessments, customised exercise or sport-based routines, collect real time data. And if you are as a teacher, measure IEP goals, but if you're not a teacher, right, and you have sport based or exercise based goals, you can measure and adapt your programming with this as well.

EB Pro features, you can use it synchronously or asynchronously, you can create multiple profiles, it saves unlimited workouts, and it collects and reports your students or client data. But the other big thing that we added a couple years ago was that you can create custom visuals and video. What we have in house, over 300 visuals, already embedded in it over 150 video models. But at the end of the day, we know that you as parents or professionals, are teaching exercises, or activities, maybe what we don't have, but you can go ahead and create that. One thing we want to mention is really point out here is that it is not compatible for phones. It's compatible with tablets powered by iOS, or Android.

We've embedded six evidence based practices in this. So technology aided instruction, it's a tablet that is an evidence based practice to help our children or this community learn visual supports, it has video modelling, social narrative, it has exercise, and it has positive reinforcement.

Again, you don't need pencils, you don't need paper, it's everything there is at your fingertips and you collect data without pencils. We're moving into 2021, and its technology but the thing that I do want to mention, and stress is that,

It's not going to solve the problem for every kid with autism, or every kid with special needs. I, of course, wish it would but we know that technology can be a major distraction. So, this is another tool in your toolbox, or you may have this, but you're going to have some sort of paper-based system to help your children, clients or athletes learn sport or an exercise.

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We do have an assessment tool, so that's something you guys are doing as coaches, you can create your own custom assessment assessments but that's actually based in the web, and then it pushes out to your devices. So, we've got a number of tutorials to show you how all this works.

This is now ExerciseBuddy, it is now supported in seven independent research studies. And one of those research studies as called out there that she has actually done three, she is a BCBA or ABA researcher and university professor, and the fact that we bridge the gap from the other studies of physical education or adaptive physical education world, but now that we're bridging the gap in special education. I highly suggest that, again, you share this with special educators or parents to understand that exercise needs to play a role in our children's lives. We do have a 14-day free trial for this. So, you guys can sign up right now and start using it. Otherwise, after that trial, it's \$6 a month or \$54 a year per licence, and there is the link to our YouTube tutorials.

So, with that said, I know it was brief and it was extremely brief, extremely quick. But if you have any questions, you can email us, again, if you remember from earlier with the autism exercise specialist certificate, definitely email Stefanie for more information as we come out with it and sign up for any of your free trials via ExerciseBuddy. Right now, if you have a compatible device, so I appreciate you listening, and I look forward to now answering some of your questions.