

Transcript of Unpacking Trauma: A Follow Up to Healthy Brains, Healthy Families

Tiedra Marshall: Good morning, I'm Tiedra Marshall, family support technical assistance coordinator with the Pennsylvania Family Support Team, based at the Center for Schools and Communities. I will be your moderator for today and it's my pleasure to welcome you to today's webinar session, Unpacking Trauma: A Follow Up to Healthy Brains/Healthy Families, presented by Michael Brink.

Our presenter today is Michael Brink. For those of you who were able to join us in April, you were able to get a sneak peek at our presenters' information, skills and technical assistance and knowledge. He's a consultant with Early Intervention Technical Assistance, part of the Pennsylvania Training and Technical Assistance Network.

He provides training and assistance to local infant, toddler and preschool early intervention agencies that provide supports and services to children birth to school age with developmental disabilities and their families. As an early childhood professional, he has worked as a teacher, home visitor, administrator, trainer and always as a learner. Michael is a board-certified behavior analyst and a certified brain injury specialist. It is my pleasure to welcome Michael this morning. Thank you for joining us, Mike. The microphone is now yours.

Michael Brink: All right, thank you Tiedra. Good morning everyone, it's nice to be with you today. As Tiedra mentioned, this is a follow-up to the Healthy Brains and Healthy Families webinar that my colleague, Heidi Whetlocker and I did a few months back. During that time we spent a significant amount of time talking about brain development and what that looks like, so I'm just going to review that very briefly this morning.

There are a number of factors that influence early brain development. These important factors include things like genetics, food and nutrition, responsiveness of parents, daily experiences and physical activities. Now in the past some scientists thought that brain development was determined genetically and that brain growth followed a biologically pre-determined path. That we were just set on this course for our brain development.

But we now know that early experiences impact the development of the brain and influence the specific way in which circuits were pathways in the brain become wider. We can think of a baby brain as being a work in progress. Let's take a quick look at a short video clip that will demonstrate how those connections occur in the brain.

Announcer: How is that even possible? Let's break it down. As we said, a baby is born with 100 billion neurons. But those quadrillion connections, they're not there yet. Those connections form at a very rapid speed during the first five years of life at 700 to a thousand new synapses per second. Those connections are created

through every interaction a child has and are important because they form the architecture of the brain.

Every time you talk to and engage with a child, you are literally growing a brain, connecting the different parts of the brain, which allows for new ideas, insights and creative thinking. Each moment of eye contact, each new word exchange, each time you make a child laugh, you are strengthening these connections.

Since there are so many different ways to do this, we ask people around the world, send us videos of your favorite ways to engage with the children in your life. During these early years, a child's brain makes as many connections as possible and then, it begins pruning the ones that aren't used and strengthening the ones that are. A dynamic process that continues throughout life.

Michael Brink:

Those connections are built within the brain and what happens is the connections that are strengthened, that are repeated that occur time and time again continue to develop and the connections that we don't use fade away. We refer to that as the "Pruning Process." As adults as learners, there are some things that we need to know in order to make new learning for us, those of us on this webinar today, how do we make this learning meaningful? We need to know things like why is this information important to me and how will I benefit from it? How can I make use of it in a real and practical way? How will it make me be a better person, a better parent, a better caregiver, a better home visitor or whatever my role is?

The information that I want to share with you today is important because for better or for worse we can change the actual structure, the architecture of the brain based on experience. We know that brain development is activity dependent. We can think of that as the "use it or lose it phenomenon." We know that every experience excites some neural circuits in the brain and that if that same experience leaves other circuits alone.

We know that those neural circuits that are used over and over are strengthened while others are not used are dropped or pruned away. For all of these reasons, we want to make sure that we're providing many experiences to make the connections and strengthen the circuits that will be most beneficial for young children as they develop.

This is a really nice resource that I would like to share with you today. The link is provided for you on the bottom of the screen. You can follow that. It's a great resource to build positive connections in the brain and strengthen those circuits for young children. It's never too early to be thinking about early language and literacy development.

Mike's taking us through here. If you just click on that download, "This Complete Publication," Mike? What I'm going to do is talk to you about we want to think about our adults as learners so the adults you're working with, the parents, the caregivers, we've got to think about what's their learning style like? Never

suggesting that you're going to walk into every family and hand them this 17 or 27 page booklet.

Some of your parents are never going to respond to that. Some of them don't want to see any handout, but there's information in this that will be able to build your skills to take it and share with families. There is also information that you might be able to print just a page or show and share with some of those families who would like a handout. Mike, if you would scroll down a little bit further I think we want to get to Page 2. There's a little guy talking on the phone is the picture, keep on going, a little bit further. Yeah, this is the one with the box. Here we go.

What I want to share with you here is the way this document is laid out it says that it gives you a set of 10 practices. When we look at the 10 practices, they are not going to look earth-shattering to you. But they are all focused on developing language and communication skills in infants and toddlers. You can always think about that, also think about that for children whose language is delayed in any form.

Each one of these practices is presented with a description of the practice, the research evidence that supports the use of the practice and examples of how we can use that to promote language and communication development in young children. They're not things that are done separately. You can use them in conjunction with one more than another and you can use the research base to help with families understand some of that. That's good, Mike. You can just go ahead and get out of that and go back to the slides.

Here is what a list of those practices are so that you can see them a little better. As I was saying, it's not like they're used in isolation. You could use, for example, Practice Number Five: Tuning In. You can see what that's about as I'm talking you do this, while you are providing a running commentary so that would be Practice Number Two. At the same time, you could be labeling names of the objects, so Practice Number Four.

What's really specific about each one of these is it gives you that research of where it's based on. For example, one of my favorites is Practice Number Seven: Read It Again and Again and Again. It's describing this idea of reading books multiple times. I'm sure that many of you are familiar with the parent who talks about, "Oh my heavens, my kid just wants me to read this same story to them over and over and I really get tired of that same book, right?" Many of us who are experienced with young children have experienced that phenomenon.

So what we try to share with families and with parents is this is a good thing and we engage them in a conversation and say, "Well, isn't this cool? Have you ever tried to maybe, it's a bedtime book and it's part of your bedtime routine and you are just trying to move them along so you skip over a few parts and your child stops you because they know you skipped something," and we're trying to show them that that's good because they are learning story sequence. They are

learning the vocabulary development. They know all those parts. The parents just get frustrated sometimes.

On that Practice Number Seven, here's one of the little tidbits of research that it says that I think is really cool. "Children learn more new words if a single story is read to them multiple times than if several stories are read to them just once." I think that's one of those pieces of research that we can have to share with families to help with that discussion about why it's so important to engage with those practices.

Another set of resources that I'd like to share with you are all of these that come from the PA Promise For Children website. We don't have to ... Actually Mike, we do need to go to this one, if you would click on that link. If you're familiar with any of these resources, I would like you to take some time and write into the chat box what it is that you've done with those or how you have used them as I have Mike take us through some of these.

What's really cool about these is every one of these resources is already aligned to the Pennsylvania Early Learning Standards. The first one is this "Learning is Everywhere," that yellow book. Mike, if you just scroll down a little further I'm going to have you keep going down on this Page and we see this title that says "There's a Book for That." You'll see these are aligned by months, so Mike, if you would click on June. For the month of June, we're talking about "Being in the Neighborhood" and there are some resources that will come up for this. Again, if we scroll down, you're going to see it's organized by infants, by toddlers, by pre-kindergarten and by kindergarten so if you just stop there for second, Mike.

What I like about this is particularly this month of June where we're talking about "Being in the Neighborhood," every one of those activities based on the child's age is talking about let's go out for a walk and do these things. I think that we are all aware of the fact that we live in a different world today that's very technology-based. Without making judgments about that, I can tell you that in my own neighborhood I can see, I can drive down the street and see a young mom pushing a stroller. The three-year-old is walking alongside, holding onto the stroller and mom is talking on the phone with someone else, right? Have you experienced this?

What we're missing out on is that opportunity of mom is saying, giving that narrative from that practice, being a commentator, saying, "Look over there, I see a dog. What color is the dog? Do you hear the dog barking? What else do you hear? Do you hear the birds?" All that which language development we're not seeing as much of. Suggestions like this for families are really cool.

Mike, if you would click on that link that says "Print June's calendar activities" and keep in mind these are for every month. Again, these are all aligned to the Early Learning Standards, so you can see under activity one it says "Key Learning Areas, Scientific Thinking." Under number two, it's "Creative Thinking and Experience." Again, these are activities. These are just printables, one page that

you might be able to leave with some of your families or give them some ideas of things to do around how to make those strong connections for language and literacy development within the brain. Again, determined by infant, toddler, pre-K and K. Mike, if we can just go back to that site that we were on, okay good.

A lot more resources are available on that website. There are songs available. If you are on there, if you can get into that link, you'll find book lists, songs that you can print to share for each month, all those aligned with the PA Early Learning Standards as I said. All good things that will help develop and strengthen those good connections in the brain that we want to see.

We've been talking about strengthening those connections. Let's take a look at some of the stages of brain development. This manual, the information on these next few slides come from the Brain Injury in Children and Youth. It's a manual for educators that's developed from the Colorado Department of Education. Later on in the presentation, I'm going to take you to a website and show you where you can get some more information based on this manual. Actually, you can download the entire manual.

When we're thinking about development of the brain and some of the impacts about that, I'd like to give you your first poll question. Do you think this statement is true or false? A mild brain injury can have long-lasting effects that also need interventions. Is that true or false?

Tiedra Marshall: Mike, while we're waiting for those responses to come in, we did have a response in the chat box that says that one particular program they have given that calendar out to various families and that they have sadly witnessed the fact that technology has separated people socially so they are agreeing with your statement.

Michael Brink: Okay, thanks Tiedra. Yeah, those resources are all available in that website. You can print them for free. Any of those links Mike was clicking on for us, you can go in and download something. You can order those. I know some programs have bought them. There is a nominal fee. There's information on the website about how you can purchase them if your organization is interested if you want to look through and see which ones might meet your needs best, thanks Tiedra.

Oh, look at this, my peeps, I like to say, wonderful. Here's the information we need to know about this is that when we talk about categories of brain injury, medical definitions look at mild, moderate and severe when they categorize a brain injury, but what people don't often think about is the fact that concussion is considered a mild brain injury and concussions are really big these days. That's in the news all the time. We had the movie out last December. All the information, all the things that are happening in the NFL. All the return to play that's happening with local sports teams, lots happening around concussion.

We know that for the majority of people will recover from a concussion, which is again a mild brain injury, within about a three to four week period of time, but

everyone doesn't. In fact, there are often these long-lasting effects and sometimes these latent effects that occur much later on. That's going to segue us into looking at some of this developmental information.

What I want you to think about is we're just going to talk right now about the birth to three age group, but that manual that I'm going to give you the link for will give you other age ranges, so three to five, six to nine, that type of thing. Some of the developmental characteristics that we typically see occurring between birth and three are listed on this slide.

For example, from birth to three we're working on language acquisition; the refinement of sensory and motor systems; that regulation of our sleep and wake patterns and that really foundational cause-and-effect relationship building. That one's really key. The understanding of cause and effect relationships is critical for all of us throughout our lives. We don't always think of it as starting at infancy, but I'm asking you to think about it in that way. What is one of those first cause and effect relationships we see as infants?

Well, I cry and someone comes to me. Someone comes and meets my need so that cause and effect is laid in that manner. That initial cause-and-effect relationship or sometimes we prefer to that as "serve and return." I do something as an infant, someone else does something in reply.

Now there are also some characteristics behaviorally that we see if a brain injury occurs during that birth to three period. If a child sustains a brain injury during that birth to three period of time, the developmental milestones that we just looked at on the previous slide are sometimes disrupted. In that case, the child would have trouble understanding what's happening to him, tend to get overwhelmed by experiences. Some of the situations that are most likely interesting to other children their age are often over-stimulating for them.

Some of these behavioral characteristics are things we might see if an injury happens between birth and three. You might be looking at some of those in thinking that that looks like a typical two-year-old or three-year-old, right? What I want you to be thinking of is is there a change in these behaviors after the suspected injury?

Perhaps, using those primitive behaviors like biting and hitting, you weren't seeing before and then there is a fall, a bump to the head that you are suspect about. You are worried about there might be something or are there signs I should be watching for? If you are starting to see a use of biting, hitting, screaming that wasn't there before that might be indication for you that you want to get some further evaluations on.

Again, what we're thinking about is if the brain injury occurred during that birth to three period, what are the disruptions in the development that might happen later on? Although very young children don't typically demonstrate self-control or self-regulation, the persistence of those problems if an injury happened during birth to

three might occur further on throughout adulthood, throughout their lifespan. A child who has sustained that brain injury during the birth to three period very likely will need to rely on others to provide structure and support and supervision much more so to a much greater degree than someone else even as they progress.

I would like to talk to you a little bit about so here are some common impacts that we associated with a traumatic brain injury. Those are the things on the left-hand side of the screen and then what are some of the suggested supports for that particular impact? For example, after a traumatic brain injury, an individual might experience a disruption in regulation or experience increased anxiety. A way to support that individual is to provide a consistent and predictable routine. We may also expect a person to demonstrate frequent changes in mood or irritability after a traumatic brain injury. An organized environment could be an effective support in that case.

Now, we often talk about the importance of organized environments for young children, but we don't naturally think of that as a support for someone who's having mood irritability. Again, this is a good example of using strategies that we might already know but being very intentional about why we're using them. We're going to take a look at some online resources that are available for some of these things, some of these supports, particularly resources that are going to help us to develop that consistent and predictable routine, how to organize environments and how to develop some visual aids and cues.

Mike, if you would pull up that web resource list and this is one of the handouts, a Word document that's available to all of you. If you download this to your own computer, then you'll have this list of links that would be active, hyperlinks so it would take you directly to some of the sites that we're going to look at now.

Mike, the very first one we're going to look at is the first hyperlink on the left-hand side that says "The Center for the Social and Emotional Foundations for Early Learning or CSEFEL." While this site is opening up, I'm going to give you ... I've shared, my organization has shared these resources with folks numerous times over the years, but what we often hear from people is there's so much there they can't find what they're looking for, so I tried to give you rather than just a global homepage link, links that are going to take you to specific items.

This one is giving you, taking you to a section called "Resources or Family Tools." You can see a lot of those little picture icons. Mike, if you can find the one that says "Teaching Your Child About Feelings." I believe it's the third one down on the left. It's a PDF. We'll just open up that one so people can get a sense of what these look like.

Again, know your adult as a learner, so is your family someone who's going to respond to they might like a link to something, a resource they can read. Maybe they just want you to share some information with them, but this is some great information to help you as well. Mike, if you scroll down through this, we'll see

how this is organized. Again, behavioral disruption after, just stop on this page please.

A behavioral disruption after a traumatic brain injury is often these changes in emotions, inability to regulate those emotions. This gives you some nice information based on development stages from Greenspan of what we should expect from children. If you scroll down a little further, Mike, I think it's a couple of pages down.

We're also going to talk about the importance of building an emotional vocabulary. A little further there's a little box. There we go, it's a little kiddo's face. If you can enlarge that a bit for us that would be great. We talk about building emotional vocabulary for kiddos and what we really mean by that is we've got to get kids beyond happy, sad and mad. There's a wealth of emotions out there. There's a wealth of emotional words. Again, this is a resource that gives families some ideas just in that little tan box about all these different kinds of emotional words we can be using with kids and modeling that for them as well.

Mike, if you would just use the arrow to go back to that same site and then scroll down where it says that just about where your cursor is, that "Tips on Nurturing Your Child's Social and Emotional Development." There are also several resources hear from the Zero to Three Organization. What I like about this first one is there are several items here. We are in a different society. We are really that digital society and there are a lot of little video clips we can get families to as well.

Here's a quick little clip on social and emotional development. If you scroll down just a bit Mike, we can see there is a series on developing social skills. There are some questions and answers on things like my child clings to me at playgroups. What do I do? There are some other things here in terms of handout resources, video resources, all about developing those social and emotional skills in young children.

Mike, if we can use the arrow back again, still staying at that same site. Even though there's a different link on the list, I'm going to get Mike to just do this for us from this page. Mike, on the left-hand side, that yellow bar, there is resources by category and there's one that says "For Teachers and Caregivers" further down. There we go.

All those bullets on the top are active links, but I'm having Mike scroll down a little bit further. There is something called "Scripted Stories" you might be familiar with. I'm going to show you another resource that I like better than this one for that. Down here just towards the bottom where it says "Book Nooks," this is the section I want to show you. These resources were developed. Again, we're building those connections in the brain, right? This is all about language and literacy development. These are stories about social and emotional development. This pulls it all together.

What they took here were very common, popular kid's books that people know and gave you lots of suggestions of things you can do with them. Mike, if you can go on the right-hand side, it's pretty far down. It's called "The Kissing Hand." It's the PDF, if we can open that one. For any popular book that you might get on the list, it will give you a synopsis of what the story is like. Then if you scroll down to this one Mike for folks so they get a sense of what's here that will be great.

It gives you lots of activities. Here's a little bit of sign language you can do about this story. Here are some suggestions for let's make some stick puppets to do with kids. Let's do story sequencing and when they give you those activities, we keep scrolling all the way down they're even going to give you some of the reproducibles for some of the characters from the book.

That's what the books looks like. I think those are pretty fun. People respond to those pretty well. Mike, if you'll just use the back arrow, going back to that same space where we just were. Scroll down a little further and we'll see "Teaching Social Seals." I'm talking to about this building and emotional vocabulary beyond happy, sad and mad. We see all kinds of things here. There's one on the left-hand side Mike, I think the second one down that says "Feelings Chart PDF." You'll see just some reproducibles that folks like these a lot.

We've got emotional words to build that emotional vocabulary. If you scroll down a little further there's another version of this that's a wheel that folks like to make an arrow and do a spinner and make some gains out of it. In that section if you just go back Mike, there's a lot of resources to support that emotional vocabulary. Interview who are familiar with that Tucker the Turtle technique for calming and breathing there's information there. We're not going to take a look at it, but you can get there through those links.

Okay Mike, I'm going to have you again, just scroll up a little bit on the page, so we can look at that left-hand bar where the resources were and go back to the homepage on this site. Do you see where the taxicab is? If you would click that link. This for those of you who have the Word document with the web resources, this is the second box going down. It's the Technical Assistance Center on Social Emotional Interventions or we call it TACSEI. I'm going to get Mike to the place where your link will take you, so Mike if you just hit the drop down on "What You Want to Do" and you'll get "Browse Resources" and then were going to go down to "Making Life Easier Series."

This series was developed, remember one of those supports to a traumatic brain injury is providing consistent routines. That helps with that mood irritability. It helps for dysregulation and lots of those impacts of traumatic injury. Establishing a routine is important for kiddos. This series is developed. Mike, if you would do the bedtime and naptime routines, just open that in scroll through it as I talk.

These are developed for families. They are really colorful, eye-catching. Again, Know your Parent. Do they want this whole thing or not? But he gives you tips about here's the bedtime routine. Here are some things you need to consider. It

might be an example where a family who tells you they are having trouble establishing a bedtime routine or they're not seeing the connections to the importance of that, you could talk through them with this and at the very end of each one of these, there's just a half page that you could give them that summarizes the whole thing. If you scroll down just a little further, Mike to the end. There will be this half page.

It summarizes all that information, all those tips. There it is "Making Life Easier: Bedtime & Naptime." That would be an easy one. For a family who is looking for support in that routine may be that is a handout that we leave with them. Just a back arrow back so we can see those again. Several routines that are available for them. Okay, let's get out of that one, Mike and there's another one on that web list, the links that I'm going to take you a different place.

We can go back to the Word document itself. This "Center for Early Childhood and Mental Health," the third box down. If you would hit the first link on that one. This is a set of posters that are actually social - emotional tips. Mike, it's the set that says "Social Emotional Tips." there's a set of four bullets. You can hit the top one "Social Emotional Tips for Families with Infants." These come as tips for families with infants. There's a set for families with toddlers and there's also caregivers.

We're going to scroll through Mike to about Page 4 or so. This beginning information on all of these sets, this will be a great place to stop right here. It just tells you how they were developed but then they look like this. There are just five tips for a certain routine of the day, so dressing, there's toileting, there's feeding, there's napping. There's those types of things and it's just nice, little five tips for families to think about. Again, strengthening those connections, building those connections in the brain, doing this routine for your kiddo. Make sure you have time to take a look at all those.

Okay Mike and then there's one more back on that link list, that Word document list and it's on Page 2. It's the one that says "Tots and Tech Newsletter." The second one, there we go. This is a great newsletter that if you are not sure how to do visual supports, if you are not sure how to make them, this really summarizes the whole process for you. It gives you some information about what our visual supports and Mike, you can just scroll through this one as I talk as well.

It identifies different types of visual supports. It will say what our social stories? Remember, I told you there was one on the other side about scripted stories and I didn't like it as much? This is a better version, so what are social stories? It will tell you what those are like. It tells you how you can use them. It gives you an example then it tells you exactly how you can make one. It does that for a variety of things for choice boards, for the if-then statements and other things like that. Okay Mike, we can just close out of all of those and go back to the slides please, great and I think I will have control.

Lots of resources available for you and you can take a look at those at your own leisure. Just as those positive experiences can affect healthy brain development in children's experiences, if they experience a lot of trauma or maltreatment, things like abusive head trauma or shaken baby syndrome, maltreatment, toxic stress, those can affect the brain architecture as well.

If a child is repeatedly exposed to those type of things, those are the connections that are going to be strengthened. Continued exposure to stress and maltreatment is going to strengthen connections for your body's response to those things. I want to talk to you a little bit about something called the Bucharest Early Intervention Project. If you're interested in this, you can check out their website on your own.

There was a neuroscientist named Charles Nelson, who first traveled to Bucharest and he entered the Romanian orphanages at that time. He described seeing things like a baby whose brain had swelled to the size of a basketball because of an untreated infection and a malnourished one-year-old who was no bigger than a newborn. But he says what really stays with him is the eerie silence of the infant wards. He said it would be dead silent. All the babies just laying on their backs and staring at the ceiling. Why cry when no one is paying attention to you? This is what we're talking about, right? There was no serve and return happening there. There was no development of that cause and effect relationship. But there is hope.

The Bucharest Early Intervention Project is a joint collaboration between researchers at Tulane University, the University of Maryland and Children's Hospital of Boston. The study began in the fall of 2000 and they are really looking at examining the effects of institutionalization on brain and behavior development and they want to see what's the impact of high quality care as an intervention?

One of the things that they say in one of their early articles is that a significant finding of theirs is that childhood adversity can damage the brain as surely as inhaling toxic substances or absorbing a blow to the head can. This is a revelation with profound implications and not just for the Romanian orphanages. This is what we're talking about. We are talking about the effects of toxic stress and that's how we can relate to that information that they have provided as well.

Now, the National Scientific Counsel on Developing Child does a lot of work around this concept of toxic stress and the effects on brain development and how that impacts children. They talk about the fact that a little bit of stress is good for all of us. We call that "positive stress" and that helps us learn to deal with adversity in our life and that's okay. The thing that makes it okay, particularly for little kiddos, is the fact that there's this supportive adult there. There's a supportive relationship. There's a nurturing environment that makes that stress okay.

Then they also talk about something they list as "tolerable amounts of stress." That's associated with exposure to potentially damaging events. That could be be

the harmful effects of a serious injury, a disaster, a death. But again, if they're buffered by the nurturing environment and a supportive adult, kids tend to work through that.

Then there's the level of toxic stress. This results from strong, frequent or prolonged activation of the body's stress response system and it's in the absence of that buffering protection and support of that adult relationship. These are things like that could include child abuse, neglect, extreme poverty, maternal depression with poor child outcomes or poor parent-child interactions. The part that's missing here is that supportive relationship with the adult in that nurturing environment.

What I wanted to share with you about that or along with that is this idea of Positive Behavior Interventions and Supports or PBIS. Some of you might be familiar with that. Based on a tier model of support or in this case they refer to it as the "pyramid model," and those models are designed this way. Everybody gets the bottom layer. That's good stuff for everyone and everyone gets that.

In addition to that, some people are going to need a little more support so that's the next tier, in this case that green tier, that targeted support and then we still do the bottom for everyone. Some are going to need that green tier, that middle tier and then a very few are going to need some intensive supports in addition, too, so everybody gets the bottom, right?

The part I want to point out to you here is that that bottom tier is that high quality and supportive environment, that nurturing and responsive relationship and those are exactly the things we are talking about as the buffers for stress that will help buffer that stress from children and not allow it to reach that toxic level. I just like to show folks that a lot of these things that are out there in our world of early childhood all come together. They're not separate pieces. We can mesh all of these.

Now our infant and toddler programs, who do the Pyramid Model of Behavioral Support, do something called "The PIWI Model" or "The PIWI Philosophy" and that is Parents Interacting with Infants. We love our little acronyms, right? For the little kids, we do the Piwi Philosophy. What I want to show you here is that even in the pyramid, the piwi module, we see the same types of words. We see parent-child relationships, supportive environments, significant relationships, supportive relationships. Those same concepts are there, whether it's the piwi philosophy or the pyramid framework. Those really support each other and go very well together.

What we're talking about here is building resilience, building resilience in children, building resilience in families to deal with stress, to deal with trauma, to deal with traumatic brain injury. Let's take a look at our next video clip, which really talks about that science of resilience and what that's all about.

- Jack Shonkoff: Resilience is the result of a highly interactive process between individual characteristics in the person and the environment in which that individual has developed.
- Philip Fisher: It's really the counter-balancing of difficult things that may exist in the child's life with positive things that occur within the family but even positive things that may exist in the community.
- W. Thomas Boyd: The easy way of thinking about resilience is like a scale with a fulcrum in the middle of it and there are things on both sides of that scale, experiences of both bad things or good things.
- Announcer: Our genes shape where the fulcrum is positioned at the start.
- W. Thomas Boyd: There are certain genes that make a child more sensitive to the effects of maltreatment or parental neglect or witnessing violence.
- Philip Fisher: The fulcrum may start out more towards one side or more towards the other side and that's going to make a big difference in terms of how much these subsequent events affect things positively or negatively.
- Announcer: Science tells us that experience moves the fulcrum for better or for worse.
- Nathan A. Fox: Even though we are born with genes, genes will respond differently to certain environmental situations as opposed to others.
- W. Thomas Boyd: What the genes are actually doing are turning up or turning down the expression of chemicals in circuits in the brain and the circuitry in the entire body that govern our responses to stress, to anxiety, to depressive symptoms.
- Announcer: When positive experiences accumulate and children learn coping skills that help them to manage stress, the fulcrum can slide so the scale tilts towards positive outcomes more easily. That's what resilience is all about.
- Jack Shonkoff: There is always an adult or more than one adult who is key to providing that relationship that helps to build resilience.
- Michael Brink: I think that really brings home for us the idea of the importance of our role as adults supporting other adults and then those adults supporting their children. How key we are in that whole relationship to make sure that we're building resilience in children, to make sure that we're building the right connections to develop those healthy brains, to make sure we're protecting them from trauma and that we are helping them to become more resilient.
- I also wanted to share information with you from the Center for the Study of Social Policy: Strengthening Families because so many times when we look at models for families, we focus on risk factors. But I want you to take a minute and think about are there problems associated with simply focusing on risk factors? This is our next poll question. If we're always focusing on risk factors, what kind

of problems do you think might be associated with that? We'll give you a second to respond to the poll.

All right, so we've got some poll results up there. Most folks "All of the above." The good thing with "All of the above" as the answer is that any of them is correct, right? Let's go back to the slides. What I want to talk to you about from this is the fact that one of the big ideas behind the Strengthening Families approach is that they focus on protective factors rather than risk factors.

Just like you indicated in that last poll, not all risk can be changed. For example, we know that young maternal age is a risk factor for many poor outcomes. We know that low parental IQ can be a risk factor, but we can't change either one of those things. We know that for many of the risks that we're concerned about there can be people who have some of those risk factors, but they still succeed and thrive despite that risk.

If we focus only on the risk, we stigmatize those individuals who are at risk and they might be functioning very well. We also know that if we focus on risk, that may lead us to target families incorrectly. We all know cases of families that might fit the risk profile but are doing just fine and we probably also know some other families who might seem fine on the risk checklist but could use some other support or they're actually pretty fragile, so addressing risk doesn't actually get us at the good outcomes that we want.

Strengthening Families has identified protective factors and uses that as their focus, rather than risk factors. These are the five protective factors that they have identified as helping families get good outcomes: parental resilience, social connections, knowledge of parent and child development, concrete support in times of need and social and emotional competence. We are going to take a look at, a closer look at two of these: Knowledge of parenting and child development and social and emotional competence of children.

In terms of knowledge of parenting and childhood development, we know it's important but sometimes we don't know what information to give to parents about social development and emotional development and when do we give that? I think these questions on the slide can help us to determine that. If there's a time when we see a parent has really inappropriate expectations for the child due to the child's age that's a time to talk about child development.

If we see that a parent really just has a lack of strategies, "I just don't know what to do with my kiddo at this point?" That's the time to talk about child development. Or a time when we're seeing the parent getting really frustrated with their child that's a time to talk about appropriate child development.

There's another set of resources that I would like Mike to take a look at. Mike, you can just copy and paste that one or it's on that Word document on Page 1 under the CDC. These are all free materials that come from the Center for Disease Control. What's really nice about this is that they will send you multiple

copies of these things in a really nice format. If you can just enlarge this a little bit, Mike, so we can see what we're talking about.

The link that I gave you on that Word document will take you to this page that says "Free Materials" and we all like that. You can look through all of these. Mike, what I would like you to do is to scroll down further on the page and there's something that says, here this purple one "Learn the Signs, Act Early Campaign." Now if the top one that says "View or Print Materials " There we go.

If we come down to these milestone checklists and come over to the right where it says "Two years" and just open that one. You can print from this site. You can print these checklists. They are really nice. Here's one for two-year-olds. We have three-year-olds, four-year-olds. We have months for early development and it will give you things.

These are just developmental checklists. This is what most children do at this age, so social emotional language and communication, cognitive and then there's even a box that says "If your child is not doing any of these things or if you are seeing these issues, you might want to have a conversation with your pediatrician." Mike, if you scroll down to the second part of this, it will just show people that this is also available in Spanish for each one of these. Now Mike, I'm just going to ask you to use the back arrow and go back to that site, so we can show them a few more things here.

Here it says, just below that Mike where it says "Milestone Products for a Range of ages," and that English under the first one, the booklet. This is one of the ones that they'll send to you. You can see they have it opened up so you can see it's a size, so it's actually half a sheet of paper folded basically. If you just scroll down a little bit, Mike, through this one so they get a sense of it as well.

This is a nice, little booklet for families because you can see in the same booklet, it's got all those age ranges and what are the expectations? If we go just a little bit more, we'll see, for example, at age 2, here are the things that my baby should be doing and the right-hand side of that is "How You Can Support your Child's Development." There is ideas for parents of what they can do as well.

Like I said, you can call the CDC or use the web to place an order. Some of these things, there might be a limit of maybe 10 per address but then 10 is actually a packet of 50, so you can get tons and tons of these. Once you use your address, you know how to work that system, right? Use your address, use your mom's address, use your sister's address, you can get lots of this stuff for free.

Okay Mike, back arrow again because there's one more thing on that slide I want to show them that I think is pretty cool. Right below that it's "Milestones brochure: Track Your Child's Development" that one in English, too, because this is another one. Instead of the booklet, it's a trifold, so if you scroll down to the second page I

like this one personally because I think it looks like Candyland and I think it's a nice visual for parents to understand, too.

Development happens in a continuum. We develop certain skills first. We build upon those skills and the other thing is it's not exactly a "My child is two-years-old so they have to be doing all these things right now," like it happens during this time period. Okay Mike, we can get off the CDC site and go back to the slides, thank you. Make sure you take a look at that and order some of that stuff as well.

The second protective factor that I wanted to highlight for you is that social emotional competence of children and we've been talking a lot about that. I've been showing you a lot of that, but I wanted to show you this slide because again, like I said sometimes we're not quite sure what information about social-emotional development to teach or how that sequence develops and I think this is a nice visual for folks.

We certainly want to make sure that children understand first, how to recognize and communicate their own emotions. That emotional vocabulary, moving beyond happy, sad and mad. We want to learn those words like frustrated and angry. Once children develop a good, emotional vocabulary, then we start talking about controlling their feelings. "It's okay for me to be mad. It is not okay for me to hit someone when I'm mad." That's that kind of thing that comes in on that purple circle there.

Then once we're able to control those responses, then we start talking about developing strategies for kiddos around their emotions. What will you do when I feel angry and some of those resources I gave you like that Tucker Turtle technique gets into those strategies. There's one on the Headstart site called "Dragon Prep," but it's that now I can label my emotions, step one. I can control them a little better, step two. Now I can actually start to make some strategies for what happens when I feel a certain way, step three and then the fourth one is really being able to empathize with others. What's it like for someone else when they're feeling that way. That's just a good sequence of emotional skill development in kids, too, to keep in mind.

I believe I shared this with you last time. We're not going to jump onto this site, but a series of these posters about stress. This is for all of us as adults. We all experience stress ourselves. We know the families we work with experience stress. There is a whole set of these posters that talk about stress from different angles and what you can do, little strategies to calm yourself when you are feeling stressful. Please take a look at those whenever you get a chance and think about for your own life.

I know folks who say, "I'm a home visitor. I keep one of those in my car. When I get back in I just remind myself sometimes it's stressful, but it's okay. I'm going to take a couple of deep breaths." Other folks who say, "You know there's a family member that I work with and this one particular will be really nice to leave with them and they can put it on the refrigerator." Take a look at all of those as well.

Then the last thing I want to do folks is just jump on to this website, which is my organization. Mike, if you can do that for us? Early Intervention Technical Assistance, so it's EITA/pa.org. That's also on your web resource list. I'm going to ask Mike to go up to the top where it says "Topics of Interest" and there's a drop-down and then you'll see there is a traumatic brain injury link. There is a Topic of Interest page on traumatic brain injury.

One of the things I want to share with you is when you have time again, take a look at this site. Mike, if you scroll down to websites, the way this site is set-up so if you hit that first one that says "BrainSTEPS" it will give you some information about what "BrainSTEPS" is and then there's a hyperlink within that Mike, the first word.

BrainSTEPS is actually a school reentry program in Pennsylvania. Some of you might be familiar with that. School districts, a lot of intermediate units have BrainSTEPS teams, so it's folks who have specific training around brain injury. The idea is a child in the school has sustained a brain injury. From the time that happens and they're in the hospital, they're in rehab, there are connections with the rehab team, the BrainSTEPS team and the school in terms of what do we have to do to get the school ready and prepare it to meet this child's needs when they come back?

You can take a look at that about "About BrainSTEPS" is a good place to go for you to take a look and get some information about what those teams are all about. There are school-age-based teams. The grant is written through Pennsylvania Department of Education and the Department of Health but it's written as a K through 12 grant.

I work pretty closely with their director and we work on the BrainSTEPS folks to preschools and we've been really concentrating the last few years on getting some of those teams to add preschool team members, so a lot of those existing teams serve preschool kiddos or they've got connections, so make sure you take a look at them when you get a chance. We do the arrow back to that EITA portal site, Mike.

We've got some other links for websites there as well to the Brain Injury Association of PA and some other sites, the Center for Brain Injury Research and Training. These are all things you can just get there a click around. They'll take you to some additional information. Where it says "Documents" if you do a little drop, hit that drop-down, Mike, the first one up on top of "Documents." There we go. That's the manual that I told you about where we talked about that sequencing of information from development stages and disruptions. I told you, I focused on the birth to three category, but that's where you can find the manual that will give you to the three to five, five to six and other categories as well.

I don't want to hold you past our time, so you can look around on this site. The other thing I do want to point out to you before we leave it though is under "Professional Development," there's something that says "Head Bumps Matter:

Protecting Young Brains." If you would click on that hyperlink within the drop-down, Mike. This is something from the Early Childhood Education Linkage System, which is actually online modules about protection from brain injury and some information around that. That's done very, very well.

You can do those for credit. There's a nominal fee if you want the credit, the actual documentation of credit or you can just work your way through them but if you are interested in more information that's a great resource to have now. Okay Mike, that's it for clicking around on slides and I believe folks that that is our final slide. I wanted to share, make sure you have a lot of information and a lot of resources to go to. I'll put up a last slide that has my contact information. If there's anything, any additional support I can provide to you if you're looking for additional resources, please don't hesitate to send me an email.

Tiedra Marshall: Hey Mike, there is one question that has not been answered. There are some programs that work with families who do not have custody of their children or they have limited contact with their children. Are there any resources you could recommend for working with those types of families?

Michael Brink: I guess I'm wondering in what capacity regarding just in general?

Tiedra Marshall: I don't know if any of the resources that you listed would be better suited for those types of families? If we don't know the answer now, feel free, you can send me an email and I will work with that person who submitted that question. Otherwise, there aren't any more questions. A lot of affirmations, add this information was useful. Some people had some of the resources and sought new ways to use it, so thank you for giving us all of that information and allowing us to be privileged to your wealth of knowledge.

I want to thank everyone for joining us today. The archived session will be at the Pennsylvania Parents as Teachers website. Again, that website is www.PA/pata.org. That will be there within a week. When you receive the electronic evaluation the email, please take a couple of minutes to complete it. Again, your feedback is essential to helping us to design professional development opportunities of the highest qualities for your learning needs. Registration information for next month's webinar will be emailed soon and will be placed on the Parents as Teachers website. Thank you again for joining us and this concludes today's webinar.