

Fourth Trimester Podcast

Episode 103: Wire Your Baby for Success Through Optimal Newborn Brain Development

Sarah Trott: [00:00:05] My name is Sarah Trott. I'm a new mama to a baby girl and this podcast is all about postpartum care for the few months following birth, the time period also known as the Fourth Trimester. My postpartum doula, Esther Gallagher, is my co-host. She's a mother, grandmother, perinatal educator, birth and postpartum care provider. I've benefited hugely from her support. All parents can benefit from the wisdom and support that a postpartum Doula provides. Fourth trimester care is about the practical, emotional and social support parents and baby require, and importantly, helps set the tone for the lifelong journey of parenting.

When I first became pregnant, I had never heard of postpartum Doulas, let alone knew what they did. So much of the training and preparation that expecting parents do is focused on the birth and newborn care. Once a baby is born, often the first interaction parents have with medical or child professionals, other than the first pediatrician visits, is the six-week checkup with the OB/GYN. *What about caring for mama and family between the birth and the six week doctor visit? What are the strategies for taking care of the partner and the rest of the family while looking after your newborn?*

Our podcasts contain expert interviews with specialists from many fields to cover topics including postpartum doula practices, prenatal care, prenatal and postnatal yoga, parenting, breastfeeding, physical recovery from birth, nutrition, newborn care, midwifery, negotiating family visitation, and many more.

First-hand experience is shared through lots of stories from both new and seasoned parents. Hear what other parents are asking and what they have done in their own lives.

We reference other podcasts, internet resources and real-life experts who can help you on your own parenting journey. Visit us at <http://fourthtrimesterpodcast.com>

Sarah Trott: [00:00:02] Hi, this is Sarah Trott and welcome back to the Fourth Trimester Podcast. We have a special guest today. Our topic is about newborn brain development and wiring your baby's brain for success through optimal brain development and the importance of that "serve and return" during the first year of life.

Sarah Trott: [00:00:25] I'm going to introduce my guest in a moment, and before I do, I'd like to let you know that we have a website which is fourthtrimesterpodcast.com. It's packed with great information on all of our episodes, as well as deals from partners that we have. So check those out. It's fourthtrimesterpodcast.com/deals. And then you can also look at all of the freebies and resources that we have for you that we've collected over the years, so we highly recommend going there if you haven't seen that yet.

Sarah Trott: [00:01:01] And now I'm going to talk about our topic and our guest. So like I said, we're talking about optimal newborn brain development. We're going to talk about how the brain develops, what parents can do practically to optimize that development, the "serve and return" interaction concept, and example routines and rituals that you can implement right away with your newborn during this first year of life and beyond. And our guest today is Rebecca Walsh. She has been on our show before. Welcome back Rebecca.

Rebecca Walsh: [00:01:38] Thank you so much, Sarah. It's so wonderful to be back. Yes.

Sarah Trott: [00:01:44] So I'm going to give you a little bit of an intro, Rebecca. So Rebecca has an extensive background in education and early childhood development. She has over 20 years experience in early childhood education. She has a bachelor's degree in child development, and a master's degree in religion and psychology. She's held lots of senior positions as a teacher and mentor and educator, and she also is a female founder. Her own business is called Early Childhood Matters, and she creates and leads education programs there. We love those courses. Please go to her website, earlychildhoodmatters.org, and we'll link to it on the website in the article that goes with the show.

Sarah Trott: [00:02:29] Her last episode that she recorded with us on [Fourth Trimester is Episode 96. It's all about mom groups](#). Why? Because she is also hands-down the queen of mom groups. She has created many and led many over the years. I have participated in her mom groups. They are brilliant. Specifically her second time moms group, which is a whole other set of topics versus the first time around. So definitely listen to episode 96. It's called The Mom Group guide.

Sarah Trott: [00:03:07] I also have to mention that she's a mom. She has three children of her own. Rebecca is incredibly credentialed and experienced, she's a very humble and compassionate teacher. So thank you so much for coming back to be on our program, Rebecca.

Rebecca Walsh: [00:03:25] Oh, thank you again, Sarah, for having me. It's so wonderful to be here and to be a part of Fourth Trimester, which is really just offering so many amazing resources to parents in this very critical and often isolating time, right after baby is born. And to have these resources available is just amazing. So I'm really excited to be a part of this.

Sarah Trott: [00:03:50] Thank you. Yes. Well, so let's dive right in. I am so excited to talk about this topic. This first year of life is such a tender time, and there are a lot of different ideas about what that could or could not look like. But I'm sure that a lot of parents like me, we're very interested in thinking about how to optimally support and help my baby develop during that first year of life. And so we're talking about both the EQ emotional and the IQ intellectual development of the brain. Is that right?

Rebecca Walsh: [00:04:26] Absolutely, absolutely. And I am so excited to talk about this topic. It is something that I am just so passionate about and I really believe that it should. Everybody should know about this. So putting this information out here to more parents is so critical. I think it should be everybody that ever graduates from a university should have this knowledge. Everybody that graduates from high school should have this knowledge.

Rebecca Walsh: [00:04:55] Everybody that has a baby should absolutely be given this information about just what happens in that first year of life, right? Like what happens from a brain development perspective. How is the brain built. So we're going to try to answer those two questions in this episode: why is the first year so important for the potential of the human brain? And secondly, how is that brain built, exactly?

Sarah Trott: [00:05:28] Yeah, and we all are humans with a brain. This is so critical for everyone to understand. I couldn't agree with you more. Let's shout it from the rooftops.

Rebecca Walsh: [00:05:39] Yeah, absolutely. I mean, doctors, politicians, economists, mental health professionals, literally everybody should be talking about this. So let's go. I really think it's the most important and direct way to transform the world. This is what I think.

Sarah Trott: [00:05:55] Yeah. So let's talk about that. Why?

Rebecca Walsh: [00:06:00] I mean, basically, in the first year of life, you are literally building human potential. I kind of just have to pause there. Like we're building human potential in the first year of life, and the whole architecture of the brain is going to be formed by these early interactions and this responsive environment and responsive relationship.

Rebecca Walsh: [00:06:25] So really what's interesting is this is kind of cutting edge as far as realizing the importance of actually that first year. So we've known the importance of the first five years. We know we've known for a while. And some of your listeners may not know this still, but we know that 90% of the brain develops by the age of five.

Rebecca Walsh: [00:06:48] I knew I always wanted to work with children and families and I myself came from an environment with a lot of adversity, and a lot of my friends, neighbors had even more adversity than I did. And so knowing that I really wanted to work with children and families. I knew I wanted to be in that space from a pretty early age. And when I went to college, I wasn't sure if I wanted to go into teaching, if I wanted to be a therapist or a school counselor. I was still kind of figuring it out. And I remember

going to the child development department and they were giving their little spiel. And I always loved young children anyway. They were my favorite to babysit at that preschool age. And so I went to check it out.

Rebecca Walsh: [00:07:38] And I'll never forget my professor at the time. Well, my future professor at the time, who became a mentor, Doctor K, she said in this in the spiel in the speech well, 90% of the brain develops by the age of five. So if you want to make an impact in the world, please join the child development department. And I was sold. I mean, I was absolutely sold because I had seen that so much in my life over and over, where you have children who are in kindergarten, who are in first grade, and teachers that are doing amazing work with these children. But you notice that they're already struggling. They're already behind. Right? We have the achievement gap studies. We have the word gap studies like we know and now we know even more.

Rebecca Walsh: [00:08:33] But anyway, that's kind of what drew me to the field was that piece of knowledge 90% of the brain develops by the age of five. So if we're going to really make an impact, this is the time.

Rebecca Walsh: [00:08:44] So since then what started to be emphasized, I would say in the last like 10 to 15 years even, is this idea of the first three years being so impactful. And we know that really the limbic system or the emotional center of the brain is almost fully developed by the age of three. There's a little restructuring that happens in adolescence, but basically the whole structure of the brain is developed by the age of three, the structure of the limbic brain. So now we know the first three. But then pretty recently I would say we've learned that it's the first year is actually when the architecture or the foundation for that limbic system is pretty much set into motion.

Sarah Trott: [00:09:44] First year. Wow. I mean, that's a lot to fathom and wrap the head around. So can you break that down even a little bit further? I mean, the human potential formed in that first year?

Rebecca Walsh: [00:09:56] Yeah, I know it's mind blowing. Like and again, this is why we all sort of need to, to understand this, but. Yeah. but basically the brain builds from

the bottom up, So the stronger the foundation is, the more potential for this higher functioning brain to be built upon it. I mean, it's kind of like if you were to hire a contractor to come to your house and let's say you wanted to, I'd love to expand my attic and maybe put some rooms up there, right? Or, uh I would love to do, like, a little deck off the top floor or we're thinking about moving our kitchen up to the top and bringing the bedrooms down or anything that you're doing you're adding weight, you're adding load bearing on the, on that top floor. The first thing that the contractor or that engineer is going to be looking at is your foundations. Number one, can the foundation support this work in the attic, this work for that added floor or structure. So the brain is really similar. So that's just kind of a really good visual way to think about it. Basically if that foundation is strong then the rest of the brain can literally be built upon it. Then that leads to that higher functioning. When we're talking about brain development, unlike a house, we're talking about potential for intellect, like you said, EQ, IQ. All of that.

Sarah Trott: [00:11:38] So higher functioning. You've got your foundation level. And then on top of that you've got the limbic the more of the EQ and then on top of that is the intelligence.

Rebecca Walsh: [00:11:47] Exactly. Again the brain builds from the bottom up. So really it starts in utero. If we're going to look at policies to support children and families and essentially society, If we want to transform society by getting to a brain that has this really strong prefrontal cortex. That's one thing that we can think about and start with is like an end goal, right?

Rebecca Walsh: [00:12:17] End goal would be brains that have this really healthy very interconnected cerebral cortex. So the cerebral cortex is that last part of the brain to develop. Some of you may know it's not fully developed until 25. But that part of the brain is what codes for really essential things. Everything from just being a functional, productive member of society to being you know, an altruistic member of society so that that cerebral cortex is going to code for all of your basic executive function skills. it's going to code for things like really primarily self control. So the ability to have an emotion or a feeling and not act on it immediately, but be able to exhibit some self-control and some inhibition. The other thing that we're thinking about when we think

of executive function or what do you what comes to mind for you, right? Like when you think of executive function, I would say.

Sarah Trott: [00:13:24] I mean, I would be thinking about that, that intelligence, like the person who's in charge of managing every function of the body, the movement of our body, the decisions, the speaking, the things that we're saying in our thinking. It's very much our thinking brain.

Rebecca Walsh: [00:13:39] Yeah, exactly. So that's that cerebral brain. And then that higher that highest brain, which isn't developed until fully 25 is like that problem solving brain. That brain that is able to use past experiences to mitigate our current behavior or future behavior. So it's the planning brain. It's basically you think of it as the brain that makes us human, that separates us from the rest of the mammalian world, right? So we're able to predict, we're able to plan, we're able to problem solve, we're able to think about things in the future.

Rebecca Walsh: [00:14:15] Thinking about these things and thinking about it, and the other big thing that that final part of the brain is responsible for is literally compassion. So that is something that we don't see in the animal kingdom. We see a lot of empathy in the animal kingdom. Right? Like if you have a dog and you're kind of feeling sad, the dog may notice and come over and just kind of give you a cuddle. But when you're, let's say you have a cut on your finger, the dog isn't able to think oh, gee, they have a cut. I probably will just wait for my food. I know they're trying to feed me, but I'm going to wait because I see that they're hurting.

Rebecca Walsh: [00:14:58] And I bet you that that feels a lot like how when I was out at the park the other day and I stepped on something, I cut my foot like a dog's not going to be able to do that. A dog is like, feed me, feed me, feed me. Oh, you're cut like, I can't think of anything else. So you think about a human. And again, not all humans are able to do something like that, but a human being is able to kind of put their own needs aside for a second and think about somebody else. It's very higher functioning.

Rebecca Walsh: [00:15:29] If you can imagine a world where everybody has this potential to problem solve, to not act on impulses. that has a world where everybody is able to, you know, have compassion for others, a world where people are able to use logical thinking and reason before making decisions that are able to think about the future. Right? I mean, there's so many implications of this. And this is why I say, like the greatest impact economically, socially on so many levels that we can have is really to make sure that these brains are developing to their fullest potential.

Sarah Trott: [00:16:20] Yes. Amazing.

Rebecca Walsh: [00:16:22] Literally, that's all we're talking about is can we give everybody in life the opportunity for their brains to develop to their fullest potential? Yeah. That's kind of the long and the short of it. And like I said, that's like the prefrontal cortex and it starts, it starts in utero. Just basic because each section of the brain is dependent on the other. When you have this brainstem, then that's the only part of the brain developed in utero. And so that brainstem or that kind of reptilian brain, things like, uh well, basic things like abstaining from drugs and alcohol are going to lead to the potential of the brainstem.

Also, healthy nutrition. So during pregnancy is when that first part of the brain develops which will impact however that develops, will impact the limbic brain. And then however, the limbic brain develops will impact the cerebral brain. So all the things that you were talking about, like the ability to control movement, the ability to use language, the ability to use logic, the ability to do you know, advanced math? All of that is, is in that cerebral. And then that prefrontal cortex is that final part that really separates us and allows us to have self-control and compassion. In utero, we're taking our prenatal vitamins. We know how important it is now, like things we didn't know before. Like how important folate is.

Rebecca Walsh: [00:18:08] So much research on fish oil and how that can help myelinate those brain cells and help them come together. So those are the things you can think about prenatally. and, and basic abstaining from drugs and alcohol, that's those are the kind of those basic things. and next comes that limbic. So as soon as the baby is born, what we're doing is we are starting to develop the limbic brain. We are

literally wiring the limbic brain from the moment the child smells us for the first time, the moment they feel the warmth of our body. They're already moving from the reptilian world, which never feels the warmth of their mother's body. A reptile hatches from the egg and is 100% good to go. They don't need that other part of the brain to develop in order to survive.

Rebecca Walsh: [00:19:08] The way that a reptile is coded is that they just need survival instincts. They need to be able to eat, hunt you know, fight or flight and, and that's all they need now a baby. obviously. Will not survive without human care and connection. So that's kind of this first part is how do we set up this limbic brain to reach its fullest potential so that the cerebral brain and the prefrontal cortex can then reach their potential.

Rebecca Walsh: [00:19:49] One of the things we know about incarceration is that about 98% of people who are incarcerated had trauma, abuse and neglect before the age of three.

Sarah Trott: [00:20:05] That's hard, right? So it's a really sad statistic.

Rebecca Walsh: [00:20:09] And what we're thinking about is how their brain was wired differently. So that limbic brain not coming together and not being able to support things like self-control, things like self, you know impulse control, Things like ration and reason and, and all of those things. So, so yeah. So we know how important this is.

Sarah Trott: [00:20:36] Rebecca, I have to step in and ask. But that's not to say that if someone has experienced some of those things and then later in life they're still as children, it's not. That doesn't mean you'll necessarily be incarcerated. There's going back and addressing trauma and helping create that sense of connectivity, that sense of care that's so critical for brain development.

Rebecca Walsh: [00:20:58] Oh my gosh. Yeah. No, 100% I mean and we have a lot. Yeah. No thank you for clarifying. It's more just looking at that statistic and saying what does that say about how things maybe didn't come together for this child, how things

were not available to support this child's human potential. Absolutely, we have a lot of resiliency studies and you know, depending on the environment there's thousands, millions and millions of children that have experienced some level of trauma, abuse, neglect that are 100% you know, functioning and, and successful adults.

Rebecca Walsh: [00:21:49] One of the interesting studies that I wanted to highlight was actually that if you look at, for example domestic violence and there's a really interesting study that was done by Casa, which is an advocate for foster care children. And they did this longitudinal study and found that children that witnessed domestic violence in the first year versus if they looked at children who had witnessed domestic violence between 0 and 1, 1 to 3, 3 to 5, 5 to 7, and then eight plus. Thinking about an eight year old, a 13 year old, you're thinking about a one year old, a two year old, and then you're thinking about an infant, right? A 0 to 1. And the children that had the largest outcomes. Negative outcomes. Socially, cognitively, emotionally were, believe it or not, children that had witnessed domestic violence in that first year of life.

Sarah Trott: [00:23:03] Wow. Wow. That's interesting. That's not necessarily what I would have thought.

Rebecca Walsh: [00:23:08] Right? Yeah. I mean, most people don't because you think, well, the baby will probably be okay. At least they won't remember.

Sarah Trott: [00:23:16] Yeah, I've heard that before. The “baby won't remember” comment. Not necessarily in relation to domestic violence or those other abuse situations, but just in relation to whatever everyday things that are happening.

Rebecca Walsh: [00:23:32] Yeah. So let's, let's debunk that a little bit. Yeah. So the baby won't remember. I mean, it is 100% true that we do not have cognitive memories. Usually earliest is around two and for most people it's more like between 3 and 4 is their earliest memory. But some people can have their earliest memories being between 2 and 3. Okay, so it is 100% true that your baby is never going to, as an adult, say, oh, I remember that time when blah blah blah blah blah happened when I was seven months old. No. Not possible.

Why? Because that part of the brain isn't fully developed until that second or third year of life. Okay. Hippocampus. So that part of the brain hasn't wired together yet. Okay. So true, true fact. But unfortunately, what is more true is that their body will remember and the structure of their brain will be changed and shape more dramatically by any events in that first year. Because, again, in the first year of life, we have a million synaptic connections per second. Everything's coming together, everything is wiring, and your brain is literally being told how to code. And the more connections in that limbic system, again, greater potential for these higher functioning. So yeah, they won't remember it, but their brain, their brain will be changed by it more dramatically.

Rebecca Walsh: [00:25:15] But I also want to be clear with listeners about how do we create these synaptic connections? How do we get a dense limbic system, which is what we're after. The denser the limbic system, the more potential the cerebral and prefrontal cortex has for development. So we're going to talk about that.

Rebecca Walsh: [00:25:39] I want to start by just saying, like this is really something we're looking at over the first year of life. This is not like a second by second, day by day, hour by hour kind of thing. We're looking at responsive caregiving and a responsive, least toxic environment possible in that first year of life. So if you're in day 16 or if you're in month two of a newborn and you're exhausted and you're stressed and you're tired and you're overwhelmed and you're not getting much sleep, like this is not going to impact your baby's brain development. Okay. we're talking about a responsive, loving relationship that's going to develop over the first year.

Rebecca Walsh: [00:26:28] And in fact, there're more and more studies showing that many women don't develop a bond with their babies right away, that it is a much slower process than Hollywood or movies or hallmark cards would lead us to believe so. Or Instagram. That many women and dads for that matter take time to develop that bond. That is really normal. So I want to just preface when we talk about brain building ways, just preface it by saying it's okay if it feels a little slower in the beginning.

Sarah Trott: [00:27:13] In other words, don't stress it if you aren't 100% paying close attention to this aspect of your baby's development 24 seven. In other words, you're saying it's okay to take a balanced approach and take care of yourself.

Rebecca Walsh: [00:27:26] Oh, yes, 100%. And let's talk about what that looks like. But basically right now in these first 3 or 4 months, the only thing that really is important is that you are as much as you can respond to the baby's needs. Right? So when the baby cries, are they being picked up when they're hungry? Are they being fed? lots of research on feeding on demand. This is why pediatricians recommend it there if we want to do some other myth busting. Yes.

Rebecca Walsh: [00:28:00] There's a book that was completely debunked by medical science and the medical world. I cannot believe that parents are still using it after it's been basically linked to a failure to thrive as an infant. Even some deaths. And it's this basically very strict schedule of feeding on demand where parents are told that they should feed a very strict schedule of not feeding on demand - of feeding on a schedule. That they should only feed every 3 or 4 hours. They should never pick up a child if they're hungry, they should never feed them in between. And again, it's been completely debunked. And I'm very surprised even I talked to families and very well educated families in San Francisco that are still following this book.

Rebecca Walsh: [00:29:09] Basically that's the most important thing I would say in those first few months is just you know, talking to your doctor. And every, every baby may have slightly different needs, but when they cry, when they're hungry, are they being fed or are they being nurtured? and again, if you're really tired and stressed out and you can't always do that, it's okay, because this is going to be something that the baby learns.

This trust that they're learning is really over that first year or even the first 18 months. but it is like, and we should take a moment and I know you have a lot of resources for postpartum depression, and you've had episodes on this as well. Just to say, like, if you're feeling like this is more serious, it is really important to get the care and to get the support that you need to be able to take breaks from your baby, to be able to feel

connected and close. And if you have postpartum depression or anxiety that is getting in the way, it's certainly important from a developmental perspective that you reach out and get support.

Sarah Trott: [00:30:31] Yeah, absolutely. We're big fans of Postpartum Support International here in the United States. There's a free phone number. You can call and talk to someone anonymously and get resources that could help you talk to your doctor, talk to your friends or your partner, and make sure you get the help that you need. Thank you.

Rebecca Walsh: [00:30:50] let's shift gears a little bit. We talked a lot about what happens in the first year or what we know about why this first year is so important. and now let's shift gears and talk more specifically about how we get that density.

Sarah Trott: [00:31:13] Yes. What leads to that optimal environment.

Rebecca Walsh: [00:31:19] you think of it in two ways. One is the environment and the other would be relationships. So as far as the environment goes, what we're thinking about there is a least toxic environment, a least stressful environment. So obviously things that are going to be really stressful on a child are domestic violence, any kind of violence in the home, things like if parents are really stressed about food insecurity or housing insecurity, it can lead to a less present parent if they're so caught up in these kinds of basic their own survival, basic needs. So that can lead to a more toxic environment. Those are some of the risk factors that we know.

Rebecca Walsh: [00:32:22] And by the way, if your listeners are interested in addition to the course that we have on Famfully that will be talking about at the end. A lot of this research is coming out of the [Harvard Center on the Developing Child](#) and they have been conducting these longitudinal studies over the last 30 or 40 years. And they're kind of leading this, this brain science development. In fact, about five years ago, they changed their website from saying 700 million or 700 thousand synaptic connections per second to oh, no, we actually think it's a million synaptic connections per second in

that first year. meaning the brain is forming and growing faster than we even thought it was.

But anyway, they have some amazing resources to think about, but basically some of the risk factors that they're listing are these big picture things like poverty and food insecurity, housing insecurity and domestic violence, all of those things. And the other two and final critical things would be drug and alcohol abuse. So that makes a lot of sense, right? Like obviously if you have an addiction, it's very hard to be present to somebody else. It's hard to be available. So those are kind of those big picture things in the environment. but I think sometimes it can also in our own environments what can lead to is just our own mental health.

Rebecca Walsh: [00:34:09] Getting the support that we need. and just the distractions as busy parents. So thinking about cell phone use, sometimes is thinking about cell phone use as something in the environment that sort of takes us away from the present with our child. And as we'll talk about, we're not talking about our children, our babies even need 100% of our attention all the time. In fact, a lot of research shows that a little bit of stress in the context of a loving, connected environment and loving connected relationships can have positive effects on the brain. So a little bit of stress, a little bit of crying and then figuring out for themselves that, oh, actually, I got through that. I was okay. Those can be positive. But again, we're talking about the big picture here is the relationship - is relationship loving, is it connected? and those are going to be the things that we really want to focus on.

Sarah Trott: [00:35:20] Okay. And is this the "serve and return" concept that we were talking about earlier?

Rebecca Walsh: [00:35:24] Yes. As far as what a healthy relationship looks like. Scientists have kind of broken it down. And it's really interesting. If you go on the Harvard Center for the Developing Child's website, they actually have videos where you can see where they film just people interacting with their children and some grandparents, sometimes daycare providers, sometimes mothers, fathers just interacting with their children. And what they highlight is in all of these videos, what

they're noticing is that there's really high quality "serve and return". So a basic way to analyze a healthy, loving relationship. What does that mean? It seems kind of abstract and nonscientific.

Rebecca Walsh: [00:36:14] Although we should bring up I think one of the first you know, studies, historical studies that highlighted this need for love and connection in babies was you know, looking at Doctor Ed Tronick, who was brought in to the orphanage crisis in the United States post World War one. And the medical doctors at the time could not figure out why all of these babies were not surviving. They had really meticulous charts of all of their feeding. They had been changed, their diapers had been changed, they'd been fed and this was going on in different parts of the world. But so there's a lot of different very similar studies.

Henry Chaplin decided to go in and observe and to see what was going on. And when he does, he notices that the nurses have like a 1 to 30 ratio, let's say. And so they're very overwhelmed and they're not talking to the babies. They're not connecting with them. They're just propping up the bottles. They're changing their diapers really quickly. and they're moving on. And when he's interviewing them by the way, Anna Pinkley did the same thing in Europe at the time, post World War one Yugoslavian orphanage crisis. and Anna Pinkley did the same thing, and she's going, what's going on? Well, what they found was that what was going on was that the babies weren't attached to anyone. And basically going back to Henry Chapman in the US, the survival rate to the age of two in a US orphanage was 0%.

Sarah Trott: [00:38:13] That's heartbreaking to hear. Babies are really reliant on that emotional secure attachment with another person.

Rebecca Walsh: [00:38:20] That was the first time when the medical world had their eyes opened around this stuff. And he actually says babies need love to survive. And so that was like revolutionizing.

Rebecca Walsh: [00:38:33] Anyway, going back to what we can do and what does that mean? I think what researchers are trying to figure out, is what does a responsive,

loving relationship look like. And so what they came up with was this idea of the "serve and return", which is used in brain development studies for all kinds of different things actually. But the "serve and return" in infant brain development is when an infant reaches out to a parent in two ways.

So an infant reaches out to a parent or, or or caregiver when they are stressed. That's a serve. So if that stress serve is returned with comfort and closeness again, in those early days, you may not be able to make the baby stop crying no matter what you do, right? But you know, nine times out of ten there may be that ten time where you're just like, I can't, and I'm just going to leave the baby.

Rebecca Walsh: [00:39:38] And that's the safest thing for me to do. But nine times out of ten, you're trying, right? You're holding, you're rocking, you're bouncing, you're doing all the things. So the baby is associating when I'm stressed, somebody will be there for me, right? and again, that's going to be like the majority of the time, not every single time, and not even if it's a tiny bit of stress. And they can recover on their own. That can be even healthy. But when they're really stressed, is someone there for me? And then so that's one kind of serve, the other kind of serve that's going to lead to this synaptic connections coming together is the connection serve.

Rebecca Walsh: [00:40:18] So this is like really simply like when a baby, uh a young baby might be just noticing their, their hands for the first time. And sometimes, again, independent play, having them be on their own, doing that can be wonderful. but when they're noticing their hands and then they look up to you. And they're kind of looking at you and they're kind of waiting for a response. Are you there to say, oh, you noticed your hands? Those are your hands. Oh, aren't they so wonderful? Isn't that amazing that you can move your hands and then as I get older, they're going to be pointing to things. And is somebody there to talk to them and tell them about what they're pointing to to notice the different textures with them, to notice the different sounds with them. You can see when they hear a sound and they might turn their head. And is somebody there?

Rebecca Walsh: [00:41:21] On a very basic level, what we're talking about is somebody being there for your child. And so when we're thinking about a parent, we're talking about a daycare provider, a nanny, but it's somebody that the majority of the time, again, this is not 100% of the time. In fact, like I said, there's studies that suggest even if you had all that time in the world to be 100% attuned, it would maybe not be the healthiest thing. certainly when we look at resiliency and independence. Okay. So it's not to say but we're really talking about the quality of interactions.

Sarah Trott: [00:42:06] And the quality of interaction, and specifically so more often than not, in other words, not all the time, but more often than not, on the balance we are returning. We're listening to that stress, anxiety, or reaching out for help to show them that, hey, we're here for them. When you're asking for that support. Yes. And then also helping them develop that strong sense of self esteem, and to know that they're interesting by responding when they're finding something interesting, which, by the way, as adults, like the curtains might not be that interesting, but of course, for that baby or that toddler, yeah, this could be hugely important. And so honoring their interest helps them to develop their self-esteem and helps them to develop their own sense of self and knowing that they are important. So I really love the way you broke that down into those categories.

Rebecca Walsh: [00:42:56] And that's something that we talk about in all of our classes is this idea of floor time and being one on one and present and one of the role play scenarios that we do. It asks what is a child learning when somebody is there kind of just even just what I tell a lot of parents with just really young children is just imitating what they're doing. So if your baby starts like picking up something and, and going like this, just pick up something and do the same. So again like you said, that tells me as a baby that wow, people like my ideas. I'm going to keep coming up with things. I'm going to keep exploring. Okay.

Again going back to those horrible orphanage studies. But like if nobody's doing that I'm going to stop exploring. I'm going to stop being interested. And therefore that limbic system is not going to develop. And I am not a lizard, so I cannot survive past those first two years. I have to have a limbic system and ultimately I have to have a cerebral

system to survive. So when we think about the importance of just connecting, right, being present, being in tune with the baby and again, it doesn't have to be all the time.

Rebecca Walsh: [00:44:25] and I think obviously like a big distraction nowadays is our phones. And there they say a phone is the equivalent of 20 people in the room. So you have about 20 other people that you're connecting to on average. Probably more than that. But like on average it's about the 20 other people in the room. The only problem that would be wonderful if a baby was in a room with 21 people, it would be amazing for that baby.

Rebecca Walsh: [00:44:54] And in fact, when we look at traditional societies, we know that the ratio of adults to children is 13 to 1, and now adults are considered 13 and over. But if you have any older cousins or teenagers around, you know that they can be incredibly connected and helpful with the baby. So we know that the ratio is about 13 to 1. And that is what we are kind of wired for, that much connection. So what we're noticing now is that this generation of the nuclear family we're raising a generation of. Connection deprived children. There's a deprivation of connection. And then you take that one person or if they're lucky, they might have two people that are assigned to them. And those two people are basically on the phone with 20 other people.

Sarah Trott: [00:45:49] Yeah, yeah. Well, I mean, we as adults know how that feels right to be trying to have a meaningful connection. And then someone else is ignoring us to look at a screen. It feels terrible to us, it feels terrible to our kids.

Sarah Trott: [00:46:09] It teaches them that they're not as important. I heard someone say something like, it doesn't make them like us less or love us less as caregivers. It just makes themselves feel less worthy.

Rebecca Walsh: [00:46:28] Taking all that and self-care and all of that into account. So you know, my, my biggest recommendation would be to have some designated times where you're fully present you can even start with just like ten minutes especially if you have a very young baby. It's just ten minutes where you're going to what I did with when my children were young. I would just put my phone on airplane mode for ten minutes

and just know that they were going to be my only thing for those moments. so that's like, that's one, one way. But another thing is to and what we were going to talk about was how do we build that connection into the routines that we already have.

Sarah Trott: [00:47:14] So what does that look like? I mean, we talked a little bit about different parenting styles, is there a parenting style that actually helps that baby's brain develop?

Rebecca Walsh: [00:47:26] Yeah. Great question. I mean, I think I would say responsive, Responsive caregiving. So it is what we're talking about and we're really talking about, again, somebody that's there for the child it doesn't have to be 100% of the time. but we want to be responding to the child's cues and needs. And one of the things that we can think about is and actually going back to those orphanage, the in in Europe so empirically was the what ended up founding the RIE method because what she told all of the nurses was, when you're changing their diapers and when you're feeding them, I want you to pick them up.

And they said, oh, I can't, they'll attach to me. And she said, they need to attach to you, but I might not be here tomorrow or I might not be able. It doesn't matter. They need to attach to someone. So. They didn't have time to change anything else. The ratios were horribly tragic at that time. But she said when you're feeding them, talk to them. You know, like you said, am I important to this person who's taking care of my needs? That's like a very you think about yourself as an elderly person and somebody has to start to wash you or change you or dress you do you want somebody that's really distracted and not talking to you, or do you want someone that's acknowledging your dignity and human person, right.

Rebecca Walsh: [00:48:58] And telling you. All right, Sarah, we're gonna have to change you now, you know? Okay, we're gonna do this. We're gonna do that. Okay? This is, you know you want to be acknowledged, right? so that same thing. So in the video that we have on the Famfully courses. We actually have a video of myself changing my daughter, who's now 11, when she was just a few months old. And one of the things that I learned from the RIE method and it I'm not saying that you need to

follow RIE to a T to have optimal brain development. There's lots of ways that you could get to optimal brain development.

The basic, fundamental way would be to be responsive and to be in tune with your child or to have somebody having and this could be multiple people, right? it could be you for a certain part of the day, and then it could be a nanny or daycare provider, but you want to make sure that they are they they are seeing your child.

Rebecca Walsh: [00:50:03] They are responding to your child. Those are really important pieces to look for. And so a diaper change can be a great way. And maybe that's kind of a way to, to end with this example of just the "serve and return" potential of a diaper change is exponential. So the baby is going to start by probably not always being, wanting to be put on their back.

You can start by saying something like, I'm going to go ahead and put you on your back. I know sometimes that's hard for you, but mama's here. I'm going to be here for you during that time. Then the baby may look at you and you can say, yeah, I'm here. So you're face to face with a baby during a diaper change. So there's eye contact. There's already touch, so why not ritualize it,

Rebecca Walsh: [00:51:00] So then instead of just putting them on, starting to undress them and start taking off the diaper straps, let them know, say, okay, I'm gonna undo the buttons now. Okay, let's count them together. One button, two button, three button. And we should say another really important thing that I want to make sure you're aware of is that no, a baby doesn't need to know how to count. They don't need to know their colors. They don't need to know their animal sounds. They don't need to know any of that. and they don't need fancy toys.

Sarah Trott: [00:51:36] What educational toys do you recommend?

Rebecca Walsh: [00:51:39] I mean, there are a lot of great educational toys out there. And if they help you to sort of just connect and explore with your child, then 100% sure. But do you need anything? Absolutely. 100%. No, there is no research that shows any

connection with any specific product or you know, program or even even music, you know believe it or not, there's really not much of a connection in utero, there's more of a connection with music interestingly. There's really nothing that you need to purchase or buy. It's about how they could be pointing at a box. They could be pointing at a hair tie. They can be, you know it's about the richness of that relationship and that connection.

Rebecca Walsh: [00:52:32] But yeah, there are a lot of interesting kinds of toys out there now. And if they again, if they help you connect, if counting the buttons is more about connecting with the child. but cerebral brain development. So numbers, colors, letters, all of that learning to read, learning to count, all of that will really start to be important. Three plus. And we know that at three, that's when that cerebral, the first cerebral brain starts to really come online and be wired. not that it doesn't exist before that, but at three is when that starts to say, okay, what was my potential? What happened in that limbic brain? How many synaptic connections do I have with those? I can now build my higher brain.

Rebecca Walsh: [00:53:21] And so it's really not until three. And then essentially till the end of life we can always learn something new, but what we can't do is we can't go back in time and wire that limbic brain. We can't increase the density of that limbic brain. pass those three years and again, now we're learning that that foundation of the limbic brain is even formed in that first year. So the more connection the more uh. You know, we're able to respond and talk. You know, you hear a talk, sing, read, write. you hear these things because those are served and return interactions, right?

Rebecca Walsh: [00:54:06] When we talk to our babies, when they go GA and we go GA, That's a "serve and return". when they lift up their leg at a diaper change and we say, oh, thank you, you lifted up your leg for me, that makes it easier for me to change your diaper. Oh, okay. I'm going to lift up your other leg. Okay? I'm going to undo your strap, and you're making eye contact, and you're telling them that they're seen, that they're important, that they're heard. All of those are going to build the brain. But again. The density we're talking about is limbic density. Limbic density is built through a nontoxic, stressful environment and rich relational environments. That's really it.

Rebecca Walsh: [00:54:56] I know it can feel kind of overwhelming on the one hand to be like, oh my gosh I have to do all of what in the first year. But really, someone just needs to be there. That's what it is. It's about emotional presence. and again, doesn't have to be all the time. Doesn't have to be every moment of every day. It's really important to take breaks. It's really important to get the care that you need. but overall, you can kind of think about is my child growing up in a rich relational environment? Do they feel connected? Do they feel safe? Do they feel loved? Those are kind of just the basics.

Sarah Trott: [00:55:38] Oh, thank you so much, Rebecca. I love the summary there at the end, especially how you're talking about that. Really, it comes down to you, you as the caregiver. You don't need fancy toys. You don't need to be 24 over seven, kind of thinking cerebrally yourself about all these things you need to do. It's really just being there, being present. Yes. And to a degree that's also following your own instincts. We have a whole episode talking about self-trust, and that's about listening to your inner voice.

Speaker3: [00:56:10] And I have to connect that to some of the things you were saying earlier around the importance of self-care and the importance of being responsive. So if you know how to be responsive to yourself as an adult and listen to your own feelings, that's huge. And that's also something that is what I'm hearing from you. Highly, highly relevant and important for showing that as an example to your child, to show them that they can listen to their voice and express their needs, express their interests, and that those are worthy, those are worthy of interaction and respect.

Rebecca Walsh: [00:56:46] Yeah, absolutely. And like you said. It feels like you don't have to overthink it in this first year, right? Knowing that you don't have to overthink it. Knowing that you can just be present and be there. And that is 100%.

Rebecca Walsh: [00:57:05] Your baby is going to be miles and miles ahead. If they have somebody or a few people that are 100% there for them. and connected with them. And they have time on their own, they have time to kind of work through stress. Sometimes that's totally fine. But overall, do they have somebody that's there for them?

yeah. You don't have to overthink it. you can't spoil a baby, right? You hear that? It's 100% true from a developmental perspective. What that baby needs is just unconditional love.

Rebecca Walsh: [00:57:40] In that first year, absolutely trusting yourself, trusting your instincts actually forever as a parent, you still want to do that. During that first year, really trusting your voice, trusting that you are enough, that connection is 100% enough. Such a beautiful, beautiful thing to leave on.

Sarah Trott: [00:58:45] I love that. So we've mentioned Famfully a few times. I'm going to now talk about Famfully more directly, it is a site - you can go to famfully.com. It is like "masterclass for parenting classes". They have a pregnancy collection including free breastfeeding classes to childbirth and infant CPR, a baby collection which is the first year of parenting, the topic of our topic today. In fact and choosing childcare, things like that. And then also another section for a toddler collection, parenting a toddler, potty training, other top toddler questions and categories like that. So if you are interested in hearing more from Rebecca, a lot of her courses are there on Famfully. You can go to Famfully and use the code FOURTH for 20% off there. So again, go to Famfully and use the code FOURTH for for 20% off all of the classes when you sign up.

And then you can also visit Early Childhood Matters. If you want to go and visit Rebecca in person and take some of her courses, any of her education courses, any of her mom groups, which I highly recommend from first hand experience. and you're here in the Bay area, you can go to her site and use that same code FOURTH and have 20% off on early childhood matters as well.

Sarah Trott: [01:00:14] Yes, we will wrap here. Thank you so much, Rebecca.

Rebecca Walsh: [01:00:18] Thank you. And thank you again for the work that you're doing to support families in these early months.

Sarah Trott: You can find out more about Esther Gallagher on <http://www.esthergallagher.com/>. You can also subscribe to this podcast in order to hear

more from us. [Click here for iTunes](#) and [click here for Spotify](#). Thank you for listening everyone and I hope you'll join us next time on the Fourth Trimester. The theme music on this podcast was created by Sean Trott. Hear more at <https://soundcloud.com/seantrott>. Special thanks to my true loves: my husband Ben, daughter Penelope, and baby girl Evelyn. Don't forget to share the Fourth Trimester Podcast with any new and expecting parents. I'm Sarah Trott. Goodbye for now.